# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



**Defense-Wide** 

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide

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Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

# **Table of Volumes**

Defense Advanced Research Projects Agency	Volume 1
Missile Defense Agency	Volume 2
Office of the Secretary of Defense	Volume 3
Chemical and Biological Defense Programs	Volume 4
Defense Contract Management Agency	
Defense Human Resources Activity	Volume 5 - 19
Defense Information Systems Agency	Volume 5 - 73
Defense Logistics Agency	Volume 5 - 267
Defense Security Cooperation Agency	Volume 5 - 427
Defense Security Service	Volume 5 - 457
Defense Technical Information Center	Volume 5 - 481
Defense Threat Reduction Agency	Volume 5 - 505
The Joint Staff	Volume 5 - 623
U.S. Special Operations Command	Volume 5 - 695
Washington Headquarters Service	Volume 5 - 967
Operational Test and Evaluation	Volume 5 - 991

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Defense Geospatial Intelligence Agency	. (see NI	P and MI	P Justification Books)
Defense Intelligence Agency	. (see NI	P and MIF	Justification Books)
National Security Agency	.(see NI	P and MIF	Justification Books)

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

# **Table of Contents**

Comptroller Exhibit R-1	\
Program Element Table of Contents (by Budget Activity then Line Item Number)	x
Program Element Table of Contents (Alphabetically by Program Element Title)	xxii
RDT&E Justification Books	Volume {

	UNCLASSIFIED
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#### Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Research, Development, Test & Eval, DW	78,712	63,654		63,654
Total Research, Development, Test & Evaluation	78,712	63,654		63,654

#### Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Research, Development, Test & Eval, DW	28,946		28,946
Total Research, Development, Test & Evaluation	28,946		28,946

νi

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Advanced Technology Development (ATD)	13,915	13,579		13,579
System Development and Demonstration (SDD)	389	389		389
RDT&E Management Support	64,408	49,686		49,686
Total Research, Development, Test & Evaluation	78,712	63,654		63,654
Summary Recap of FYDP Programs				
Research and Development	78,712	63,654		63,654
Total Research, Development, Test & Evaluation	78,712	63,654		63,654

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 FY 2013 OCO Total
Advanced Technology Development (ATD)	12,195	12,195
System Development and Demonstration (SDD)	387	387
RDT&E Management Support	16,364	16,364
Total Research, Development, Test & Evaluation	28,946	28,946
Summary Recap of FYDP Programs		
Research and Development	28,946	28,946
Total Research, Development, Test & Evaluation	28,946	28,946

#### Defense-Wide

#### FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	Total
Advanced Technology Development (ATD)	13,915	13,579		13,579
System Development and Demonstration (SDD)	389	389		389
RDT&E Management Support	64,408	49,686		49,686
Total Research, Development, Test & Evaluation	78,712	63,654		63,654
Summary Recap of FYDP Programs				
Research and Development	78,712	63,654		63,654
Total Research, Development, Test & Evaluation	78,712	63,654		63,654

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 FY 2013 OCO Total
Advanced Technology Development (ATD)	12,195	12,195
System Development and Demonstration (SDD)	387	387
RDT&E Management Support	16,364	16,364
Total Research, Development, Test & Evaluation	28,946	28,946
Summary Recap of FYDP Programs		
Research and Development	28,946	28,946
Total Research, Development, Test & Evaluation	28,946	28,946

#### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Defense Human Resources Activity	78,712	63,654		63,654
Total Research, Development, Test & Evaluation	78,712	63,654		63,654

χi

#### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation	FY 2013 Base	FY 2013 FY 2013 OCO Total
Defense Human Resources Activity	28,946	28,946
Total Research, Development, Test & Evaluation	28,946	28,946

xii

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program							S
Line	Element			FY 2011	FY 2012	FY 2012	FY 2012	e
No	Number	Item	Act	Actuals	Base	oco	Total	C
								-
58	0603769SE	Distributed Learning Advanced Technology Development	03	13,915	13,579		13,579	U
	Advan	ced Technology Development (ATD)		13,915	13,579		13,579	
125	0605021SE	Homeland Personnel Security Initiative	05	389	389		389	U
	Syste	m Development and Demonstration (SDD)		389	389		389	
163	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	64,408	49,686		49,686	U
		3000000 3000						
	RDT&E	Management Support		64,408	49,686		49,686	
Tota	l Research,	Development, Test & Eval, DW		78,712	63,654		63,654	

R-1C: FY 2013 President's Budget (Published Version), as of February 3, 2012 at 12:21:33

xiii

#### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program						S
Line	Element			FY 2013	FY 2013	FY 2013	е
No	Number	Item	Act	Base	oco	Total	C
							7
58	0603769SE	Distributed Learning Advanced Technology Development	03	12,195		12,195	U
	Advar	nced Technology Development (ATD)		12,195		12,195	
125	0605021SE	Homeland Personnel Security Initiative	05	387		387	U
	Syste	em Development and Demonstration (SDD)		387		387	
163	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	16,364		16,364	U
	RDT&F	Management Support		16,364		16,364	
-	• 1 • • • • • • • • • • • • • • • • • •						
Tota.	Research,	Development, Test & Eval, DW		28,946		28,946	

R-1C: FY 2013 President's Budget (Published Version), as of February 3, 2012 at 12:21:33

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

### **Program Element Table of Contents (by Budget Activity then Line Item Number)**

Budget Activity 01: Basic Research

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
1	01	0601000BR	DTRA Basic Research Initiative	Volume 5 - 527

#### **Budget Activity 02: Applied Research**

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title Program Element Title	age
23	02	0602718BR	WMD Defeat Technologies	533
24	02	1160401BB	Special Operations Technology Development	749

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 03: Advanced Technology Development (ATD)
Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title Page
28	03	0603160BR	Counterproliferation Initiatives - Proliferation, Prevention and Defeat
32	03	0603264S	Agile Transportation for the 21st Century (AT21) Theater CapabilityVolume 5 - 283
47	03	0603712S	Logistics Research and Development Technology (Log R&D)Volume 5 - 287
48	03	0603713S	Deployment and Distribution Enterprise Technology
50	03	0603720S	Microelectronics Technology Development and Support (DMEA)Volume 5 - 327
58	03	0603769SE	Distributed Learning Advanced Technology Development (ADL)
62	03	0603828J	Joint ExperimentationVolume 5 - 643
70	03	1160402BB	Special Operations Advanced Technology DevelopmentVolume 5 - 755
71	03	1160422BB	Aviation Engineering Analysis
72	03	1160472BB	SOF Information and Broadcast Systems Advanced TechnologyVolume 5 - 767

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 04: Advanced Component Development & Prototypes (ACD&P) Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	y Program Element Number	Program Element Title	Page
104	04	0604787J	Joint Systems IntegrationVolum	ie 5 - 647
106	04	0604828J	Joint FIRES Integration and Interoperability TeamVolum	ne 5 - 651

**Budget Activity 05: Development & Demonstration (SDD)** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	<b>Budget Activity</b>	Program Element Number	Program Element Title Pa	ige
119	05	0604764K	Advanced IT Services Joint Program Office (AITS-JPO)Volume 5 -	91
121	05	0605000BR	WMD Defeat CapabilitiesVolume 5 - 6	311
123	05	0605013BL	Information Technology DevelopmentVolume 5 -	11
125	05	0605021SE	FY 2013 Homeland Personnel Security Directive (HSPD-12) InitiativeVolume 5 -	41
128	05	0605070S	DoD Enterprise Systems Development and DemonstrationVolume 5 - 3	337
132	05	0303141K	Global Combat Support SystemVolume 5 - 1	07

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 06: RDT&E Management Support

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title Page
144	06	0605126J	Joint Integrated Air & Missle Defense Organization (JIAMDO)Volume 5 - 655
153	06	0605502BR	`Small Business Innovation Research
157	06	0605502D8W	Small Business Innovative Research
158	06	0605502S	Small Business Innovative Research (SBIR)
158	06	0605801KA	Defense Technical Information Center
163	06	0605803SE	R&D in Support of DOD Enlistment, Testing and EvaluationVolume 5 - 45
170	06	0204571J	Joint Staff Analytical Support (JSAS)Volume 5 - 671
174	06	0303166J	Support to Information Operations Capability
183	06	0901598D8W	IT Software Development InitiativesVolume 5 - 987

**Budget Activity 07: Operational Systems Development** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	/ Program Element Number	Program Element Title P	age
184	07	0604130V	Enterprise Security SystemVolume 5 -	475

# Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

**Budget Activity 07: Operational Systems Development** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title	Page
186	07	0605127T	Regional International Outreach (RIO) - Partnership for Peace Information Managem (PIMS)	-
187	07	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	Volume 5 - 451
190	07	0607828J	Joint Integration & Interoperability	Volume 5 - 679
191	07	0208043J	Planning and Decision Aid System (PDAS)	Volume 5 - 683
192	07	0208045K	C4I Interoperability	Volume 5 - 117
194	07	0301144K	Joint/Allied Coalition Information Sharing	Volume 5 - 133
201	07	0302016K	National Military Command System-Wide Support	Volume 5 - 145
202	07	0302019K	Defense Info. Infrastructure Engineering and Integration	Volume 5 - 151
203	07	0303126K	Long-Haul Communications - DCS	Volume 5 - 169
204	07	0303131K	Minimum Essential Emergency Communications Network (MEECN)	Volume 5 - 189
209	07	0303140K	Information Systems Security Program	Volume 5 - 199
210	07	0303149J	Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW)	Volume 5 - 685
211	07	0303150K	Global Command and Control System	Volume 5 - 205
212	07	0303153K	Defense Spectrum Organization	Volume 5 - 221
213	07	0303170K	Net-Centric Enterprise Services (NCES)	Volume 5 - 233
215	07	0303610K	Teleport Program	Volume 5 - 243

# Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 07: Operational Systems Development

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title	Page
215	07	0304210BB	Special Applications for Contingencies	Volume 5 - 771
222	07	0305103K	Cybersecurity Initiative	Volume 5 - 257
230	07	0305208BB	Distributed Common Ground/Surface Systems	Volume 5 - 779
235	07	0305208K	Distributed Common Ground/Surface Systems	Volume 5 - 259
235	07	0305219BB	MQ-1 Predator A UAV	Volume 5 - 789
245	07	0708011S	Industrial Preparedness Manufacturing Technology (IP ManTech)	Volume 5 - 387
246	07	0708012S	Logistics Support Activities (LSA)	Volume 5 - 423
251	07	0902298J	Management Headquarters	Volume 5 - 693
251	07	1105219BB	MQ-9 Unmanned Aerial Vehicle	Volume 5 - 797
252	07	1105232BB	RQ-11 UAV	Volume 5 - 805
253	07	1105233BB	RQ-7 UAV	Volume 5 - 809
254	07	1160279BB	Small Business Innovative Research	Volume 5 - 813
255	07	1160403BB	Special Operations Aviation Systems Advanced Development	Volume 5 - 817
256	07	1160404BB	Special Operations Tactical Systems Development	Volume 5 - 829
257	07	1160405BB	Special Operations Intelligence Systems Development	Volume 5 - 833
259	07	1160421BB	Special Operations CV-22 Development	Volume 5 - 845
260	07	1160427BB	Mission Training and Preparation Systems (MTPS)	Volume 5 - 853
261	07	1160429BB	AC/MC-130J	Volume 5 - 861

# Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

**Budget Activity 07: Operational Systems Development** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title Page
262	07	1160474BB	SOF Communications Equipment and Electronics SystemsVolume 5 - 869
263	07	1160476BB	SOF Tactical Radio Systems
264	07	1160477BB	SOF Weapons SystemsVolume 5 - 883
265	07	1160478BB	Soldier Protection and Survival Systems
266	07	1160479BB	SOF Visual Augmentation, Lasers and Sensor Systems
267	07	1160480BB	SOF Tactical VehiclesVolume 5 - 915
268	07	1160481BB	SOF MunitionsVolume 5 - 923
269	07	1160482BB	SOF Rotary Wing AviationVolume 5 - 931
270	07	1160483BB	SOF Underwater SystemsVolume 5 - 943
271	07	1160484BB	SOF Surface CraftVolume 5 - 953
272	07	1160488BB	Military Information Support Operations (MISO) (Formerly SOF PSYOP)Volume 5 - 961

Budget Activity 06: RDT&E Management Support

Appropriation 0460: Operational Test and Evaluation, Defense

Line Item	Budget Activity	Program Element Number	Program Element Title	Page
1	06	0605118OTE	Operational Test and EvaluationVolume 5	5 - 1007

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 06: RDT&E Management Support

Appropriation 0460: Operational Test and Evaluation, Defense

Line Item	Budget Activity	Program Element Number	Program Element Title	Page
2	06	0605131OTE	Live Fire Test and EvaluationVolume 5	- 1013
3	06	0605814OTE	Operational Test Activities and AnalysesVolume 5	- 1021

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Logistics Support Activities (LSA)	0708012S	246	07Volume 5 - 423
AC/MC-130J	1160429BB	261	07Volume 5 - 861
Advanced IT Services Joint Program Office (AITS-JPO)	0604764K	119	05Volume 5 - 91
Agile Transportation for the 21st Century (AT21) Theater Capability	0603264S	32	03Volume 5 - 283
Aviation Engineering Analysis	1160422BB	71	03Volume 5 - 763
C4I Interoperability	0208045K	192	07Volume 5 - 117
Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW)	0303149J	210	07Volume 5 - 685
Counterproliferation Initiatives - Proliferation, Prevention and Defeat	0603160BR	28	03Volume 5 - 575
Cybersecurity Initiative	0305103K	222	07Volume 5 - 257
DTRA Basic Research Initiative	0601000BR	1	01Volume 5 - 527
Defense Info. Infrastructure Engineering and Integration	0302019K	202	07Volume 5 - 151
Defense Spectrum Organization	0303153K	212	07Volume 5 - 221
Defense Technical Information Center	0605801KA	158	06Volume 5 - 491
Deployment and Distribution Enterprise Technology	0603713S	48	03Volume 5 - 305
Distributed Common Ground/Surface Systems	0305208K	235	07Volume 5 - 259
Distributed Common Ground/Surface Systems	0305208BB	230	07Volume 5 - 779

UNCLASSIFIED

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Distributed Learning Advanced Technology Development (ADL)	0603769SE	58	03Volume 5 - 37
DoD Enterprise Systems Development and Demonstration	0605070S	128	05Volume 5 - 337
Enterprise Security System	0604130V	184	07Volume 5 - 475
FY 2013 Homeland Personnel Security Directive (HSPD-12) Initiative	0605021SE	125	05Volume 5 - 41
Global Combat Support System	0303141K	132	05Volume 5 - 107
Global Command and Control System	0303150K	211	07Volume 5 - 205
IT Software Development Initiatives	0901598D8W	183	06Volume 5 - 987
Industrial Preparedness Manufacturing Technology (IP ManTech)	0708011S	245	07Volume 5 - 387
Information Systems Security Program	0303140K	209	07Volume 5 - 199
Information Technology Development	0605013BL	123	05Volume 5 - 11
Joint Experimentation	0603828J	62	03Volume 5 - 643
Joint FIRES Integration and Interoperability Team	0604828J	106	04Volume 5 - 651
Joint Integrated Air & Missle Defense Organization (JIAMDO)	0605126J	144	06Volume 5 - 655
Joint Integration & Interoperability	0607828J	190	07Volume 5 - 679
Joint Staff Analytical Support (JSAS)	0204571J	170	06Volume 5 - 671
Joint Systems Integration	0604787J	104	04Volume 5 - 647
Joint/Allied Coalition Information Sharing	0301144K	194	07Volume 5 - 133
Live Fire Test and Evaluation	0605131OTE	2	06Volume 5 - 1013
Logistics Research and Development Technology (Log R&D)	0603712S	47	03Volume 5 - 287

UNCLASSIFIED

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Long-Haul Communications - DCS	0303126K	203	07Volume 5 - 169
MQ-1 Predator A UAV	0305219BB	235	07Volume 5 - 789
MQ-9 Unmanned Aerial Vehicle	1105219BB	251	07Volume 5 - 797
Management Headquarters	0902298J	251	07Volume 5 - 693
Microelectronics Technology Development and Support (DMEA)	0603720S	50	03Volume 5 - 327
Military Information Support Operations (MISO) (Formerly SOF PSYOP)	1160488BB	272	07Volume 5 - 961
Minimum Essential Emergency Communications Network (MEECN)	0303131K	204	07Volume 5 - 189
Mission Training and Preparation Systems (MTPS)	1160427BB	260	07Volume 5 - 853
National Military Command System-Wide Support	0302016K	201	07Volume 5 - 145
Net-Centric Enterprise Services (NCES)	0303170K	213	07Volume 5 - 233
Operational Test Activities and Analyses	0605814OTE	3	06Volume 5 - 1021
Operational Test and Evaluation	0605118OTE	1	06Volume 5 - 1007
Overseas Humanitarian Assistance Shared Information System (OHASIS)	0605147T	187	07Volume 5 - 451
Planning and Decision Aid System (PDAS)	0208043J	191	07Volume 5 - 683
R&D in Support of DOD Enlistment, Testing and Evaluation	0605803SE	163	06Volume 5 - 45
RQ-11 UAV	1105232BB	252	07Volume 5 - 805
RQ-7 UAV	1105233BB	253	07Volume 5 - 809
Regional International Outreach (RIO) - Partnership for Peace Information Management System (PIMS)	0605127T	186	07Volume 5 - 443
SOF Communications Equipment and Electronics Systems	1160474BB	262	07Volume 5 - 869

UNCLASSIFIED

Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Program Element Title	Program Element Number	Line Item	Budget Activity Page
SOF Information and Broadcast Systems Advanced Technology	1160472BB	72	03Volume 5 - 767
SOF Munitions	1160481BB	268	07Volume 5 - 923
SOF Rotary Wing Aviation	1160482BB	269	07Volume 5 - 931
SOF Surface Craft	1160484BB	271	07Volume 5 - 953
SOF Tactical Radio Systems	1160476BB	263	07Volume 5 - 877
SOF Tactical Vehicles	1160480BB	267	07Volume 5 - 915
SOF Underwater Systems	1160483BB	270	07Volume 5 - 943
SOF Visual Augmentation, Lasers and Sensor Systems	1160479BB	266	07Volume 5 - 907
SOF Weapons Systems	1160477BB	264	07Volume 5 - 883
Small Business Innovative Research	1160279BB	254	07Volume 5 - 813
Small Business Innovative Research	0605502D8W	157	06Volume 5 - 985
Small Business Innovative Research (SBIR)	0605502S	158	06Volume 5 - 383
Soldier Protection and Survival Systems	1160478BB	265	07Volume 5 - 891
Special Applications for Contingencies	0304210BB	215	07Volume 5 - 771
Special Operations Advanced Technology Development	1160402BB	70	03Volume 5 - 755
Special Operations Aviation Systems Advanced Development	1160403BB	255	07Volume 5 - 817
Special Operations CV-22 Development	1160421BB	259	07Volume 5 - 845
Special Operations Intelligence Systems Development	1160405BB	257	07Volume 5 - 833
Special Operations Tactical Systems Development	1160404BB	256	07Volume 5 - 829

# Defense-Wide • President's Budget Submission FY 2013 • RDT&E Program

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Special Operations Technology Development	1160401BB	24	02Volume 5 - 749
Support to Information Operations Capability	0303166J	174	06Volume 5 - 675
Teleport Program	0303610K	215	07Volume 5 - 243
WMD Defeat Capabilities	0605000BR	121	05Volume 5 - 611
WMD Defeat Technologies	0602718BR	23	02Volume 5 - 533
`Small Business Innovation Research	0605502BR	153	06Volume 5 - 619

UNCLASSIFIED
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xxviii

# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



# **Defense Contract Management Agency**

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



Defense Contract Management Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 5
Program Element Table of Contents (by Budget Activity then Line Item Number)	Volume 5 - 7
Program Element Table of Contents (Alphabetically by Program Element Title)	Volume 5 - 9
Exhibit R-2's	. Volume 5 - 11



# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

04 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line	Program Element			FY 2011	FY 2012	FY 2012	FY 2012	FY 2013	FY 2013	FY 2013	S
No	Number	Item	Act	Actuals	Base	OCO	Totals	Base	000		e c
											-
123	0605013BL	Information Technology Development	05	11,826	12,228		12,228	12,699		12,699	U
	System	m Development and Demonstration (SDD	)	11,826	12,228		12,228	12,699		12,699	
Tota	L Research,	Development, Test & Eval, DW		11,826	12,228		12,228	12,699		12,699	

R-1C: FY 2013 President's Budget (Published Version), as of January 4, 2012 at 18:43:35



Defense Contract Management Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (by Budget Activity then Line Item Number)**

Budget Activity 05: Development & Demonstration (SDD)

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
123	05	0605013BL	Information Technology DevelopmentVolui	me 5 - 11



Defense Contract Management Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Information Technology Development	0605013BL	123	05Volume 5 - 11



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Contract Management Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605013BL: Information Technology Development

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	11.826	12.228	12.699	-	12.699	12.955	13.224	13.495	13.899	Continuing	Continuing
01: Systems Modifications and Development	11.826	12.228	12.699	-	12.699	12.955	13.224	13.495	13.899	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This budget submission sustains Web-basing all new DCMA-unique software applications, and continues supporting Web Services software technology (i.e., machine-to-machine information exchanges between DCMA, DCMA's customers in the Military Services and Defense agencies, and the Defense industry, based upon the open-standard Extensible Markup Language [XML], Simple Object Access Protocol [SOAP], and so on). There are three primary reasons why DCMA is pursuing this direction. First, Web-based applications dramatically reduce the costs associated with fielding new software mission capabilities. (Only a limited handful of central servers need to be updated rather than thousands of employees' desktop computers.) Second, Web-basing and Web Services make DCMA's software applications much more adaptable to the ongoing and future changes in the Department's procurement and financial management systems that are being implemented in accordance with the Department's Business Enterprise Architecture. Third, DCMA has found that Web-based application development is substantially less expensive than traditional client/server or mainframe-based application development. One of the reasons why Web-based development is less expensive is that Web-basing applications allows DCMA to productively adapt large amounts of open source software packages with minimal or even zero acquisition and support costs. Also, this allows Military Services to achieve their desired real-time supply chain information "Reachback" capabilities that will extend all the way onto the factory floors where parts, components, and systems are being produced. All metrics tied to the funds in this exhibit have achieved a "green" status.

FY 2011 Actual: In FY 2011 (\$11.826) DCMA tested new DCMA-unique automated information application modules that will support: Defense Supply Chain "Reachback" via-the-Web capabilities; Public Key Infrastructure-enabled Web application modules; and improved (more accurate and timely) reimbursable earnings reporting. Also funding included the continued testing and improving of DCMA's portals functionality for external and internal customers, and continued development and implementation of Web Services software technologies (e.g., Simple Object Access Protocol, Universal Discovery and Description Integration, Web Services Description Language).

FY 2012 - 2013 Plan: In FY 2012 (\$12.228) and FY 2013 (\$12.699) DCMA will continue to test new DCMA-unique automated information application modules that will support: Defense Supply Chain "Reachback" via-the-Web capabilities; Public Key Infrastructure-enabled Web application modules; and "anywhere, anytime" access for DCMA personnel worldwide. Also funding includes the continuation of testing and improving DCMA's accessibility and functionality for external customers, and the continuation of developing and implementing Web Services software technologies (e.g., Simple Object Access Protocol, Universal Discovery and Description Integration, Web Services Description Language), and supporting the agency's Performance Management Initiative.

PE 0605013BL: Information Technology Development Defense Contract Management Agency

UNCLASSIFIED
Page 1 of 8

R-1 Line #123

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Contract Management Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605013BL: Information Technology Development

BA 5: Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	11.937	12.228	12.542	-	12.542
Current President's Budget	11.826	12.228	12.699	-	12.699
Total Adjustments	-0.111	-	0.157	-	0.157
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	_			
<ul> <li>Reprogrammings</li> </ul>	-	_			
SBIR/STTR Transfer	-	-			
Other Program Adjustment	-0.111	-	0.157	-	0.157

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Ju	stification: PE	3 2013 Defe	nse Contrac	t Manageme	nt Agency		·	·	DATE: Febr	uary 2012	
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 5: Development & Demonstrati	st & Evaluation	n, Defense-V	Vide		IOMENCLA 3BL: Informa nt		logy	PROJECT 01: System	s Modificatio	ns and Deve	elopment
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
01: Systems Modifications and Development	11.826	12.228	12.699	-	12.699	12.955	13.224	13.495	13.899	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

#### A. Mission Description and Budget Item Justification

This budget submission sustains the ongoing effort to Web-base all new DCMA-unique software applications and support the development of web service software technology that consume and integrate various data sources and department level business systems. There are three primary reasons why DCMA continues to pursue this direction. First, Web-based applications dramatically reduce the costs associated with fielding new software mission capabilities that help to provide data in a mobile environment as it relates to DCMA initiatives. Second, Web-basing and Web Services make DCMA's software applications much more adaptable to the ongoing and future changes in the Department's procurement and financial management systems that are being implemented in accordance with the Department's Business Enterprise Architecture. Third, DCMA has found that Web-based application development is substantially less expensive than traditional client/server or mainframe-based application development. One of the reasons why Web-based development is less expensive is that Web-basing applications allows DCMA to productively adapt large amounts of open source software packages with minimal or even zero acquisition and support costs. Also, this allows Military Services to achieve their desired real-time supply chain information "Reachback" capabilities that will extend all the way onto the factory floors where parts, components, and systems are being produced. All metrics tied to the funds in this exhibit have achieved a "green" status. DCMA is planning to develop non-proprietary solutions to replace commercial software that will reduce the overall infrastructure costs for COTS related tools. The testing and support of cyber systems mandates to reduce the impact on day-to-day operations and the development of enterprise level identity and access management solutions remains a key priority for the coming years.

FY 2011 Actual: In FY 2011(\$11.826) DCMA developed and tested the Electronic Integrated Tool Set (EITS) that will provide a baseline supplier capabilities assessment architecture and operating concept to assemble timely, accurate, predictive, and actionable business information, while allowing visibility into contractor capabilities across the DoD Acquisition Enterprise; provided testing support for the new releases of the Wide Area Workflow (WAWF), and the Electronic Data Information (EDI) system; developed the Contractor Business Analysis Repository (CBAR) that will ensure customers are provided with real-time information on rates, business systems, and reportable audits; and lastly DCMA laid the groundwork for the Learned Management System (LMS) that will assist in building critical acquisition competencies.

FY 2012-2013 Plan: In FY 2012 (\$12.228) and FY 2013 (\$12.699) DCMA will continue to: evolve EITS functionality to focus on the development and integration of related enterprise tool solutions and data sources which increase the depth of supply chain assessment, increase automation, and therefore enhance the accuracy and efficiency of these assessment products while providing access to external customer users; enhance the functionality of the Contractor Business Analysis Repository (CBAR); fully develop the Learned Management System (LMS); develop agency level Performance Indicators to assess the contract management performance. Also, DCMA is planning to develop solutions for enterprise actionable data in a mobile environment; and explore the use of Virtual Desktop Interface (VDI) for day-to-day operations that will support the mobility of the Agency. A major focus for DCMA in the next few years is the research and development of an enterprise records management system that will replace the Electronic Document Workflow System (EDW).

PE 0605013BL: *Information Technology Development* Defense Contract Management Agency

Page 3 of 8

R-1 Line #123

Volume 5 - 13

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Contract	t Management Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605013BL: Information Technology	01: System	s Modifications and Development
BA 5: Development & Demonstration (SDD)	Development		

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Software Development	11.826	12.228	12.699
Articles:	0	0	0
Description: This budget submission sustains the ongoing effort to Web-base all new DCMA-unique software applications and support the development of web service software technology that consume and integrate various data sources and department level business systems. There are three primary reasons why DCMA continues to pursue this direction. First, Web-based applications dramatically reduce the costs associated with fielding new software mission capabilities that help to provide data in a mobile environment as it relates to DCMA initiatives. Second, Web-basing and Web Services make DCMA's software applications much more adaptable to the ongoing and future changes in the Department's procurement and financial management systems that are being implemented in accordance with the Department's Business Enterprise Architecture. Third, DCMA has found that Web-based application development is substantially less expensive than traditional client/server or mainframe-based application development. One of the reasons why Web-based development is less expensive is that Web-basing applications allows DCMA to productively adapt large amounts of open source software packages with minimal or even zero acquisition and support costs. Also, this allows Military Services to achieve their desired real-time supply chain information "Reachback" capabilities that will extend all the way onto the factory floors where parts, components, and systems are being produced. All metrics tied to the funds in this exhibit have achieved a "green" status. DCMA is planning to develop non-proprietary solutions to replace commercial software that will reduce the overall infrastructure costs for COTS related tools. The testing and support of cyber systems mandates to reduce the impact on day-to-day operations and the development of enterprise level identity and access management solutions remains a key priority for the coming years.			
FY 2011 Accomplishments:  DCMA developed and tested the Electronic Integrated Tool Set (EITS) that will provide a baseline supplier capabilities assessment architecture and operating concept to assemble timely, accurate, predictive, and actionable business information, while allowing visibility into contractor capabilities across the DoD Acquisition Enterprise; provided testing support for the new releases of the Wide Area Workflow (WAWF), and the Electronic Data Information (EDI) system; developed the Contractor Business Analysis Repository (CBAR) that will ensure customers are provided with real-time information on rates, business systems, and reportable audits; and lastly DCMA laid the groundwork for the Learned Management System (LMS) that will assist in building critical acquisition competencies.			
FY 2012 Plans:  DCMA will continue to: evolve EITS functionality to focus on the development and integration of related enterprise tool solutions and data sources which increase the depth of supply chain assessment, increase automation, and therefore enhance the accuracy and efficiency of these assessment products while providing access to external customer users; enhance the functionality of the Contractor Business Analysis Repository (CBAR); fully develop the Learned Management System (LMS); develop agency level Performance Indicators to assess the contract management performance. Also, DCMA is planning to			

PE 0605013BL: *Information Technology Development* Defense Contract Management Agency

UNCLASSIFIED
Page 4 of 8

R-1 Line #123

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Contract	ct Management Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605013BL: Information Technology	01: System	s Modifications and Development

Development

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) FY 2011 FY 2012 FY 2013 develop solutions for enterprise actionable data in a mobile environment; and explore the use of Virtual Desktop Interface (VDI) for day-to-day operations that will support the mobility of the Agency. A major focus for DCMA in the next few years is the research and development of an enterprise records management system that will replace the Electronic Document Workflow System (EDW). FY 2013 Plans: DCMA will continue to: evolve EITS functionality to focus on the development and integration of related enterprise tool solutions and data sources which increase the depth of supply chain assessment, increase automation, and therefore enhance the accuracy and efficiency of these assessment products while providing access to external customer users; enhance the functionality of the Contractor Business Analysis Repository (CBAR); fully develop the Learned Management System (LMS); develop agency level Performance Indicators to assess the contract management performance. Also, DCMA is planning to develop solutions for enterprise actionable data in a mobile environment; and explore the use of Virtual Desktop Interface (VDI) for day-to-day operations that will support the mobility of the Agency. A major focus for DCMA in the next few years is the research and development of an enterprise records management system that will replace the Electronic Document Workflow System

## C. Other Program Funding Summary (\$ in Millions)

BA 5: Development & Demonstration (SDD)

		•	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
Line Item	<b>FY 2011</b>	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
0701113BL: PDW: Procurement	2.041	2.076	2.129		2.129	2.172	2.218	2.263	2.331	Continuing	Continuing
Operations											
• 0701113 BL: O&M: Procurement	138.337	103.905	120.483		120.483	119.625	120.944	121.937	123.000	Continuing	Continuing
Operations											

## D. Acquisition Strategy

Contractors are utilized to perform specialized functions such as software development and testing. A number of mini-competitions are held with Federal Supply Schedule, Government Wide Acquisition Contracts, and DCMA Basic Purchasing Agreement Vendors.

#### E. Performance Metrics

N/A

(EDW).

PE 0605013BL: *Information Technology Development* Defense Contract Management Agency

UNCLASSIFIED
Page 5 of 8

R-1 Line #123

**Accomplishments/Planned Programs Subtotals** 

11.826

12.228

12.699

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Contract Management Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

PE 0605013BL: Information Technology

Development

01: Systems Modifications and Development

**DATE:** February 2012

<b>Product Development</b>	(\$ in Millio	ns)		FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	C/Various	TBD:TBD	84.331	12.228		12.699		-		12.699	Continuing	Continuing	N/A
		Subtotal	84.331	12.228		12.699		-		12.699			
			Total Prior Years Cost		2012	FY 2 Ba			2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	84.331	12.228		12.699		-		12.699			

#### Remarks

DCMA Information Technology covers those efforts associated with the development of DCMA-unique mission software applications. DCMA will issue several contracts to continue DCMA's development and improvement of its unique mission applications to improve its contract management workforce's productivity, efficiency, and effectiveness.

PE 0605013BL: *Information Technology Development* Defense Contract Management Agency

UNCLASSIFIED
Page 6 of 8

R-1 Line #123

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Contract Management Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**DATE:** February 2012 **PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

PE 0605013BL: Information Technology Development

01: Systems Modifications and Development

		FY:	2011			FY :	2012	2		FΥ	2013	3		FY:	2014	Ļ		FY 2	201	5		FΥ	201	6		FY 2	2017	7
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	
Phase VII - Development										,			,										·	·		,		
Phase VII -Testing																												_
Phase VII - Deployment																												
Phase VIII - Development																												_
Phase VIII - Testing																												_
Phase VIII - Deployment																												_
Phase IX - Development																												_
Phase IX - Testing																												
Phase IX - Deployment																												
Phase X - Development																												_
Phase X - Testing																	Ī											_
Phase X - Deployment																												
Phase XI - Development																												_
Phase XI - Testing																												_
Phase XI - Deployment																												
Phase XII - Development																												_
Phase XII - Testing																												
Phase XII - Deployment																												_
Phase XIII - Development																			-					-				Ī
Phase XIII - Testing																												Ī
Phase XIII - Deployment																												ī

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Contract Management Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605013BL: Information Technology

Development

**PROJECT** 

01: Systems Modifications and Development

**DATE:** February 2012

### Schedule Details

	Sta	art	E	nd
Events	Quarter	Year	Quarter	Year
Phase VII - Development	1	2011	3	2011
Phase VII -Testing	2	2011	4	2011
Phase VII - Deployment	4	2011	4	2011
Phase VIII - Development	1	2012	3	2012
Phase VIII - Testing	2	2012	4	2012
Phase VIII - Deployment	4	2012	4	2012
Phase IX - Development	1	2013	3	2013
Phase IX - Testing	2	2013	4	2013
Phase IX - Deployment	4	2013	4	2013
Phase X - Development	1	2014	3	2014
Phase X - Testing	2	2014	4	2014
Phase X - Deployment	4	2014	4	2014
Phase XI - Development	1	2015	3	2015
Phase XI - Testing	2	2015	4	2015
Phase XI - Deployment	4	2015	4	2015
Phase XII - Development	1	2016	3	2016
Phase XII - Testing	2	2016	4	2016
Phase XII - Deployment	4	2016	4	2016
Phase XIII - Development	1	2017	3	2017
Phase XIII - Testing	2	2017	4	2017
Phase XIII - Deployment	4	2017	4	2017

# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



# **DoD Human Resources Activity**

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



DoD Human Resources Activity • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 -	23
Program Element Table of Contents (by Budget Activity then Line Item Number)	.Volume 5 -	33
Program Element Table of Contents (Alphabetically by Program Element Title)	.Volume 5 -	35
Exhibit R-2's	Volume 5 -	37



#### Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Research, Development, Test & Eval, DW	78,712	63,654		63,654
Total Research, Development, Test & Evaluation	78,712	63,654		63,654

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Research, Development, Test & Eval, DW	28,946		28,946
Total Research, Development, Test & Evaluation	28,946		28,946

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Advanced Technology Development (ATD)	13,915	13,579		13,579
System Development and Demonstration (SDD)	389	389		389
RDT&E Management Support	64,408	49,686		49,686
Total Research, Development, Test & Evaluation	78,712	63,654		63,654
Summary Recap of FYDP Programs				
Research and Development	78,712	63,654		63,654
Total Research, Development, Test & Evaluation	78,712	63,654		63,654

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 FY 2013 OCO Total
Advanced Technology Development (ATD)	12,195	12,195
System Development and Demonstration (SDD)	387	387
RDT&E Management Support	16,364	16,364
Total Research, Development, Test & Evaluation	28,946	28,946
Summary Recap of FYDP Programs		
Research and Development	28,946	28,946
Total Research, Development, Test & Evaluation	28,946	28,946

# Defense-Wide

#### FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

FY 2012 FY 2012 FY 2012 Base OCO Total FY 2011 Actuals Summary Recap of Budget Activities 13,579 13,579 13,915 Advanced Technology Development (ATD) 389 389 System Development and Demonstration (SDD) 49,686 49,686 64,408 RDT&E Management Support 63,654 78,712 63,654 Total Research, Development, Test & Evaluation Summary Recap of FYDP Programs

R-1C: FY 2013 President's Budget (Published Version), as of February 3, 2012 at 12:21:33

Research and Development

Total Research, Development, Test & Evaluation

Page D Volume 5 - 27

03 Feb 2012

63,654

63,654

63,654

63,654

78,712

78,712

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 FY 2013 OCO Total
Advanced Technology Development (ATD)	12,195	12,195
System Development and Demonstration (SDD)	387	387
RDT&E Management Support	16,364	16,364
Total Research, Development, Test & Evaluation	28,946	28,946
Summary Recap of FYDP Programs		
Research and Development	28,946	28,946
Total Research, Development, Test & Evaluation	28,946	28,946

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Defense Human Resources Activity	78,712	63,654		63,654
Total Research, Development, Test & Evaluation	78,712	63,654		63,654

#### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation	FY 2013 Base	FY 2013 FY 2013 OCO Total
Defense Human Resources Activity	28,946	28,946
Total Research, Development, Test & Evaluation	28,946	28,946

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program			PH 0011	FIX 2012	FY 2012	FY 2012	s e
Line	Element			FY 2011	FY 2012			
No	Number	Item	Act	Actuals	Base	oco	Total	C
								-
58	0603769SE	Distributed Learning Advanced Technology Development	03	13,915	13,579		13,579	U
	Advan	ced Technology Development (ATD)		13,915	13,579		13,579	
125	0605021SE	Homeland Personnel Security Initiative	05	389	389		389	U
	Syste	m Development and Demonstration (SDD)		389	389		389	
163	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	64,408	49,686		49,686	U
11757000								
	RDT&E	Management Support		64,408	49,686		49,686	
Tota	l Research,	Development, Test & Eval, DW		78,712	63,654		63,654	

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Feb 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program						S
Line	Element			FY 2013	FY 2013	FY 2013	е
No	Number	Item	Act	Base	oco	Total	C
							7
58	0603769SE	Distributed Learning Advanced Technology Development	03	12,195		12,195	U
	Advar	nced Technology Development (ATD)		12,195		12,195	
125	0605021SE	Homeland Personnel Security Initiative	05	387		387	U
	Syste	em Development and Demonstration (SDD)		387		387	
163	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	16,364		16,364	U
	RDT&F	Management Support		16,364		16,364	
-	• 1 • • • • • • • • • • • • • • • • • •						
Tota.	Research,	Development, Test & Eval, DW		28,946		28,946	

DoD Human Resources Activity • President's Budget Submission FY 2013 • RDT&E Program

## **Program Element Table of Contents (by Budget Activity then Line Item Number)**

Budget Activity 03: Advanced Technology Development (ATD)

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
58	03	0603769SE	Distributed Learning Advanced Technology Development (ADL)	Volume 5 - 37

Budget Activity 05: Development & Demonstration (SDD)

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
125	05	0605021SE	FY 2013 Homeland Personnel Security Directive (HSPD-12) Initiative	Volume 5 - 41

Budget Activity 06: RDT&E Management Support

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	/ Program Element Number	Program Element Title	Page
163	06	0605803SE	R&D in Support of DOD Enlistment, Testing and EvaluationVo	olume 5 - 45



DoD Human Resources Activity • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Distributed Learning Advanced Technology Development (ADL)	0603769SE	58	03Volume 5 - 37
FY 2013 Homeland Personnel Security Directive (HSPD-12) Initiative	0605021SE	125	05Volume 5 - 41
R&D in Support of DOD Enlistment, Testing and Evaluation	0605803SE	163	06Volume 5 - 45



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 DoD Human Resources Activity

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 3: Advanced Technology Development (ATD)

PE 0603769SE: Distributed Learning Advanced Technology Development (ADL)

**DATE:** February 2012

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	13.915	13.579	12.195	-	12.195	12.116	12.090	12.303	12.303	Continuing	Continuing
Project 1: Advanced Distributed Learning	13.915	13.579	12.195	-	12.195	12.116	12.090	12.303	12.303	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Department of Defense Human Resources Activity (DHRA) is a DoD-wide Field Activity chartered to support the Under Secretary of Defense for Personnel and Readiness (USD (P&R)).

Advanced Distributed Learning (ADL) Initiative: This program develops the technologies to make learning and performance support available to service members, anytime, anywhere. The ADL concept enables the ability to migrate online learning content to multiple hardware and software applications using the Sharable Content Object Reference Model (SCORM®) standard. It has become the defacto standard and is moving through international bodies for global accreditation; its use is mandatory throughout the Department of Defense (DoD) through (Instruction1322.26). The program develops and maintains US and international partnerships with public education, vocational training, and lifelong learning programs. Policy oversight is managed by the Office of the Deputy Assistant Secretary of Defense/Readiness (Training Readiness and Strategy). Current research is on an advanced concept for the purpose of development of a Personal Learning Assistant (PLA) that will provide training and learning to promote adaptability and agility in the workforce with the capability to tailor and adapt instructional material to fit the learners' strength and weaknesses, learning style, and level of proficiency.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	13.986	13.579	-	-	-
Current President's Budget	13.915	13.579	12.195	-	12.195
Total Adjustments	-0.071	-	12.195	-	12.195
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-0.071	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Changed to add FY 2013 Baseline	-	-	12.195	-	12.195

PE 0603769SE: Distributed Learning Advanced Technology Developme...

DoD Human Resources Activity

UNCLASSIFIED
Page 1 of 3

R-1 Line #58

Exhibit R-2A, RDT&E Project Just	ification: PE	2013 DoD I	Human Res	sources Activity				DATE: February 2012			
				R-1 ITEM NOMENCLATURE PE 0603769SE: Distributed Learning Advanced Technology Development (ADL)				PROJECT Project 1: Advanced Distributed Learning			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Project 1: Advanced Distributed Learning	13.915	13.579	12.195	-	12.195	12.116	12.090	12.303	12.303	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Department of Defense Human Resources Activity (DHRA) is a DoD-wide Field Activity chartered to support the Under Secretary of Defense for Personnel and Readiness (USD (P&R)).

Advanced Distributed Learning (ADL) Initiative: This program develops the technologies to make learning and performance support available to service members, anytime, anywhere. The ADL concept enables the ability to migrate online learning content to multiple hardware and software applications using the Sharable Content Object Reference Model (SCORM®) standard. It has become the defacto standard and is moving through international bodies for global accreditation; its use is mandatory throughout the Department of Defense (DoD) through (Instruction1322.26). The program develops and maintains US and international partnerships with public education, vocational training, and lifelong learning programs. Policy oversight is managed by the Office of the Deputy Assistant Secretary of Defense/Readiness (Training Readiness and Strategy). Current research is on an advanced concept for the purpose of development of a Personal Learning Assistant (PLA) that will provide training and learning to promote adaptability and agility in the workforce with the capability to tailor and adapt instructional material to fit the learners' strength and weaknesses, learning style, and level of proficiency.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Advanced Distributed Learning	13.915	13.579	12.195	
<b>Description:</b> Research, develop and deploy new learning technologies with the ability to emulate an expert personal trainer/ coach, capable of learning about an individual, taking into account individual differences (prior knowledge, ability, learning rates, working memory, etc), sensing their learning state (e.g., attention, fatigue), and tracking and monitoring their learning throughout their life—adapting course material in a manner best suited for the individual.				
<ul> <li>FY 2011 Accomplishments:</li> <li>Published research articles in leading professional journals on the effectiveness of online learning compared to classroom training</li> <li>Tested advanced instructional methods using intelligent tutors for training Horn-of-Africa scenarios at the Joint Forces Command.</li> <li>Completed specifications for bridging technical publications to the SCORM model</li> </ul>				
FY 2012 Plans: • Publish research articles in leading professional journals on the effectiveness of online learning compared to classroom training;				

PE 0603769SE: Distributed Learning Advanced Technology Developme...

DoD Human Resources Activity

UNCLASSIFIED

Volume 5 - 38

R-1 Line #58

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Res	ources Activity		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603769SE: Distributed Learning Advanced	Project 1: A	dvanced Distributed Learning
BA 3: Advanced Technology Development (ATD)	Technology Development (ADL)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Research new learning technologies for possible integration into DoD educational and training programs to include the			
ergonomic integration of less-invasive, human-computer devices within a training environment and structured learning content			
schemas and transformation technologies that can modularize content, enhance semantic understanding, and improve the			
prospects for reuse;			
Test advanced instructional methods using intelligent tutors for training;			
Establish advanced concept research and prototypes for the Next Generation SCORM standard.			
FY 2013 Plans:			
• Research new learning technologies for possible integration into DoD educational and training programs to include innovative methodologies and approaches to using Social Networking for solving problems in collaborative, disparate environments in a manner that improves learning outcomes and demonstrate the application of the spacing effect using current mobile technologies			
to reinforce learning and improve long-term retention.			
Continue to test advanced instructional methods for intelligent tutors for training;			
Continue research on advanced concept research on the next generation learning environment.			
Accomplishments/Planned Programs Subtotals	13.915	13.579	12.195

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Not Required.

#### **E. Performance Metrics**

In FY2013, conduct research for the purpose of exploring the application of new and emerging educational and training technologies for development of a capability by which learners have access to effective, personalized learning content and/or job performance aids that are presented in a format suitable for their preferences and can be accessed from multiple devices/platforms. Prototype an Intelligent Tutor to assess the validity, scalability, exportability and affordability of DARPA's "Education Dominance" program incorporating the processes utilized for Education Dominance and generalize them into mathematics to be applied to DoDEA schools curriculum with the intent to determine the utilization of this technology across DoD and as a step toward the more comprehensive PLA. Metrics include, but are not limited to; Scalability, Generalizability, and Affordability as defined below:

- Scalability Usable across the Department of Defense (DoD) and other federal agencies.
- Generalizability Built on a framework that can be used as a basis to provide this capability for any topic.
- Affordability Reasonably priced solution to enable wide spread use.

PE 0603769SE: Distributed Learning Advanced Technology Developme...
DoD Human Resources Activity

**UNCLASSIFIED** 

Page 3 of 3 R-1 Line #58



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 DoD Human Resources Activity

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605021SE: FY 2013 Homeland Personnel Security Directive (HSPD-12) Initiative

**DATE:** February 2012

BA 5: Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.389	0.389	0.387	-	0.387	0.386	0.386	0.393	0.393	Continuing	Continuing
Project 1: Defense Enrollment Eligibility Reporting System	0.389	0.389	0.387	-	0.387	0.386	0.386	0.393	0.393	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Department of Defense Human Resources Activity (DHRA) is a DoD-wide Field Activity chartered to support the Under Secretary of Defense for Personnel and Readiness (USD (P&R)). HSPD-12 requires rapid electronic authentication for all Government employees, uniformed individuals and contractors. The Defense Enrollment and Eligibility System will provide Enterprise capability for the cardholder data repository, common Access interface to multiple types of Access control hardware, common Access software, the ability to control Access to multiple facilities through one authoritative data source, and provide the standards and data to/form and power efficient gates. Implement Enterprise Access control data for the DoD while providing standards and reducing redundancy. RDT&E funding will be expended to develop the secure interfaces necessary to work with the FBI and first responders for Enterprise authentication. Many systems support different aspects of electronic authentication across the Department. RDT&E will allow for the pursuit of a potential solution that will interface disparate applications/systems. This will increase Government efficiency by rapidly verifying electronically the identity of an individual and can be used by many applications, reduce identity fraud, protect privacy by limiting information stored, and increase privacy processes to maintain Access controls, thereby facilitating identification of first responders

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	0.391	0.389	-	-	-
Current President's Budget	0.389	0.389	0.387	-	0.387
Total Adjustments	-0.002	-	0.387	-	0.387
Congressional General Reductions	_	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-0.002	-			
Congressional Adds	_	-			
Congressional Directed Transfers	_	-			
Reprogrammings	_	-			
SBIR/STTR Transfer	_	-			
Changed to add FY 2013 Baseline	-	-	0.387	-	0.387

PE 0605021SE: FY 2013 Homeland Personnel Security Directive (HSP... DoD Human Resources Activity

Page 1 of 3

R-1 Line #125

Exhibit R-2A, RDT&E Project Just	stification: PE	3 2013 DoD	Human Res	esources Activity					<b>DATE</b> : February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0605021SE: FY 2013 Homeland Personnel Security Directive (HSPD-12) Initiative				PROJECT Project 1: Defense Enrollment Eligibility Reporting System			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Project 1: Defense Enrollment Eligibility Reporting System	0.389	0.389	0.387	-	0.387	0.386	0.386	0.393	0.393	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

B Accomplishments/Planned Programs (\$ in Millions)

The Department of Defense Human Resources Activity (DHRA) is a DoD-wide Field Activity chartered to support the Under Secretary of Defense for Personnel and Readiness (USD (P&R)). HSPD-12 requires rapid electronic authentication for all Government employees, uniformed individuals and contractors. The Defense Enrollment and Eligibility System will provide Enterprise capability for the cardholder data repository, common Access interface to multiple types of Access control hardware, common Access software, the ability to control Access to multiple facilities through one authoritative data source, and provide the standards and data to/ form and power efficient gates. Implement Enterprise Access control data for the DoD while providing standards and reducing redundancy. RDT&E funding will be expended to develop the secure interfaces necessary to work with the FBI and first responders for Enterprise authentication. Many systems support different aspects of electronic authentication across the Department. RDT&E will allow for the pursuit of a potential solution that will interface disparate applications/systems. This will increase Government efficiency by rapidly verifying electronically the identity of an individual and can be used by many applications, reduce identity fraud, protect privacy by limiting information stored, and increase privacy processes to maintain Access controls, thereby facilitating identification of first responders.

b. Accomplishments/Flaimed Frograms (\$ in Millions)	FY 2011	F1 2012	FY 2013
Title: Defense Enrollment Eligibility Reporting System/HSPD-12	0.389	0.389	0.387
<b>Description:</b> The Department of Defense Human Resources Activity (DHRA) is a DoD-wide Field Activity chartered to support the Under Secretary of Defense for Personnel and Readiness (USD (P&R)). HSPD-12 requires rapid electronic authentication for all Government employees, uniformed individuals and contractors.			
FY 2011 Accomplishments: Continued research and development of: Provided security personnel notices on persons of interest attempting to Access facilities and increased personnel protection and policy compliance Provided immediate authentication of emergency essential personnel Provided an interface among disparate applications/systems across the DoD			
FY 2012 Plans: Continue research and development of: Providing security personnel notices on persons of interest attempting to Access facilities and increased personnel protection and policy compliance Providing immediate authentication of emergency essential personnel			

PE 0605021SE: FY 2013 Homeland Personnel Security Directive (HSP... DoD Human Resources Activity

UNCLASSIFIED

R-1 Line #125

EV 2011

EV 2012

EV 2012

	······································				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide	PROJECT	Defense En	rollment Eligi	ibilitv	
BA 5: Development & Demonstration (SDD)	PE 0605021SE: FY 2013 Homeland Personnel Security Directive (HSPD-12) Initiative	Reporting System			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Providing an interface among disparate applications/systems across					
FY 2013 Plans:					
Continue research and development of:					
• Providing security personnel notices on persons of interest attempting	ng to Access facilities and increased personnel prote	ection			
and policy compliance					
• Providing immediate authentication of emergency essential personn	el				

**Accomplishments/Planned Programs Subtotals** 

# C. Other Program Funding Summary (\$ in Millions)

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Resources Activity

N/A

#### D. Acquisition Strategy

Existing contract vehicles in place/GSA for COTS.

#### **E. Performance Metrics**

None

PE 0605021SE: FY 2013 Homeland Personnel Security Directive (HSP... DoD Human Resources Activity

UNCLASSIFIED
Page 3 of 3

R-1 Line #125

Volume 5 - 43

**DATE:** February 2012

0.389

0.389

0.387



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 DoD Human Resources Activity

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation

**DATE:** February 2012

BA 6: RDT&E Management Support

<u> </u>											
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	64.408	49.686	16.364	-	16.364	6.908	6.195	5.788	6.066	Continuing	Continuing
Project 1 : Joint Service Training & Readiness System Development	4.264	4.165	-	-	-	-	-	-	-	Continuing	Continuing
Project 2: Defense Training Resource Analysis	3.403	3.311	-	-	-	-	-	-	-	Continuing	Continuing
Project 3: DoD Enlistment Processing & Testing	2.077	2.030	1.054	-	1.054	0.381	0.807	1.235	1.261	Continuing	Continuing
Project 4: Federal Voting Assistance Program	38.845	27.032	9.692	-	9.692	-	-	-	-	Continuing	Continuing
Project 5: Human Resources Automation Enhancements	8.855	6.772	1.312	-	1.312	2.831	2.833	1.868	2.873	Continuing	Continuing
Project 6: Sexual Assault Prevention and Response Office	6.964	4.980	-	-	-	-	-	-	-	Continuing	Continuing
Project 7: Global Force Mgmt Data Initiative	-	1.396	0.608	-	0.608	-	-	-	-	Continuing	Continuing
Project 8: NEO Tracking System	-	-	0.761	-	0.761	0.759	0.629	0.758	-	Continuing	Continuing
Project 9: Synchronized Predeployment & Operational Tracker Enterprise Suite	-	-	2.937	-	2.937	2.937	1.926	1.927	1.932	Continuing	Continuing

# A. Mission Description and Budget Item Justification

The Department of Defense Human Resources Activity (DHRA) is a DoD-wide Field Activity chartered to support the Under Secretary of Defense for Personnel and Readiness (USD (P&R)). This PE includes application of R&D to expedite prototype development and mission support efforts to sustain and/or modernize operations required for general RDT&E.

Project 1: Joint Service Training & Readiness System Development. Established by the Secretary of Defense to improve the training and readiness of the Active and Reserve Components. This program expedites the prototype development of new training and readiness technologies and Joint Service Training and Readiness systems, which improve training and readiness effectiveness and enhance military forces' performance. It also facilitates the sharing of training and readiness information, while allowing for the transfer of emerging and innovative technologies among the Services and the private sector. Efforts have included: development of mission essential tasks; design, development, and implementation of performance metrics, data, and methodologies for the Joint Assessment and Enabling Capability

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED

Page 1 of 27 R-1 Line #163

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 DoD Human Resources Activity

**R-1 ITEM NOMENCLATURE** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation

BA 6: RDT&E Management Support

APPROPRIATION/BUDGET ACTIVITY

to guide Training Transformation and support the Department's balanced scorecard and Defense Readiness Reporting System; identified and defined joint urban training requirements identified methods to conduct effective joint training and determined best means to develop simulations, military construction, and other urban training facilities that meet Service, joint, and fiscal demands and requirements; developed joint training regimen requirements and investments ranging from the joint strategic level down to the joint tactical level for joint asymmetric warfare; and developed a joint stability and support operations training roadmap and investment plan for operations other than war including peace enforcement, peacekeeping, and humanitarian assistance.

Project 2: The Defense Training Resources Analysis. This project supports DHRA and DoD training managers (OSD, Joint Staff, Unified Commands, and the Services) in promoting more efficient and effective use of training resources, increasing the effectiveness of military training, and enhancing the readiness and performance of the military forces. Projects analyze the contributions to readiness of various training techniques and programs and use the results to expedite new training concepts and procedures that increase unit effectiveness or decrease costs. Emphasis is placed on developing analytical tools and systematic methodologies to improve training resource allocations.

Project 3: DoD Enlistment Processing and Testing. The project administers testing programs, which enable the Armed Services to select highly qualified military recruits. The DoD uses a single test, the Armed Services Vocational Aptitude Battery (ASVAB), to determine eligibility of military applicants and to report recruit quality data to Congress. High quality recruits are obtained from administering the ASVAB annually to approximately 600,000 applicants for Military Service as part of the DoD Enlistment Testing program, and to 1 million students in the DoD Student Testing program. Each Service also uses ASVAB test forms developed in this program as part of their in-service testing programs. New ASVAB test forms and related support materials are implemented approximately every four years. This allows DoD to make measurement improvements as well as decrease the likelihood of test compromise. Ongoing RDT&E efforts include development and evaluation of procedures which (1) reduce or eliminate threats to the validity of the ASVAB test scores generated; (2) improve the efficiency of the test development, calibration, and validation process; and (3) improve selection and classification decisions made by each Service through more effective use of test score information. In addition, periodic assessments are required to provide DoD manpower planners and Congress with information on aptitude trends in the population from which recruits are drawn.

Project 4: Federal Voting Assistance Program. Given the agile planning and deployment flexibilities required in as dynamic a RDT&E environment as internet voting, the FY 2013 execution plan will be significantly influenced by the results of the FY2011 and FY2012 research, development, and evaluation results. However, current plans are to initiate the first two phases of the internet voting demonstration competition challenge:

o Phase I of Internet Voting Competition Challenge: In the first phase submissions will focus on defining security, reliability, usability, and accountability requirements for internet voting systems. Submissions will be open to the public, and will be open to public critique. FVAP will review those submissions and critiques, and then consolidate them into a single set of requirements for Phase II.

o Phase II of Internet Voting Competition Challenge: In this phase, submission will provide high level designs and detailed hardware and software architectures, along with procedures necessary for secure operation. Submissions will be sufficiently detailed so that a reasonably skilled information technologist could implement the system to allow for broader peer review. However, many details such as user interfaces and database layouts will be likely be undefined. As with the first phase, submissions will be open for critique. In this phase critiques will focus on identifying areas where designs do not meet the requirements defined in the first phase.

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 2 of 27

R-1 Line #163

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 DoD Human Resources Activity

**DATE**: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation

BA 6: RDT&E Management Support

The result may be modification of architectures to incorporate ideas from several teams. At the conclusion of this phase, the Department will narrow down the set of acceptable architectures.

o Conformance Testing to EAC Pilot Program Requirements for Kiosk Systems Used in a 2014 Election: To support the testing of internet voting systems from monitored kiosk test platform (where the ballots of record are printed out and delivered to jurisdictions like other absentee ballots, but the same ballot is delivered electronically to the election jurisdiction for comparison to the paper ballot of record), the Department will test conformance of selected systems to the EAC Pilot Program Testing Requirements. Again, in 2014, the pilot effort will be limited to military voters at domestic US locations.

Project 5: Civilian HR automation enhancements planned for FY 2012 and FY 2013 are focused on software development to support the Department's civilian workforce, including readiness requirements for the development of automation for an expeditionary civilian workforce; an SES-focused performance management system; development of interfaces with the Defense Civilian Personnel Data System (DCPDS) and other civilian HR systems to fully expand the Enterprise Staffing Solution; development of DCPDS interfaces with Office of Personnel Management (OPM) initiative mandates for HR Line of Business (LoB), electronic Official Personnel Folder, Retirement Systems Modernization implementation, and HR Line of Business. DoD is one of five designated Shared Service Centers in the federal government focused on providing standard services across agency lines, gaining potential significant business and cost-saving benefits. DoD is considered a leader in this initiative. Continues the conversion of employees back to other personnel systems as mandated in NDAA 2010 and designs new flexibilities to include, but not limited to the establishment of policies and procedures for a new Performance Management System, a redesigned hiring process adhering to veterans' preference requirements, a "Department of Defense Civilian Workforce Incentive fund", and a Mandatory Training and Retraining Program for Supervisors. DCPDS is the Department's enterprise civilian HR system that has provided the savings originally projected in the achievement of full operational capability in 2002 and which has continued to operate as the DoD system serving over 800,000 employee records. Additional initiatives to sustain the Department's lead in automated systems to include, expansion of employee self service functionality, and systems to support civilian HR operations to a single operational site, with linkage to Component operations worldwide.

Project 6: The integrated DoD SAPR Data Collection and Reporting System (Defense Sexual Assault Incident Database (DSAID)) must accommodate a variety of uses, including the tracking of sexual assault victim support services, support SAPR program administration, program reporting requirements, and data analysis. In order to facilitate analysis at the OSD level, the System should be able to easily export data for analysis in computerized statistical applications, such as Statistical Package for the Social Sciences (SPSS). Service field-level users may use the system to track support to victims of sexual assault throughout the lifecycle of that support requirement and to facilitate sexual assault case transfer between SARCs and Services. Service headquarters-level users will use the system to support program planning, analysis, and management. DoD SAPR Office (SAPRO) users and Service headquarters-level users will access the system to produce mandated and requested reports, monitor program effectiveness and support cohort and trend analysis. The Defense Sexual Assault Incident Database (DSAID) will support SAPR programs for all active duty and Reserve personnel, including National Guard (NG) Service members when on active duty or when performing active service and inactive duty training (as defined in Section (101)(d)(3) of Chapter 47 of title 10, United States Code) with the ability to expand to cover other DoD personnel as required. Additionally, system implementation at the state level will provide a new capability to manage SAPR programs for National Guard personnel under Title 32 USC. Implementation of this capability will be based on a state NG structure grouped according to state and subdivided into sexual assaults from the separate Army and Air National Guard. Full Deployment and Delivery (FDD) is scheduled for Q4 FY2012 as a result additional RDT&E funding will not be required after FY2012.

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 3 of 27

R-1 Line #163

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 DoD Human Resources Activity

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

R-1 ITEM NOMENCLATURE

PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation

BA 6: RDT&E Management Support

Project 7: Defense Manpower Data Center (DMDC) acts as the authoritative source for identity and personnel information for the DoD Net Centric Enterprise Computing vision of the Department of Defense's Global Information Grid (GIG 2.0). Based on the DEERS identities, DMDC provides the key attribute service for the Department of Defense (DoD) Identity and Access Management (IdAM) Capability. The Enterprise Identity Attribute Service (EIAS) supports IdAM through the distribution of DoD person and personnel attributes to applications and services in a controlled, consistent, and secure manner to support ABAC decisions. The controlled, authoritative information provided via EIAS can be used to confirm an individual's identity, affiliation to the DoD, clearance, pay grade/rank, organization and occupation series for an authorization decision. A key attribute for decision makers is organization. The Global Force Management Data Initiative (GFM\_DI) provides the unique organization identifier (OUID) in the EIAS payload. To meet the DoD demand for the OUID, DMDC working with J8 and the Service/Agencies has to 1) establish the linkage between a person (EDI\_PI) and the OUID, 2) provide the OUID attribute in the EIAS payload for access decisions, and 3) standardize the organizational attributes required to make access decisions.

Project 8: The Neo Tracking System (NTS) / Emergency Tracking Accountability System (ETAS) is a certified and accredited DoD automated system that accounts for, and sustains visibility of noncombatant evacuees during a NEO under the authority of DODD 1000.25, DoD Personnel Identity Protection (PIP) Program. NTS is currently being used in the USAFRICOM, USCENTCOM, USEUCOM, USSOUTHCOM, and USPACOM AORs. The ETAS component is the CONUS domestic version of NTS and is for use by USNORTHCOM during disasters in the CONUS whether natural, accidental, or acts of terrorism. The primary purpose of the NTS/ETAS is to provide individual accountability of the evacuee by creating and maintaining a database of evacuees assembled during an evacuation operation and subsequently tracking the evacuees' movement throughout the evacuation process.

Project 9: The Synchronized Pre-deployment and Operational Tracker Enterprise Suite (SPOT-ES) is the Department of Defense (DoD) system of record for accountability and visibility of contracts and contractor personnel authorized to operate in a contingency operation. SPOT-ES provides web based tracking and visibility into contract services, personnel and equipment locations; provides a common operational picture for Combatant Commanders; enhances the analytical tools to accurately plan for the quantity of contracted support required for future contingency operations; and collects accurate data for the OMB-directed quarterly census of all contractors supporting contingency operations.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 DoD Human Resources Activity

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation

BA 6: RDT&E Management Support

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	64.737	49.810	-	-	-
Current President's Budget	64.408	49.686	16.364	-	16.364
Total Adjustments	-0.329	-0.124	16.364	-	16.364
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-0.329	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-0.124			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-	-			
<ul> <li>Changed to add FY 2013 Baseline</li> </ul>	-	-	16.364	-	16.364

#### **Change Summary Explanation**

FY 2013, Project 1, Joint Service Training & Readiness System Development, and Project 2, Defense Training Resource Analysis was transfered to Washington Headquarter Services for proper execution.

Project 9, Synchronized Pre-deployment & Operational Tracker enterprise Suite (SPOT), was transferred to DHRA from DLA/BTA for proper execution.

Exhibit R-2A, RDT&E Project Just	nibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Resources Activity											
PPROPRIATION/BUDGET ACTIVITY 400: Research, Development, Test & Evaluation, Defense-Wide A 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation				PROJECT Project 1 : Joint Service Training & Readiness System Development				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
Project 1 : Joint Service Training & Readiness System Development	4.264	4.165	-	-	-	-	-	-	-	Continuing	Continuing	
Quantity of RDT&E Articles												

#### A. Mission Description and Budget Item Justification

R Accomplishments/Planned Programs (\$ in Millions)

The Joint Service programs were established by the Secretary of Defense to improve the training and readiness of the Active and Reserve Components. This project expedites the prototype development of new training and readiness technologies and Joint Service training and readiness systems, which improve the training and readiness effectiveness and enhance the performance of the military forces. It also facilitates the sharing of training and readiness information, while allowing for the transfer of emerging and innovative technologies among the Services and private sector. Efforts have included: development of mission essential tasks; design, development, and implementation of performance metrics, data, and methodologies for the Joint Assessment and Enabling Capability to guide Training Transformation and support the Department's balanced scorecard and Defense Readiness Reporting System; identified and defined joint urban training requirements, identified methods to conduct effective joint training, and determined best means to develop simulations, military construction, and other urban training facilities that meet Service, joint, and fiscal demands and requirements; developed joint training regimen requirements and investments ranging from the joint strategic level down to the joint tactical level for joint asymmetric warfare; and developed a joint stability and support operations training roadmap and investment plan for operations other than war including peace enforcement, peacekeeping, and humanitarian assistance.

B. Accomplishments/Planned Programs (\$ in willions)	FY 2011	FY 2012	FY 2013
Title: Joint Service Training & Readiness System Development	4.264	4.165	-
Description: Joint Service Training & Readiness System Development			
<ul> <li>FY 2011 Accomplishments:</li> <li>Provided analyses on technical and scientific issues needed to develop a Common Framework for making education, training, and performance/decision aiding available on demand-anytime, anywhere-and tailored to the specific needs of individual learners, learning objectives, and environments.</li> <li>Provided support to the Joint Knowledge Development and Distribution Capability for ADL Prototype development in support of Joint Staff and Combatant Commanders.</li> <li>Provided analysis of current and emerging operational requirements of Combatant Commanders, Training Transformation Joint Management Office and other stake holders to identify major system improvement opportunities.</li> <li>Continued to develop mission essential tasks.</li> </ul>			
<ul> <li>Provided refinement of the DoD training strategy for the Services, combatant commands and Defense Agencies.</li> <li>Continued to assist in identifying and analyzing the specific benefits of early and effective incorporation of System Training (ST) details into acquisition programs, particularly those with significant human systems interface requirements.</li> </ul>			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human F	Resources Activity		DATE: Fel	bruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	PE 0605803SE: R&D in Support of DOD		<b>T</b> : Joint Service Training & Readin Development			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013	
<ul> <li>Continued to improve process model to assist in the integration of the Provided review analysis of the changing DoD training posture and resources and capabilities in the Western Pacific.</li> <li>Identified the spectrum of requirements the Army will need to addrest to improve the match between force design and future employment in Provided study on "Stress on the Force" identifying specialized capa Asymmetric Warfare (e.g. cyber) and Civil Support.</li> </ul>	requirements and their implications for future training so over the coming decade by identifying potential initied, within expected affordability constraints.					
<ul> <li>FY 2012 Plans:</li> <li>Provide an assessment and forecast of DOD logistics and material impacts that have occurred and will occur over the next five to ten yer.</li> <li>Continue to assess the current state of logistics/material readiness is logistical and material processes in DoD.</li> <li>Continue to support prototype development, assessment and application.</li> <li>Analyze estimated rates of personnel instability among unit leaders.</li> <li>Identify primary underlying causes of instability and assess potentia.</li> <li>Continue to develop Virtual Worlds (VW) technology to support Dep.</li> <li>Provide a VW Framework (VWF) which includes an overarching arc well as a VW Roadmap and Governance process to implement the V.</li> <li>Continue to develop strategies to combat "Stress on the Force"</li> <li>Continue to assess the ongoing requirement for Civil Affairs forces and offer recommendations on how to address potential training short</li> </ul>	ars. In the Department and track the performance of various ation of DoD's Knowledge Management Systems and hip. I effects of policies to mitigate instability partment of Defense (DoD) training. Shitecture encompassing a number of VW applications WF.  an compare the requirements to the planned future ca	Ports.				
FY 2013 Plans: Program will transfer to Washington Headquarter Services.						
	Accomplishments/Planned Programs Su	ubtotals	4.264	4.165	-	
C. Other Program Funding Summary (\$ in Millions)  N/A  D. Acquisition Strategy  NOT REQUIRED.						

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 7 of 27

R-1 Line #163

	UNCLASSIFIED	
Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human F	Resources Activity	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation	PROJECT Project 1 : Joint Service Training & Readines System Development
E. Performance Metrics  Each project contained within this program contains specific metrics analysis provided by the performer. The completion date for that an addressing the best use of the findings throughout the department. doctrine, tactics and procedures.	s to determine progress towards completion. Met alysis varies with each project. In addition, to that	rics for all include completed and documented t analysis, each effort contains a roadmap

Exhibit R-2A, RDT&E Project Jus		DATE: February 2012									
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Tes BA 6: RDT&E Management Suppo	R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation				PROJECT Project 2: Defense Training Resource Analysis						
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Project 2: Defense Training Resource Analysis	3.403	3.311	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

This project supports DHRA and DoD training managers (OSD, Joint Staff, Unified Commands, and the Services) in promoting more efficient and effective use of training resources, increasing the effectiveness of military training, and enhancing the readiness and performance of the military forces. Projects analyze the contributions to readiness of various training techniques and programs and use the results to expedite new training concepts and procedures that increase unit effectiveness or decrease costs. Emphasis is placed on developing analytical tools and systematic methodologies to improve training resource allocations.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Defense Training Resource Analysis	3.403	3.311	-
Description: Defense Training Resource Analysis			
FY 2011 Accomplishments:  Established updated DoD training strategy drafts for Services, combatant commands and Defense Agencies  Conducted several logistics and material readiness reviews  Developed strategies to hedge the risk of the occurrence of a major combat operation  Worked with Joint Forces Command (Joint Warfighting Center and Joint Unmanned Aircraft Center of Excellence), the Military Departments and other appropriate organizations, developing a results oriented training concept that addresses the effects of competition and airspace restrictions on training, the opportunities that ground units and UAS personnel have to train together in a joint environment, the maximization of the use of available assets and the use of simulation capabilities to enhance training.  Developed reserve component mobilization training strategies to increase personnel stability, particularly among unit leadership, during the last year before mobilization or entry into the availability pool.  Assessed the effect of enlistment incentives, including educational benefits, on prior and non-prior service reserve component recruiting, training and retention.  Assessed language, regional, and cultural capabilities and their relationship to unit readiness  Studied the drivers that effect time-to-readiness, in particular, the bottlenecks in the readiness generating process and provide a roadmap on how best to incorporate information about how long it will take a unit to be ready			

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 9 of 27

R-1 Line #163

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Res		DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide	R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD	PROJECT Project 2: Defense Training Resource Anal				
BA 6: RDT&E Management Support	Enlistment, Testing and Evaluation					
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013		
<ul> <li>Assessed and analyzed rates of victim satisfaction with the quality of c Sexual Assault Prevention and Response (SAPR) Program and to meas assault victims has positively impact readiness and retention</li> </ul>						
• Provide senior decision makers access to the readiness data for Non-Steployment by developing a roadmap and implementation plan to make Defense Readiness reporting System (DRRS) in compliance with Guida Continue to evaluate and develop potential improvements in the Requestion of the Reguest Readiness Readiness Reporting the Readiness Readiness Reporting System and identify the Defenses Readiness Reporting System and identify the Defenses Readiness Reporting Reporting Reporting Reporting Readiness Reporting System and identify the Defenses Readiness Reporting Readiness Readiness Reporting Readiness Reporting Readiness	oach for concept implementation. orts. has changed over time and the historic backgrour e changes for the future. gies. tion plans Standard forces (Ad Hoc/In-Lieu-Of) prior to their e certain that Non-Standard Forces are assessed ince for Employment of the Force (GEF). est for Forces (RFF) process as part of the Globa	in the				

# C. Other Program Funding Summary (\$ in Millions)

Program will transfer to Washington Headquarter Services

N/A

# D. Acquisition Strategy

NOT REQUIRED.

FY 2013 Plans:

#### **E. Performance Metrics**

Each project contained within this program contains specific metrics to determine progress towards completion. Metrics for all include completed and documented analysis provided by the performer. The completion date for that analysis varies with each project. In addition, to that analysis, each effort contains a roadmap addressing the best use of the findings throughout the department. If the results of the analysis show benefit to the Department, those findings are included in policy, doctrine, tactics and procedures.

**Accomplishments/Planned Programs Subtotals** 

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 10 of 27

R-1 Line #163

3.403

3.311

Exhibit R-2A, RD1&E Project Jus	xhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Resources Activity										
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support				PE 0605803SE: R&D in Support of DOD				PROJECT Project 3: DoD Enlistment Processing & Testing			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Project 3: DoD Enlistment Processing & Testing	2.077	2.030	1.054	-	1.054	0.381	0.807	1.235	1.261	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

Folibit D. O.A. DDTOF Ducing A localifications DD 0040 DoD House Document Activity

The primary mission of DoD Enlistment Processing and Testing is to test and implement more accurate methods of assessing aptitudes required for military enlistment, success in training, and performance on the job. Also, it includes implementing methods that are useful in the identification of persons with the high aptitudes required by today's smaller and technically more demanding military.

•			
Title: DoD Enlistment Processing & Testing	2.077	2.030	1.054
Description: DoD Enlistment Processing & Testing			
FY 2011 Accomplishments:			
DoD Enlistment Testing Program (ETP):			
Developed and evaluated procedures for the detection of test compromise			
Continued research on revising ASVAB content areas to ensure the test measures the necessary abilities			
Continued a research line on the use of multidimensional Computerized Adaptive Testing (CAT) item selection and scoring			
procedures			
Evaluated procedures for on-line calibration of multidimensional content areas using a uni dimensional mode			
Conducted analyses to investigate ASVAB adverse impact issues			
DoD Student Testing Program (STP):			
Revised the Career Exploration Program (CEP) Web Site to include career clusters and other enhancements			
Implemented new materials and published a new technical manual			
• Began a study to evaluate the use of proctored internet-based CAT-ASVAB in the nation's high schools and community colleges			
FY 2012 Plans:			
DoD Enlistment Testing Program (ETP):			
Implement procedures for the detection of test compromise			
Review and improve the test development process, particularly item writing and development			
Collect data on new measures that could potentially be added to the ASVAB			
Continue a research line on the use of multidimensional Computerized Adaptive Testing (CAT) item selection and scoring			
procedures			

DATE: Calamiam, 2012

FY 2011

FY 2012

FY 2013

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Res	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605803SE: R&D in Support of DOD	Project 3: I	DoD Enlistment Processing &
BA 6: RDT&E Management Support	Enlistment, Testing and Evaluation	Testing	
	•		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Evaluate the use of internet-based testing as a replacement for other types of testing			
DoD Student Testing Program (STP):			
Collect data and conduct item level analyses of the Find Your Interests inventory			
Conduct evaluations of the use of proctored internet-based CAT-ASVAB in the nation's high schools and community colleges			
FY 2013 Plans:			
DoD Enlistment Testing Program (ETP):			
Finalize and implement new procedures for test development			
Continue a research line on the use of multidimensional Computerized Adaptive Testing (CAT) item selection and scoring			
procedures			
Continue research on revisions to ASVAB content			
DoD Student Testing Program (STP):			
Evaluate methods to convert all STP to CAT			
Continue to evaluate the use of internet-based CAT-ASVAB in the CEP			
Accomplishments/Planned Programs Subtotals	2.077	2.030	1.054

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

NOT REQUIRED.

#### E. Performance Metrics

Each project contained within this program contains specific metrics to determine progress towards completion. Metrics for all include completed and documented analysis provided by the performer. The completion date for that analysis varies with each project. In addition, to that analysis, each effort contains a roadmap addressing the best use of the findings throughout the department. If the results of the analysis show benefit to the Department, those findings are included in policy, doctrine, tactics and procedures.

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 12 of 27

R-1 Line #163

**Volume 5 - 56** 

Exhibit R-2A, RDT&E Project Ju	ı <b>stification:</b> PE	3 2013 DoD	Human Res	ources Activ	ity				<b>DATE</b> : Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support								PROJECT Project 4: F	ederal Votin	g Assistance	: Program
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Project 4: Federal Voting Assistance Program	38.845	27.032	9.692	-	9.692	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

The Federal Voting Assistance Program (FVAP) exists to:

- o Assist military personnel, their dependents, and overseas Americans exercise their right to vote so that they have an equal opportunity with the general population to have their vote counted:
- o Assist the States in complying with relevant federal laws, and advise them on ways to best comply with those laws; and
- o Advocate on behalf of military and overseas voters, identifying impediments to their ability to exercise their right to vote, and proposing methods to overcome those impediments.

Further, the Department of Defense is legislatively mandated to develop and deploy an absentee voting system demonstration project in which military voters can cast their votes electronically in a general federal election. To develop that system, numerous preliminary and iterative steps are necessary, including online voter registration, online ballot delivery and marking, rigorous cyber security threat analysis and evaluation, and pre-deployment system testing.

These preliminary steps also directly support improved voter assistance by providing voters easier access to voting assistance resources, expediting the delivery of blank ballots, reducing errors in completing election forms and ballots, and providing better system and program evaluation data for more agile planning and execution, as well as to support mid-course corrections in achieving the final mandate of the electronic absentee voting demonstration project.

Given the inherent uncertainties in deploying an internet voting system five to seven years from now, the Department requires substantial flexibility in shifting two-year RDT& funds over different fiscal years, and in accelerating or decelerating execution rates, dependent upon the results of the intermediate programs which support future steps in the overall effort. For example, in August 2011, during a working group meeting with computer technology scientists and representatives of EAC and NIST, the idea of conducting iterative public competitions of internet voting systems, akin to a weapon system "fly-off," was adopted, and which provides the Department potential significant cost and time savings in deploying an internet voting system. But its discovery near the end of FY2011 also makes it very difficult to fit such program development into the rigid requirements of the budget cycle and the even more rigid requirements of State election cycles.

Congressional mandates also charge the Election Assistance Commission (EAC) (and through the Technical Guideline Development Committee, the National Institute of Standards and Technology (NIST)), with developing guidelines for the Department on such electronic absentee voting systems. FVAP, EAC and NIST are jointly developing these guidelines, supported by full public engagement with the computer science, military and overseas voting advocacy, and voting system development communities. This public outreach is crucial to designing electronic absentee voting systems which will be accepted as providing the same level of ballot access, security, privacy, and accountability as the current absentee voting systems provided military and overseas voters.

PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Eval... DoD Human Resources Activity

UNCLASSIFIED
Page 13 of 27

R-1 Line #163

**Volume 5 - 57** 

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human F	Resources Activity		DATE: Fel	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation	DOD Project 4: Federal Voting Assistance Project 4: Project 4: Federal Voting Assistance Project 4:			
Original FY 2013 FVAP budget estimates assumed a 2012 or 2014 guideline development does not support demonstration project depl		em demonsti	ration project.	However, sy	ystem and
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Title: Federal Voting Assistance Program			38.845	27.032	9.692
<b>Description:</b> Federal Voting Assistance Program Funding will suppo Officer (VAO) training and to develop a dynamic public web-site to far and voting system for use in the first general election after the release analysis, evaluation, test and support functions with the intent of support members, their dependents and overseas civilian voters to register at <b>FY 2011 Accomplishments:</b>	cilitate internet-based voter registration, ballot delive of guidelines. FVAP will conduct a variety of rese corting Wounded Warrior, disabled military membered vote successfully with a minimum amount of efforms.	ery arch, rs, military ort.			
o Online Ballot Delivery and Marking: For the November 2010 general marking wizard to allow military and overseas voters to receive and in than 500,000 military voters and almost 500,000 military dependent votability, complete with all federal, State, and local candidates, with all gave the voter the ability to download a ballot online, mark it online, a selections. The voter then printed out that ballot, with State specific consystems are the same as the front-end of what a voter would experied online process at the online marking of the ballot, and supports the probenefits by having online access to the ballot 45-days prior to the election official, which often takes upwards of 30 days.	nark, online, their absentee ballots. 20 States, cover voters, joined this effort. The voter received a precipation tests as they would see in the polling place. The and have the ballot automatically filled out with the votasting instruction and pre-addressed envelope. The nation of a full internet voting system. The wizard stop ostal return of a hard-copy, "wet" signature ballot. Totion, and not having to wait for the postal delivery	ering more nct level e system voter's lese os the The voter			
o Electronic Voting System Testing and Threat Analysis: FVAP docur system required additional testing standards against national-level the group threats was needed. The Google hacking case raises serious if as electronic absentee voting systems. The Department conducted V ballot delivery and full internet voting systems against the EAC's Augualso conducted penetration testing against these system using U.S. reguideline development using existing threat analysis capability to furthin variety of threat environments. Funds will also complete kiosk-based based voting systems), evaluation of those results, and support similar evaluate the particular security capabilities of electronic voting system System (DINS) using Common Access Cards (CAC) with Public Key 12 implementation.	reats, not just against non-governmental, individual ssues of national level threats against online system of the continuity of the contin	I or small ms, such ex online Department upport stems ote PC- lso etwork			

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human F	Resources Activity		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJEC	T		
0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation	'			e Program
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
o Wounded Warrior Voting Assistance Analysis: In 2010 and into 201 Office of Transition Care and Coordination (OTCC, i.e., "Wounded W Wounded Warriors, given their dislocation from the originally assigned disabilities suffered. This project tested and evaluated the effectivened based and the remote PC-based systems for disabled military person benign and threat environments, in order to support the current absert accountability for wounded, injured, and ill military personnel.	arrior") to evaluate the particular voting assistance d units, their frequent duty station transfers, and the ess of the two electronic absentee voting systems, anel. FVAP will leverage the testing for usability bo	e needs of ne unique the kiosk- th in			
o Overseas Civilian Demographic Count: UOCAVA requires the Depart of overseas civilian voters. However, it is impossible to estimate that voverseas civilian population. Further, the method of delivering voting based upon their geographic distribution. To date, estimates of this partnerfore, in 2011, FVAP working with the Department of State, the Egroups, developed a multiple data stream collection method which fee population counts of overseas Americans by country and municipality	without knowing the size and demographics of the assistance to these overseas voters will vary sign oppulation have varied widely, with little statistical Department of Treasury, and overseas citizen advided both regression and multiple imputation analysis	overall ificantly validity.			
o Computer Security Expert Outreach: In FY 10 and FY 11, FVAP engand local election officials to determine the best way forward on the e of this engagement, FVAP hosted a series of UOCAVA Solutions Surthis meeting, attendees recommended a competition for the development outstanding security questions surrounding the return of voted ballots	electronic absentee voting demonstration project. In main meetings, the most recent in August 2011. Expense of the demonstration project, which could add	As part Ouring			
FY 2012 Plans: Based on the results of the research and testing conducted in FY 10 attesting that will improve the assistance given to military and overseas local election officials in complying with the requirements of federal la overseas voters, and advocate for military and overseas voting rights	voters in exercising their right to vote, assist state w, and in providing equal voting opportunity for m	e and			
o Electronic Absentee Voting System Evaluation Grants to States: FV election jurisdictions to test various electronic absentee voting support (but not to include funding electronic transmission of voted ballots in a local jurisdictions awarded grants will provide extensive data on UOC feed future phases of pilot projects supporting the final demonstration	rt systems, across the range of the absentee voting a live election), for multiple election cycles. States AVA voter behavior and system performance in o	g process and rder to			

ACCOMPLIANCE REPORT AS EVALUATION. Defense-Wide Enlistment, Testing and Evaluation  Project 4: Federal Voting Assistance Programs (S. in Millions)  ACCOMPLIANCE Management Support  ACCOMPLIANCE Management Programs (S. in Millions)  ACCOMPLIANCE MANAGEMENT MILLIONS AND ACCOMPLIANCE MANAGEMENT MILLIONS MANAGEMENT MILLIONS MANAGEMENT MILLIONS MANAGEMENT		UNULASSII ILD				
Accomplishments/Planned Programs (\$ in Millions)  JOCAVA voters more opportunities to register to vote, request an absentee ballot, and receive and mark absentee ballots online. The Department will use FY2012 for a second round of grants, this time focusing on establishing automated and detailed data collection and reporting systems at the State and local level to provide FVAP and the EAC with better, timelier post-election data. Initiate a Multi-Track Electronic Absentee Voting Demonstration Project Plan: Currently, the EAC is not anticipating final calidation of its testable standards for an electronic absentee voting demonstration project until 2016, at the earliest. In order to accommodate the standards development, recommend full testing, as well as any remediation discovered along the way, the 2018 general electrion remains the most kely date for the full conduct of the internet voting demonstration project. Therefore, the Department will extend its deliverables und activities schedule to reflect 2018 deployments, which require funding through 2017. Given these delays, and the recent world community consensus with the open competition approach to developing his demonstration project system, FVAP revisited its prior single-track design and development schedule, and is now pursuing a simultaneous three-track approach:  The first track focuses kinds voting systems, to serve as a monitored test platform where the ballots of record are printed out and delivered to jurisdictions like other absentee ballots, but the same ballot is delivered electronically to the election jurisdiction or comparison to the paper ballot of record. This will allow the testing of electronic absentee ballot transmission security and eliability in a live election, without threatening the integrity of the election. In 2014, the pilot effort will be limited to military voters at domestic US locations. In 2016, the pilot will expand to overseas locations for military voters. These efforts will test various suspects of conducting a full in	Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human F	Resources Activity		DATE: Fe	bruary 2012	
JOCAVA voters more opportunities to register to vote, request an absentee ballot, and receive and mark absentee ballots online. The Department will use FY2012 for a second round of grants, this time focusing on establishing automated and detailed data collection and reporting systems at the State and local level to provide FVAP and the EAC with better, timelier post-election data.  Initiate a Multi-Track Electronic Absentee Voting Demonstration Project Plan: Currently, the EAC is not anticipating final validation of its testable standards for an electronic absentee voting demonstration project until 2014, which won't support the execution of such a demonstration project until 2016, at the earliest. In order to accommodate the standards development, vocurement and full testing, as well as any remediation discovered along the way, the 2018 general election remains the most kely date for the full conduct of the internet voting demonstration project. Therefore, the Department will extend its deliverables and activities schedule for effect 2018 deployments, which require funding through 2017. Given these delays, and the recent proad community consensus with the open competition approach to developing this demonstration project system, FVAP revisited is prior single-track design and development schedule, and is now pursuing a simultaneous three-track approach:  The first track focuses kiosk voting systems, to serve as a monitored test platform where the ballots of record are printed out and delivered to jurisdictions like other absentee ballots, but the same ballot is delivered electronically to the election jurisdiction or comparison to the paper ballot of record. This will allow the testing of electronic absentee ballot transmission security and eliability in a live election, without threatening the intergity of the electronic absentee ballot transmission security and eliability in a live election, without threatening the intergity of the electronic absentee ballot transmission security and eliability in a live ele	APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	PE 0605803SE: R&D in Support of DOD			ing Assistand	ce Program
The Department will use FY2012 for a second round of grants, this time focusing on establishing automated and detailed data collection and reporting systems at the State and local level to provide FVAP and the EAC with better, timelier post-election data.  Initiate a Multi-Track Electronic Absentee Voting Demonstration Project Plan: Currently, the EAC is not anticipating final radiation of its testable standards for an electronic absentee voting demonstration project until 2014, which won't support the execution of such a demonstration project until 2016, at the earliest. In order to accommodate the standards development, procrumement and full testing, as well as any remediation discovered along the way, the 2018 general election remains the most keep date for the full conduct of the internet voting demonstration project. Therefore, the Department will extend its deliverables and activities schedule to reflect 2018 deployments, which require funding through 2017. Given these delays, and the recent proad community consensus with the open competition approach to developing this demonstration project system, FVAP revisited to prior single-track design and development schedule, and is now pursuing a simultaneous three-track approach:  10 The first track focuses kiosk voting systems, to serve as a monitored test platform where the ballots of record are printed out and delivered to jurisdictions like other absentee ballots, but the same ballot is delivered electronically to the election jurisdiction or comparison to the paper ballot of record. This will allow the testing of electronic absentee ballot socurity and eliability in a live election, without threatening the integrity of the election. In 2014, the pilot effort will be limited to military voters at domestic US locations. In 2016, the pilot will expand to overseas locations for military voters. These efforts will test various spects of conducting a full internet voting demonstration project for 2018.  10 The second track will use a three phase competition wher	B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
validation of its testable standards for an electronic absentee voting demonstration project until 2014, which won't support the execution of such a demonstration project until 2016, at the earliest. In order to accommodate the standards development, procurement and full testing, as well as any remediation discovered along the way, the 2018 general election remains the most keely date for the full conduct of the internet voting demonstration project. Therefore, the Department will extend its deliverables and activities schedule to reflect 2018 deployments, which require funding through 2017. Given these delays, and the recent proad community consensus with the open competition approach to developing this demonstration project system, FVAP revisited its prior single-track design and development schedule, and is now pursuing a simultaneous three-track approach:  10. The first track focuses kiosk voting systems, to serve as a monitored test platform where the ballots of record are printed out and delivered to jurisdictions like other absentee ballots, but the same ballot is delivered electronically to the election jurisdiction or comparison to the paper ballot of record. This will allow the testing of electronic absentee ballot transmission security and deliability in a live election, without threatening the integrity of the election. In 2014, the pilot will be limited to military voters at domestic US locations. In 2016, the pilot will expand to overseas locations for military voters. These efforts will test various aspects of conducting a full internet voting demonstration project for 2018.  10. The second track will use a three phase competition where external stakeholders and industry leaders will be challenged to exceed the Department's current approach and technical requirements, again to support a 2018 deployment. This competition will be modeled on similar competitions conducted by NIST and DARPA for cryptological and weapon system development.  10. The third track will continue the Department's direct eff	The Department will use FY2012 for a second round of grants, this tin	ne focusing on establishing automated and detailed	d data			
and delivered to jurisdictions like other absentee ballots, but the same ballot is delivered electronically to the election jurisdiction or comparison to the paper ballot of record. This will allow the testing of electronic absentee ballot transmission security and eliability in a live election, without threatening the integrity of the election. In 2014, the pilot effort will be limited to military voters at domestic US locations. In 2016, the pilot will expand to overseas locations for military voters. These efforts will test various aspects of conducting a full internet voting demonstration project for 2018.  The second track will use a three phase competition where external stakeholders and industry leaders will be challenged to exceed the Department's current approach and technical requirements, again to support a 2018 deployment. This competition will be modeled on similar competitions conducted by NIST and DARPA for cryptological and weapon system development.  The third track will continue the Department's direct efforts, supported by the EAC and NIST, to deploy an electronic absentee voting system in 2016 or 2018 for military voters only, using CAC cards and PKI, on military-protected computers resident on the Defense Information System Network (DISN).  To support this revised plan, a number of projects will be executed in FY 2012, as described below. Additionally, to the extent bossible, FVAP will direct investment, minimum of \$2 million in the SBIR (Small Business Investment Research) program.	validation of its testable standards for an electronic absentee voting dexecution of such a demonstration project until 2016, at the earliest. procurement and full testing, as well as any remediation discovered a likely date for the full conduct of the internet voting demonstration project until 2018 deployments, which require fur broad community consensus with the open competition approach to describe the standard of the stan	emonstration project until 2014, which won't support of the standards development of the way, the 2018 general election remains the ject. Therefore, the Department will extend its delinding through 2017. Given these delays, and the releveloping this demonstration project system, FVAI	ent, e most verables ecent			
exceed the Department's current approach and technical requirements, again to support a 2018 deployment. This competition will be modeled on similar competitions conducted by NIST and DARPA for cryptological and weapon system development.  The third track will continue the Department's direct efforts, supported by the EAC and NIST, to deploy an electronic absentee voting system in 2016 or 2018 for military voters only, using CAC cards and PKI, on military-protected computers resident on the Defense Information System Network (DISN).  To support this revised plan, a number of projects will be executed in FY 2012, as described below. Additionally, to the extent possible, FVAP will direct investment, minimum of \$2 million in the SBIR (Small Business Investment Research) program.  Voting Behavior and Failure Research: The Department plans on issuing a Broad Agency Announcement in FY2012 detailing	and delivered to jurisdictions like other absentee ballots, but the same for comparison to the paper ballot of record. This will allow the testing reliability in a live election, without threatening the integrity of the election at domestic US locations. In 2016, the pilot will expand to overseas to	e ballot is delivered electronically to the election juring of electronic absentee ballot transmission security tion. In 2014, the pilot effort will be limited to militate bocations for military voters. These efforts will test were secured.	sdiction y and ry voters			
voting system in 2016 or 2018 for military voters only, using CAC cards and PKI, on military-protected computers resident on the Defense Information System Network (DISN).  To support this revised plan, a number of projects will be executed in FY 2012, as described below. Additionally, to the extent possible, FVAP will direct investment, minimum of \$2 million in the SBIR (Small Business Investment Research) program.  Voting Behavior and Failure Research: The Department plans on issuing a Broad Agency Announcement in FY2012 detailing	exceed the Department's current approach and technical requirement	ts, again to support a 2018 deployment. This comp	etition will			
possible, FVAP will direct investment, minimum of \$2 million in the SBIR (Small Business Investment Research) program.  O Voting Behavior and Failure Research: The Department plans on issuing a Broad Agency Announcement in FY2012 detailing						

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human	Resources Activity		<b>DATE</b> : Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605803SE: R&D in Support of DOD	Project 4: F	ederal Vot	ing Assistand	e Program
BA 6: RDT&E Management Support	Enlistment, Testing and Evaluation				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
voting failure), providing a number of recommended research areas, methods of filling those knowledge and data gaps.	, but also inviting outside experts to propose innova	ative			
o Mobile Applications: The Department will design and deploy smart assistance, voter awareness, and completion of voter registration an		voting			
o Computer Forensic and Software Assurance Tools: To support fur requirements, develop tools to improve the Department's ability to prove the systems.					
o Data Migration Tool: Given the wide variety of election administrative Department will design and deploy a data migration tool to convecommon database formats.					
o Improved FVAP Portal: Design and deploy an improved FVAP.gov jurisdiction voting systems, provides easier and more intuitive acces Assistance Officer contact information, provides FVAP-developed devarious voter assistance systems provided by FVAP, to each other.	s to voter information such as local election official	or Voting			
o Improved Voter Registration and Back-Up Ballot Wizards: The De in 2010, to improve candidate database reliability, provide States the candidate data to Statewide races as well as federal races, and to m	e ability to upload candidate data directly, to increase	se			
o Military Address Lookup Tool: Given election officials problems wit work to develop a State election official accessible system for militar		FVAP will			
o Additional Evaluation of all FVAP Programs: The Department will of including the usefulness of currently drafted documents and forms, of portal hosting security and reliability, local election official and voting tools, and the knowledge management methods presented to voters	effectiveness of the grant programs, online wizards	, FVAP.gov			
tools, and the knowledge management methods presented to voters					

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 17 of 27

R-1 Line #163

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human R	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research Development Test & Evaluation Defense-Wide	PE 0605803SE: R&D in Support of DOD	Project 4: Federal Voting Assistance Program

BA 6: RDT&E Management Support

Enlistment, Testing and Evaluation

Project 4: Federal Voting Assistance Program

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Given the agile planning and deployment flexibilities required in as dynamic a RDT&E environment as internet voting, the FY 2013 execution plan will be significantly influenced by the results of the FY2011 and FY2012 research, development, and evaluation results. However, current plans are to initiate the first two phases of the internet voting demonstration competition challenge:			
o Phase I of Internet Voting Competition Challenge: In the first phase submissions will focus on defining security, reliability, usability, and accountability requirements for internet voting systems. Submissions will be open to the public, and will be open to public critique. FVAP will review those submissions and critiques, and then consolidate them into a single set of requirements for Phase II.			
o Phase II of Internet Voting Competition Challenge: In this phase, submission will provide high level designs and detailed hardware and software architectures, along with procedures necessary for secure operation. Submissions will be sufficiently detailed so that a reasonably skilled information technologist could implement the system to allow for broader peer review. However, many details such as user interfaces and database layouts will be likely be undefined. As with the first phase, submissions will be open for critique. In this phase critiques will focus on identifying areas where designs do not meet the requirements defined in the first phase. The result may be modification of architectures to incorporate ideas from several teams. At the conclusion of this phase, the Department will narrow down the set of acceptable architectures.			
o Conformance Testing to EAC Pilot Program Requirements for Kiosk Systems Used in a 2014 Election: To support the testing of internet voting systems from monitored kiosk test platform (where the ballots of record are printed out and delivered to jurisdictions like other absentee ballots, but the same ballot is delivered electronically to the election jurisdiction for comparison to the paper ballot of record), the Department will test conformance of selected systems to the EAC Pilot Program Testing Requirements. Again, in 2014, the pilot effort will be limited to military voters at domestic US locations.			
Accomplishments/Planned Programs Subtotals	38.845	27.032	9.692

# C. Other Program Funding Summary (\$ in Millions)

N/A

# **D. Acquisition Strategy**

**NOT REQUIRED** 

#### E. Performance Metrics

The project is the development, testing and deployment of an internet-based voter registration, ballot delivery and voting system that integrates the requirements of the electronic absentee voting guidelines.

PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Eval... DoD Human Resources Activity

**UNCLASSIFIED** 

Page 18 of 27 R-1 Line #163

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Resources Activity							<b>DATE</b> : Febr	uary 2012			
0400: Research, Development, Test & Evaluation, Defense-Wide					R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation PROJECT Project 5: F Enhancement			luman Resou ents	urces Autom	ation	
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Project 5: Human Resources Automation Enhancements	8.855	6.772	1.312	-	1.312	2.831	2.833	1.868	2.873	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

DCPDS is the Department's enterprise civilian HR system that has provided the savings originally projected in the achievement of full operational capability in 2002 and which has continued to operate as the system serving over 800,000 civilian employee records. Initiatives will focus on legislative requirements, and support of presidential, OMB and OPM initiatives, including HR LoB. Enhancements will focus on additional interfaces to more fully integrate HR automated systems and once requirements are received the development and deployment of a new automated performance appraisal system. Civilian HR automation enhancements planned for FY 2012 and FY 2013 are focused on software development of legislative requirements to support the Department's civilian workforce, including modernization of the hiring and staffing process, deployment of the OPM electronic official personnel folder system, deployment of the case management tracking system, ongoing work in the area of competency management, and the development of additional interfaces between the Defense Civilian Personnel Data System (DCPDS) and other civilian HR systems to fully integrate the automated support capabilities of the environment. DoD is one of five designated Shared Service Centers in the federal government focused on providing standard services across agency lines, gaining potential significant business and costsaving benefits. DoD is considered a leader in this initiative. Development of the automation to support a new Performance Management System is planned for the Department.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Human Resources Automation Enhancements	8.855	6.772	1.312
FY 2011 Accomplishments: Interfaces developed to support link with DCPDS; development of enhancements to support legislative requirements; information assurance enhancements developed to comply with mandated DoD requirements to align with DMZ extension for all DoD systems.			
FY 2012 Plans: Phase III of DMZ extension to comply with DoD mandated DMZ extension requirements for all systems; enhancements to comply with legislative and DoD requirements; HR LoB initiatives, including modification to eOPF interface, Retirement Systems Modernization (RSM) IAW OPM mandates. Development of improvements, interfaces, and support of the Defense Enterprise Hiring Solution to comply with mandated changes in hiring practices federal-wide.  FY 2013 Plans:			

PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Eval... DoD Human Resources Activity

UNCLASSIFIED Page 19 of 27

R-1 Line #163

Volume 5 - 63

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Re	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation	PROJECT Project 5: F	duman Resources Automation

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Continued enhancement and compliance with information assurance requirements, including DMZ extension requirements;			
DCPDS and other systems development to ensure compliance with legislative, OPM and OMB mandates; continued system			
enhancements to support HR LoB initiatives, including eOPF, RSM and related federal-wide initiatives.			
Accomplishments/Planned Programs Subtotals	8.855	6.772	1.312

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

# **E. Performance Metrics**

N/A

Exhibit R-2A, RDT&E Project Jus	DATE: February 2012											
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Tes BA 6: RDT&E Management Suppor	elopment, Test & Evaluation, Defense-Wide PE 0605				• • • • • • • • • • • • • • • • • • • •				PROJECT Project 6: Sexual Assault Prevention and Response Office			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
Project 6: Sexual Assault Prevention and Response Office	6.964	4.980	-	-	-	-	-	-	-	Continuing	Continuing	
Quantity of RDT&E Articles												

#### A. Mission Description and Budget Item Justification

The Department of Defense Human Resources Activity (DHRA) is a DoD-wide Field Activity chartered to support the Under Secretary of Defense for Personnel and Readiness (USD (P&R)).

The integrated DoD SAPR Data Collection and Reporting System (Defense Sexual Assault Incident Database (DSAID)) must accommodate a variety of uses, including the tracking of sexual assault victim support services, support SAPR program administration, program reporting requirements, and data analysis. In order to facilitate analysis at the OSD level, the System should be able to easily export data for analysis in computerized statistical applications, such as Statistical Package for the Social Sciences (SPSS). Service field-level users may use the system to track support to victims of sexual assault throughout the lifecycle of that support requirement and to facilitate sexual assault case transfer between SARCs and Services. Service headquarters-level users will use the system to support program planning, analysis, and management. DoD SAPR Office (SAPRO) users and Service headquarters-level users will access the system to produce mandated and requested reports, monitor program effectiveness and support cohort and trend analysis. The Defense Sexual Assault Incident Database (DSAID) will support SAPR programs for all active duty and Reserve personnel, including National Guard (NG) Service members when on active duty or when performing active service and inactive duty training (as defined in Section (101)(d)(3) of Chapter 47 of title 10, United States Code) with the ability to expand to cover other DoD personnel as required. Additionally, system implementation at the state level will provide a new capability to manage SAPR programs for National Guard personnel under Title 32 USC. Implementation of this capability will be based on a state NG structure grouped according to state and subdivided into sexual assaults from the separate Army and Air National Guard. Full Deployment and Delivery (FDD) is scheduled for Q4 FY2012 as a result additional RDT&E funding will not be required after FY2012.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Sexual Assault Prevention and Response Office	6.964	4.980	-
FY 2011 Accomplishments:  • Continued development of DSAID with an expected Full Deployment and Delivery (FDD) in August 2012.			
FY 2012 Plans:  • Continued development of DSAID with an expected Full Deployment and Delivery (FDD) in August 2012.			
Accomplishments/Planned Programs Subtotals	6.964	4.980	-

# C. Other Program Funding Summary (\$ in Millions)

N/A

PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Eval...
DoD Human Resources Activity

UNCLASSIFIED
Page 21 of 27

R-1 Line #163

Volume 5 - 65

	UNCLASSIFIED	
Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human	Resources Activity	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation	PROJECT Project 6: Sexual Assault Prevention and Response Office
<ul> <li>D. Acquisition Strategy</li> <li>Contract Type: Firm-Fixed, Period of Performance: 12 month Base</li> <li>Commercial Procedures (FAR Part 12); Estimated value including a</li> </ul>		6 April 2010; Number of Awards: Single; Use of
E. Performance Metrics		1
In FY 2010 Q3-Q4 activities will include the initiation of development	nt of DSAID, with further developments in FY2011	and FY2012

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 22 of 27

R-1 Line #163

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APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation				PROJECT Project 7: Global Force Mgmt Data Initiative				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
Project 7: Global Force Mgmt Data Initiative	-	1.396	0.608	-	0.608	-	-	-	-	Continuing	Continuing	

#### A. Mission Description and Budget Item Justification

B Accomplishments/Planned Programs (\$ in Millions)

Quantity of RDT&E Articles

Exhibit R-2A RDT&E Project Justification: PB 2013 DoD Human Resources Activity

Defense Manpower Data Center (DMDC) acts as the authoritative source for identity and personnel information for the DoD Net Centric Enterprise Computing vision of the Department of Defense's Global Information Grid (GIG 2.0). Based on the DEERS identities, DMDC provides the key attribute service for the Department of Defense (DoD) Identity and Access Management (IdAM) Capability. The Enterprise Identity Attribute Service (EIAS) supports IdAM through the distribution of DoD person and personnel attributes to applications and services in a controlled, consistent, and secure manner to support ABAC decisions. The controlled, authoritative information provided via EIAS can be used to confirm an individual's identity, affiliation to the DoD, clearance, pay grade/rank, organization and occupation series for an authorization decision. A key attribute for decision makers is organization. The Global Force Management Data Initiative (GFM\_DI) provides the unique organization identifier (OUID) in the EIAS payload. To meet the DoD demand for the OUID, DMDC working with J8 and the Service/Agencies has to 1) establish the linkage between a person (EDI\_PI) and the OUID, 2) provide the OUID attribute in the EIAS payload for access decisions, and 3) standardize the organizational attributes required to make access decisions.

B. Accomplishments/ritamed riograms (\$ in Millions)	F1 2011	F1 2012	F1 2013
Title: Global Force Mgmt Data Initiative (GFMDI)	-	1.396	0.608
Description: N/A			
FY 2011 Accomplishments: N/A			
FY 2012 Plans: Create a pilot to: • Establish a web service between DEERS and Component's personnel Systems to support the EDIPI to SSN links • Facilitate Component's ability to expose their Organizational Hierarchies for usage by the IdAM community • Provide web services to support development of an Enterprise organization attribute service for DoD which supports Secure Data Access			
FY 2013 Plans:  Continue to establish a web service between DEERS and Component's personnel Systems to support the EDIPI to SSN links  Continue to facilitate Component's ability to expose their Organizational Hierarchies for usage by the IdAM community			

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 23 of 27

R-1 Line #163

DATE: February 2012

EV 2011

EV 2012

EV 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Res	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605803SE: R&D in Support of DOD	Project 7: 6	Global Force Mgmt Data Initiative
BA 6: RDT&E Management Support	Enlistment, Testing and Evaluation		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
• Continue to standardize the web services to support an Enterprise organization attribute service for DoD which promotes Secure Data Access			
Accomplishments/Planned Programs Subtotals	-	1.396	0.608

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Existing contract vehicles in place/GSA for COTS.

# **E. Performance Metrics**

N/A

Exhibit R-2A, RDT&E Project Just	hibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Resources Activity										
APPROPRIATION/BUDGET ACTIV		R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test	Vide	PE 0605803SE: R&D in Support of DOD				Project 8: NEO Tracking System					
BA 6: RDT&E Management Support					Enlistment, Testing and Evaluation				, , ,		
COST (ft in Milliana)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
Project 8: NEO Tracking System	_	_	0.761	_	0.761	0.759	0.629	0.758	_	Continuina	Continuing

#### A. Mission Description and Budget Item Justification

The Neo Tracking System (NTS) / Electronic Tracking Accountability System (ETAS) is a certified and accredited DoD automated system that accounts for, and sustains visibility of noncombatant evacuees during a NEO under the authority of DODD 1000.25, DoD Personnel Identity Protection (PIP) Program. NTS is currently being used in the USAFRICOM, USCENTCOM, USEUCOM, USSOUTHCOM, and USPACOM AORs. The ETAS component is the CONUS domestic version of NTS and is for use by USNORTHCOM during disasters in the CONUS whether natural, accidental, or acts of terrorism. The primary purpose of the NTS/ETAS is to provide individual accountability of the evacuee by creating and maintaining a database of evacuees assembled during an evacuation operation and subsequently tracking the evacuees' movement through the evacuation process.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: NEO Tracking System (NTS)	-	-	0.761	
<ul> <li>FY 2013 Plans:</li> <li>Convert the NTS program to a mobile application package that can be run on tablets and smart phones</li> <li>Streamline the distribution of NTS images, reducing not only the costs associated with the creation of an image, but also the time associated with receiving the image in the field</li> </ul>				
Accomplishments/Planned Programs Subtotals	-	-	0.761	

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Quantity of RDT&E Articles

Existing contract vehicles in place/GSA for COTS.

#### **E. Performance Metrics**

N/A

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 25 of 27

R-1 Line #163

Volume 5 - 69

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 DoD	Human Res	ources Activ	ity				DATE: Febr	uary 2012	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 6: RDT&E Management Support	PE 0605803SE: R&D in Support of DOD					PROJECT Project 9: Synchronized Pre-deployment & Operational Tracker Enterprise Suite					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Project 9: Synchronized Predeployment & Operational Tracker Enterprise Suite	-	-	2.937	-	2.937	2.937	1.926	1.927	1.932	Continuing	Continuing
Quantity of RDT&E Articles											

# A. Mission Description and Budget Item Justification

The Synchronized Pre-deployment and Operational Tracker Enterprise Suite (SPOT-ES) is the Department of Defense (DoD) system of record for accountability and visibility of contracts and contractor personnel authorized to operate in a contingency operation. SPOT-ES provides web based tracking and visibility into contract services, personnel and equipment locations; provides a common operational picture for Combatant Commanders; enhances the analytical tools to accurately plan for the quantity of contracted support required for future contingency operations; and collects accurate data for the OMB-directed quarterly census of all contractors supporting contingency operations.

B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
Title: The Synchronized Pre-deployment and Operational Tracker		-	-	2.937
FY 2013 Plans:  . Continue to be the system of record for accountability and visibility of contracts and contractor personnel in support of the CENTCOM Area of Responsibility and other contingencies around the world.  . Continue to provide the only DoS, DoD, and USAID sanctioned Letter of Authorization (LOA) which provides the Government Furnished Services to contractor personnel.  . Provide the information on contractor personnel supporting Iraq and Afghanistan to the Office of the Secretary of Defense for reports to Congress.  . Provide the number of contractor personnel and contract capability to Combatant Commands for operational planning purposes and to aid in their decision making processes.				
	Accomplishments/Planned Programs Subtotals	-	-	2.937

# C. Other Program Funding Summary (\$ in Millions)

N/A

PE 0605803SE: *R&D in Support of DOD Enlistment, Testing and Eval...*DoD Human Resources Activity

UNCLASSIFIED
Page 26 of 27

R-1 Line #163

**Volume 5 - 70** 

Exhibit R-2A, RDT&E Project Justification: PB 2013 DoD Human Resources Activity		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY  0400: Research, Development, Test & Evaluation, Defense-Wide  BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605803SE: R&D in Support of DOD Enlistment, Testing and Evaluation	PROJECT Project 9: Synchronized Pre-deployment & Operational Tracker Enterprise Suite		
D. Acquisition Strategy				
N/A				
E. Performance Metrics				
N/A				



# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



# **Defense Information Systems Agency**

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



Defense Information Systems Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 -	- 77
Program Element Table of Contents (by Budget Activity then Line Item Number)	.Volume 5	- 87
Program Element Table of Contents (Alphabetically by Program Element Title)	.Volume 5	- 89
Exhibit R-2's	Volume 5	- 9′



# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Research, Development, Test & Eval, DW	261,954	281,037	12,500	293,537
Total Research, Development, Test & Evaluation	261,954	281,037	12,500	293,537

R-1C: FY 2013 President's Budget (Published Version), as of February 2, 2012 at 06:45:08

#### Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Research, Development, Test & Eval, DW	255,600		255,600
Total Research, Development, Test & Evaluation	255,600		255,600

255,600 255,600 255,600 255,600

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
System Development and Demonstration (SDD)	39,773	58,288		58,288
Operational Systems Development	222,181	222,749	12,500	235,249
Total Research, Development, Test & Evaluation	261,954	281,037	12,500	293,537
Summary Recap of FYDP Programs			d	
General Purpose Forces	71,459	72,403		72,403
Intelligence and Communications	168,724	170,183	12,500	182,683
Research and Development	21,771	38,451		38,451
Total Research, Development, Test & Evaluation	261,954	281,037	12,500	293,537

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 FY 2013 OCO Total
System Development and Demonstration (SDD)	45,457	45,457
Operational Systems Development	210,143	210,143
Total Research, Development, Test & Evaluation	255,600	255,600
Summary Recap of FYDP Programs		
General Purpose Forces	72,574	72,574
Intelligence and Communications	157,239	157,239
Research and Development	25,787	25,787
Total Research, Development, Test & Evaluation	255,600	255,600

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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Operational Systems Development	222,181	222,749	12,500	235,249
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# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation
----Defense Information Systems Agency
Total Research, Development, Test & Evaluation

FY 2011	FY 2012	FY 2012	FY 2012
Actuals	Base	oco	Total
261,954	281,037	12,500	293,537
261,954	281,037	12,500	293,537

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2013 Base	FY 2013 FY 2013 OCO Total	- 1
Defense Information Systems Agency	255,600	255,600	
Total Research, Development, Test & Evaluation	255,600	255,600	

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	s e c
								-
119	0604764K	Advanced IT Services Joint Program Office (AITS-JPO)	05	21,771	38,451		38,451	U
132	0303141K	Global Combat Support System	05	18,002	19,837		19,837	U
	Syste	m Development and Demonstration (SDD)		39,773	58,288		58,288	
192	0208045K	C4I Interoperability	07	71,459	72,403		72,403	U
194	0301144K	Joint/Allied Coalition Information Sharing	07	7,677	6,222		6,222	U
201	0302016K	National Military Command System-Wide Support	07	463	481		481	U
202	0302019K	Defense Info Infrastructure Engineering and Integration	07	34,884	15,179		15,179	U
203	0303126K	Long-Haul Communications - DCS	07	36,598	11,119	10,500	21,619	U
204	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	10,640	12,514		12,514	U
209	0303140K	Information Systems Security Program	07		5,500		5,500	U
211	0303150K	Global Command and Control System	07	26,183	54,680	2,000	56,680	U
212	0303153K	Defense Spectrum Organization	07	19,112	28,908		28,908	U
213	0303170K	Net-Centric Enterprise Services (NCES)	07	3,505	1,830		1,830	U
215	0303610K	Teleport Program	07	5,935	6,418		6,418	U
222	0305103K	Cyber Security Initiative	07	2,240	4,341		4,341	U
235	0305208K	Distributed Common Ground/Surface Systems	07	3,485	3,154		3,154	U
	Opera	tional Systems Development		222,181	222,749	12,500	235,249	
Tota	l Research,	Development, Test & Eval, DW		261,954	281,037	12,500	293,537	

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

tional Authority 02 Feb 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program Element			3 ot	FY 2013	FY 2013 OCO	FY 2013 Total	s e c
No	Number	Item		Act	Base			-
110	0604764K	Advanced IT Services Joint Program Office	ATTS-JPO)	05	25,787		25,787	U
119	74674090	Advanced II Services borne Program office	e (AII) 010/	0.5	237.3		9000000 1000000000000000000000000000000	
132	0303141K	Global Combat Support System		05	19,670		19,670	U
	System	n Development and Demonstration (SDD)			45,457		45,457	
192	0208045K	C4I Interoperability		07	72,574		72,574	U
194	0301144K	Joint/Allied Coalition Information Shari	ng	07	6,214		6,214	U
201	0302016K	National Military Command System-Wide Su	apport	07	499		499	U
202	0302019K	Defense Info Infrastructure Engineering	and Integration	07	14,498		14,498	U
203	0303126K	Long-Haul Communications - DCS		07	26,164		26,164	U
204	0303131K	Minimum Essential Emergency Communication	ons Network (MEECN)	07	12,931		12,931	U
209	0303140K	Information Systems Security Program		07				U
211	0303150K	Global Command and Control System		07	36,575		36,575	U
212	0303153K	Defense Spectrum Organization		07	24,278		24,278	U
213	0303170K	Net-Centric Enterprise Services (NCES)		07	2,924		2,924	U
215	0303610K	Teleport Program		07	6,050		6,050	U
222	0305103K	Cyber Security Initiative		07	4,189		4,189	U
235	0305208K	Distributed Common Ground/Surface System	ns	07	3,247		3,247	U
	Opera	tional Systems Development			210,143		210,143	
		_						
Tota	l Research,	Development, Test & Eval, DW			255,600		255,600	

Defense Information Systems Agency • President's Budget Submission FY 2013 • RDT&E Program

# Program Element Table of Contents (by Budget Activity then Line Item Number)

**Budget Activity 05: Development & Demonstration (SDD)** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activ	rity Program Element Number	Program Element Title	Page
119	05	0604764K	Advanced IT Services Joint Program Office (AITS-JPO)	5 - 91
132	05	0303141K	Global Combat Support SystemVolume 5	- 107

**Budget Activity 07: Operational Systems Development** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title Pag	ge
192	07	0208045K	C4I InteroperabilityVolume 5 - 11	<u> </u>
194	07	0301144K	Joint/Allied Coalition Information SharingVolume 5 - 13	33
201	07	0302016K	National Military Command System-Wide Support	45
202	07	0302019K	Defense Info. Infrastructure Engineering and IntegrationVolume 5 - 15	51
203	07	0303126K	Long-Haul Communications - DCSVolume 5 - 16	69
204	07	0303131K	Minimum Essential Emergency Communications Network (MEECN)Volume 5 - 18	89
209	07	0303140K	Information Systems Security ProgramVolume 5 - 19	99

Defense Information Systems Agency • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 07: Operational Systems Development

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title Pag	је
211	07	0303150K	Global Command and Control SystemVolume 5 - 20	<u> </u>
212	07	0303153K	Defense Spectrum Organization	21
213	07	0303170K	Net-Centric Enterprise Services (NCES)	33
215	07	0303610K	Teleport ProgramVolume 5 - 24	43
222	07	0305103K	Cybersecurity InitiativeVolume 5 - 29	57
235	07	0305208K	Distributed Common Ground/Surface SystemsVolume 5 - 29	59

Defense Information Systems Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Advanced IT Services Joint Program Office (AITS-JPO)	0604764K	119	05Volume 5 - 91
C4I Interoperability	0208045K	192	07Volume 5 - 117
Cybersecurity Initiative	0305103K	222	07Volume 5 - 257
Defense Info. Infrastructure Engineering and Integration	0302019K	202	07Volume 5 - 151
Defense Spectrum Organization	0303153K	212	07Volume 5 - 221
Distributed Common Ground/Surface Systems	0305208K	235	07Volume 5 - 259
Global Combat Support System	0303141K	132	05Volume 5 - 107
Global Command and Control System	0303150K	211	07Volume 5 - 205
Information Systems Security Program	0303140K	209	07Volume 5 - 199
Joint/Allied Coalition Information Sharing	0301144K	194	07Volume 5 - 133
Long-Haul Communications - DCS	0303126K	203	07Volume 5 - 169
Minimum Essential Emergency Communications Network (MEECN)	0303131K	204	07Volume 5 - 189
National Military Command System-Wide Support	0302016K	201	07Volume 5 - 145
Net-Centric Enterprise Services (NCES)	0303170K	213	07Volume 5 - 233
Teleport Program	0303610K	215	07Volume 5 - 243



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JPO)

**DATE:** February 2012

BA 5: Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	21.771	38.451	25.787	-	25.787	26.126	26.507	27.064	27.956	Continuing	Continuing
T26: Leading Edge Pilot Information Technology	21.771	38.451	25.787	-	25.787	26.126	26.507	27.064	27.956	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

The Advanced IT Services Joint Program Office (AITS-JPO) identifies and integrates new, mature commercial Information Technology (IT) and advanced operational concepts into net-centric battlespace capabilities to: access and exchange critical information; exploit opportunities to enhance current force capabilities; and project future force IT requirements. These products provide the Department of Defense (DoD) and National Senior Leaders, (e.g., the President of the United States (POTUS), Secretary of Defense (SECDEF), Chairman of the Joint Chiefs of Staff (CJCS), Combatant Commands (COCOMs)), as well as inter-agency participants with critical focus on the long-term collaboration, planning and information sharing operations by bringing together technology, security cooperation, and education. The program components support preparation for future joint and coalition initiatives through development and integration of a full range of data services and advanced IT applications to support practical aspects of approved cooperative activities of the United States and its coalition partners. These emergent capabilities are technologies that can be rapidly infused into existing tools.

Program investments in advanced technology benefit strategic and tactical users in the intelligence, warfighting and business domains by providing them with reliable, persistent collaboration, and networking technologies including computing-on-demand to reduce the need to replicate data or services at the point of consumption. Investments also provide support for virtual end-user environments and semantic search capabilities which enhance the decision-making process. The goal of the AITS-JPO is to provide the warfighter with technical superiority and to achieve interoperability and integration, while working in concert with joint, allied and coalition forces to effectively counter terrorism and enhance homeland security defense via the confluence of technology, security cooperation, and education.

The program uses three key mechanisms to streamline the process of fielding emergent requirements: (1) Joint Capability Technology Demonstrations (JCTD) with Office of the Secretary of Defense (OSD) /COCOM/Service/Agency teaming; (2) Joint Ventures with Combatant Commanders/Program of Record (POR) teaming; and (3) Risk Mitigation Pilots with POR/Community of Interest (COI) teaming. The JCTD process aligns with the revised Joint Capability Integration and Development System (JCIDS) process, developed by the Joint Chiefs of Staff by adapting technology and concept solutions to meet pressing warfighter needs. OSD approves new JCTDs annually and on a rolling start basis. DISA participates in both an operational and transition manager role. The JCTDs, along with the Joint ventures and risk mitigation pilots, feature teaming with appropriate offices so that funds and skill sets are leveraged across all participants. The costs are shared, thus reducing the risk to individual organizations.

The program is further divided into major subprogram areas: Command and Control (C2) and Combat Support (CS), Information Sharing (IS), Network Infrastructure (NI), Network Operations (NetOps), Cyber Threat Discovery and Program Management Support.

PE 0604764K: *Advanced IT Services Joint Program Office (AITS-JP...* Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 15

R-1 Line #119

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JPO)

**DATE:** February 2012

BA 5: Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	49.364	49.198	51.484	-	51.484
Current President's Budget	21.771	38.451	25.787	-	25.787
Total Adjustments	-27.593	-10.747	-25.697	-	-25.697
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.373			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-25.374			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	15.000			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	-27.593	-	-25.697	-	-25.697

#### **Change Summary Explanation**

The FY 2011 decrease of -\$27.593 is due to a -\$25.669 reduction to the Technology Innovation Initiative Fund (TIIF), and a -\$1.924 reduction to support higher Agency priorities.

The FY 2012 decrease of -\$10.747 is due to a -\$25.374 reduction to the Technology Innovation Initiative Fund (TIIF), a -\$.373 for Federally Funded Research and Development Centers and an increase of \$15.000 for Cyber Threat Dsicovery.

The FY 2013 decrease of -\$25.697 is the net result of a -\$26.832 reduction to the Technology Innovation Initiative Fund (TIIF), and an increase of +\$1.135 to rebaseline civilian pay.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Command and Control (C2) and Combat Support (CS)	7.029	3.888	4.075
FY 2011 Accomplishments: In FY 2011, DISA completed integration work on the Vice Chairman of the Joint Chiefs of Staff (VCJCS) National Senior Leadership Decision Support Service (NSLDSS) initiative. The focus of the FY 2011 capabilities included the ability to place global and national level events into context using a contextual reasoning framework and automating and refining outdated business processes in today's national operations and intelligence center. The operational utility assessment included favorable comments from the VCJCS on the delivered NSLDSS framework and technical underpinnings. Further, decision aid tools and infrastructure components were added as a means of providing improved decision making based on improved capabilities to understand an event, visualizing the various courses of action, and understanding the context and ramifications of the actions. These capabilities expanded user credentialing via personal attribute based access to interface with the Enterprise Identity Attribute Service to securely harvest the personal information that will improve unanticipated user access. Further,			

PE 0604764K: *Advanced IT Services Joint Program Office (AITS-JP...* Defense Information Systems Agency

UNCLASSIFIED
Page 2 of 15

R-1 Line #119

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JPO)

BA 5: Development & Demonstration (SDD)

## C. Accomplishments/Planned Programs (\$ in Millions) FY 2011 FY 2012 FY 2013 initial integration and demonstration of a machine identity capability was successfully demonstrated and will be part of the Local Attribute Store (LAS)/Contextual Policy Decision Point (CPDP) transition. A mediation service for Universal Core and DoD Metadata Standard (CDMS) schemas provided improved data interoperability. The CDMS Mediation Service successfully demonstrated a translation capability using Global Command and Control System-Joint (GCCS-J) Extensible Markup Language (XML) as source and output in a situational awareness schema. CDMS transitioned to Program Executive Office Command and Control Capabilities (PEO-C2C) on 1 July 2011, three months ahead of schedule. This provided a mediation service to the Enterprise and fills a gap in core Enterprise services. Preferred Force Generator (PFG) started on 1 July 2011 following the continuing resolution and congressional approval. PFG was able to leverage portions of the NSLDSS Framework and Net-Centric Enterprise Services (NCES) to help accelerate initial capability and to demonstrate the ability to populate preferred forces in support of Global Force Management. PFG allows secure and reliable access and exposure of C2 data. Rapid Development and Sustainment of Enterprise Mission Services (RDEMS) provided engineering support to Joint Staff, United States European Command (EUCOM), United States Special Operations Command (SOCOM), and other COCOMs-designated data sources exposing new data sources in a NCES-compliant web services. RDEMS delivered a 'how-to' guide for engineers to assist in integration of NCES Compliant standards and specifications. RDEMS documentation activities were completed on 31 August 2011. The components that make up the NSLDSS were transitioned on 31 August 2011. FY 2012 Plans: For FY 2012, the focus continues on DISA's mission as a concept innovator and rapid enabler of web services and information sources. Key activities will include dynamic, scenario-based situational awareness designed to support the mission of the senior military advisor to the POTUS and to accelerate the Web 2.0/Web 3.0 capabilities which will provide persistent collaboration and IT-enabling to the warfighter; improvements to Human-Computer interaction, particularly in the area of secure, trustworthy and mobile wireless technologies, web applications, widgets and micro-applications; technologies to improve cyber availability and situational awareness through a semantic cyber state description of resources; and agility to expand the dynamic nature of the networks, technologies, and global security, providing feature-shared situational awareness to leverage a 24x7 persistent Communication Web. The Communication Web will enable the JCS to provide the best military advice and to rapidly transform information to knowledge. DISA will provide command and control innovative technology capabilities for fully-informed strategic and tactical decision-making to the military leadership community and coalition forces in support of the initiatives that improve the warfighter's situational awareness and collaboration toolset. The decrease of -\$3.141 between FY 2011 and FY 2012 is due to transitioning JCTDs to PEO-C2C. FY 2013 Plans:

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JP... Defense Information Systems Agency

UNCLASSIFIED
Page 3 of 15

R-1 Line #119

	UNCLASSIFIED			
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense In	formation Systems Agency	DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604764K: Advanced IT Services Joint Program Office	e (AITS-JPO)		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
In FY 2013, DISA will complete the activities necessary to standup an commercial products while safeguarding the DoD networks. This app The-Shelf (COTS) products to gain early user feedback and provide a a procurement decision.	roach allows the rapid implementation of Commercial Off-			
The increase of \$0.187 between FY 2012 and FY 2013 is due to addit community.	·			
DISA will conduct operational assessments with the COCOM user cor Generation and Air Emergency (Hijack) to PEO-C2C.	mmunity and will transition web services supporting Force			
Title: Information Sharing (IS)		1.547	5.006	5.006
FY 2011 Accomplishments:  In FY 2011, DISA continued to provide capabilities for crisis action pla interoperability. DISA established a more robust information sharing of NSLDSS operations, to provide expanded information sharing across the following to the Global Information Grid (GIG): Strategic Watch, Min the LAS and CPDP. Mission Assurance Decision Support System (	environment to support wireless and emerging technologies, all supported organizations. DISA successfully transitioned dediation, XML Repository and the ABAC capability provided			
DISA successfully deployed to Rapid Access Computing Environment Toolsuite and continued to integrate the capabilities with other techno DISA successfully migrated capabilities from Semantic Wiki to conflue with Defense Technical Information Center (DTIC). DISA leads the demobile application technology efforts to ensure the DoD optimizes emoperational effectiveness. DISA continued to provide capabilities for a management, and finalized piloting procedures and best practices for	logy planning and assessment tools and initiatives. ence (enterprise wiki software) ensuring interoperability evelopment in cloud computing, mobile computing, and erging and advanced capabilities, while maximizing advanced and emerging capability evaluation and technology			
FY 2012 Plans: In FY 2012, DISA provides initial support to United States Pacific Computer Cloud Break initiatives in collaboration with OSD/I and National RecC2 and provides capability for identified gaps in the PACOM theatre. expanded information sharing to provide DoD with the capability to IT-to knowledge. DISA will begin to focus on web 3.0 technologies in the handheld/mobile devices, cloud computing, mobile computing, mobile capabilities. DISA supports enterprise management roles through interprise.	econnaissance Office. The Cloud initiative addresses agile DISA will continue to develop the means for significantly enable the warfighter and to rapidly transform information area of persistent capability and social networking, applications and composable web services as initial			

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JP... Defense Information Systems Agency

UNCLASSIFIED
Page 4 of 15

R-1 Line #119

	UNCLASSIFIED			
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Ir	nformation Systems Agency	DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604764K: Advanced IT Services Joint Program Office	e (AITS-JPO)		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
integrate commercial products into the GIG in a plug and play and sec Test/Enterprise Integration Lab that provides access to enterprise ser implementation and United States Transportation Command (USTRA integration of commercial products, the Assured Sharing Framework This security exposes the commercial product to the enterprise, ensul Information Sharing will be improved to provide the ability to share information Service/Agency (S/A) organizations.	vices integration facility, enterprise information referenced NSCOM) transportation/logistics lab. To support the rapid middleware will be extended to provide a security harness. ring appropriate information assurance controls are in place.			
The funding increase of +\$3.459 between FY 2011 and FY 2012 is re Advanced Technology Information, Identification, and Development P framework will consist of the following: TMF Tool Suite; Technology (Assessment Infrastructure; Evaluation Methodology.	rocess (ATIIP) TMF. This development of technology			
FY 2013 Plans: In FY 2013, DISA will build upon the Joint Base Joint/Enterprise Lab e include the Joint Systems Integration Center (JSIC) in Suffolk, VA. The additional web services and data sources and will be extended to other with non-governmental organizations and partner nations will foster to composable among the participating organizations.	ne PACOM Architecture initiative will be expanded to include er COCOMs. The increased emphasis on collaboration			
In FY 2013, DISA will continue support to the DoD CIO for emerging/a cloud computing, mobile computing, and mobile application technolog DoD Knowledge Management capabilities and will be hosted at the D will ensure enhanced investment decisions are focused on the relevant	lies. The TMF will be integrated/interoperable with various ISA Defense Enterprise Computing Centers. The framework			
Title: Network Infrastructure (NI)		-	2.100	2.100
FY 2011 Accomplishments: N/A				
FY 2012 Plans: In FY 2012, DISA will provide infrastructure to support the JCTDs, Risinclude wideband networking integrated with smart remote data storage visualization. DISA will provide support to the DoD GIG Enterprise Mimproved management of Tactical Entry Points.	ge, data conferencing and collaboration, and search and			

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JP... Defense Information Systems Agency

UNCLASSIFIED
Page 5 of 15

R-1 Line #119 **Volume 5 - 95** 

	UNCLASSIFIED			
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense I	nformation Systems Agency	DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604764K: Advanced IT Services Joint Program Office	e (AITS-JPO)		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
The increase of +\$2.100 between FY 2011 and FY 2012 is due to a r between terrestrial and satellite communications.	new requirement to provide interface and management tools			
FY 2013 Plans: In FY 2013, DISA will continue providing infrastructure to support the will include wideband networking integrated with smart remote data s visualization.				
Title: Network Operations (NetOps)		1.238	1.272	1.272
FY 2011 Accomplishments: In FY 2011, DISA focused efforts on NetOps support of all of the Lea improve situational awareness, alerting and visualization, and to prove				
FY 2012 Plans: In FY 2012, DISA is working with the Joint Staff Anti-terrorism/Force to expose web services and information, and to provide transition cap support environment that will provide tailored information to the Comorganizations, and coalition forces. Additionally, DISA will address the infrastructure to enable emergency relief for DoD in response to ever encompass the complexity of reconstituting communications infrastruand ensuring interoperability to military and civilian responders. This monitoring and extends the capability to PACOM. This will be demonstrated.	pabilities to assist COCOMs in employing a decision-manders, their staff, Joint Task Forces, non-government are ability to rapidly restore communications and IT atts that highlight challenged infrastructures. This effort will actures supporting ad hoc teams, multi-agency environments includes support to EUCOM Enterprise continuous instrated in PACOM Terminal Fury in FY 2012.			
The increase of +\$0.034 between FY 2011 and FY 2012 will ensure to compliance with the latest software version.	hat technical user documents are updated to be in			
FY 2013 Plans: In FY 2013, DISA will continue to work with the Joint Staff Anti-terrori support to expose web services and information, and to provide trans support environment that will provide a tailored rendering of relevant Forces, non-government organizations, and coalition forces.	ition capabilities to assist COCOMs in employing a decision-			
Title: Cyber Threat Discovery		-	15.000	-
FY 2012 Plans: The increase of \$15.0M will be applied to evaluating, testing, and der advanced discovery capabilities, specifically in the areas of mobile new				

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JP... Defense Information Systems Agency

UNCLASSIFIED
Page 6 of 15

R-1 Line #119

	UNCLASSIFIED			
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense In:	formation Systems Agency	DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604764K: Advanced IT Services Joint Program Office	e (AITS-JPO)		
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
based technologies across the DoD infrastructure. This effort will incluservice relationships with commercial entities to enhance DoD security Additionally, the funds will be applied to reviewing and applying other complemented commercial advanced discovery capabilities.	by leveraging commercial tools, processes, and expertise.			
Title: Program Management Support		11.957	11.185	13.334
FY 2011 Accomplishments: In FY 2011, Program Management Support provided managers with program management assistance, information assurance technical expertise, keengineering. Program management resources continued to support the CS, IS, NI, and NetOps, including Federally Funded Research and De Institute of Technology Lincoln Laboratory (MIT LL). Funds were used	nowledge management, outreach, and transition ne AITS-JPO growth in all key mission areas of C2 and velopment Centers (FFRDCs), MITRE and Massachusetts			
FY 2012 Plans: In FY 2012, Program Management Support continues to provide support information assurance activities, assist in contract administration, and of subject matter experts. Program Management Support also provide improvement, information assurance oversight, technical oversight and Technology Integration support, including knowledge management expectation and/or capability-based demonstrations, will continue for all the will be used for personnel support, supplies, and services.	provide technical advice and assistance through the use es asset management, quality assurance and business line d assistance, web support, and application hosting fees. pertise, outreach, transition engineering expertise, and			
The decrease of -\$0.772 between FY 2011 and FY 2012 is due to a re	eduction in program management support to the AITS-JPO.			
FY 2013 Plans: In FY 2013, there will be a continued need for core program managem oversee information assurance activities, assist in contract administrat the use of subject matter experts. Program Management Support will business line improvement, information assurance oversight, technical hosting fees. Funds will be used for personnel support, supplies, and	ion, and provide technical advice and assistance through also provide asset management, quality assurance and oversight and assistance, web support, and application			
The increase of +\$2.149 between FY 2012 and FY 2013 reflects the re Equivalents (FTEs) and overall increases for program management su				
	Accomplishments/Planned Programs Subtotals	21.771	38.451	25.787

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JP... Defense Information Systems Agency

**UNCLASSIFIED** Page 7 of 15

R-1 Line #119

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide PE 0604764K: Advanced IT Services Joint Program Office (AITS-JPO)

BA 5: Development & Demonstration (SDD)

D. Other Program Funding Summary (\$ in Millions)

N/A

### E. Acquisition Strategy

The program accomplishes its mission through a combination of strategies focused on operations, technical integration, program management, and financial tracking. Market research during the acquisition process included a review of DISA contracts, other DoD contract vehicles, and other Government agency contracts which were advertised for Government-wide usage. This market research also included consideration of small business, minority/women owned (8A), Historically Black Colleges and Universities (HBCU), mentor/protégé and other specialized contract vehicles and processes. It evaluated all contractors available from DISA sources for their ability to deliver the products specifically required for the unique program efforts. The program works collaboratively with vendors when possible to obtain generic cost data for planning and analysis purposes. Past and current contract prices for similar work and other government-wide agency contracts provided additional sources of information. Quotes from multiple sources helped provide averages for more realistic cost estimates. DISA makes a concerted effort to award many of its contracts to small businesses. Additionally, many of the DISA contracts were awarded with multiple option periods that have the benefit of fixing labor costs over an extended period and minimizing the administrative costs associated with re-issuing short-term contracts every year or two. The Advanced Concepts Office (ACO) has reviewed existing contract vehicles and continues to review the number of contracts to minimize administrative overhead. Instead of three contracts for program management, business line improvement, asset management, and financial management, there is now one small business program services contract that provides services across DISA. Another acquisition initiative was the creation and publicizing of a Broad Agency Announcement (BAA) to solicit a wide range of vendor Research and Development participation and to provide a contracting path that minimizes contract lead time. The

#### **F. Performance Metrics**

Metrics are tracked for each type of technology via In-Progress Reviews (IPRs) and management teams. Further, AT&L holds program reviews twice per year to review schedule, performance and delivery. For JCTDs, the program office develops an Implementation Directive, Tactical Transition Agreement, and a Management Plan. These guidance documents outline the basic objectives, schedule, and funding for the JCTD. The JCTD model is to build it, allow the user to try it and provide comments, so that fixes can be made rapidly, which enables the capabilities to be delivered to the users earlier. During the first year, the JCTD develops and documents the detailed objectives against which the Operational Sponsor (a COCOM) will assess military utility, as well as the detailed mechanisms by which military utility will be assessed and results measured. Regular oversight is maintained through JCTD program managers who are the central point of contact for maintaining cognizance over cost, schedule, and performance and for managing program risk. The program also incorporates internal processes to enhance financial reporting and track contractor spending. The program utilizes several web-based financial management tools as well as internal measures to monitor status.

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JP... Defense Information Systems Agency

UNCLASSIFIED
Page 8 of 15

R-1 Line #119

**DATE:** February 2012

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

R-1 ITEM NOMENCLATURE

PE 0604764K: Advanced IT Services Joint

Program Office (AITS-IPO)

PROJECT

T26: Leading Edge Pilot Information

**DATE:** February 2012

BA 5: Development & De	monstratio	on (SDD)		Prog	gram Offic	e (AITS-JF	PO)		Techn	ology			
Product Development (	\$ in Millio	ns)		FY 2	2012		2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 1	MIPR	SPAWAR SSC:Charleston, SC	16.452	3.177	Dec 2011	4.300	Oct 2012	-		4.300	Continuing	Continuing	Continuing
Product Development 2	C/CPFF	SAIC (TO 50 & 57):Arlington, VA	19.691	-		-		-		-	Continuing	Continuing	Continuing
Product Development 4	SS/FP	JACKBE:Chevy Chase, MD	4.670	-		-		-		-	Continuing	Continuing	Continuing
Product Development 4	C/CPFF	SOLERS:Arlington, VA	6.476	2.890	Jun 2012	3.649	Jun 2013	-		3.649	Continuing	Continuing	Continuing
		Subtotal	47.289	6.067		7.949		-		7.949			
Support (\$ in Millions)				FY 2	2012		2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Support 1	C/FFP	RAYTHEON:Falls Church, VA	3.714	3.716		3.718		-		3.718	-		
Support 2	C/FFP	TWM:Falls Church, VA	1.790	1.790	Sep 2012	1.790	Sep 2013	-		1.790	Continuing	Continuing	Continuing
Support 3	C/FFP	Various:Various	0.780	0.780	Aug 2012	0.991	Sep 2013	-		0.991	Continuing	Continuing	Continuing
Support 4	Various	TBD:TBD	-	15.000	Mar 2012	-		-		-	Continuing	Continuing	Continuing
		Subtotal	6.284	21.286		6.499		-		6.499			
Management Services (	\$ in Millio	ons)		FY 2	2012		2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Management Services 1	FFRDC	MITRE:McLean, VA	0.900	0.627	Oct 2011	1.000	Oct 2012	-		1.000	•		
Management Services 2	C/CPFF	Keylogic:Morgantown,	2.190	2.278	Oct 2011	0.456		-		0.456			
Program Management Civilian Pay	Various	Various:Various	8.697	8.193	Oct 2011	9.883	Oct 2012	-		9.883	Continuing	Continuing	Continuing
		Subtotal	11.787	11.098		11.339		-		11.339			

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JP... **Defense Information Systems Agency** 

**UNCLASSIFIED** Page 9 of 15

R-1 Line #119

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 [	Defense Info	ormation Systems A	Agency			DATE	<b>E:</b> Februar	y 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defendance 5: Development & Demonstration (SDD)	se-Wide	PE 0604764h	MENCLATURE (: Advanced IT Servic ce (AITS-JPO)	es Joint	PROJECT T26: Lead Technolog	Iing Edg	ge Pilot Inf	ormation	
	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	-   -	Y 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	65 360	38 451	25 787	_		25 787			

Remarks

hibit R-4, RDT&E Schedule Profile: PB 2013 D	etense	e Intor	matio	on S	-		•											TE: F	ebr	uary	201	2	
PROPRIATION/BUDGET ACTIVITY 0: Research, Development, Test & Evaluation, I 5: Development & Demonstration (SDD)	Defens	e-Wid	e		PE (	06047	764K	MENC : Adva e (AIT	nced	IT S	Servic	es Jo	oint	1	PROJ [26: L Techno	eadi	ng E	Edge F	Pilot	Info	rmat	ion	
	FY	Y 2011			FY 20	)12		FY 20	13		FY	2014		FY	2015	5		FY 20	16		F	<b>/ 201</b>	7
	1 2	2 3	4	1	2	3 4	. 1	2	3 4	1	2	3	4	1 2	2 3	4	1	2	3	4	1 2	2 3	4
Command and Control (C2) and Combat Support (CS)																							
National Senior Leadership Decision Support (NSLDS) POP, IOC, MUA & Transition																							
C2/CS FY 2011 JCTD RDEMS - POP, IOC, MUA & Transition																							
C2/CS FY 2012 JCTD - POP, IOC, MUA & Transition																							
C2/CS FY 2013 JCTD - POP, IOC, MUA			-																				
C2/CS FY 2014 JCTD - POP, IOC																							
C2/CS FY 2015 JCTD – POP																							
Joint User Messaging – POP, IOC, MUA & Transition																							
Senior Mashup (Strategic Watch)																							
Persistent Collaboration for Decision-making - POP, IOC, MUA & Transition																							
Virtual End-user Environments – POP, IOC, MUA & Transition																							
Global Crisis Situational Awareness – POP, IOC, MUA																							
Information Sharing (IS)																							
Transnational Information Sharing Cooperation (TISC) POP, IOC, MUA, Transition																							
Event Management Framework (EMF)																							
IS FY 2010 JCTD - POP, IOC, MUA & Transition																							

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JP... Defense Information Systems Agency

UNCLASSIFIED
Page 11 of 15

R-1 Line #119

thibit R-4, RDT&E Schedule Profile: PB 2013 D	efens	se Infor	mati	ion S	Systen	ns Age	ency											D	ATE:	Feb	oruar	<sub>y</sub> 2	012		
PPROPRIATION/BUDGET ACTIVITY 00: Research, Development, Test & Evaluation, I 5: Development & Demonstration (SDD)	Defen	se-Wid	le		PE (	<b>ITEM</b> 06047 gram (	64K:	Adva	ncea	IT.		vices	s Join	t	T	26: 1	JEC1 Lead nolog	ing i	Edge	e Pilo	ot Inf	form	natio	n	
		Y 2011	_		FY 20			FY 2		_	_	Y 20	_			201	_		FY 2				FY 2	_	
IS FY 2011 JCTD - POP, IOC, MUA & Transition	1	2 3	4	1	2	3 4	1	2	3 4	1 '	1	2	3   4	1	1 2	3	4	1	2	3	4	1	2	3	4
IS FY 2012 JCTD - POP, IOC, MUA & Transition																							,	,	
IS FY 2013 JCTD - POP, IOC, MUA & Transition																									
IS FY 2014 JCTD - POP, IOC																									
IS FY 2015 JCTD – POP																									
Communications Web																									
Transformational Coalition Information Sharing																									
Tactical Collaboration Support																									
Network Infrastructure (NI)																									
Intelligence Community Storage JCTD POP, IOC, MUA, Transition																									
Intelligence Community Transfer JCTD POP, IOC, MUA, Transition																									
Intelligence Community Content Staging JCTD POP, IOC																									
Intelligence Community Services JCTD POP																									
Global Security Hub																									
Authenticated and Attribute-based Access																									
Network Operations (NetOps)																									
GIG Enterprise Service Management) ESM POP, IOC, MUA, Transition																									
Mission Assurance Decision Support Systems (MADSS) POP, IOC, MUA1, MUA2, Transition																									

PE 0604764K: Advanced IT Services Joint Program Office (AITS-JP... Defense Information Systems Agency

UNCLASSIFIED
Page 12 of 15

xhibit R-4, RDT&E Schedule Profile: PB 2013 D	efense	e Info	rmati	ion S	System	s Ag	ency	/											D	ATE	:: Fe	:bru	ary 2	201	2		
PPROPRIATION/BUDGET ACTIVITY 400: Research, Development, Test & Evaluation, L A 5: Development & Demonstration (SDD)	Defens	e-Wid	de		R-1 I PE 0 Prog	6047	'64K	: Adv	ance	d 17	Se	ervic	es J	oint		T	26: 1	JEC1 Lead nolog	ling	Edg	e Pii	lot lı	nfor	mai	tion		
	F`	Y 201	1		FY 20	12		FY 2	2013			FY :	2014	ļ		FY	201	5		FY	201	6		F`	Y 20	17	
	1 2	Program Office  Y 2011		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1		2	3	4			
GIG Content Management POP, IOC, MUA, Transition						·										•	•		•		·						
GIG Risk Management POP, IOC, MUA, Transition																			I								
GIG Net Defense POP, IOC, MUA, Transition																											
GIG Services POP																			,								
Assured Services for Decision Superiority																											
Cyber Threat Discovery																											
Cyber Threat Discovery							Ā																				

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604764K: Advanced IT Services Joint

Program Office (AITS-JPO)

**PROJECT** 

T26: Leading Edge Pilot Information

**DATE:** February 2012

Technology

### Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Command and Control (C2) and Combat Support (CS)	,				
National Senior Leadership Decision Support (NSLDS) POP, IOC, MUA & Transition	1	2011	4	2011	
C2/CS FY 2011 JCTD RDEMS - POP, IOC, MUA & Transition	1	2011	4	2013	
C2/CS FY 2012 JCTD - POP, IOC, MUA & Transition	1	2012	4	2014	
C2/CS FY 2013 JCTD - POP, IOC, MUA	1	2013	4	2015	
C2/CS FY 2014 JCTD - POP, IOC	1	2014	4	2015	
C2/CS FY 2015 JCTD – POP	1	2016	4	2016	
Joint User Messaging – POP, IOC, MUA & Transition	1	2011	4	2011	
Senior Mashup (Strategic Watch)	1	2011	4	2011	
Persistent Collaboration for Decision-making - POP, IOC, MUA & Transition	1	2011	4	2012	
Virtual End-user Environments – POP, IOC, MUA & Transition	1	2012	4	2014	
Global Crisis Situational Awareness – POP, IOC, MUA	1	2013	4	2016	
Information Sharing (IS)					
Transnational Information Sharing Cooperation (TISC) POP, IOC, MUA, Transition	1	2011	4	2011	
Event Management Framework (EMF)	1	2011	2	2011	
IS FY 2010 JCTD - POP, IOC, MUA & Transition	1	2011	4	2012	
IS FY 2011 JCTD - POP, IOC, MUA & Transition	1	2011	4	2013	
IS FY 2012 JCTD - POP, IOC, MUA & Transition	1	2012	4	2014	
IS FY 2013 JCTD - POP, IOC, MUA & Transition	1	2013	4	2015	
IS FY 2014 JCTD - POP, IOC	1	2015	4	2016	
IS FY 2015 JCTD – POP	1	2015	4	2016	
Communications Web	1	2011	4	2012	

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604764K: Advanced IT Services Joint

Program Office (AITS-JPO)

PROJECT

T26: Leading Edge Pilot Information

**DATE:** February 2012

Technology

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Transformational Coalition Information Sharing	1	2012	4	2014	
Tactical Collaboration Support	1	2014	4	2016	
Network Infrastructure (NI)					
Intelligence Community Storage JCTD POP, IOC, MUA, Transition	1	2011	4	2012	
Intelligence Community Transfer JCTD POP, IOC, MUA, Transition	1	2012	4	2014	
Intelligence Community Content Staging JCTD POP, IOC	1	2014	4	2015	
Intelligence Community Services JCTD POP	1	2016	4	2016	
Global Security Hub	1	2011	4	2013	
Authenticated and Attribute-based Access	1	2012	4	2015	
Network Operations (NetOps)					
GIG Enterprise Service Management) ESM POP, IOC, MUA, Transition	1	2011	4	2012	
Mission Assurance Decision Support Systems (MADSS) POP, IOC, MUA1, MUA2, Transition	1	2011	4	2013	
GIG Content Management POP, IOC, MUA, Transition	1	2012	4	2014	
GIG Risk Management POP, IOC, MUA, Transition	1	2013	4	2015	
GIG Net Defense POP, IOC, MUA, Transition	1	2014	4	2016	
GIG Services POP	1	2015	4	2016	
Assured Services for Decision Superiority	1	2011	4	2014	
Cyber Threat Discovery			1		
Cyber Threat Discovery	1	2012	4	2012	



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303141K: Global Combat Support System

BA 5: Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	18.002	19.837	19.670	-	19.670	20.381	20.708	20.716	20.967	Continuing	Continuing
CS01: Global Combat Support System	18.002	19.837	19.670	-	19.670	20.381	20.708	20.716	20.967	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Global Combat Support System-Joint (GCSS-J) is an information technology (IT) application that continues to transition to a service oriented architecture to deliver asset visibility to the joint logistician (i.e., essential capabilities, functions, activities, and tasks necessary to sustain all elements of operating forces in theater at all levels), and facilitates information interoperability across and between Combat Support and Command and Control functions. In conjunction with other Global Information Grid elements including Global Command and Control System-Joint (GCCS-J), Computing Services, and Combatant Commands/Services/Agencies information architectures, GCSS-J will provide the IT capabilities required to move and sustain joint forces throughout the spectrum of military operations. The primary beneficiaries of this investment are the joint logisticians. They are military officers, warrant officers, enlisted personnel, civilians, and contractors that specialize in providing joint logistics support that extends from the national industrial base to the end user. Joint logisticians are the planners, executors, and controllers of core joint logistic capabilities. They understand tactical, operational, and strategic operations and synchronize efforts to effectively meet joint force requirements.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	17.842	19.837	20.473	-	20.473
Current President's Budget	18.002	19.837	19.670	-	19.670
Total Adjustments	0.160	-	-0.803	-	-0.803
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	0.160	-	-0.803	-	-0.803

### **Change Summary Explanation**

The FY 2011 increase of +\$0.160 updates the Global Combat Support System portal query tool to access the Joint Planning and Execution System (JPES) RTB database.

The FY 2013 decrease of -\$0.803 reduces C2 Adaptive Planning efforts.

PE 0303141K: Global Combat Support System Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 9

R-1 Line #132

Volume 5 - 107

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Just	stification: PE	3 2013 Defer	nse Informat	tion Systems	Agency				DATE: Febi	uary 2012	
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 5: Development & Demonstrati	st & Evaluation	n, Defense-V	Vide		<b>IOMENCLAT</b> 1K: <i>Global C</i>			PROJECT CS01: Glob	al Combat S	Combat Support System  Cost To Complete  20.967 Continuing	em
COST (\$ in Millions)	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017		Total Cost		
CS01: Global Combat Support System	18.002	19.837	19.670	-	19.670	20.381	20.708	20.716	20.967	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

B Accomplishments/Planned Programs (\$ in Millions)

The Global Combat Support System-Joint (GCSS-J), in conjunction with other Global Information Grid (GIG) elements including Global Command and Control System-Joint (GCCS-J), Defense Information Systems Network, Computing Services, and Combatant Commands/Services/Agencies information architectures, will provide the Information Technology (IT) capabilities required to move and sustain joint forces throughout the full spectrum of military operations. GCSS-J enables the joint logistics warfighter in Combatant Commands and Joint Task Forces to conduct operations in a complex, interconnected, and increasingly global operational environment. The joint logistic warfighters are responsible for planning, executing, and controlling core logistics capabilities. The joint logisticians understand the tactical, operational, and strategic support requirements and synchronize the efforts to effectively meet joint force requirements. GCSS-J provides asset visibility from disparate authoritative data sources to provide the warfighter an integrated picture of the battlespace. GCSS-J provides web-based capabilities in a net-centric environment to provide information to authorized users regardless of geographic location.

b. Accomplishments/Flamed Frograms (\$ in Millions)	FT ZUTT	F1 2012	F1 2013
Title: Global Combat Support System-Joint	18.002	19.837	19.670
<b>Description:</b> The GCSS-J, in conjunction with other GIG elements including GCCS-J, Computing Services, and Combatant Commands/Services/Agencies information architectures, will provide the Information Technology (IT) capabilities required to move and sustain joint forces throughout the full spectrum of military operations.			
FY 2011 Accomplishments:  Achieved the initial architectural transition and capability migration (i.e., flex-based architecture) which affects the mapping, reporting capabilities, and Joint Engineer Planning and Execution Systems; enhancements to the Intra-theater Distribution capability development (e.g., air, land, and sea domains). GCSS-J met the functional priorities of the Combatant Command 129 Requirements as approved and prioritized by the functional sponsor, Joint Staff J4.			
FY 2012 Plans: FY 2012 funding supports development of web services for the National Level Ammunition Capability (NLAC) (i.e., data to enhance munitions logistics planning and management by supporting the Joint Ammunition Community, including ammunition users, managers, and planners throughout the Department of Defense); create new WatchBoards; include Google Earth functionality and capabilities (i.e., provide the ability to render geographically tagged report data, map layers, and WatchBoards in a format that can be consumed and displayed by the Google Earth clients); and enhance the Distribution capability and WatchBoard functions on the NIPRNet.			

PE 0303141K: Global Combat Support System Defense Information Systems Agency

Page 2 of 9

R-1 Line #132

EV 2011

EV 2012

EV 2012

**Exhibit R-2A**, **RDT&E Project Justification**: PB 2013 Defense Information Systems Agency **DATE**: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide PE 0303141K: Global Combat Support System CS01: Global Combat Support System

BA 5: Development & Demonstration (SDD)

B. Accomplishments/Planned Programs (\$ in Millions)

The increase of +\$1.835 million from FY 2011 to FY 2012 accelerates GCSS-J Increment 7 development resulting in rapidly

delivering capability (e.g., fuels WatchBoards, Google Earth, web services to support the Combatant Commands, and logistic planning) to joint logisticans.

#### FY 2013 Plans:

Development initiatives for FY 2013 will include expanding the Intra-theatre Distribution capability (e.g., expenditures of munitions during contingencies); develop WatchBoards for remaining classes of supply (e.g., food, equipment), upgrades to the Joint Engineer Planning and Execution System capability, and begin requirement analysis for humanitarian support.

The decrease of -\$0.167 million from FY 2012 to FY 2013 will support planned Increment 7 development in four sprints.

Accomplishments/i lannea i rograms captotals   10.002   10.007   10.070	Accomplishments/Planned Programs Subtotals	18.002	19.837	19.670
---	--	--------	--------	--------

#### C. Other Program Funding Summary (\$ in Millions)

	- '	•	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	Base	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• O&M, DW/PE 0303141K: O&M,	12.243	15.006	14.166		14.166	14.155	14.443	14.703	14.954	Continuing	Continuing
DW											
<ul><li>Procurement, DW/PE 0303141K:</li></ul>	2.695	2.955	2.963		2.963	3.065	3.111	3.113	3.184	Continuing	Continuing
Procurement, DW										_	

# D. Acquisition Strategy

The GCSS-J Program Management Office (PMO) uses various contract types, employs large and small contractors, and is focused on achieving agency socio-economic goals and incorporating DoD acquisition reform initiatives in purchasing. The PMO maximizes the use of performance-based contracts and requires contractors to establish and manage specific earned value data to mitigate risk and monitor deviations from cost, schedule, and performance objectives. The PMO evaluates performance by conducting thorough Post-award Contract Reviews, monthly Contract Performance Reviews, and bi-monthly In-Process Reviews.

The PMO uses a Statement of Objectives (SOO) for development efforts rather than the traditional Statement of Work, as it provides potential offerors flexibility to develop cost-effective solutions and the opportunity to propose innovative alternatives to meet GCSS-J requirements. By stating the requirements in the form of a SOO, the contractor can produce a technical solution methodology to deliver leading edge technology to the warfighter.

#### **E. Performance Metrics**

GCSS-J fields capabilities are based on functional priorities of the Combatant Command 129 Requirements as approved and prioritized by the functional sponsor, Joint Staff J4. These requirements and goals are translated into releases with specific capabilities, which have established cost, schedule, and performance parameters

PE 0303141K: Global Combat Support System Defense Information Systems Agency

UNCLASSIFIED
Page 3 of 9

R-1 Line #132

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Inform	ation Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	<b>PROJECT</b>	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303141K: Global Combat Support System	CS01: Glob	pal Combat Support System
BA 5: Development & Demonstration (SDD)			

approved by the DISA's Component Acquisition Executive/Milestone Decision Authority. Metrics and requirements are routinely gathered by the GCSS-J Program Management Office (PMO). The metrics from the strategic server sites are analyzed by the PMO to ensure that operational mission threads continue to be met and if system enhancement/capabilities are of benefiting the user. Future capabilities include tools that allow GCSS-J to refine and enhance the type of performance metrics that can be gathered and analyzed. This becomes increasingly important as GCSS-J continues to integrate additional data sources and external applications. This postures and allows GCSS-J to continue to transition to a Service Oriented Architecture and directly supports DoD's net-centric vision of exposing and consuming web services. As GCSS-J usage increases and new capabilities are fielded, performance metrics are kin ensuring that the system is meeting user requirements.

Mission and Business Results and Strategic National and Theater Defense

- FY 2011 (Actual) The Key Performance Parameters, found in the GCSS-J Acquisition Program Baseline, define baseline measures for the effectiveness of mission performance; the threshold is 95%. With the fielding of v7.2, the baseline measure was met.
- FY 2012 (Estimated) The Key Performance Parameters, found in the GCSS-J Acquisition Program Baseline, define baseline measures for the effectiveness of mission performance; the threshold is 95%. Data will be gathered from the First Look Site during development and from surveys once the capability is deployed. Data not yet available.
- FY 2013 (Estimated) The Key Performance Parameters, found in the GCSS-J Acquisition Program Baseline, define baseline measures for the effectiveness of mission performance; the threshold is 95%. Data will be gathered from the First Look Site during development and from surveys once the capability is deployed. Data not yet available.

Customer Results and Customer Satisfaction

- FY 2011 (Results) Help Desk Key Performance Indicators (KPI) define the baseline measure to evaluate customer satisfaction and provide a service desk assessment; KPI threshold is 80%. Data was gathered from the strategic server site, SMC-Montgomery, and from user surveys. The baseline measure was met.
- FY 2012 (Estimated) Help Desk KPI define the baseline measure to evaluate customer satisfaction and provide a service desk assessment; KPI threshold is 80%. Data will be gathered from the strategic server site, SMC-Montgomery, and from user surveys. Data not yet available.
- FY 2013 (Estimated) Help Desk KPI define the baseline measure to evaluate customer satisfaction and provide a service desk assessment; KPI threshold is 80%. Data will be gathered from the strategic server site, SMC-Montgomery, and from user surveys. Data not yet available.

Processes and Activities and Program Monitoring

- FY 2011 (Results) Baseline Measure to deploy Increment 7, v7.2 4th Quarter 2011. The baseline measure was met in 3rd Quarter 2011.

PE 0303141K: Global Combat Support System Defense Information Systems Agency

Page 4 of 9

R-1 Line #132

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information	ion Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303141K: Global Combat Support System	CS01: Glob	al Combat Support System
BA 5: Development & Demonstration (SDD)			

- FY 2012 (Estimated) Baseline Measure to deploy Increment 7, v7.3 4th Quarter 2012. Data not yet available.
- FY 2013 (Estimated) Baseline Measure To deploy Increment 7, v7.4 4th Quarter 2013. Data not yet available.

Technology and System Development

- FY 2011 (Estimated) Baseline Measure is the ability to effectively provide end-to-end technical exchange with all external data providers at a 95% effectiveness level. System Administrators at the DECCs will gather data from system logs to validate effectiveness. Data not yet available.
- FY 2012 (Estimated) Baseline Measure is the ability to effectively provide end-to-end technical exchange with all external data providers at a 95% effectiveness level. System Administrators at the DECCs will gather data from system logs to validate effectiveness. Data not yet available.
- FY 2013 (Estimated) Baseline Measure is the ability to effectively provide end-to-end technical exchange with all external data providers at a 95% effectiveness level. System Administrators at the DECCs will gather data from system logs to validate effectiveness. Data not yet available.

GCSS-J Campaign Plan links - ACT 1.2.1.4: C2 of Combat Support.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)

PE 0303141K: Global Combat Support System | CS01: Global Combat Support System

**DATE:** February 2012

Product Development	Product Development (\$ in Millions)				012	FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 1	C/T&M	Enterworks:Sterling, VA	8.745	-		-		-		-	0.000	8.745	8.745
Product Development 2	C/T&M	WFI (DSI):Manassas, VA	4.125	-		-		-		-	0.000	4.125	4.125
Product Development 3	C/CPAF	NGIT :Herndon, VA	78.229	16.831	Mar 2012	16.570	Mar 2013	-		16.570	Continuing	Continuing	Continuing
Product Development 4	C/T&M	SAIC:Falls Church, VA	17.061	-		-		-		-	0.000	17.061	17.061
Product Development 5	C/FFP	NGIT, :Reston, VA	21.669	-		-		-		-	0.000	21.669	21.669
Product Development 6	SS/FFP	UNISYS,:Falls Church, VA	12.169	1.148	Apr 2012	1.184	Apr 2013	-		1.184	Continuing	Continuing	Continuing
Product Development 7	MIPR	FGM, :Reston, VA	5.482	-		-		-		-	0.000	5.482	5.482
Product Development 8	SS/FFP	Merlin, :McLean, VA	1.664	-		-		-		-	0.000	1.664	1.664
Product Development 9	MIPR	JDTC,:Ft. Eustis, VA	2.423	-		-		-		-	0.000	2.423	2.423
Product Development 10	MIPR	CSC, :Norfolk, VA	0.300	-		-		-		-	0.000	0.300	0.300
		Subtotal	151.867	17.979		17.754		-		17.754			

Test and Evaluation (\$	Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation 1	C/CPFF	COMTEK, :Sterling,VA	3.902	-		-		-		-	0.000	3.902	3.902
Test & Evaluation 2	MIPR	SSO,:Montgomery	0.500	-		-		-		-	0.000	0.500	0.500
Test & Evaluation 3	MIPR	DIA:WDC	1.500	0.428	Nov 2011	0.441	Nov 2012	-		0.441	Continuing	Continuing	Continuing
Test & Evaluation 4	C/CPFF	Pragmatics:Pragmatics	1.684	-		-		-		-	0.000	1.684	1.684
Test & Evaluation 5	C/CPFF	AAC, Inc.,:Vienna, VA	1.462	0.430	Jul 2012	0.448	Jul 2013	-		0.448	Continuing	Continuing	Continuing
Test & Evaluation 6	MIPR	JITC,:Ft. Huachuca, AZ	3.548	0.730	Nov 2011	0.750	Nov 2012	-		0.750	Continuing	Continuing	Continuing
Test & Evaluation 7	MIPR	STRATCOM (DAA):Bolling AFB, DC	-	0.150	Dec 2011	0.155	Dec 2012	-		0.155	Continuing	Continuing	Continuing
Test & Evaluation 8	MIPR	DISA (TE LAB Support):Fort Meade, MD	0.800	0.120	Oct 2011	0.122	Oct 2012	-		0.122	Continuing	Continuing	Continuing
	Subtotal 13.396					1.916		-		1.916			

PE 0303141K: Global Combat Support System **Defense Information Systems Agency** 

**UNCLASSIFIED** Page 6 of 9

R-1 Line #132

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)

PE 0303141K: Global Combat Support System | CS01: Global Combat Support System |

**DATE:** February 2012

Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services 1	FFRDC	MITRE,:Vienna, VA	16.934	-		-		-		-	0.000	16.934	16.934
Management Services 2	SS/CPFF	UMD, :Eastern Shore, MD	1.021	-		-		-		-	0.000	1.021	1.021
Management Services 3	MIPR	IDA,:Alexandria, VA	0.749	-		-		-		-	0.000	0.749	0.749
Management Services 4	MIPR	JFCOM,:Norfolk, Va	0.100	-		-		-		-	0.000	0.100	0.100
		Subtotal	18.804	-		-		-		-	0.000	18.804	18.804
			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	184.067	19.837		19.670		-		19.670			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency **DATE:** February 2012 **R-1 ITEM NOMENCLATURE PROJECT** APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0303141K: Global Combat Support System | CS01: Global Combat Support System BA 5: Development & Demonstration (SDD) FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 3 3 4 Engineering Events & Milestones: Software Sys Requirements Review (2 Major Releases Annually) Engineering Events & Milestones: Preliminary Design Review (2 Major Releases Annually) Engineering Events & Milestones: Critical Design Review (2 Major Releases Annually) Developmental Test & Evaluation (2 Major Releases Annually) Contractor Integration Test (2 Major Releases Annually) Accept/Security Testing (2 Major Releases Annually) Operational Test & Evaluation (2 Major Releases Annually) Operational Test Readiness Review (2 Major Releases Annually) Fielding Decision (2 Major Releases Annually) Acquisition Events – Milestone B/C: Increment 8 - MS B Acquisition Events – Milestone B/C: Increment 8 - MS C

PE 0303141K: Global Combat Support System Defense Information Systems Agency

Page 8 of 9

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0303141K: Global Combat Support System | CS01: Global Combat Support System

**PROJECT** 

**DATE:** February 2012

## Schedule Details

	Sta	art	En	d
Events	Quarter	Year	Quarter	Year
Engineering Events & Milestones: Software Sys Requirements Review (2 Major Releases Annually)	1	2011	4	2017
Engineering Events & Milestones: Preliminary Design Review (2 Major Releases Annually)	1	2011	4	2017
Engineering Events & Milestones: Critical Design Review (2 Major Releases Annually)	1	2011	4	2017
Developmental Test & Evaluation (2 Major Releases Annually)	1	2011	3	2017
Contractor Integration Test (2 Major Releases Annually)	1	2011	3	2017
Accept/Security Testing (2 Major Releases Annually)	2	2011	4	2017
Operational Test & Evaluation (2 Major Releases Annually)	2	2011	4	2017
Operational Test Readiness Review (2 Major Releases Annually)	2	2011	4	2017
Fielding Decision (2 Major Releases Annually)	2	2011	4	2016
Acquisition Events – Milestone B/C: Increment 8 – MS B	2	2014	2	2014
Acquisition Events – Milestone B/C: Increment 8 – MS C	4	2014	4	2014



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0208045K: C4I Interoperability

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	71.459	72.403	72.574	-	72.574	73.597	73.533	73.824	74.215	Continuing	Continuing
T30: Test and Evaluation	9.768	16.540	16.226	-	16.226	15.067	15.128	15.256	15.284	Continuing	Continuing
T40: Major Range Test Facility Base	61.691	55.863	56.348	-	56.348	58.530	58.405	58.568	58.931	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Defense Information Systems Agency (DISA) Major Range and Test Facility Base (MRTFB) includes over 1,084 military, civilian, and contractor personnel and nearly 140,274 square feet of Command, Control, Communications, Computing and Intelligence (C4I)/Global Information Grid (GIG) testing laboratories. Under DISA's Test and Evaluation (T&E) Executive, the Joint Interoperability Test Command (JITC) serves as the only joint element of the Department of Defense's (DoD's) MRTFB, which is a national asset that is sized, operated, and maintained primarily for DoD test and evaluation support missions.

JITC is the sole interoperability certifier for all Information Technology/National Security Systems (IT/NSS) for DoD. Additional core missions include testing of DoD terrestrial, space, and tactical communications capabilities, supporting warfighters on technical IT/NSS issues, and assisting Combatant Command to Coalition partner interoperability. JITC, as the only Joint Operational Test Agency (OTA), plans and conducts operational tests and evaluations (OT&E) for DISA, the National Security Agency (NSA), Defense Intelligence Agency (DIA), military services, and other DoD agencies. JITC supports agile acquisition and rapid fielding of netcentric capabilities by improving test, evaluation, and certification (TE&C) processes and gaining efficiencies, investigating innovative methodologies and tools, and continuously enhancing the posture of the T&E infrastructure for its customers.

In FY 2013, to ensure its relevancy to DoD and the warfighter community, JITC will continue to manage and maintain its current capability base to provide efficient, responsive TE&C services, as well as continue to:

- Integrate evolving web-based, cloud and virtual information technology capabilities and designing, implementing and maintaining the Net-Ready Key Performance Parameters (NR-KPP) as part of the core DoD interoperability certification process. These serve as pillars to the TE&C methodology and use operationally realistic test concepts which reduce risk and offer efficiencies across the DoD Enterprise.
- Expand test infrastructure and operations to allow for rapid, on-demand provisioning, federation across the DoD and integration with enterprise environments by implementing cloud and virtualized computing concepts in support of Joint/Coalition and Service unique certifications at minimum cost.
- Coordinate and manage functional area products required for Joint T&E of Intelligence, Warfighting, and Business capabilities supporting Joint and Coalition warfighting efficiencies and effectiveness.
- Provide consistent, repeatable test methodologies that ensure DISA and other DoD Service/Agency acquired capabilities are operationally effective, suitable, and secure; certifying Joint Warfighter systems are interoperable with each other.
- Provide T&E guidance/oversight to nearly 130 DISA programs, creating synergy and efficiencies across the large IT portfolio within DISA, gaining insight in new technologies and commercial best practices.

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 16

R-1 Line #192

Volume 5 - 117

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

DATE: February 2012

## APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0208045K: C4I Interoperability

BA 7: Operational Systems Development

- Operate, manage, and maintain DISA's state-of-the-art test infrastructure and facility to ensure the DISA and JITC missions are executed, while optimizing support to their Service/Agency/Coalition customers.
- Evolve IT test policies and processes to proactively support the DoD's migration towards more agile development and acquisition of IT/NSS capabilities in support of Section 804 Acquisition Reform.
- Implement Design of Experiments (DOE) and Science-Based Test Design (SBTD) approaches, concepts, and strategies in T&E methodologies to support the Director, Operational Testing and Evaluation and the Under Assistant Secretary of Defense for Developmental T&E guidance to increase the emphasis on scientific test design and statistical rigor in T&E.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	74.023	72.403	72.153	-	72.153
Current President's Budget	71.459	72.403	72.574	-	72.574
Total Adjustments	-2.564	-	0.421	-	0.421
Congressional General Reductions	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
Congressional Rescissions	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	-2.564	-	0.421	-	0.421

# **Change Summary Explanation**

The FY 2011 decrease of -\$2.564 was realigned to support higher agency priorities.

The FY 2013 increase of +\$0.421 is the result of an internal Agency re-allocation for the reduction in contracting services to support the SECDEF initiative on improving DoD operations and adjustment for inflation in FY13.

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

UNCLASSIFIED
Page 2 of 16

R-1 Line #192

Exhibit R-2A, RDT&E Project Ju	stification: PE	3 2013 Defei	nse Informat	tion Systems	s Agency		DATE: February 2012				
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Development			NOMENCLA 5K: <i>C4I Inter</i>			PROJECT T30: Test and Evaluation					
COST (\$ in Millions)	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost			
T30: Test and Evaluation	16.226	-	16.226	15.067	15.128	15.256	15.284	Continuing	Continuing		
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

The Joint Interoperability Test Command (JITC), as the only Joint Operational Test Agency, conducts Operational Test and Evaluations (OT&E) to determine the operational effectiveness, suitability, interoperability, and survivability of systems. As the sole DoD joint interoperability test certification authority, the JITC conducts lifecycle testing, evaluation, and certification (TE&C) of the DoD National Information Technology/National Security Systems (IT/NSS) that are acquired, assigned, or managed by the Defense Information Systems Agency (DISA), Military Services and other Agencies.

- Provides direct interoperability support to Combatant Commanders during exercises and contingency operations to ensure joint interoperability throughout the lifecycle of DoD IT/NSS, and ensures successful combined operations with Allies and Coalition partners. Provides funding for direct test support to Combatant Command (COCOM) operations in theater; as well as technical 24x7 Warfighter Command, Control, Communications, Computing and Intelligence (C4I) Hotline support to the COCOMs and Services.
- Conducts five annual distributed Joint Tactical Data Link hardware-in-the-loop interoperability test events to evaluate Service and Agency warfighting capabilities.
- Plans, conducts, analyzes and reports for three annual DoD Interoperability Communications Exercises (DICE) which provide a distributed Joint Task Force (JTF) network to support agile, responsive, and efficient testing and rapid deployment of Joint Warfighting communications capabilities.
- Provides a sustaining capability to support engineering, development, and operational evaluation of current and future IT/NSS. Ensures the success of DoD's Global Information Grid (GIG)-enabling programs throughout their entire lifecycle. These capabilities are available to the DoD community to verify their own net-centric C4I warfighting capabilities.
- Support the warfighter with enterprise messaging test and evaluation (T&E) of Navy strategic and tactical systems by verifying the ability of systems to interoperate in a joint environment through the conduct of interoperability and functional assessments, independent verification and validation testing, requirements review, pre-test planning, data collection and analysis, and post-test reporting.
- Develops, implements, and maintains the Major Range and Test Facility Base's (MRTFB's) interoperability testing tools to provide DoD with a Center of Excellence for testing Joint Warfighting capabilities in a realistic operational environment. As an MRTFB facility, these capabilities and mission are considered a national asset.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Operational Test and Evaluation	1.360	1.360	1.334
FY 2011 Accomplishments:  JITC conducted operational test and evaluations of GIG-enabling capabilities and of DISA IT/NSS acquisition Programs of Record (PoRs) to determine if the systems met user requirements and to support capability fielding decisions. Also provided operational			

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

UNCLASSIFIED
Page 3 of 16

R-1 Line #192

	UNCLASSIFIED							
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Infor	mation Systems Agency		DATE: Fe	bruary 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	1400: Research, Development, Test & Evaluation, Defense-Wide PE 0208045K: C4I Interoperability T30: To							
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013			
test and evaluation support to Combatant Commanders, Services Co Agency (NSA), Defense Logistics Agency (DLA), and Business Trans	•	ational Security						
Efforts focus on improving core capabilities, OT&E policy, operationa policy defines processes and procedures, and provides OT&E-specifiensure adherence of policy to test programs, consistent development analysis structures, application of agile test methodologies, and applimanagement provides a persistent suite of automated data management storage, authentication, trouble reporting, and analysis of test data. I commonality across test programs, enabling sharing of test results for reducing duplicative test efforts.	ic training to test action officers. Operational e t of integrated evaluation strategies and missio cation of statistical rigor to data collection and nent tools and support personnel to provide da mplementing these core capabilities ensures of	valuators n-based analysis. Data ta collection, onsistency and						
FY 2013 Plans:  JITC will conduct operational test and evaluations of GIG-enabling casystem's operational effectiveness, suitability, security, and interoperation of acquisition fielding decisions. JITC will also provide operational test Services Components, and DoD Agencies. Efforts will continue to for evaluation, centralized data management, and agile test methodologic	ability. This information informs decision make st and evaluation support to Combatant Comm cus on improving core capabilities, OT&E polic	ers in support nanders,						
The decrease of -\$0.026 in funding between FY 2012 and FY 2013 is in contracting services to support the SECDEF initiative on improving	<b>.</b> .	of the reduction						
Title: Joint Interoperability Testing			7.268	12.155	11.924			
FY 2011 Accomplishments:  JITC conducted several interoperability test events to support agile, rewarfighting communications capabilities. JITC provided test related issued interoperability testing and certification related products. JITC of Test Exemption, Information Support Plan (ISP), and Legacy Waiv (ICTO) requests for the Military Communications Electronics Board (Nevaluation of systems at the enterprise level in a net-centric environment dedicated test networks.	services for Acquisition Category (ACAT) I pro supported other Joint Staff initiatives, such as er requests and processed Interim Certificate to MCEB) Interoperability Test Panel (ITP). Focu	grams and the review to Operate s was more on						
FY 2012 Plans:  JITC is conducting and participating in test activities involving a wide services for ACAT I programs and issuing interoperability testing and								

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

UNCLASSIFIED
Page 4 of 16

R-1 Line #192

	rmation Systems Agency		<b>DATE:</b> Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0208045K: C4I Interoperability	PROJEC T30: Test	T and Evaluati		
B. Accomplishments/Planned Programs (\$ in Millions)  Joint Staff initiatives, such as the review of Test Exemption, ISP, and	d Legacy Waiver requests and processing ICTO	requests for	FY 2011	FY 2012	FY 2013
the MCEB ITP.  The increase of +\$4.887 in funding between FY 2011 and FY 2012 is					
and the effect of FY11 decreases from execution of funds planned a accommodate civpay adjustments and urgent infrastructure requiren	s Project: T30 (Direct) in Project: T40 (Institution				
FY 2013 Plans:  To advance our existing interoperability certification process, JITC w by introducing various mission threads from real life contingencies. developed at the enterprise level, JITC will conduct more assessment more virtualization capabilities. JITC will strengthen its ability to conscenarios and continue to evolve its test policies and processes to p development and acquisition of IT capabilities.	Further, as the entire DoD IT systems and capal nts at that level, requiring more complex tools ar duct distributed testing using complex tools and	bilities are nd employing real life			
The decrease of -\$0.231 in funding between FY 2012 and FY 2013 in contracting services to support the SECDEF initiative on improving		f the reduction			
Title: Support to Warfighter			1.140	3.025	2.96
FY 2011 Accomplishments:  JITC responded to Hotline calls from across the DoD and other fede Interoperability Boards (CCIBs), COCOM sponsored exercises, cont North Atlantic Treaty Organization (NATO) tactical data link tests, an addition, JITC participated in Afghanistan Mission Network (AMN) de Coalition communications equipment testing to ensure successful co	ingency operations, Combined Interoperability T nd provided on-site liaison officer support to the G evelopment, Coalition Network migration, and Ur	COCOMs. In nited States/			
FY 2012 Plans: JITC continues to respond to Hotline calls from across the DoD and	other federal agencies, support CCIBs, COCON ts, and provide on-site liaison officer support to t				

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

UNCLASSIFIED
Page 5 of 16

R-1 Line #192

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

DATE: February 2012

R-1 ITEM NOMENCLATURE
PE 0208045K: C4I Interoperability
T30: Test and Evaluation

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
The increase of +\$1.885 in funding between FY 2011 and FY 2012 is the result of FY11 decreases from execution of funds planned as Project: T30 (Direct) in Project: T40 (Institutional) to accommodate civpay adjustments and urgent infrastructure requirements.			
FY 2013 Plans:  JITC will continue to provide unparalleled support to the warfighter while aggressively accelerating its engagement programs. These programs will include on-demand rapid response contingency support to Regional COCOMs, enhanced assessment support for the three largest COCOM interoperability exercises across Europe, Africa, and the Pacific, and final development and deployment of the Global Communications Interoperability Program, a cloud-based service that will revolutionize coalition C4 planning. JITC will continue to improve the velocity at which Hotline requests are successfully resolved in support of customers across the DoD and other federal agencies. JITC will broaden its support to the Joint Staff and functional COCOMs with a multitude of new value-added consultation and interoperability assessment services providing support across the entire interoperability spectrum.			
The decrease of -\$0.057 in funding between FY 2012 and FY 2013 is the result of an internal Agency re-allocation of the reduction in contracting services to support the SECDEF initiative on improving DoD operations.			
Accomplishments/Planned Programs Subtotals	9.768	16.540	16.226

## C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Three prime contracts, with multiple sub-contracts, support this project. These competitively-awarded, non-personal services contracts provide maximum flexibility and allow for expansion and contraction of staff years as workload expands and contracts.

#### **E. Performance Metrics**

Performance is tracked through measures of support to the warfighter/acquisition communities. In FY 2011, JITC responded to nearly 300 Hotline calls from across the DoD, other federal agencies and commercial sector. JITC participated in ten CCIBs; one COCOM sponsored exercise, three contingency operations, two CITs, two NATO tactical data link tests, and provided two on-site liaison officers who supported four COCOMs. JITC conducted three DICE events, in which annual participation included over 14 systems/capabilities and resulted in approximately nine system/capability assessments or certifications and four support, training and technology demonstrations. JITC supported 676 test activities involving over 576 DoD systems and 84 ACAT I programs. JITC issued over 567 interoperability testing and certification related products. In addition, JITC supported other Joint Staff initiatives, such as the review of over 108 Test Exemption, ISP, and Legacy Waiver requests. JITC also processed approximately 187 ICTO requests for the MCEB ITP. Planned success metrics include: published test methodologies are timely, accurate, readily available, and support the needs of T&E and Program Executive Office (PEO) communities; percentage of test events that are completed with a reduced cycle time

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

Page 6 of 16

R-1 Line #192

PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
		FROJECI
400: Research, Development, Test & Evaluation, Defense-Wide A 7: Operational Systems Development	PE 0208045K: C4I Interoperability	T30: Test and Evaluation
while meeting technical rigor requirements; percentage of resolv		cal and timeliness requirements; and percentage of
positive responses from customers in terms of cost, schedule, a	nd performance.	

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0208045K: C4I Interoperability

PROJECT

T30: Test and Evaluation

**DATE:** February 2012

Test and Evaluation (\$	in Millions	·)		FY 2	012		2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	C/T&M	Northrup Grumman Mission System:Ft. Huachuca, AZ	33.271	-		-		-		-	0.000	33.271	33.271
Test and Evaluation	C/T&M	Interop Joint Venture:Ft. Huachuca, AZ	40.754	-		-		-		-	0.000	40.754	40.754
Test and Evaluation	C/T&M	Northrup Grumman Information Technology:Ft. Huachuca, AZ	24.371	-		-		-		-	0.000	24.371	24.371
Test and Evaluation	TBD	TBD:TBD	-	12.150	Oct 2011	12.007	Oct 2012	-		12.007	Continuing	Continuing	Continuing
		Subtotal	98.396	12.150		12.007		-		12.007			

Management Services	FY 2	012	FY 2013 Base		FY 2013 OCO		FY 2013 Total						
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	Various	Defense Information Systems Agency:Ft. Huachuca, AZ	14.029	4.390	Oct 2011	4.219	Oct 2012	-		4.219	Continuing	Continuing	Continuing
		Subtotal	14.029	4.390		4.219		-		4.219			

_											
	Total Prior										Target
	Years			FY:	2013	FY:	2013	FY 2013	Cost To		Value of
	Cost	FY 2	2012	Ва	ase	0	CO	Total	Complete	Total Cost	Contract
Project Cost Totals	112.425	16.540		16.226		-		16.226			

Remarks

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

UNCLASSIFIED
Page 8 of 16

R-1 Line #192

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY
0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

DATE: February 2012

R-1 ITEM NOMENCLATURE
PE 0208045K: C4I Interoperability
T30: Test and Evaluation

		FY	2011		FY 2012			FY 2013		FY 2014			FY 2015			FY 2016			5	FY 2017								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Provide Operational Test & Evaluation (OT&E) of DISA acquired systems																									'			
Conduct joint interoperability test and certification on DoD C4I systems using the Joint Family of Tactical Data Links (TDL)																												
Plan and conduct the Defense Interoperability Communications Exercise (DICE)																												
Navy Message Legacy Systems																												
Navy Tactical Message Systems																												
Operate 24/7 Interoperability Hotline & Publish quarterly Lessons Learned reports																												
Provide Joint/Combined Interoperability Test support to Combatant Commanders																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0208045K: C4I Interoperability

**PROJECT** 

T30: Test and Evaluation

**DATE:** February 2012

## Schedule Details

	Sta	art	End		
Events	Quarter	Year	Quarter	Year	
Provide Operational Test & Evaluation (OT&E) of DISA acquired systems	1	2011	4	2017	
Conduct joint interoperability test and certification on DoD C4I systems using the Joint Family of Tactical Data Links (TDL)	1	2011	4	2017	
Plan and conduct the Defense Interoperability Communications Exercise (DICE)	1	2011	4	2017	
Navy Message Legacy Systems	1	2011	4	2017	
Navy Tactical Message Systems	1	2011	4	2017	
Operate 24/7 Interoperability Hotline & Publish quarterly Lessons Learned reports	1	2011	4	2017	
Provide Joint/Combined Interoperability Test support to Combatant Commanders	1	2011	4	2017	

EXHIBIT K-ZA, KDT&E PTOJECT JUST	illication. PE	2013 Delei	ise illioilliai	ion Systems	Agency				DATE. Febluary 2012				
0400: Research, Development, Test	APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				OMENCLAT 5K: <i>C4I Inter</i>	_		PROJECT T40: Major Range Test Facility Base					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
T40: Major Range Test Facility Base	61.691	55.863	56.348	-	56.348	58.530	58.405	58.568	58.931	Continuing	Continuing		
Quantity of RDT&E Articles													

#### A. Mission Description and Budget Item Justification

Exhibit R-24 RDT&F Project Justification: PR 2013 Defense Information Systems Agency

Provides institutional funds for the Defense Information Systems Agency's (DISA's) Joint Interoperability Test Command (JITC). JITC serves as the only joint element of the Department of Defense's (DoD's) Major Range and Test Facility Base (MRTFB), which is a national asset that is sized, operated, and maintained primarily for DoD test and evaluation support missions. As an MRTFB facility, JITC's global reach extends to the entire spectrum of the DoD, Federal government, private industry, and allies in support of command and control, intelligence, and defense reform initiatives. This includes commercial entities, which allows JITC to coordinate directly with vendors to obtain critical pre-acquisition test results. This early involvement enables rapid delivery of enhanced military capabilities at lower cost.

- Fully enables JITC mission capability, thus making DISA capable of executing its Information Technology/National Security System (IT/NSS) interoperability test and evaluation (T&E) mission mandated in the Chairman of the Joint Chief of Staff Instruction (CJCSI) 6212 and DoD policies.
- Provides the necessary test capabilities and facilities infrastructure, process tracking and reporting systems, as well as hardware and software maintenance to enable direct test support to DoD's major IT/NSS acquisitions (e.g., Net-centric core services, Defense Readiness Reporting System (DRRS), B-52 Combat Network Communications Technology (CONECT), Global Combat Support System (GCSS), etc.) as well as Joint Tactical Data Links (TDL), command and control, global, terrestrial, satellite and tactical communications systems, evolving to hand held and wireless technologies. Supports DISA's mandated mission to serve as an MRTFB by providing for and maintaining the DISA/JITC IT infrastructure. The environments and test tool enhancements allow testing efforts to keep pace with the rapid change in technology and improve the testing methodologies and timelines for DoD IT/NSS acquisitions.
- From an IT/NSS perspective, DISA acquisition and the T&E support coupled with infrastructure of the Global Information Grid (GIG) serve as the DoD's corollary information technology capability.
- Includes working with industry consortiums on best practices, investing in process based modeling and simulation, evolving standards based frameworks to support testing and analysis as a service, and evolving and virtualizing the laboratories to meet future technology changes and enhancements in hardware and testing software with an emphasis on unified communications requirements, and interactive web enabled capabilities.
- Enables the DISA MRTFB to continue implementing Net Readiness Capabilities Resources (NRCR), which provide DoD with a lifecycle support capability for DoD's tactical and strategic networks and their interfaces, as well as build communications and test environments for the current and future Converged Real-time Internet Protocol (IP) Services for voice, data and video, Software as a Service (SaaS), NCES, and core services in preparation to conduct agile, on-demand test services for the department.
- Continues efforts to provision a Joint Test and Evaluation network through the convergence of current test networks that meets the infrastructure requirements to support the entire spectrum of DoD acquisition process life cycle needs.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Interoperability Test Support	61.691	55.863	56.348

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

Page 11 of 16

R-1 Line #192

Volume 5 - 127

DATE: February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency  DATE: February 2012											
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT									
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0208045K: C4I Interoperability	T40: Major	Range Test Facility Base								
BA 7: Operational Systems Development											

# B. Accomplishments/Planned Programs (\$ in Millions) FY 2011 FY 2012 FY 2013 FY 2011 Accomplishments: Funds were used for civilian pay costs for the Test and Evaluation Executive and JITC operations, DISA MRTFB institutional efforts, as well as the development of virtual communications capabilities; TestForge.mil capability development; T&E infrastructure support to sustain DISA programs across the GIG; establish Defense Research and Engineering Network (DREN) connections to support testing globally; enhanced laboratory upgrades; and to develop, implement, and maintain the MRTFB's enterprise testing tools necessary to provide DoD with a Center of Excellence for testing of net-centric systems in a realistic operational environment. Laboratory and testing software enhancements allowed testing efforts to keep pace with the rapid change in technology. This initiative requires, at a minimum, refreshing on a periodic basis (approximately every two years). Identified and acquired a power management system to support the Federal Data Center Consolidation Initiative (FDCCI) resulting in a 20 percent non-peak hour power reduction. These initiatives improved the infrastructure and created efficiencies through the use of virtual and federated concepts to provide optimal flexibility in a dynamic IT laboratory environment. FY 2012 Plans: Maintain and operate base operations, multi-purpose testbed infrastructures, contract management, award fee costs, communications, automation support, operating expenses, T&E standards, policies, and procedures. Fund the associated civilian pay costs for all functions at Indian Head, MD, Fort Huachuca, AZ, and Fort George G. Meade, MD, as well as maintain the virtual communications capability and enhanced laboratory upgrades. Develop, implement, and maintain the MRTFB's enterprise testing tools necessary to provide DoD with a Center of Excellence for testing of net-centric systems in a realistic operational environment. Continue to enhance laboratory and testing software to keep pace with the rapid changes in technology. The decrease of -\$5.828 between FY 2011 and FY 2012 is the effect of FY11 decreases resulting from execution of funds planned as Project: T30 (Direct) in Project: T40 (Institutional) to accommodate civpay adjustments and urgent infrastructure requirements. FY 2013 Plans: JITC will continue to emulate IT/NSS operational infrastructures in its test facilities, ensuring interoperability issues around the globe can be reconstructed and addressed remotely and enhance its laboratory and testing hardware and software to keep pace with the rapid changes in technology. The Command will continue to: maintain and operate base operations, communications, automation support, operating expenses, T&E standards, policies and procedures; fund the associated civilian pay costs for all functions at Indian Head, MD, Fort Huachuca, AZ, and Fort George G. Meade, MD. JITC will continue to maintenance of virtual communications capabilities and enhanced laboratory upgrades; develop, implement, and maintain the MRTFB's enterprise testing tools necessary to provide DoD with a Center of Excellence for testing of net-centric systems in a realistic operational environment.

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

Page 12 of 16

R-1 Line #192

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency  DATE: February 2012									
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT							
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0208045K: C4I Interoperability	T40: Major Range Test Facility Base							
BA 7: Operational Systems Development									

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
The increase of +\$0.485 from FY 2012 to FY 2013 is the result of the aggregate effect of an internal Agency re-allocation of the reduction in contracting services to support the SECDEF initiative on improving DoD operations and adjustment for inflation in FY13.			
Accomplishments/Planned Programs Subtotals	61.691	55.863	56.348

## C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Three prime contracts, with multiple sub-contracts, support this project. These competitively-awarded, non-personal services contracts provide maximum flexibility and allow for expansion and contraction of staff years as workload expands and contracts.

#### **E. Performance Metrics**

The ability to meet DoD's joint warfighting capabilities test and evaluation requirements, thus meeting the Department's mission requirements of fielding interoperable joint warfighting capabilities. Ability to operate and maintain the MRTFB supported by 1,084 military, civilians, and contractor personnel, and nearly 140,274 square feet of C4I/GIG testing laboratories in the development of standard T&E methods and practices, availability of testbeds, testing software enhancement and testing facilities for customer testing requirements while controlling indirect mission cost. Planned success metrics: Percentage of time test and evaluation networks are available to support core mission areas.

PE 0208045K: *C4I Interoperability* Defense Information Systems Agency

Page 13 of 16

R-1 Line #192

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0208045K: C4I Interoperability

PROJECT

T40: Major Range Test Facility Base

**DATE:** February 2012

Test and Evaluation (\$	in Millions	)		FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	C/T&M	Northrup Grumman Mission System:Ft. Huachuca, AZ	63.927	-		-		-		-	Continuing	Continuing	63.927
Test and Evaluation	C/T&M	Interop Joint Venture:Ft. Huachuca, AZ	87.143	-		-		-		-	Continuing	Continuing	87.255
Test and Evaluation	C/T&M	Northrup Grumman Information Technology:Ft. Huachuca, AZ	44.329	-		-		-		-	Continuing	Continuing	44.329
Test and Evaluation	TBD	TBD:TBD	-	34.160	Oct 2011	34.659	Oct 2012	-		34.659	Continuing	Continuing	Continuing
		Subtotal	195.399	34.160		34.659		-		34.659			

Management Services	(\$ in Millio	ns)		FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	Various	Defense Information Systems Agency:Ft. Huachuca, AZ	44.391	21.703	Oct 2011	21.689	Oct 2012	-		21.689	Continuing	Continuing	Continuing
		Subtotal	44.391	21.703		21.689		-		21.689			

	<b>Total Prior</b>										Target
	Years			FY	2013	FY:	2013	FY 2013	Cost To		Value of
	Cost	FY 2	2012	Ва	ase	0	co	Total	Complete	Total Cost	Contract
Project Cost Totals	239.790	55.863		56.348		-		56.348			

Remarks

PE 0208045K: C4I Interoperability Defense Information Systems Agency **UNCLASSIFIED** Page 14 of 16

R-1 Line #192

**DATE:** February 2012 Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0208045K: C4I Interoperability T40: Major Range Test Facility Base BA 7: Operational Systems Development FY 2011 FY 2017 FY 2012 FY 2013 FY 2014 FY 2015 **FY 2016** 

4

2

Develop and Implement Interoperability test systems to support warfighters

2

3

3

1 2

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOM

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0208045K: C4I Interoperability

**PROJECT** 

T40: Major Range Test Facility Base

**DATE:** February 2012

## Schedule Details

	St	art	Eı	nd	
Events	Quarter	Year	Quarter	Year	
Develop and Implement Interoperability test systems to support warfighters	1	2011	4	2017	

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0301144K: Joint/Allied Coalition Information Sharing

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	7.677	6.222	6.214	-	6.214	8.223	5.585	5.596	5.668	Continuing	Continuing
NND: Multinational Information sharing	7.677	6.222	6.214	-	6.214	8.223	5.585	5.596	5.668	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

Through the Combined Enterprise Regional Information Exchange System (CENTRIXS) and Pegasus (formally GRIFFIN), the Multinational Information Sharing (MNIS) Program enables secure sharing of operational and intelligence information and enhances collaboration amongst United States forces, their most trusted allies and additional multinational partners in the ongoing war. This effort also increases overall combat effectiveness by leveraging capabilities and information from all partners and reducing the possibility of fratricide. These coalition information sharing systems are in direct support of the Department of Defense's (DoD's) strategic goals to "Win our Nation's Wars" and "Deter conflict and promote security". In addition, they are aligned with DISA's strategy to "accelerate operational effectiveness and efficiency" and "enable sharing of information while staunchly defending it." The MNIS program currently supports five Combatant Commands (COCOMs) with connectivity in 89 nations and North America Treaty Organization (NATO), 11 Bilateral agreements and 150 sites with in excess of 80,000 users worldwide. The MNIS also evaluates new technologies and develops tactics, techniques and procedures that facilitate the transition of technologies and capabilities into operational multinational information sharing capability enhancements. This is accomplished through the Combined Federated Battle laboratory Network (CFBLNet) and is in direct support of both CENTRIXS and Pegasus.

As a planned improvement to the CENTRIXS coalition network, Common Mission Network Transport (CMNT) will provide a distinct and permanent CMNT backbone capabilities; thus enabling NETOPS centers to manage individual networks more efficiently. CMNT provides a common transport for encrypted traffic to meet mission partner communication requirements and establishes a "black core capable" network to facilitate the movement of Virtual Private Network traffic between segments. This capability supports DoD instruction 8110.1 guidance of integrating CENTRIXS and other operational networks into existing DoD general service communications infrastructure as a separate network servicing all DoD MNIS requirements.

The MNIS emerging capability, Unclassified Information Sharing (UISS), extends U.S. information sharing capabilities to its Mission Partners (MPs) and beyond, providing an efficient, effective, enterprise-level solutions that allows Combatant Commands to share unclassified information with other U.S. Government (USG) agencies, host nations (HNs), intergovernmental organizations (IGOs), nongovernmental organizations, and other non traditional partners. The employment concept for the UISS capability is to implement an Internet-based capability (IBC) approach in making its capability available to as broad a community as needed to support Combatant Command mission operations. The UISS Capability will enable multi-lateral exchanges of tangible and intangible value and ad-hoc communications through shared communities of interest and issue-specific groups among and across organizations and individuals using a Web-based, "non-mil", information sharing and collaboration tool that may be accessed anytime, from anywhere, by any user with an Internet connection, and including web-enabled mobile personal devices.

PE 0301144K: Joint/Allied Coalition Information Sharing Defense Information Systems Agency

Page 1 of 11

R-1 Line #194

Volume 5 - 133

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

**DATE:** February 2012

# APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0301144K: Joint/Allied Coalition Information Sharing

BA 7: Operational Systems Development

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	9.379	7.093	6.159	-	6.159
Current President's Budget	7.677	6.222	6.214	-	6.214
Total Adjustments	-1.702	-0.871	0.055	-	0.055
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.871			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	_	-			
<ul> <li>Congressional Adds</li> </ul>	_	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	_	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
<ul> <li>SBIR/STTR Transfer</li> </ul>	_	-			
Other Adjustment	-1.702	-	0.055	-	0.055

# **Change Summary Explanation**

The FY 2011 decrease of -\$1.702 supported higher Agency priorities.

The FY 2012 decrease of -\$0.871 is due to the FFRDC reduction.

The FY 2013 increase of \$0.055 is due to inflationary adjustments.

Exhibit R-2A, RDT&E Project Ju-	Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency												
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Development	T <b>URE</b> ed Coalition	Information	project nation NND: Multinational Information sharing										
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
NND: Multinational Information sharing	7.677	6.222	6.214	-	6.214	5.585	5.596	5.668	Continuing	Continuing			
Quantity of RDT&E Articles	uantity of RDT&E Articles												

#### A. Mission Description and Budget Item Justification

The Multinational Information Sharing (MNIS) Program is a portfolio of four coalition information sharing capabilities designed to enable and improve sharing of operational and intelligence information among U.S. forces and our multinational partners.

- -First, Combined Enterprise Regional Information Exchange System (CENTRIXS), supports intelligence and classified operations and information exchange and sharing at the Secret Releasable (REL) level. There are multiple, cryptographically-isolated CENTRIXS enclaves serving various communities of interest (COI) that support multinational efforts to include the Overseas Contingency Operations (OCO) and counter-narcotics operations. CENTRIXS is regionally focused and combatant command (COCOM) centric. The MNIS Program Management Office (PMO) provides selected centralized services from two Defense Enterprise Computing Centers (DECCs) for five of the 40+ CENTRIXS networks/ COIs, and engineering support for standardized solutions. The DISA Campaign plan requires cross enclave and cross domain sharing environments that exploit enterprise and web based service capabilities by the end of Fiscal Year (FY) 2014. CENTRIXS does not offer the type and level of functionality required to support cross-COI mission requirements. The CENTRIXS enhancement, Common Mission Network Transport (CMNT), provides a common transport for encrypted traffic to meet mission partner communication requirements and establishe a "black core capable" network to facilitate the movement of Virtual Private Network traffic between segments. This capability supports DoD instruction 8110.1 guidance of integrating CENTRIXS and other operational networks into existing DoD general service communications infrastructure as a separate network servicing all DoD MNIS requirements.
- -Second, Pegasus, (formerly GRIFFIN)/Improved Connectivity Initiative (ICI), interconnects the national Command and Control (C2) systems of Combined Communications Electronics Board (CCEB) Nations, (to include Australia, Canada, New Zealand, United Kingdom and the United States), using Commercial Off The Shelf (COTS) security appliances and Cross Domain Solutions (CDS) that enable information sharing to facilitate situational awareness and operational planning/execution. Pegasus has a strategic focus and is member nation centric. The name GRIFFIN/ICI changed to Pegasus in June 2010.
- -Third, the Combined Federated Battle Laboratory Network (CFBLNet) provides a controlled coalition Research, Development, Trials and Assessment (RDT&A) coalition information sharing "sandbox" for the United States, CCEB Nations, NATO, and invited nations. This sandbox is used to evaluate new technologies and to develop tactics, techniques and procedures that facilitate the transition of promising technologies and capabilities into operational multinational information sharing capability enhancements. Its direct customers are the CCEB nations' military operational and intelligence entities led by their US counterparts at the Combatant Command and Agency levels. It is being used for the Coalition Warrior Interoperability Demonstrations, NATO missile defense initiatives, and by the Intelligence, Surveillance and Reconnaissance (ISR) community to test their capabilities prior to deployment.

PE 0301144K: Joint/Allied Coalition Information Sharing Defense Information Systems Agency

Page 3 of 11

R-1 Line #194

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency  DATE: February 2012											
APPROPRIATION/BUDGET ACTIVITY	PROJECT										
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0301144K: Joint/Allied Coalition Information	NND: Multin	national Information sharing								
BA 7: Operational Systems Development											

-Fourth, the Unclassified Information Sharing (UISS), extends U.S. information sharing capabilities to its Mission Partners (MPs) and beyond, providing an efficient, effective, enterprise-level solutions that allows Combatant Commands to share unclassified information with other U.S. Government (USG) agencies, host nations (HNs), intergovernmental organizations (IGOs), nongovernmental organizations, and other non traditional partners.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Multinational Information Sharing	7.677		6.214		6.214
<b>Description:</b> Through the Combined Enterprise Regional Information Exchange System (CENTRIXS) and Pegasus (formally GRIFFIN), the Multinational Information Sharing (MNIS) Program enables secure sharing of operational and intelligence information and enhances collaboration amongst United States forces, their most trusted allies and additional multinational partners in the ongoing war. A new capability to support enhancements for the Unclassified Information Sharing-All Partners Acess (UISS-APAN) starts in FY 2012. UISS-APAN migrates existing systems supporting coalition sharing to an enterprise solution hosted on a DISA Defense Enterprise Computing Center. UISS-APAN capability will satisfy Combatant Commands need for tools and technology to support collaboration with non-traditional partners for humanitarian missions.			<del></del> · ·		·
FY 2011 Accomplishments: CENTRIXS CMNT: Began incremental initial testing and integration for CMNT capabilities.					
Pegasus/ICI: Supported testing, certification and accreditation of Web Services for all CCEB Nations. Extended file publishing to 2 CCEB Nations. Extended Chat Services between United States and remaining CCEB Nations. Converged CENTRIXS Coalition Four Eyes into the ICI with initial email and web services capabilities.					
CFBLNet: Conducted USJFCOM-led CWID 11 Exercises/EMPIRE CHALLENGE 11/12 Exercises to support Intelligence, Surveillance, and Reconnaissance, missile defense, and NATO force interoperability testing. Continued to evaluate emerging capabilities and technologies supportive of coalition information sharing needs.					
FY 2012 Plans: CENTRIXS CMNT: Initial Implementation of CMNT capabilities, establish a business model for use of the CMNT across coalition networks.					
Pegasus/ICI: Support testing, certification and accreditation of Web Services for all CCEB Nations. Complete file publishing to all CCEB Nations.					
CFBLNet: Conduct EMPIRE CHALLENGE 11/12 Exercises to support Intelligence, Surveillance, and Reconnaissance, missile defense, and NATO force interoperability testing. Continue to evaluate emerging					

PE 0301144K: *Joint/Allied Coalition Information Sharing* Defense Information Systems Agency

R-1 Line #194

			UNCLAS							
Exhibit R-2A, RDT&E Project Justification: PB	2013 Defense I	Informatio	n Systems A	Agency				DATE: Febr	uary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation BA 7: Operational Systems Development	, Defense-Wide	· P	R <b>-1 ITEM NC</b> PE 03011441 Sharing		URE d Coalition In		ROJECT ND: Multina	ntional Infori	mation shari	ing
B. Accomplishments/Planned Programs (\$ in	<u>Millions)</u>					FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
capabilities and technologies supportive of coaliti Development Facility at China Lake, CA to the M GBR. This connection will facilitate collaborative Fighter (JSF) Mission Planning and other applica	aritime Integration in the planning and the	on and Su	ipport Centr	e at Portsdo	wn West					
UISS-APAN: Complete Initial Operation Capabilit to UISS-APAN enterprise from their current stove						s				
The decrease of -\$1.455 million from FY 2011 to	FY 2012 transit	ions CCE	R Phase I to	sustainme	nt.					
FY 2013 Base Plans: CENTRIXS CMNT: Deployment of CMNT										
Pegasus/ICI: Continue to improve Pegasus E-maservices to all CCEB Nations.	ail with all CCEB	Nations.	Continue to	expand and	l enhance cha	at				
CFBLNet: Continue to evaluate emerging capabi sharing needs. Continue to define, create and tes for American, British, Canadian, and Australian e eliminate those gaps.	st a simultaneou	ıs distribut	ted Synthetic	c Environme	ent capability					
UISS-APAN: Design and develop an implementa Design and develop capability improvements to in			y of Operation	ons (COOP)	support.					
The decrease of -\$0.008 between FY 2012 and FCFBLNet.	Y 2013 will redu	uce the te	sting baselir	ne for CENT	RIXS and					
	Ac	complish	nments/Plar	ned Progra	ams Subtota	ls 7.67	6.222	6.214	-	6.214
	ions)									
C. Other Program Funding Summary (\$ in Mill	10113 <i>j</i>									
C. Other Program Funding Summary (\$ in Mill  Line Item FY 2011	•	Y 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	EV 00.45	Cost To Complete	T-4-! 0

PE 0301144K: *Joint/Allied Coalition Information Sharing* Defense Information Systems Agency

UNCLASSIFIED
Page 5 of 11

R-1 Line #194

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Informa	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0301144K: Joint/Allied Coalition Information	NND: Multin	national Information sharing
BA 7: Operational Systems Development	Sharing		

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• Proc, DW/0301144K: <i>Proc, DW</i>	5.620	3.497	5.496		5.496	6.383	2.547	2.548	2.576	Continuing	Continuing

## **D. Acquisition Strategy**

Performance-based contracts are primarily used for this support. MNIS maximizes the use of competitive awards and uses various contract types, employs large and small contractors, and is focused to achieve agency socio-economic goals and incorporate DoD acquisition reform initiatives. MNIS evaluates performance by conducting thorough Post-award Contract Reviews, monthly Contract Performance Reviews, and monthly In-Process Reviews.

#### **E. Performance Metrics**

#### Measure:

-Functional and/or Security Test & Evaluation test cases.

#### Performance Metric:

- -System will provide for 99.99% data integrity for authorized users sharing information cross COI
- -Maintain 99.99% Confidentiality for users, by Nation between COI's.
- -Direct traffic with 99.99% accuracy for chat, email, VOIP, file transfer, data storage and web service.

## Methodology:

- -Assessment Plan
- -Sample ≥ 10K transactions (Email, chat & file storage/transfer)
- -Conduct selected ST&E test cases

#### Measure:

-Security

#### Performance Metric:

-Deny 98.5% of unauthorized user attempts

#### Methodology:

- -Assessment Plan
- -DISA Field Security Operations (FSO) will conduct penetration testing

Measure:

PE 0301144K: Joint/Allied Coalition Information Sharing Defense Information Systems Agency

Page 6 of 11

R-1 Line #194

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Informa		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	PROJECT		
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0301144K: Joint/Allied Coalition Information	NND: Multii	national Information sharing
BA 7: Operational Systems Development	Sharing		

-Security

## Performance Metric:

-Audit log must capture 99.99% of any unauthorized user activity.

# Methodology:

- -Assessment Plan
- -Conduct audit log reviews in conjunction
- -FSO penetration tests.

## Measure:

-Reliability

## Performance Metric:

- -98.9% availability of the DISA-managed infrastructure.
- -Mean time to restore functionality <30 minutes.

# Methodology:

- -Assessment Plan
- -Audit logs and Monitoring

PE 0301144K: *Joint/Allied Coalition Information Sharing* Defense Information Systems Agency

R-1 Line #194

UNCLASSIFIED Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0301144K: Joint/Allied Coalition Information | NND: Multinational Information sharing Sharing BA 7: Operational Systems Development **FY 2013** FY 2013 FY 2013 **Product Development (\$ in Millions)** FY 2012 Base oco Total **Total Prior** Target Contract Method Performing Years Award Award Award Cost To Value of **Cost Category Item Activity & Location** Cost Date Cost Date Cost Date Complete **Total Cost** Contract & Type Cost Cost Harris Cross Domain Chat - develop C/CPFF Corporation:Alexandria 13.374 1.100 Feb 2012 1.300 Feb 2013 Continuing Continuing 1.300 Continuing & tech svcs Cross Domain Solutions HAI/Raytheon:Arlington operational capabilities C/CPFF 11.143 0.388 Feb 2012 0.400 Feb 2013 0.400 Continuing Continuing Continuina VA support Subtotal 24.517 1.488 1.700 1.700 FY 2013 FY 2013 **FY 2013** Support (\$ in Millions) FY 2012 Base oco Total Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of **Activity & Location** Cost Cost Date **Total Cost** Contract **Cost Category Item** & Type Cost Cost Date Date Cost Complete **CLASSIFIED** MIPR Continuing 9.069 Continuina Continuina Federally Funded Research Continuing C/CPFF MITRE: Arlington VA 5.861 1 467 Mar 2012 Continuing Continuing Develop Center (FFRDC) Ingenium and SAIC:Upper Marlboro Program support C/CPFF 1 522 Continuina Continuing Continuina MD and Washington D.C. C/CPFF **Engineering Support** Raytheon: Arlington VA Feb 2012 Feb 2013 0.650 Continuing Continuing Continuing 6.397 1.341 0.650 Continuing DoD Services **MIPR** Various: Various 1.171 Continuing Continuina Harris Project Planning and C/CPFF Corporation:Alexandria 2.864 Mar 2013 2.864 Continuing Continuing Continuing Management VA Subtotal 24.020 2.808 3.514 3.514 FY 2013 FY 2013 FY 2013 Test and Evaluation (\$ in Millions) FY 2012 Base oco Total Contract **Total Prior Target Cost To** Value of Method Performing Years Award Award Award **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Cost Date Cost Complete **Total Cost** Contract Date Coalition Lab T&E, IAVA STIG MIPR JITC:Fort Meade MD 7.911 1.926 Feb 2012 1.000 Dec 2012 1.000 Continuing Continuing Continuing

PE 0301144K: Joint/Allied Coalition Information Sharing **Defense Information Systems Agency** 

UNCLASSIFIED Page 8 of 11

R-1 Line #194

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	PROJECT		
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0301144K: Joint/Allied Coalition Information	NND: Multin	national Information sharing
BA 7: Operational Systems Development	Sharing		

Test and Evaluation (\$ in Millions)				FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	7.911	1.926		1.000		-		1.000			
Total Prior Years Cost		FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract		
		Project Cost Totals	56.448	6.222		6.214		-		6.214			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 [	Defer	nse	Infor	mat	ion :	Syst	ems	Ag	ency	,											D	ATE	: Fe	brua	ary 2	2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, BA 7: Operational Systems Development	Defe	ense	-Wia	le		PI		011	NOI 44K					litio	n Info	rma	atior		R <b>OJ</b> ND:			iona	l Info	orma	atio	n sha	aring	1
		FY	2011	1		FY	2012	2		FY	201	3		FY	2014			FY	201	5		FY	2010	6		FY	201	 7
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MULTINATIONAL INFORMATION SHARING (MNIS) – Current Systems			'			<u>'</u>	'	'		'	•	'	'					'		'		'						
CENTRIXS Capability																												
CMNT																												
JITC Testing Security/C&A																												
CFBLNet																												
UIS																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0301144K: Joint/Allied Coalition Information	NND: Multir	national Information sharing
BA 7: Operational Systems Development	Sharing		

# Schedule Details

	St	tart	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
MULTINATIONAL INFORMATION SHARING (MNIS) - Current Systems					
CENTRIXS Capability	1	2011	4	2017	
CMNT	4	2011	4	2014	
JITC Testing Security/C&A	1	2011	4	2017	
CFBLNet	1	2011	4	2017	
UIS	2	2012	4	2017	



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0302016K: National Military Command System-Wide Support

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
Total Program Element	0.463	0.481	0.499	-	0.499	0.517	0.526	0.526	0.532	Continuing	Continuing
S32: NMCS Command Center Engineering	0.463	0.481	0.499	-	0.499	0.517	0.526	0.526	0.532	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

The National Military Command System (NMCS), operated by the Chairman of the Joint Chiefs of Staff, provides the President, Secretary of Defense, and other national senior leaders the ability to maintain situational and operational awareness and command and control of military forces in all crisis and/or national emergency contingencies. DISA's NMCS Engineering program meets the NMCS Systems Engineer responsibilities, per Department of Defense Directive (DoDD) S-5100.44 and Chairman of the Joint Chiefs of Staff Instruction 3280.01B, to provide the Joint Staff with operationally efficient and cost-effective engineering solutions to ensure that components and facilities satisfy operational requirements including emergency messaging, situational awareness, crisis action, and information management.

The NMCS engineering program is vital in supporting the government's ability to safeguard national security and respond to contingencies globally and/or nuclear war. NMCS Engineering focuses on the implementation of collaborative tools into current and crisis operations areas, the integration of adequate back-up storage and recovery of voice, video and data across the continental United States to support key leaders, transition of nuclear command and control to Internet Protocol (IP)-based networks, migration of data and voice network to NEXT-GEN satellites, implementation of modern crypto-logical devices, and the utilization of wireless networking to support Warning Systems and situational awareness. In addition, NMCS Engineering continues to maintain the NMCS Reference Guide (NRG) required by DoDD S-5100.44 and to develop engineering and test plans for the installation of hardware and software systems utilized within the NMCS.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	0.467	0.481	0.494	-	0.494
Current President's Budget	0.463	0.481	0.499	-	0.499
Total Adjustments	-0.004	-	0.005	-	0.005
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	-0.004	-	0.005	-	0.005

PE 0302016K: *National Military Command System-Wide Support* Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 6

R-1 Line #201

Volume 5 - 145

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0302016K: National Military Command System-Wide Support

BA 7: Operational Systems Development

## **Change Summary Explanation**

The FY 2011 decrease of -\$.004 supports higher Agency priorities.

The FY 2013 increase of -\$.005 reflects inflationary adjustments.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: NMCS Systems Engineering	0.463	0.481	0.499
FY 2011 Accomplishments: Installed and tested new radios and antennas for the UEN system at Site R and BCS-F at the NMCC, alternate NMCC at Site-R, and the Office of the Secretary of Defense, Communications. The NMCS Reference Guide (NRG) was completed and entered into an on-going maintenance phase.			
FY 2012 Plans:  Efforts include upgrade to the Super High Frequency communications network, implement and install the modernized Enhanced Pentagon Capability (EPC) switch architecture and the National and Nuclear Crypto-logical Modernization efforts, maintain of the NRG, and develop the Primary Command Center Toolkit Expansion database and analytical tools.			
The increase between FY 2011 and FY 2012 of +\$0.018 provides increased implementation support for the NMCC.			
FY 2013 Plans: Will maintain the NRG and the Primary Command Center Toolkit. Additional efforts include providing technical evaluations for implementing NC2 over IP and modernizing the Raptor communications network. In FY 2013, the National and Nuclear Cryptological Modernization efforts will conclude.			
The increase between FY 2012 and FY 2013 of +\$0.018 will provide increased implementation support for the NMCC.			

## D. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• O&M, DW/PE 0302016K: <i>O&amp;M</i> ,	25.658	28.643	29.864	0.000	29.864	30.580	30.464	30.405	30.923	Continuing	Continuing
DW											

# E. Acquisition Strategy

Full and open competition resulted in a contract with Raytheon, Arlington, VA.

PE 0302016K: *National Military Command System-Wide Support* Defense Information Systems Agency

UNCLASSIFIED
Page 2 of 6

R-1 Line #201

**Accomplishments/Planned Programs Subtotals** 

Volume 5 - 146

0.499

0.481

0.463

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Infor	mation Systems Agency	DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE					
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0302016K: National Military Command System-Wide Sup	oport				
BA 7: Operational Systems Development						

#### **F. Performance Metrics**

The NMCS Engineering Branch conducts regularly scheduled In-progress Program Reviews (IPRs) and Configuration Control Board (CCB) meetings to monitor status of engineering projects/tasks. Each current project/task is evaluated in terms of how well the technical work is progressing and how allocated resources are being utilized. Adjustments to resources, schedules, and technical directions are made, as required. Future projects/tasks are also discussed, thereby ensuring an integrated approach is maintained across all related project/task areas. To further increase the utility of the IPR/CCB structure, the Joint Staff customer participates in the project/task reviews. The result of this approach is a truly integrated effort of NMCS Engineering, contractor, and Joint Staff working together to achieve common program goals. For FY 2011, thirteen major projects were completed. All thirteen projects met operational/functional requirements and were accepted by their respective NMCS customers. All thirteen projects were completed within allocated costs/resources. All thirteen projects were completed within the original schedule.

PE 0302016K: *National Military Command System-Wide Support* Defense Information Systems Agency

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0302016K: National Military Command

S32: NMCS Command Center Engineering

**DATE:** February 2012

BA 7: Operational Systems Development

System-Wide Support

Support (\$ in Millions)				FY 2	2012	FY 2 Ba	2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering/Tech Services	C/CPFF	Raytheon E- Sys:Arlington, VA	3.814	0.481	Nov 2011	0.499	Nov 2012	-		0.499	Continuing	Continuing	5.525
		Subtotal	3.814	0.481		0.499		-		0.499			5.525
			Total Prior Years Cost	FY :	2012	FY 2 Ba	2013 ise		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	3.814	0.481		0.499		-		0.499			5.525

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency **DATE:** February 2012 **R-1 ITEM NOMENCLATURE PROJECT** APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide S32: NMCS Command Center Engineering PE 0302016K: National Military Command BA 7: Operational Systems Development System-Wide Support **FY 2011** FY 2014 FY 2015 FY 2012 FY 2013 FY 2016 FY 2017 2 2 3 3 2 3 2 1 4 2 3 1 Completion of the NMCS Reference Guide Maintenance/Update of NMCS Reference Guide (ongoing real-time) Completion of the PCC Toolkit Expansion Maintenance/Update of the PCC Toolkit Expansion Completion of UEN Upgrade Installation of Battle Control System-Fixed in the NCR Completion of Study: NC2 over IP Completion of SHF Upgrade Installation of new MILSTAR circuits Inspection/Maintenance of HEMP sites in the **NCR** 

PE 0302016K: *National Military Command System-Wide Support* Defense Information Systems Agency

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0302016K: National Military Command

System-Wide Support

**PROJECT** 

S32: NMCS Command Center Engineering

**DATE:** February 2012

## Schedule Details

	Sta	art	End		
Events	Quarter	Year	Quarter	Year	
Completion of the NMCS Reference Guide	1	2011	1	2011	
Maintenance/Update of NMCS Reference Guide (ongoing real-time)	2	2011	4	2017	
Completion of the PCC Toolkit Expansion	1	2011	2	2012	
Maintenance/Update of the PCC Toolkit Expansion	3	2013	4	2017	
Completion of UEN Upgrade	1	2011	1	2011	
Installation of Battle Control System-Fixed in the NCR	1	2011	2	2011	
Completion of Study: NC2 over IP	1	2011	4	2012	
Completion of SHF Upgrade	1	2011	4	2014	
Installation of new MILSTAR circuits	1	2011	3	2011	
Inspection/Maintenance of HEMP sites in the NCR	2	2011	4	2017	

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0302019K: Defense Info. Infrastructure Engineering and Integration

**DATE:** February 2012

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	34.884	15.179	14.498	-	14.498	14.198	9.687	8.880	8.989	Continuing	Continuing
E65: Modeling and Simulation	26.090	12.946	5.775	-	5.775	5.972	5.814	6.005	6.083	Continuing	Continuing
T62: GIG Systems Engineering and Support	8.794	2.233	8.723	-	8.723	8.226	3.873	2.875	2.906	Continuing	Continuing

## A. Mission Description and Budget Item Justification

The Global Information Grid (GIG) Enterprise Wide Systems Engineering (EWSE) project resolves near term (1 to 3 years) high-priority technical issues defined by Department of Defense Chief Information Officer (DOD CIO) and DISA, that impact operational capabilities affecting GIG end-to-end (E2E) interoperability and performance. The Chief Technology Officer (CTO) supports efforts that will strengthen the delivery of critical GIG products, services, and capabilities to the warfighter through the establishment of the DISA Technology Management Framework (TMF). This Framework provides analysis, strategies, and roadmaps, as well as technology development and insertion into DISA programs of record, while also influencing Service/Agency program technology investments. As the Science and Technology arm of DISA, CTO projects are critical to providing the venue for technology assessment and insertion in DISA (and DoD) that will result in more efficient and effective technology investments and ultimately improved global, net-centric operations.

The Modeling and Simulation project provides architecture, systems engineering and end-to-end analytical functions for DISA and its customers, ensuring integrated capabilities to fulfill warfighter mission requirements. Ongoing beneficiaries of these capabilities include DOD CIO, the DISA Network Services Directorate, Program Executive Office-Mission Assurance (PEO-MA), the DISN Command Center (DCC), Joint Communications Simulation System (JCSS) users in DoD, and other DISA programs/projects such as Net-Centric Enterprise Services (NCES), CENTRIXS Cross Enclave Requirement (CCER) (PEO-C2C), etc.

FY 2013 funding will provide DISN Internet Protocol (IP) and Transport Capacity Planning models, to include FY 2013 technology refresh and new user requirements, DoD Internet traffic models and analyses for capacity planning and IA initiatives, Voice and Video over IP (VVoIP) modeling tools supporting the Unified Capabilities Requirements (UCR) Document and end-to-end security goals of the evolving DISN, enhanced modeling and instrumentation techniques for net-centric applications planning and tuning and JCSS modeling tools supporting the combatant commands.

As the Science and Technology arm of DISA, CTO projects are critical to rapidly providing the venue for technology assessment and insertion in DISA (and DoD) that will result in more efficient and effective technology investments and ultimately improved global, net-centric operations. Further, as the Department of Defense Global Information Grid (DoD GIG) Chief Technologist, the CTO provides analysis of industry standards and specifications and advises the DoD/CIO on ensuring the framework for information sharing across DoD and the federal community is provided. The CTO provides rapid integration of emerging commercial technologies to gain immediate user feedback, provide risk mitigation, and support enhancements of concept of operations and tactics, techniques, and procedures for initiatives addressing the Chairman's capability gap.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide PE 0302019K: Defense Info. Infrastructure Engineering and Integration

BA 7: Operational Systems Development

The Interoperability Enhancement Process (IEP) supports the resolution of Tactical Data Enterprise Services (TDES) through issues resolution, the developing TDES capability, and TDES verification and certification. The overarching objective of the IEP will be to support the realization and maintenance of interoperable Net-Centric weapons, sensors, and Command and Control (C2) systems at the tactical edge.

The EWSE project will provide technical solutions to addresses unique end-to-end interoperability and performance in DoD and GIG areas of concern. Enterprise-level technical requirements are undefined for a significant number of GIG end-to-end issues. EWSE provides end-to-end system documentation that defines functional, performance, and interface guidelines that programs can use but is often unavailable. Through the EWSE program, no single entity will resolve technical, policy, or programmatic issues on proposed end-to-end solutions. Without defining enterprise requirements, networks would only interface effectively at Tier 0, effectively defeating the transformational advantages of many next generation GIG components.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	16.629	8.366	8.354	-	8.354
Current President's Budget	34.884	15.179	14.498	-	14.498
Total Adjustments	18.255	6.813	6.144	-	6.144
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.687			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	7.500			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	18.255	-	6.144	-	6.144

# **Change Summary Explanation**

The FY 2011 increase of +\$18.255 is due to an increase of +\$20.000 for the Cyber Security Program and a decrease of -\$1.745 realigned to higher Agency priorities.

The FY 2012 increase of +\$6.813 is due to an increase of +\$7.500 for the Cyber Security Pilots Program and a decrease of -\$0.687 for higher headquarter priorities.

The FY 2013 increase of +\$6.144 is attributable to two factors. The major increase of +\$6.000 is due to analysis of industry standards, specifications and rapid integration of emerging commercial technologies to gain immediate user feedback, provide risk mitigation, and support enhancements of concept of operations and tactics, techniques, and procedures for initiatives addressing the Chairman's capability gap. A second increase of +\$0.144 is an inflation adjustment.

UNCLASSIFIED
Page 2 of 18

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Jus	stification: PE	3 2013 Defei	nse Informa	tion Systems	Agency				DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Tes BA 7: Operational Systems Develo	st & Evaluation	n, Defense-V	Vide	PE 0302019	IOMENCLAT PK: Defense g and Integra	Info. Infrasti		PROJECT E65: Model	ing and Sim	ulation	
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
E65: Modeling and Simulation	26.090	12.946	5.775	-	5.775	5.972	5.814	6.005	6.083	Continuing	Continuing
Quantity of RDT&E Articles											

## A. Mission Description and Budget Item Justification

The Modeling and Simulation project provides architecture, systems engineering and end-to-end analytical functions for DISA and its customers, ensuring integrated capabilities to fulfill warfighter mission requirements. Modeling and Simulation performs a broad spectrum of activities for the DoD communications planning and investment strategy, including: application assessments, contingency planning, network capacity planning and diagnostics, and systems-level modeling and simulation. Modeling and Simulation develops across-theater information awareness for Combatant Commands through application solutions for integrated networks, to include DoD's missions in Iraq and Afghanistan and the Defense Information Systems Network (DISN), by: (1) supporting the development and implementation of GIG EWSE processes essential to evolving the GIG in a manner that enables interoperability and end-to-end performance for critical GIG programs; (2) developing standardized DISA systems analyses and integration processes to improve systems integration across DISA for all DISA developed communication systems and services; and (3) providing the underlying modeling and simulation and analytical support for end-to-end DISA and DoD systems engineering and assessment. These operations provide DoD decision makers, with services and a suite of tools capable of identifying key points of impact on DoD command and control information systems and recommending tradeoffs within the GIG configuration with regard to prioritized performance, availability, and security. This effort will reduce the risk in products deployment to the warfighter through improved network performance and traffic analysis, and an efficient means of troubleshooting and subsequent redesign.

The Interoperability Enhancement Process (IEP) supports the Tactical Data Enterprise Services (TDES) implementation and issues resolution, the development of TDES capability, and TDES verification and certification. The overarching objective of the IEP will be to support the implementation and maintenance of interoperable Net-Centric weapons, sensors, and C2 systems at the tactical edge. The IEP will use jointly defined and developed interoperability tool set to determine the TDES interoperability capabilities of systems. Interoperability shortfalls will be identified for each system. The gaps will be based on weapon, sensor or C2 system capabilities analyzed with respect to current policies, architectures, operational concepts, Joint Mission Threats (JTMs) and other criteria that collectively form the standard view of the TDES Architecture.

The interoperability gaps will be documented to provide each system a common format implementation specification for TDES Interoperability. This requirements process will be updated consistent with the maintenance/upgrade cycle for each system. For emerging systems, the IEP will be conducted prior to Milestone "C" of the platform. DISA will support this process through: the establishment and maintenance of the IEP databases that contain platform system interoperability capabilities; the jointly approved standard view of the TDES Architecture; and the implementation specification(s) for TDES Interoperability. The Services will be responsible for development of the material solutions that provide system compliance with their respective implementation specification(s) for TDES Interoperability. The Services will update the DISA IEP databases with system interoperability capabilities as validated by flag level review. Validated data will include capability deviations and schedules for "full" Joint certification. A second component of the IEP will provide warfighters operationally relevant information to maximize net-enabled systems. Services have agreed upon common capability characteristics to identify system performance in a joint environment. The collection of these efforts, when synchronized across the services and available to joint warfighters through net-centric capabilities is called Joint Capabilities and Limitations.

PE 0302019K: Defense Info. Infrastructure Engineering and Integ... Defense Information Systems Agency

UNCLASSIFIED
Page 3 of 18

R-1 Line #202

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Infor	mation Systems Agency		DATE: Fel	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0302019K: Defense Info. Infrastructure Engineering and Integration	PROJEC E65: Mod	T leling and Sin	nulation	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Title: Modeling and Simulation			26.090	12.946	5.775
FY 2011 Accomplishments: Funds supported EWSE efforts to resolve near and mid term high-pri- interoperability and performance. Six technical tasks were completed Hosting Applications and Data in a Virtual Computing Environment, E Common Radio Interface to IP Layer; Global Access Control; and Glo (GTP) were developed and delivered under these tasks. GTPs are us EWSE also continued to technically manage Integrated SATCOM Op NetOps Technical Architecture; and evolve DISA Unified Communica DoD standards management office, EWSE coordinated DoD WiMAX comments. Four technical tasks were initiated in FY11: Secure Feder Services and Architecture; Service-Orientation in DIL; and DoD Enter support customers within DISA and stakeholder in the DoD communi task were used for Enterprise Engineering Technical Track at the DIS	In FY11: Federated SOA Architecture for GIG Serend-to-End Service and Performance & SLA Manage Multicast Network Architecture. GIG Technical Fixed by the DoD Programs of Record for NR-KPP corrections Management JCTD; develop DoD level Gations and Collaboration Architecture. In partnershipsecure Profile RFI with the industry and adjudicate rated GIG Core Architecture and Routing Services reprise User Initiative-Directory Services. All tasks dity. Preliminary results from the Service-Orientation	gement; Profiles compliance. iIG co with ed vendor GIG VPN irectly			
Funds supported development of GIG Convergence Master Plan Volthe near-term target technical architecture and Vol. II which consists and the complete DISA technical baseline. Modeling and Simulation techniques for Enterprise Email end-to-end performance assessment prepare for the FY 2013 Technology Refresh and to meet new user models and analyses for capacity planning and IA initiatives, for DISA modeling tools and techniques to provide inputs to network planning security goals of the evolving DISN, to ensure timely support of the plan Convergence Master Plan; and supported modeling for customer near	of the complete service offering to service capability funds provided enhanced modeling and instrument; enabled continued, enhanced, modeling capability requirements in each theater; provided DoD Inter A Director, CYBERCOM, and Network Services; er in support of Unified Communications and end to-elans/stages in the DISN Technical Evolution Plan a	tation ties to net traffic thanced and GIG			
DISA EE3 successfully tested, verified, validated, and fielded in DEC federation (GTG-F) to allow for "data-centric" Interoperability and Supby the Services. Established a program entry point through the Enhatransparently tag data as it is entered or imported in to a structured to the Interoperability Assessment Module (IAM) was developed within the Joint assessment community of potential interoperability gaps. This is a positive paradigm shift from document driven reviews to data arc interoperability for the Joint Warfighter.	oportability analysis of Joint Information Support Planced Information Support Plan (EISP) application emplate with Extensible Markup Language (XML). the GTG-F to perform assessment of the data table he introduction of this new "data-centric" analysis of	ans to In addition, es to alert capability			

PE 0302019K: *Defense Info. Infrastructure Engineering and Integ...* Defense Information Systems Agency

R-1 Line #202

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Infor	rmation Systems Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJEC	T		
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	PE 0302019K: Defense Info. Infrastructure Engineering and Integration	E65: <i>Mod</i>	leling and Sir	mulation	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
DISA EE3, as the DoD Executive Agent for IT Standards, merged th utilization with the emerging standards management processes deve improve interoperatbility and enterprise information sharing among the	eloped within the Intelligence Community. This cha				
FY 2012 Plans: Funds continue EWSE efforts to resolve near term (1 to 3 years) high affecting GIG end-to-end (E2E) performance in transport, computing and Enterprise Services.					
Modeling and Simulation funding continues, enhanced, modeling cap Planning models, to include addressing FY 2013 Technology Refresh traffic analyses for capacity planning and IA initiatives, supporting DIS projects; enhanced modeling tools and techniques to provide inputs that and end to-end security goals of the evolving DISN, to ensure timely Plan and GIG Convergence Master Plan; enhanced modeling and instand tuning, to include Enterprise services, and modeling support for a planning.	h and new user requirements in each theater; DoD SA Director, CYBERCOM, Network Services, and F to network planning in support of Unified Communic support of the plans/stages in the DISN Technical strumentation techniques for net-centric application	Internet PEO-MA cations Evolution is planning			
The decrease of -\$13.144 between FY 2011 and FY 2012 is attributa Congressional Add for the Cyber Security Pilots Program and a decreproject in FY 2011.	· ·	the IEP			
Primary execution of FY11 Cyber Security Pilot funds in support of the information assurance products and technologies into DoD operation to explore and evaluate the viability of commercial solutions in the archost and network levels, enclave security policy evaluation, data cent unmanaged mobile endpoints, end-to-end cloud security, and cryptog in overseeing and managing these pilots is to ensure the objectives a facilitate enterprise deployment and sustainment. Another key aspect of the cyber accelerator concept as an innovative mechanism for idea technologies and products for the DoD.	ns. Specifically, planned and ongoing pilots will be of eas of non-signature-based detection products at be ter attack detection and diagnosis, securing manage graphic tagging for data loss prevention. DISA's in- and metrics associated with the pilots are optimized of the cyber pilot funding for FY12 is the advance	executed ooth the led and volvement led			
FY 2013 Plans:					

PE 0302019K: *Defense Info. Infrastructure Engineering and Integ...*Defense Information Systems Agency

UNCLASSIFIED
Page 5 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

PE 0302019K: Defense Info. Infrastructure
Engineering and Integration

DATE: February 2012

PROJECT

E65: Modeling and Simulation

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Funding will continue EWSE efforts to resolve near term (1 to 3 years) high-priority technical issues impacting operational capabilities affecting GIG end-to-end (E2E) performance in transport, computing services, applications, information assurance (IA), Network Operations (NetOps) and Enterprise Services. EWSE will continue to investigate leading edge technologies and technology gaps such as Cloud Computing Services, WiMax technologies, and the provision of Enterprise Services in the Disconnected, Intermittent, and Limited (DIL) communications environment, as identified in the GIG Convergence Master Plan (GCMP). The EWSE Team will continue to develop GIG Technical Profiles (GTP) for these leading edge GIG enterprise services and will expand the GCMP process to encompass DoD-wide technical issues. The cost per project/effort is \$0.875 million.	·	·	
Modeling and Simulation funding will continue FY 2012 efforts to enhance, modeling capabilities that will provide DISN IP and Transport Capacity Planning models, to include addressing FY 2013 Technology Refresh and new user requirements in each theater when identified, DoD Internet traffic models and analyses for capacity planning and IA initiatives, for DISA Director, Cybercom, and Network Services, Enhanced modeling tools and techniques to provide inputs to network planning in support of Unified Communications and endto-end security goals of the evolving DISN, to ensure timely support of the plans/stages in the DISN Technical Evolution Plan and GIG Convergence Master Plan, Enhanced modeling and instrumentation techniques for net-centric applications planning and tuning, to include Enterprise services, and Modeling support for customer needs in DISA program/project decisions and planning.			
The decrease of -\$7.171 from FY 2012 to FY 2013 is comprised of two adjustments: a decrease of -\$7.500 for a one-time Congressional add for the Cyber Security Pilot Program and an increase of +\$0.329 for leading-edge technologies in DISN IP and Transport Capacity Planning models.			
Accomplishments/Planned Programs Subtotals	26.090	12.946	5.775

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• PE 0302019K: Operation &	29.675	33.730	29.515		29.515	32.885	33.982	33.700	34.119	Continuing	Continuing
Maintenance, Defense-Wide											

## D. Acquisition Strategy

The GIG EWSE project uses contractors for technical IPT support, and piloting and validation support. Booz Allen Hamilton, and Lockheed Martin are the main providers for this support. These companies are uniquely qualified to provide the necessary level of technical support needed to address GIG end-to-end performance issues.

PE 0302019K: *Defense Info. Infrastructure Engineering and Integ...* Defense Information Systems Agency

UNCLASSIFIED
Page 6 of 18

R-1 Line #202

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information	ation Systems Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0302019K: Defense Info. Infrastructure	E65: Modeling and Simulation
BA 7: Operational Systems Development	Engineering and Integration	

Modeling and Simulation uses a range of contractors for modeling support to the various projects. Contractors range from small to large business, predominantly using open competition methods and Firm Fixed Price (FFP) tasks, and seeking multi-year (base plus option years) contracts as possible. Support includes network modeling tool and processes development to adapt to ever-evolving OSD/DISA programs and projects, analyses, capacity planning, and network redesign using the models. Some specific support (e.g., integration with proprietary OPNET software) will require contracting with OPNET (e.g., sole source). Federally Funded Research and Development Centers (FFRDC) are also considered depending upon the task.

The Interoperability Enhancement Process funds are executed by Military Inter-departmental Purchase Requests (MIPR) with associated Service Level Agreements to Air Force and Navy IAW the execution of IEP Management Plan.

#### E. Performance Metrics

Modeling and Simulation performance measured by DISN core bandwidth sufficiency tied to transport and IP capacity planning and activation of bandwidth in the DISN core to keep at least 25 percent spare capacity to allow for provisioning of unforeseen requirements and rerouting under outages.

The IEP utilizes the joint set of Net-Ready Key Performance Parameters (NR-KPPs) as the metrics for interoperability assessment. These NR-KPPs are applied to all legacy or new weapons, sensors and C2 systems. The iSmart tracking matrix measures data reuse, and data validation process with feedback loops to validate data based upon JITC testing results.

The IEP will capture and assess standard RAM performance metrics such as Operational Availability (Ao), Mean Time Between Failures (MTBF), and Mean Time To Repair (MTTR). Additionally, Customer Usage Reports will be generated to ascertain peak usage periods, potential latency/quality of service issues, and most used/least used of the sub-application capabilities.

The EWSE projects will be measured by the number of intermediate and final GTGs and/or GTPs that are published to support interoperability of DISA C2 programs and the number of engineering/technical solutions that are adopted by programs/initiatives across DoD, COCOMs, and the services. These solutions will be coordinated with the stakeholder/user, to ensure EWSE has the right solution to the right problem.

PE 0302019K: Defense Info. Infrastructure Engineering and Integ... Defense Information Systems Agency

UNCLASSIFIED
Page 7 of 18

R-1 Line #202 **Volume 5 - 157** 

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0302019K: Defense Info. Infrastructure

Engineering and Integration

**PROJECT** 

E65: Modeling and Simulation

**DATE:** February 2012

Product Development (	\$ in Millio	ns)		FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 1	SS/FFP	OPNET Tech, Inc.:Bethesda, MD	3.022	1.262	Aug 2012	1.302	Aug 2013	-		1.302	Continuing	Continuing	5.10
Product Development 2	C/CPFF	APPTIS:Chantilly, VA	1.137	0.336	Jan 2012	0.117	Jan 2013	-		0.117	Continuing	Continuing	0.99
Product Development 3	SS/FFP	Noblis:Falls Church, VA	1.312	-		-		-		-	Continuing	Continuing	0.98
Product Development 4	C/FFP	Booz Allen, Hamilton:McLean, VA	1.092	1.092	Dec 2011	2.019	Dec 2012	-		2.019	Continuing	Continuing	3.11
Product Development 5	C/FFP	NRL:Washington, DC	0.100	-		-		-		-	Continuing	Continuing	0.10
Product Development 6	C/CPFF	TBD:TBD	0.161	1.006	Mar 2012	1.544	Mar 2013	-		1.544	Continuing	Continuing	2.71
Product Development 7	C/FFP	TBD:TBD	2.200	0.500	Dec 2011	0.143	Dec 2012	-		0.143	Continuing	Continuing	3.44
Product Development 8	C/CPFF	TBD:TBD	0.926	0.500	Dec 2011	0.154		-		0.154	Continuing	Continuing	0.500
Product Development 9	C/CPFF	TBD:TBD	3.109	0.750	Mar 2012	-		-		-	Continuing	Continuing	3.14
Product Development 10	MIPR	Various:Various	7.011	-		-		-		-	Continuing	Continuing	7.01
Enterprise Wide Systems Engineering 11	C/FFP	Northrop Grumman:Fairfax, VA	1.784	-		-		-		-	Continuing	Continuing	1.784
Clear Sky Pilot	C/CPFF	AFRL Terremark:TBD	11.000	7.500		-		-		-	Continuing	Continuing	3.000
Narus	C/CPFF	AFRL:Rome, NY	1.450	-		-		-		-	Continuing	Continuing	1.450
Cyber Accelerator	C/CPFF	DTIC:Alexandria, VA	7.516	-		-		-		-	Continuing	Continuing	2.800
Commercial Integration Demonstration	C/CPFF	DTIC:Alexandria, VA	2.750	-		-		-		-	Continuing	Continuing	2.750
Web Content Filtering: Perimeter Defense Integration	C/FFP	Oberon Associates:Ft. Meade, MD	1.854	-		-		-		-	Continuing	Continuing	1.854
Host Based Security Ops Assessment	C/FFP	Summit Technologies, Inc:Ft Meade, MD	0.700	-		-		-		-	Continuing	Continuing	0.70
Secure Configuration Management Ops Assessment	C/FFP	Cyber Security research and Solutions Corp:Ft Meade, MD	0.964	-		-		-		-	Continuing	Continuing	0.96
		Subtotal	48.088	12.946		5.279		-		5.279			42.39

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0302019K: Defense Info. Infrastructure Engineering and Integration

E65: Modeling and Simulation

**DATE:** February 2012

BA 7: Operational Systems Development

FY 2013 FY 2013 FY 2013 Test and Evaluation (\$ in Millions) FY 2012 oco Total Base **Total Prior** Contract Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Test and Evaluation SS/CPFF Comptel:Arlington, VA 2.072 0.496 Mar 2013 0.496 Continuing Continuing 2.568 0.496 0.496 Subtotal 2.072 2.568

	Total Prior Years Cost	FY 2	2012	FY 2013 Base		2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	50.160	12.946		5.775	-		5.775			44.965

**Remarks** 

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM N

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0302019K: Defense Info. Infrastructure

Engineering and Integration

**PROJECT** 

E65: Modeling and Simulation

**DATE:** February 2012

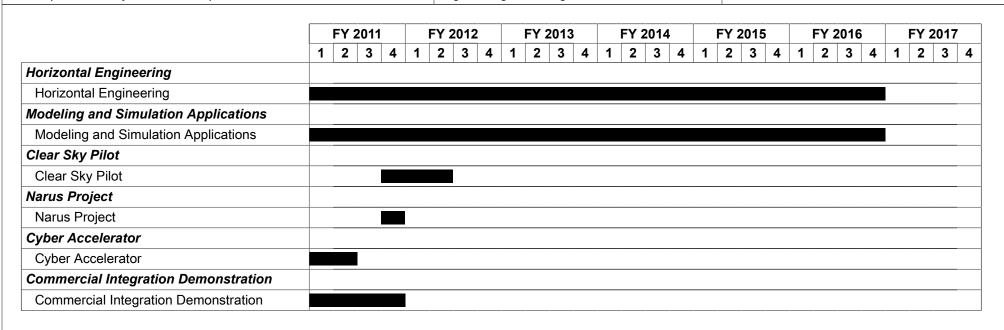


Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0302019K: Defense Info. Infrastructure

Engineering and Integration

**PROJECT** 

E65: Modeling and Simulation

**DATE:** February 2012

## Schedule Details

	Sta	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Horizontal Engineering				
Horizontal Engineering	1	2011	4	2016
Modeling and Simulation Applications				
Modeling and Simulation Applications	1	2011	4	2016
Clear Sky Pilot				
Clear Sky Pilot	4	2011	2	2012
Narus Project				
Narus Project	4	2011	4	2011
Cyber Accelerator			,	
Cyber Accelerator	1	2011	2	2011
Commercial Integration Demonstration			,	
Commercial Integration Demonstration	1	2011	4	2011
		L		

Exhibit R-2A, RDT&E Project Jus	stification: PE	3 2013 Defe	nse Informat	tion Systems	Agency				DATE: Febr	uary 2012	
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Tes BA 7: Operational Systems Develo	st & Evaluation	Evaluation, Defense-Wide PE 0302019K: Defense Info. Infrastructure T62: GIG Systems Engineering and Integration					Support				
COST (\$ in Millions) FY 2011 FY 2012 Base				FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
T62: GIG Systems Engineering and Support	8.794	2.233	8.723	-	8.723	8.226	3.873	2.875	2.906	Continuing	Continuing
Quantity of RDT&E Articles											

## A. Mission Description and Budget Item Justification

The Chief Technology Officer (CTO) supports efforts to deliver critical GIG products, services, and capabilities to the warfighter through the establishment of the DISA TMF. This framework provides analysis, strategies, and roadmaps, as well as technology assessment and insertion into DISA products and services, while also influencing Service/Agency program technology investments. As the Science and Technology arm of DISA, CTO projects are critical to rapidly providing the venue for technology assessment and insertion in DISA (and DoD) that will result in more efficient and effective technology investments and ultimately improved global, net-centric operations.

- •Capability 1 supports end-to-end technology analysis, assessments, and reviews of all solutions, products, services, and capabilities to ensure all are consistent with GIG architecture and standards. These projects provide direct support to Services, COCOMS, OSD, and the Joint Staff as well as the DoD business and acquisition communities and the intelligence community (IC). The end result is more efficient and effective technology investments and ultimately improved global, net-centric operations which are delivered through GIG products, services, and capabilities to the Services, COCOMS, OSD, and the Joint Staff as well as the DoD business and acquisition communities and the IC.
- •Capability 2 supports various aspects of evolving the GIG, including developing enterprise system architecture constructs for the GIG and components, providing engineering guidance for system and component evolution, including incorporating new technology from industry. Engineering and technical support of the DISA programs implementing the GIG involves technical research and analysis of state-of-the-art and emerging technologies, architectures, and data communication and application frameworks. This involves the identification and recommendation of innovative engineering techniques, practices and methodologies that are critical to the DISA in its role of instantiating the GIG architecture; the support of information exchanges with the Services, OSD, the COCOMS, and the Joint Staff to identify opportunities, issues, and solutions to improve the DISA products; and, facilitation and harmonization of cross-corporate programs relative to the DISA programs and the GIG.

The other mission in this exhibit is performing classified work. All aspects of this project are classified and require special access. Detailed information on this project is not contained in this document.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Global Information Grid (GIG) Systems Engineering and Support	8.794	2.233	8.723
FY 2011 Accomplishments:			

PE 0302019K: *Defense Info. Infrastructure Engineering and Integ...* Defense Information Systems Agency

UNCLASSIFIED
Page 12 of 18

R-1 Line #202

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Informa	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0302019K: Defense Info. Infrastructure Engineering and Integration	PROJECT T62: GIG S	ystems Engineering and Support

# B. Accomplishments/Planned Programs (\$ in Millions) FY 2011 funding of \$4.700 million was used to evolve the TMF and continue support of the Technology Readiness Assessments (TDA). TDA is an essential capability supporting several key DISA programs of record as well as supporting the close-out of the Enterprise thin-client effort. DISA has successfully developed an initial technology environment, including the infrastructure and methodologies necessary for technology evaluation and analysis. A streamlined, Department of Defense Architecture Framework (DoDAF)-compliant Multi-level Security (MLS) Enterprise Architecture (EA) was published that fuses the architecture with recognized, dependent enterprise services such as directory and domain name system while supporting vendor agnostic enterprise and local virtual domains. The design of the Enterprise Identity Management System (EIMS) was completed, using detailed use-cases and work flows abstracted from the recently completed Joint Staff MLS thin-client pilot and leveraging evolving/emerging IA policies/practices and best-in-class products that are MLS certified. The resulting architectural "blue-print" can serve as the building-code for architecture design and service integration/interoperability among domain and/or mission-level architectures with the EIMS, targeted for a 2QFY12 proof-of-concept, validating that the architecture is viable and can support GIG 2.0 goals of improved information sharing, security, and resiliency.

The remaining \$4.094 supported classified work.

#### FY 2012 Plans:

FY 2012 funding of \$2.233 million is being used to refine several major elements of the TMF and continue support of the Technology Readiness Assessment. The Strategic Technology Plan is being updated to better align with the technologies that were identified in the Technology Watch List and the Technology Environment will be expanded to include venues such as DoD test ranges and the non-DoD Federal sector and peering with DoD and national laboratory assets. The Enterprise Architecture and Infrastructure effort continues to defining/refining technology gaps and mitigation of identified deficiencies through technology innovation activities and focused investments which will translate into piloting activities in support of GIG optimization resulting in improved information sharing, information security, and network performance of the GIG.

The decrease of -\$6.561 between FY 2011 and FY 2012 is due to the completion of DAMA-C and thin client projects.

#### FY 2013 Plans:

FY 2013 funding of \$2.723 million will be used for CTO Engineering Support to refine several elements of the TMF reflecting lessons-learned and customer/user feedback and metrics measurements/results from the application of the TMF to technology management challenges within DISA (and the CTO), with other DoD organizations, the intelligence community, and initial use with non-DoD external entities in the Federal Government (e.g. Department of Homeland Security (DHS)). The funding will also be used to continue support of the Technology Readiness Assessment, an essential capability supporting several key DISA programs of record with a greater leveraging of venues such as DoD test ranges and the non-DoD Federal sector and peering with DoD and national laboratory assets to more fully realize cross-domain, cross enterprise end-to-end system testing, further realizing and resulting in improved information sharing, information security, and network performance of the GIG.

FY 2011

FY 2012

**FY 2013** 

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Inform	nation Systems Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0302019K: Defense Info. Infrastructure	T62: GIG Systems Engineering and Support
BA 7: Operational Systems Development	Engineering and Integration	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Funding of \$6.000 million will be used to provide analysis of industry standards and specifications to advise the DoD/CIO on making the framework for information sharing is available to the DoD and the federal community. Provide rapid integration of emerging commercial technologies to gain immediate user feedback, provide risk mitigation, and support enhancements of operations and tactics, techniques, and procedures for initiatives addressing the Chairman's capability gap.			
The increase of +\$6.490 between FY 2012 and FY 2013 is comprised of two factors. +\$6.000 is for rapid integration of emerging commercial technologies to gain immediate user feedback, provide risk mitigation for initiatives addressing the Chairman's capability gap. +\$0.490 will be used for performing an in-depth capability analysis of near term and future DoD cloud service offerings and the participation and establishment of a new standards group for inter-cloud communication and existing cloud standards bodies.			
Accomplishments/Planned Programs Subtotals	8.794	2.233	8.723

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<u>Base</u>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• O&M, DW/PE 0302019K:	2.159	2.117	4.649		4.649	4.623	4.721	4.717	4.744	Continuing	Continuing

Operation & Maintenance,

Defense-Wide

## D. Acquisition Strategy

Awarded an 8a Small Business Contract with Moya, Technologies, Inc.

These projects provide technical, engineering, and integration expertise to the DISA Chief Technology Officer (CTO) in support of the major GIG components, which include: GIG Enterprise Services (GES), Defense Information Systems Network (DISN), Satellite Communications (SATCOM), GIG Directory Service, Global Combat Support System (GCSS), Joint Command and Control (JC2), Joint Planning and Execution Services (JPES), Teleport, Global Command and Control System (GCCS), Enterprise Services Management (ESM), Information Assurance (IA), Wireless Services, Net-Centric Enterprise Services (NCES), and other related components. This project provides technical, engineering, and integration expertise to the DISA Chief Technology Officer (CTO) to meet the warfighters' needs of today and the future. This effort will provide support to DISA and Joint Staff in its mission of providing Enterprise Multi-Level Security Architecture (EA) solution developed for the DoD for GIG Enterprise Services. The EA solution will provide the agile blue-print guiding architectural construct and principles for programs of record that deliver MLS enterprise services while the test, certification and accreditation and pilot deployment of the Enterprise Identity Management System, built using the EA guiding principles, will provide a first look at an enterprise capability supporting the GIG Enterprise Information Environment (EIE). MITRE (FFRDC) will provide support to

PE 0302019K: Defense Info. Infrastructure Engineering and Integ...

UNCLASSIFIED Page 14 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information	Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency										
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT									
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0302019K: Defense Info. Infrastructure	T62: GIG S	ystems Engineering and Support								
BA 7: Operational Systems Development	Engineering and Integration										

DISA in its mission of providing technical strategies to realign and perform end-to-end systems engineering for the DoD for GIG EIE. MITRE (FFRDC) will ensure that system integration and implementation is coordinated with other major C2 systems through its support to other C2 System Program Executive Offices.

#### **E. Performance Metrics**

The CTO has developed different sets of metrics to ensure that whichever metrics are applied, they are relevant and have meaning to the project's purpose and projected outcome, consistent with DISA mission objectives, POR technology requirements and gaps, and CTO technology themes. Performance is measured by achievement of project milestones and the acceptance/transition of these technologies/services/capabilities into programs of record or as a new, separate program/service offering to the DoD and IC communities. Specific and measurable metrics that will be introduced and used include number and percentage of emerging and mature technologies adopted and/or adapted by DISA and/or the Department to address/satisfy the documented technology and service gaps identified in capstone enterprise environment architectures, program/project needs statements, and other key technology planning and guideline documents; and the number and percentage of technology research and development initiatives and investments in the Department, peering organizations, and/or industry partners that are attributable to technology research, investments and evolution plans in DISA and promoted via the technology watch-list and outreach activities used to identify, promote, channel and aligning technology research and investments to reduce time to field new/emerging technologies to satisfy warfighter requirements.

In FY 2011, Program Management Support provided managers with project management, financial management, contract management assistance, information assurance technical expertise, knowledge management, outreach, and transition engineering. Program management resources continued to support the growth in all key mission areas of technology analysis, assessment, evaluation, and integration. Additionally, DISA will need continued civilian pay funding to cover salaries and benefits for Government civilian personnel assigned to CTO; training, professional development and travel for CTO personnel; and supplies and services for CTO operations.

In FY 2012 and FY 2013, there will be a continued need for core program management support to the technology analysis, assessment, evaluation, and integration activities to manage financial accounts, oversee information assurance activities, assist in contract administration, and provide technical advice and assistance through the use of subject matter experts. Program Management support will also provide asset management, quality assurance and business line improvement, information assurance oversight, technical oversight and assistance, web support, and application hosting fees. Technology integration support, including knowledge management expertise, outreach, transition engineering expertise, and scenario and/or capability-based demonstrations, will continue for all the program managers in each of the mission areas.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0302019K: Defense Info. Infrastructure

Engineering and Integration

\_\_\_

**DATE:** February 2012

PROJECT

T62: GIG Systems Engineering and Support

<b>Product Development</b>	(\$ in Millio	ns)		FY 2	2012		2013 se	FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering and Technical Services	FFRDC	MITRE:McLean, VA	1.650	1.038	Oct 2011	1.200	Oct 2012	-		1.200	Continuing	Continuing	4.575
Industry Tech Res	C/FFP	Gartner:Various	0.120	0.120	Oct 2011	0.129	Oct 2012	-		0.129	Continuing	Continuing	0.120
GIG Technical Insertion Engineering	C/FFP	SRA, Inc.:Fairfax, VA	1.211	-		-		-		-	Continuing	Continuing	2.472
Product Development	C/Various	Raytheon:Various	1.297	0.616	Oct 2011	-		-		-	Continuing	Continuing	0.788
DAMA-C	MIPR	Defense Micro- electronics Activity:Various	11.794	-		-		-		-	Continuing	Continuing	11.794
Thin Engineering Support	MIPR	Air Force Research Lab:Various	1.500	-		-		-		-	Continuing	Continuing	1.500
Engineering and Technical Support	C/FFP	Moya Technologies, Inc.:TBD	-	-		1.394	Oct 2012	-		1.394	Continuing	Continuing	1.070
Engineering Technical Services	MIPR	TBD:TBD	1.142	0.459	Oct 2011	6.000	Oct 2012	-		6.000	Continuing	Continuing	6.051
		Subtotal	18.714	2.233		8.723		-		8.723			28.370
			Total Prior Years Cost	FY 2	2012	FY 2 Ba	2013 ise	FY 2	2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	18.714	2.233		8.723		-		8.723			28.370

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013	B Defe	ense	Infor	mat	ion	Sys	tems	βA	genc	у													TAC	ſΕ: ˈ	Feb	oruai	ry 2	012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0302019K: Defense Info. Infrastructure Engineering and Integration									PROJECT T62: GIG Systems Engineering and Se					d Si	ıppo											
		FY	2011	1		FY	201	2		F	Y 20	13			FY	2014	ı		FY	201	5		F	Y 20	016	 		FY 2	201	7
	1	2	3	4	1	2	3	4	4 1		2 3	3 4	4	1	2	3	4	1	2	3	4	1	1	2	3	4	1	2	3	4
Technical Direction Agent (TDA)					,						,						,		,											
Technical Direction Agent (TDA)																														
Engineering Support (Raytheon)																														
Engineering Support (Raytheon)																														
Industry Technical Research																														
Industry Technical Research																														

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0302019K: Defense Info. Infrastructure

Engineering and Integration

**PROJECT** 

T62: GIG Systems Engineering and Support

**DATE:** February 2012

## Schedule Details

	St	End			
Events by Sub Project	Quarter	Year	Quarter	Year	
Technical Direction Agent (TDA)					
Technical Direction Agent (TDA)	1	2011	4	2017	
Engineering Support (Raytheon)					
Engineering Support (Raytheon)	1	2011	4	2017	
Industry Technical Research					
Industry Technical Research	1	2011	4	2017	

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303126K: Long-Haul Communications - DCS

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	36.598	21.619	26.164	-	26.164	21.694	12.033	11.025	11.151	Continuing	Continuing
PC01: Presidential and National Voice Conferencing	1.000	4.140	18.902	-	18.902	14.180	4.398	3.389	3.427	Continuing	Continuing
T82: DISN Systems Engineering Support	35.598	17.479	7.262	-	7.262	7.514	7.635	7.636	7.724	Continuing	Continuing

#### Note

## A. Mission Description and Budget Item Justification

The Defense Information Systems Network (DISN) is the Department of Defense (DoD) consolidated worldwide telecommunications capability that provides secure, end-to-end information transport for DoD operations. It also provides the warfighter and the Combatant Commands (COCOMs) with robust Command, Control, Communications, Computing, and Intelligence (C4I) infrastructure to support DoD netcentric missions and business requirements. The Defense Red Switch Network (DRSN) is a DoD Secure Voice, Command and Control Network that is controlled and directed by the Joint Staff and the Office of the Secretary of Defense. It provides multilevel secure, rapid, ad hoc, voice calling and conferencing capability to senior leaders including the President, Secretary of Defense, Services, COCOMs, subordinate organizations (military and civilian) and allies. DRSN also supports the National Emergency Action Decision Network (NEADN)/Presidential and National Voice Conferencing (PNVC) and the Enhanced Pentagon Capability/Survivable Emergency Conferencing Network (EPC/SECN).

DISN Systems Engineering Support: This effort includes: engineering for Internet Protocol (IP) and Optical transport capabilities to ensure the essential operations of a robust and secure DISN; refreshment of operational systems and network operating systems that instrument and automate the operations, administration, maintenance and provisioning functions and creating a single DISN-wide view for network managers and operators; and the peripheral and component design in support of the DRSN to sustain continued highly classified, critical senior leadership communications capabilities. In addition, Integrated SATCOM-GIG Operations & Management (ISOM): The ISOM is a JCTD project that includes all activities necessary to develop a scalable and policy-based management system that enables dynamic allocations and provisioning of satellite communications (SATCOM) resources. Project activities include developing system architecture, producing and conducting a functional evaluation of the ISOM prototype.

Integrated Waveform (IW): The IW program consists of the development, testing, fielding, and initial operations of the IW system.

NEADN/PNVC: The NEADN provides selected system engineering for continued development and testing of the Presidential and National Voice Conferencing (PNVC) equipment for senior leaders. The PNVC system provides a military satellite-based, survivable, secure, and near toll-quality voice conferencing capability for the President, Secretary of Defense, Chairman, Joint Chiefs of Staff, and other senior national/military leaders anywhere in the world as needed. Specifically, the project funding supports the acquisition activities for the PNVC baseband equipment, including critical and essential engineering required to develop new vocoder and

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 20

R-1 Line #203

Volume 5 - 169

**DATE:** February 2012

<sup>\*</sup>The FY 2012 total includes \$10.500 million in OCO funding.

<sup>\*\*</sup>The FY 2011 total included \$23.125 million in OCO funding.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303126K: Long-Haul Communications - DCS

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

cryptographic and audio-summing equipment. Lack of sufficient funding will significantly impact the implementation of an enhanced, survivable voice conferencing capability to the President and other decision makers.

Distributed Tactical Communications System (DTCS): The DTCS is a variation of the Iridium Satellite Phone used by the warfighter under the Enhanced Mobile Satellite Service. The variation improves Iridium's capability to network and sub-network users to improve performance, reduce end-to-end latency and improve data handling to the handset. New handsets and software modifications will be required to utilize the improved service and allow Iridium satellites to "relay" information between the satellites. A separate Network Management capability will be required because the new service cannot leverage the standard commercial Iridium Network Manager. Funding provides engineering, development and testing resources for continued improvement to the Naval Surface Weapons Center's (NSWC) Technology Prototype to a fully fielded operational capability. Handsets are already fielded as part of a Central Command (CENTCOM) Joint Urgent Operational Needs Statement. Follow-on Research and Development effort includes two additional Handset Variants (Command and Control and Secret Command and Control), Network Management System, User Control Interface, and Satellite Software Modifications. Failure to fully fund would have severe negative impacts on the warfighter in the field in the Southwest Asia area of responsibility (SWA AOR).

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	32.255	21.824	25.890	-	25.890
Current President's Budget	36.598	21.619	26.164	-	26.164
Total Adjustments	4.343	-0.205	0.274	-	0.274
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.205			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	4.343	-	0.274	-	0.274

# **Change Summary Explanation**

The FY 2011 increase of +\$4.343 in base funding is due to one-time costs associated with ISOM and IW development.

The FY 2012 decrease of -\$0.205 in base funding is due to contractor efficiencies.

The FY 2013 increase of +\$0.274 in FY 2013 base funding is due to inflationary adjustments.

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

Page 2 of 20

R-1 Line #203

Volume 5 - 170

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Defei	nse Intormat	ion Systems	Agency				DAIE: Febr	uary 2012					
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop	& Evaluation	n, Defense-V	Vide	PE 0303126K: Long-Haul Communications - PC01: Pre						PROJECT PC01: Presidential and National Voice Conferencing					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost				
PC01: Presidential and National Voice Conferencing	1.000	4.140	18.902	-	18.902	14.180	4.398	3.389	3.427	Continuing	Continuing				
Quantity of RDT&E Articles															

## A. Mission Description and Budget Item Justification

The National Emergency Action Decision Network (NEADN) provides system engineering, development and testing of the Presidential and National Voice Conferencing (PNVC) equipment for senior leaders. The PNVC system provides a military satellite-based, world-wide, survivable, secure, and near toll-quality voice conferencing capability for the President, Secretary of Defense, Chairman, Joint Chiefs of Staff, and other senior national/military leaders. By implementing new technology capabilities (e.g. Ethernet-Framing and higher data rate), this project provides improved performance to the survivable voice conferencing capability. This project supports the acquisition activities for the PNVC baseband equipment, including engineering required to develop new vocoder and cryptographic and audio-summing equipment. PNVC baseband development and production schedule is synchronized with the fielding of military Advanced Extremely High Frequency (AEHF) satellite communications (SATCOM) terminals.

PNVC is STRATCOM's highest priority for the NC2 mission and lack of sufficient funding will significantly delay DISA's delivery of the baseband equipment leaving the enhanced, survivable voice conferencing capability for the national decision makers at risk.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	oco	Total
Title: National Emergency Action Decision Network (NEADN)	1.000	4.140	18.902	-	18.902
<b>Description:</b> Description: NEADN/PNVC Systems Engineering - Conducts analyses for continuity of NEADN voice conferencing for national/military leaders through the PNVC deployment. Continue engineering, technical analysis, development and coordination to ensure terminal, baseband, and satellite synchronization for voice conferencing amongst senior leaders.					
FY 2011 Accomplishments: The PNVC Capabilities Production Document was updated and the Concept of Operations (CONOPS) for PNVC was defined to fully utilize the enhanced capabilities provided by the system. Funding initiated the development of Multi-stream Summing Device (MSD)-III and other Defense Red Switch Network (DRSN) interface equipment, which continued into FY 2012. Delivered PNVC Baseband Interface Group (BIG) updated technical specifications.					
FY 2012 Plans:					

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

Page 3 of 20

R-1 Line #203

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Informa	tion Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303126K: Long-Haul Communications -	PC01: Pres	idential and National Voice
BA 7: Operational Systems Development	DCS	Conferencii	ng

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
In FY 2012, contract preparations continue, with the National Security Agency as the acquisition agent, including the technical and acquisition documentation leading to a PNVC BIG contract award in FY 2013.					
The increase of +\$3.140 from FY 2011 to FY 2012 funds the development of the MSD-III PNVC/DRSN interface equipment, completion of Clinical Data Repository (CDR) and the initiation of factory testing for these components.					
FY 2013 Base Plans: The expected two year development contract for the BIG will be awarded. The DRSN interface equipment will undergo development testing and evaluation to support FY 2013 procurement decisions. A single enclosure will be developed to contain all PNVC baseband equipment for the PNVC special users; plus coordination for platform integration and developmental testing for the end to end PNVC capability.					
The +\$14.762 increase from FY 2012 to FY 2013 develops the PNVC baseband equipment to support an Initial Operational Capability (IOC) in FY 2015.					
Accomplishments/Planned Programs Subtotals	1.000	4.140	18.902	-	18.902

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	<b>FY 2011</b>	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
Procurement, DW/PE 0303126K:	0.000	0.000	3.100		3.100	7.400	10.700	1.800	1.820	Continuing	Continuing
Procurement, Defense-Wide											

# D. Acquisition Strategy

Engineering support for the NEADN is provided by existing DoD contracts and FFRDC support.

## **E. Performance Metrics**

PNVC project metrics track the development of various documents: Project Management Plan (PMP), Concept of Operations (CONOPs), Acquisition Strategy, Capability Production Document (CPD), and other documents needed to manage the project. Data metrics based on cost, schedule, and performance are used for the NEADN development and certification efforts.

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

UNCLASSIFIED
Page 4 of 20

R-1 Line #203

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0303126K: Long-Haul Communications -PC01: Presidential and National Voice DCS BA 7: Operational Systems Development Conferencina FY 2013 FY 2013 FY 2013 **Product Development (\$ in Millions)** FY 2012 Base oco Total **Total Prior** Target Contract Method Performing Years Award Award Award Cost To Value of Cost Cost Category Item **Activity & Location** Cost Date Date Complete **Total Cost** Contract & Type Cost Cost Date Cost Booz Allen Systems Engineering C/CPFF 0.600 Oct 2011 0.600 Oct 2012 0.600 Continuing Continuing N/A Hamilton:McLean, VA Systems Engineering **FFRDC** Mitre:McLean, VA 0.223 0.100 Oct 2011 0.100 Oct 2012 0.100 Continuing Continuing N/A **MIPR** Feb 2013 **BIG Development Preparation** NSA:Various 0.180 0.200 Apr 2012 12.400 12.400 Continuina Continuina N/A MSD-III Development C/T&M Raytheon:Largo, FL 2.900 2.800 Oct 2011 3.878 Oct 2012 3.878 Continuing Continuing N/A 3.303 3 700 16.978 16 978 Subtotal **FY 2013** FY 2013 FY 2013 Support (\$ in Millions) oco FY 2012 Base Total **Total Prior** Contract Target Performing Years Award Award **Cost To** Value of Method Award **Cost Category Item** Cost Cost **Total Cost** & Type **Activity & Location** Cost Cost Date Date Date Cost Complete Contract Subtotal 0.000 0.000 0.000 FY 2013 FY 2013 FY 2013 Test and Evaluation (\$ in Millions) FY 2012 Base oco Total **Total Prior** Contract **Target** Method Years Award **Cost To** Value of Performing Award Award **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Certification Testing **MIPR** Various Various 0.345 1 624 1.624 Continuina Continuina Continuina Subtotal 0.345 1.624 1.624 FY 2013 FY 2013 FY 2013 Management Services (\$ in Millions) FY 2012 Base oco Total **Total Prior** Contract Target Value of Method Performing Years Award Award Award Cost To Cost Category Item & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Aerospace Management Services **FFRDC** Corporation:Falls 0.250 0.095 Nov 2011 0.300 Oct 2012 0.300 Continuing Continuina Continuina Church, VA 0.095 0.300 0.300 Subtotal 0.250

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

UNCLASSIFIED
Page 5 of 20

R-1 Line #203

APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NO	MENCLATURE		PROJE	CT			
0400: Research, Development, Test & Evaluation, Defen	se-Wide	PE 0303126k	K: Long-Haul Commui	nications -	PC01: I	Presidenti	al and Nat	ional Voice	
BA 7: Operational Systems Development		DCS	-		Confere	encing			
	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 201	3	FY 2013	Cost To	Total Cost	Target Value of

18.902

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

**Project Cost Totals** 

3.553

4.140

Remarks

**DATE:** February 2012

18.902

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

PROJECT

PE 0303126K: Long-Haul Communications - DCS

PROJECT

PC01: Presidential and National Voice

Conferencing

		FY 2	2011			FΥ	2012	2		FY 2	2013			FY 2	2014			FY 2	2015	5		FY	2016	3		FY 2	017	,
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	
Systems Engineering for NEADN/PNVC																												_
Systems Engineering for NEADN/PNVC																												
Acquisition Documentation for PNVC																												
Acquisition Documentation for PNVC																												
PNVC CONOPS																												
PNVC CONOPS																												
PNVC Capabilities Production Doc																												
PNVC Capabilities Production Doc																												
PNVC/DRSN Spec Dev																												
PNVC/DRSN Spec Dev																												
PNVC/DRSN Interface Equip Dev																												
PNVC/DRSN Interface Equip Dev																												-
Special Users Requirements Doc																												
Special Users Requirements Doc																												
PNVC Development Contract Preps																												
PNVC Development Contract Preps																												
Command and Control Secure Handset																												
Command and Control Secure Handset																												
Increased Push to talk time to .7 seconds																												_
Improved Network Architecture																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303126K: Long-Haul Communications -

DCS

**PROJECT** 

PC01: Presidential and National Voice

**DATE:** February 2012

Conferencing

## Schedule Details

	Sta	End		
Events by Sub Project	Quarter	Year	Quarter	Year
Systems Engineering for NEADN/PNVC				
Systems Engineering for NEADN/PNVC	1	2011	4	2016
Acquisition Documentation for PNVC				
Acquisition Documentation for PNVC	1	2011	2	2012
PNVC CONOPS				
PNVC CONOPS	4	2011	2	2012
PNVC Capabilities Production Doc				
PNVC Capabilities Production Doc	3	2011	3	2011
PNVC/DRSN Spec Dev				
PNVC/DRSN Spec Dev	1	2011	2	2011
PNVC/DRSN Interface Equip Dev				
PNVC/DRSN Interface Equip Dev	4	2011	3	2014
Special Users Requirements Doc				
Special Users Requirements Doc	1	2011	1	2011
PNVC Development Contract Preps				
PNVC Development Contract Preps	1	2011	4	2011
Command and Control Secure Handset			,	
Command and Control Secure Handset	2	2011	1	2012
Increased Push to talk time to .7 seconds	4	2011	3	2012
Improved Network Architecture	4	2011	3	2012

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Defer	nse Informat	tion Systems	Agency				<b>DATE:</b> Febi	uary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development					<b>IOMENCLA</b> 6K: <i>Long-Ha</i>	TURE nul Communi	PROJECT T82: DISN	T N Systems Engineering Support				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
T82: DISN Systems Engineering Support	35.598	17.479	7.262	-	7.262	7.514	7.635	7.636	7.724	Continuing	Continuing	
Quantity of RDT&E Articles												

## A. Mission Description and Budget Item Justification

Internet Protocol (IP) and Optical Transport Technology Refresh (TR): Provides the engineering technical expertise necessary to support and integrate newer, more efficient technologies required to replace the current end of lifecycle equipment and to achieve more efficient IP and optical technologies. These new technologies provide protected and assured services for mobility; high-quality information sharing and collaboration capabilities provide critical support to the warfighter as well as other DoD and federal customers.

Element Management System (EMS): Provides operational and network operating systems that instrument and automate the operations, administration, maintenance and provisioning functions creating a single DISN-wide view for network managers and operators. EMS is a component of the DISN Operational Support Systems (OSS).

Secure Voice Switches: This equipment satisfies unique military requirements for multilevel security (i.e., extensive conferencing/conference management capabilities and features, and gateway functions) that are not available in commercial products. Due to the proprietary multi-level security and conferencing solutions embedded in Secure Voice Switch equipment, the only alternative to wholesale replacement is the Engineering Change Proposal (ECP) process which is used to identify and manage the development of replacement parts and peripherals necessary to ensure the continued support of the system.

Distributed Tactical Communications System (DTCS): This system is a tactical and scalable over-the-horizon, on-the-move, and beyond line of sight voice communications system for the small unit disadvantaged user.

- Phase 1 supported CENTCOM Joint Urgent Operational Needs CC-0278 by fielding 500 radios with basic functionality for 100 mile communications in an austere environment. This provided basic functionality with the initial development and fielding of the Radio Only handset.
- Phase 2 supported basic CENTCOM Joint Urgent Operational Needs CC-0368 requirements by fielding more than 5,000 handsets to the CENTCOM Area of Operation. Improvements to DTCS were increased in range from 100 miles to 250 miles, improved network capacity from 250 to 16,000, user operated management tool, color screen command and control handset with NSA approved encryption, and tactical vehicle integration.
- Phase 3 supports improving CENTCOM Joint Urgent Operational Needs CC-0368 requirements. DTCS improvements include architecture that enables self management and monitoring, alternate supplier development, interoperability interfaces, and internet protocol infrastructure.

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

Page 9 of 20

R-1 Line #203

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Inform	ation Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303126K: Long-Haul Communications -	T82: <i>DISN</i>	Systems Engineering Support
BA 7: Operational Systems Development	DCS		

The Integrated SATCOM-GIG Operations & Management (ISOM) JCTD project will include all activities necessary to develop a scalable and policy-based management system that enables dynamic allocation and provisioning of satellite communications (SATCOM) resources. Project activities will include developing system architecture, producing and conducting a functional evaluation of the ISOM prototype.

The Integrated Waveform (IW) program consists of the development, testing, fielding and initial operations of the IW systems necessary to update technical capabilities.

Major Range and Test Facility funding for test facility equipment and installation.

B. Accomplishments/Planned Programs (\$ in Millions)

B. Accomplishments/r lanned r rograms (\$\psi\ m\	FY 2011	FY 2012	Base	OCO	Total
Title: IP & Optical Transport (a component of Tech Refresh)	10.501	3.715	3.883	-	3.883
FY 2011 Accomplishments: Completed Phase III of the DSS-2A Switch modification for the DRSN. Phase III is the completion phase of the DSS-2A large switch replacement development project. Initiated effort to IP enable the DRSN DSS-2A switch for improved interworking with classified Voice over IP systems. This initial step included defining requirements and beginning design.					
FY 2012 Plans: The focus of FY2012 RDT&E funds is on the secure voice offerings to support Unified Capabilities. The DRSN voice switches, High-Altitude Electromagnetic Pulse HEMP and NORTHCOM conferencing are all initiatives that are at or near the end of life cycle for existing capabilities. Research activities are required to ensure continued technology refreshment to support these important DISN mission functions. FY 2012 Tech Refresh (TR) funding will continue the effort started in FY2011 to IP enable the DRSN DSS-2A switch. In FY2012, funds will be used for the first part of a two part development of a replacement (HEMP) phone for survivable secure voice NC2 systems. Additionally, FY12 TR funding is bieng used to develop and test a NORTHCOM Conferencing solution that supports large, multi-node distributed conferences for critical Homeland Security missions which provides conference controller with: the capability of remote call status across the conference; authorized control of remote switch functionality; and post-conference analysis capability.					
The decrease of -\$6.786 between FY 2011 and FY 2012 is due to the completion of Phase III of the DSS-2A modification and a new focus on secure voice offerings to support unified capabilities including IP enabling of the DRSN DSS-2A switch. Also included in FY11 funding was a onetime cost associated with ISOM and IW development.					
FY 2013 Base Plans:					

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

UNCLASSIFIED
Page 10 of 20

R-1 Line #203

FY 2013 | FY 2013 | FY 2013

	ONOLASSII ILD						
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Infor	mation Systems Agency		D	ATE: Febru	ary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303126K: Long-Haul Communicati DCS		ROJECT 2: DISN Sys	stems Engir	tems Engineering Suppo		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	
FY 2013 funds will be used to complete the effort to IP Enable the DF Phone development and continue developing and testing a NORTHC large, multi-node distributed conferences for critical Homeland Securi	OM conferencing solution that supports						
The increase of +\$0.168 from FY 2012 to FY 2013 is due to the more IP enabling of the DSS-2A switch, which includes testing and accredi							
Title: Elements Management System (a component of DISN OSS)		1.169	1.336	1.338	-	1.338	
In FY 2011, the funding continued providing a standardized capability management data and the implementation of a shared data model on applications. Specific activities included the development of additional as additional data protocols for pulling data to and pushing data from (CCV) which is near completion in one security domain in the product Information Sharing Services for Voice - In FY 2011, funding supported management of DISN voice services. The capability includes the devinterfaces, web services for legacy voice and Real Time Services (RT will decrease response time to problems and provisioning of voice services.	n service oriented architecture for all EMS al "out-of-the-box" data translations as well the Common Communications Vehicles tion environment.  ed data sharing of systems providing velopment of data standards, data sharing TS) network management systems. Funding						
Network Management Solutions for New DISN Technologies – In FY in providing network management support for new DISN catalogue se research on network management solutions for Secure Voice over IP supported the development of a DISA Integrated Incident Manageme supporting the DISA Command Center (DCC). Providing network manew DISN services and technologies is vital to supporting network opwarfighter.	ervices. FY 2011 activities included and RTS technologies. In addition, funding ant System as well as an operations portal nagement in parallel with the deployment of						
Information Sharing Services for Voice – Funding supported data sha DISN voice services. The capability includes the development of data services for legacy voice and Real Time Services (RTS) network mar response time to problems and provisioning of voice services.	a standards, data sharing interfaces, web						

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Infor	mation Systems Agency			ATE: Febru	ary 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303126K: Long-Haul Communication DCS		ROJECT 82: DISN Sy	T N Systems Engineering Suppo				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total		
Network Management Solutions for New DISN Technologies – This of network management support for new DISN catalogue services. FY network management solutions for Secure Voice over IP and RTS tendevelopment of a DISA Integrated Incident Management System as VDISA Command Center (DCC). Providing network management in paservices and technologies is vital to supporting network operations are	2011 activities included research on chnologies. Funding supported the well as an operations portal supporting the arallel with the deployment of new DISN							
FY 2012 Plans: In FY 2012, the funding will focus on network management integration	n of RTS and future DISN services.							
Data Integration for RTS - For RTS, emphasis includes a standardize for network management data and the implementation of a shared dath this effort supports the information sharing and network operations of awareness through a common user interface for obtaining information DISN RTS.	ata model on service oriented architecture.  objectives of a unified view and situational							
Network Management Solutions for New DISN Technologies – It is cr support for future DISN catalogue services requirements. FY 2012 ac management solutions for Secure Voice over IP and RTS technologies parallel with the deployment of new DISN services and technologies the changing missions of the warfighter.	ctivities include research on network es. Providing network management in							
The increase of +\$.167 from FY 2011 to FY 2012 is due to growth in expand network management requirements for the OSS.	DISN services and network elements which							
FY 2013 Base Plans: Activities for FY13 include support for DISA emerging technologies a consume data and services. Areas will include service assurance for as they converge across a collaborative environment in support of a management standpoint, this includes providing a full set of services, includes integrated satellite communications and real time services the network management capability operated in parallel with DISN capability.	DISA catalogue services and requirements full spectrum of operations. From a network end-to-end across an infrastructure that brough IP convergence. For FY13, the							

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

R-1 Line #203

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Inform	nation Systems Agency		D	ATE: Febru	ary 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE		ROJECT				
0400: Research, Development, Test & Evaluation, Defense-Wide	tions - T82: DISN Systems Engineering Support						
BA 7: Operational Systems Development	DCS						
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	
The increase of +\$.002 from FY 2012 to FY 2013 is due to the growth which expands network management requirements for the OSS.	in DISN services and network elements						
Title: Peripheral and Component Design (formerly Engineering Change	ge Proposals (ECP) DRSN Components)	0.80	3 1.928	2.041	-	2.041	
FY 2011 Accomplishments:  FY 2011 continued the effort to develop and produce a replacement for Remote (STE-R) based Channel Encryption Unit (CEU) to support fut wireless devices using the Secure Communications Interoperability Prused in develop a modified Multifunction Digital Adapter to support remetworks.	ure gateways for STEs and secure rotocol (SCIP). FY2011 funds also were						
FY 2012 Plans: FY 2012 funding for DRSN component refresh develops specifications (ECP) for replacement of the Dual Narrowband Interface (DNI) card us that current parts will be obsolete and the user interface software on the update. If not funded, the effort to replace the DNI card will be halted and aging software will not go forward. This will adversely affect the mother systems (EPC/SECN) that use these switch systems. To the exwill take longer to complete and development costs are likely to increasion of the property of the propert	sed in the DSS-2A switch. It is anticipated he Command Center Consoles will require and the efforts to deal with obsolete parts hid and long term viability of the DRSN and tent that funding is reduced, these efforts						
The increase of +\$1.125 from FY 2011 to FY 2012 is due to a minor of DNI card.	change in the rate of development of the						
FY 2013 Base Plans: FY 2013 funding will continue the DNI replacement development effor effort initiated in FY 2012. Due to the level of funding, it is expected the years. Depending on final costs and funding availability, an ECP for rethat have obsolete parts or EOL software issues would be initiated.	nat these efforts will occur over several efresh of other components or peripheral						
The increase of +\$.113 from FY 2012 to FY 2013 is due to a change in	n the mix of items being developed.						
Title: Distributed Tactical Communications System		23.12	5 10.500	-	-	-	
FY 2011 Accomplishments:							

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

UNCLASSIFIED
Page 13 of 20

R-1 Line #203

E	chibit R-2A, RDT&E Project Justification: PB 2013 Defense Informat	DATE: February 2012		
AF	PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
04	900: Research, Development, Test & Evaluation, Defense-Wide	PE 0303126K: Long-Haul Communications -	T82: <i>DISN</i> 3	Systems Engineering Support
BA	A 7: Operational Systems Development	DCS		

B. Accomplishments/Planned Programs (\$ in Millions)	EV 0044	EV 0040	FY 2013	FY 2013	FY 2013
Planned improvements to JUON CC-0368 requirements included software updates to the gateway infrastructure and user management tools and fielding of the command and control handset. Prototype and design of the secure command and control handset, interoperability improvements and integration into tactical vehicles were accomplished.	FY 2011	FY 2012	Base	oco	Total
FY 2012 Plans: OCO: Funding of \$10.500 million is for Phase 3 implementation and completion of JUON CC-0368. This includes the fielding of the secure command and control handset, web compatible architecture that expands network management functionality, and an increased response time for push-to-talk from ~ 2 seconds to ~ .7 seconds.					
The decrease of -\$12.625 between FY 2011 and FY 2012 is due to several of the system development tasks being completed and the amount of the development dollars being lowered as the system approaches completion.					
FY 2013 Base Plans: The reduction of -\$10.500 from FY 2012 is due to the completion of JUON CC-0368 in FY 2012 and the transition of DTCS capability to Enhanced Mobile Satellite Service (EMSS) for sustainment from the customer base.					
Accomplishments/Planned Programs Subtotals	35.598	17.479	7.262	-	7.262

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
<ul> <li>O&amp;M/PE0303126K: Operation &amp;</li> </ul>	156.515	157.778	61.762	91.257	153.019	66.830	65.765	61.281	62.374	Continuing	Continuing
Maintenance, Defense-Wide											
<ul><li>Procurement/PE0303126K:</li></ul>	95.856	84.932	116.801		116.801	122.657	100.240	91.379	118.463	Continuing	Continuing
Procurement, Defense-Wide											

## D. Acquisition Strategy

Products acquired for EMS requirements are professional services, network management software, supporting hardware, and development tools. Professional services will be procured through existing contracts available to DISA. For hardware and software, the DISA Computing Services group will be utilized for leased managed services, as well as the NASA enterprise equipment contracting vehicle when necessary and applicable.

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

UNCLASSIFIED
Page 14 of 20

R-1 Line #203

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE **PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303126K: Long-Haul Communications -

T82: DISN Systems Engineering Support

**DATE:** February 2012

BA 7: Operational Systems Development

The DSS-2A large switch modification and DRSN components will use an existing Air Force Command and Control Switching Systems (CCSS) Depot Support contract with the DSS-2A manufacturer (Raytheon) to perform the development and modification work, system integration and testing support.

DCS

#### **E. Performance Metrics**

FY 2011 FY 2012 FY 2013 Execute within Execute within Execute

APPROPRIATION/BUDGET ACTIVITY

**Network Management Solutions** 5% of Plan 5 % of Plan 5% of Plan

Network Solutions - New DISN Technologies Execute within Execute within Execute within

5% of Plan 5% of Plan 5% of Plan

**DSS-2A Switch Replacement** 100% of Plan Complete N/A

DTCS tracks performance through competition of requirements for JUON CC-0368

- FY 2011 Increase the number of available networks from 250 to 16.000
- FY 2011 Develop the NSA approved Secure Command and Control Handset
- FY 2012 Increase the push to talk speed from 2 seconds to .7 seconds
- FY 2012 Improve network architecture to integrate internet management of the network

PE 0303126K: Long-Haul Communications - DCS **Defense Information Systems Agency** 

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303126K: Long-Haul Communications -

DCS

PROJECT

T82: DISN Systems Engineering Support

**DATE:** February 2012

Product Development (	\$ in Millio	ns)		FY 2012		FY 2013 Base			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering for DSRN Components & Peripherals	Various	Raytheon:Florida	3.729	1.928	Feb 2011	2.041	Apr 2013	-		2.041	Continuing	Continuing	Continuing
Systems Engineering for DSS-2A Secure Voice Switch Replacement	Various	Raytheon:Florida	21.440	-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering for IP and Optical Technology Refresh	Various	DITCO:Various	1.912	3.715	Feb 2011	3.883		-		3.883	Continuing	Continuing	Continuing
Engineering & Technical Services for Web Based Mediation	C/T&M	Apptis:VA	1.168	-		-		-		-	Continuing	Continuing	Continuing
Engineering & Technical Services for Information Sharing Services for Voice	C/T&M	SAIC:VA	2.128	0.546	Jan 2012	0.546	Jan 2013	-		0.546	Continuing	Continuing	Continuing
Engineering & Technical Services for Network Mgmt Solutions for New DISN Element Technologies	C/T&M	SAIC:VA	0.795	0.790	Jun 2012	0.792	Jun 2013	-		0.792	Continuing	Continuing	Continuing
Single Sign On	C/T&M	SAIC:Various	1.397	-		-		-		-	Continuing	Continuing	Continuing
System Engineering for VoSIP	C/T&M	Various:Various	1.218	-		-		-		-	Continuing	Continuing	Continuing
Space Vehicle Upload	SS/CPFF	Iridium:McLean, VA	11.585	1.050		-		-		-	Continuing	Continuing	Continuing
Gateway Improvement	SS/CPFF	Iridium:McLean, VA	9.810	3.755		-		-		-	Continuing	Continuing	Continuing
Field Application Tool	MIPR	NSWC:Dahlgren	5.015	1.620		-		-		-	Continuing	Continuing	Continuing
DTCS Handset	SS/CPFF	Iridium:McLean, VA	5.700	0.150		-		-		-	Continuing	Continuing	Continuing
Command and Control Handset	SS/CPFF	Iridium:McLean, VA	6.750	0.525		-		-		-	Continuing	Continuing	Continuing
Alt. Supplier Development	MIPR	NSWC:Dahlgren, VA	2.900	0.550		-		-		-	Continuing	Continuing	Continuing
Radio Only Interface	MIPR	NSWC:Dahlgren, VA	2.180	0.345		-				-	Continuing	Continuing	Continuing
Remote Control Unit	SS/CPFF	Iridium:McLean, VA	2.100	-		-		-		-	Continuing	Continuing	Continuing
Type 1 Security	SS/CPFF	Iridium:McLean, VA	6.100	0.355		-		-		-	Continuing	Continuing	Continuing
Vehicle Integration	MIPR	NSWC:Dahlgren, VA	2.255	0.930		-		-		-	Continuing	Continuing	Continuing

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

UNCLASSIFIED
Page 16 of 20

R-1 Line #203

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0303126K: Long-Haul Communications -T82: DISN Systems Engineering Support DCS BA 7: Operational Systems Development FY 2013 FY 2013 FY 2013 **Product Development (\$ in Millions)** FY 2012 oco Base Total **Total Prior** Contract **Target** Method Performing Years Award Award Award Cost To Value of **Cost Category Item Activity & Location** Cost Date Cost Date Cost Date Complete **Total Cost** Contract & Type Cost Cost 88.182 16.259 7.262 7.262 Subtotal FY 2013 FY 2013 FY 2013 Support (\$ in Millions) FY 2012 Base oco Total Contract **Total Prior** Target Method Performing Years Award Award Award Cost To Value of **Total Cost Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete Contract 0.000 0.000 Subtotal 0.000 FY 2013 **FY 2013** FY 2013 Test and Evaluation (\$ in Millions) FY 2012 oco Base Total **Total Prior** Target Contract Cost To Method Performing Years Award Award Award Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Certification Testing MIPR JITC:Various 1.230 1.220 Continuing Continuing Continuing 1.230 1.220 Subtotal **FY 2013** FY 2013 FY 2013 Management Services (\$ in Millions) oco Total FY 2012 Base **Total Prior** Contract Target Method Performing Years Award Award Award **Cost To** Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Subtotal 0.000 0.000 0.000 **Total Prior** Target Years FY 2013 FY 2013 FY 2013 Cost To Value of Cost FY 2012 oco Total Complete Total Cost Contract Base 7.262 **Project Cost Totals** 89.412 17.479 7.262 Remarks

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

Page 17 of 20

R-1 Line #203

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency **DATE:** February 2012 **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0303126K: Long-Haul Communications -T82: DISN Systems Engineering Support BA 7: Operational Systems Development DCS **FY 2011** FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 3 3 2 3 2 4 1 2 3 4 1 2 4 3 1 Web-Based Mediation Admin Web-Based Mediation Admin Tactical Vehicle Integration Tactical Vehicle Integration User Management Tool/Field Application Tool Command and Control Handset Satellite Software Upgrade Satellite Software Upgrade Systems Engineering for DSS-2A Secure Voice Switch Replacement Systems Engineering for DSS-2A Secure Voice Switch Replacement Systems Engineering for DRSN Components and Peripherals Systems Engineering for DRSN Components and Peripherals Data Integration for Real Time Services Data Integration for Real Time Services **Network Management Solutions for New DISN Technologies Network Management Solutions for New DISN Technologies** Information Sharing Services for Voice Legacy Systems Real Time Services (RTS)

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

Page 18 of 20

R-1 Line #203 Volume 5 - 186

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EV 4																								
ГТ	2011	1		FY :	2012			FY 2	2013		F	Y 20	)14		FY	2015	i	F١	20	16		FY	2017	7
2	3	4	1	2	3	4	1	2	3	4	1	2	3	4 1	2	3	4	1 2	2 ;	3 4	4 1	1 2	3	4
												,							•					
																								•
			FY 2011 2 3 4																					

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303126K: Long-Haul Communications -

DCS

PROJECT

T82: DISN Systems Engineering Support

**DATE:** February 2012

# Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Web-Based Mediation Admin				
Web-Based Mediation Admin	1	2011	3	2011
Tactical Vehicle Integration				
Tactical Vehicle Integration	2	2011	4	2011
User Management Tool/Field Application Tool				
Command and Control Handset	1	2011	4	2011
Satellite Software Upgrade			,	
Satellite Software Upgrade	1	2011	2	2011
Systems Engineering for DSS-2A Secure Voice Switch Replacement				
Systems Engineering for DSS-2A Secure Voice Switch Replacement	1	2011	3	2011
Systems Engineering for DRSN Components and Peripherals				
Systems Engineering for DRSN Components and Peripherals	4	2011	4	2016
Data Integration for Real Time Services				
Data Integration for Real Time Services	1	2012	4	2012
Network Management Solutions for New DISN Technologies				
Network Management Solutions for New DISN Technologies	1	2011	4	2012
Information Sharing Services for Voice				
Legacy Systems	2	2011	4	2011
Real Time Services (RTS)	1	2011	4	2011
Range Extension				
Range Extension	3	2011	2	2012
Increase number of networks to 16K	3	2011	1	2012

PE 0303126K: Long-Haul Communications - DCS Defense Information Systems Agency

UNCLASSIFIED
Page 20 of 20

R-1 Line #203

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303131K: Minimum Essential Emergency Communications Network (MEECN)

**DATE:** February 2012

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ III WIIIIONS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
Total Program Element	10.640	12.514	12.931	-	12.931	13.284	13.448	13.448	13.602	Continuing	Continuing
T64: Special Projects	4.800	5.170	5.251	-	5.251	5.435	5.523	5.524	5.592	Continuing	Continuing
T70: Strategic C3 Support	5.840	7.344	7.680	-	7.680	7.849	7.925	7.924	8.010	Continuing	Continuing

### A. Mission Description and Budget Item Justification

Minimum Essential Emergency Communications Network (MEECN) provides the Nuclear Command, Control, and Communications (NC3) engineer with plans and procedures; systems analysis; operational assessments; systems engineering; and development of concepts of operation and architectures. The NC3 System provides connectivity from the President and the Secretary of Defense through the National Military Command System (NMCS) to nuclear execution forces integral to fighting a "homeland-to-homeland," as well as theater nuclear war. MEECN includes the Emergency Action Message (EAM) dissemination systems and those systems used for integrated Tactical Warning/Attack Assessment (TW/AA), presidential decision-making conferencing, force report back, re-targeting, force management, and requests for permission to use nuclear weapons. Efforts assure positive control of nuclear forces and connectivity between the Secretary of Defense, strategic and theater forces, and an informed decision-making linkage between the President, the Secretary of Defense, and the Combatant Commands. MEECN ensures our national leadership has proper command and control of our forces during times of national emergency, up to and including nuclear war. Reduction or elimination of funding would seriously degrade DISA's ability to perform the systems engineering functions supporting the maintenance and evolution of MEECN. DISA would not be able to provide nuclear C3 planning assistance to the Joint Staff, nor perform assessments of the nuclear C3 system.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	9.529	12.514	12.799	-	12.799
Current President's Budget	10.640	12.514	12.931	-	12.931
Total Adjustments	1.111	-	0.132	-	0.132
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	1.111	-	0.132	-	0.132

# **Change Summary Explanation**

The FY 2011 increase of +\$1.111 provides for increased NC3 operational assessments, future architecture and crypto modernization efforts.

The FY 2013 increase of +\$0.132 also provides for increased NC3 operational assessments, future architecture and crypto modernization efforts.

PE 0303131K: Minimum Essential Emergency Communications Network...
Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 9

R-1 Line #204

Exhibit R-2A, RDT&E Project Just	stification: PE	3 2013 Defei	nse Informa	tion Systems	s Agency				<b>DATE:</b> Febi	ruary 2012	
APPROPRIATION/BUDGET ACT	VITY			R-1 ITEM N	OMENCLA	TURE		PROJECT			
0400: Research, Development, Te	st & Evaluation	n, Defense-V	Vide	PE 030313	1K: Minimun	n Essential E	mergency	T64: Specia	al Projects		
BA 7: Operational Systems Develo	pment			Communica	ations Netwo	rk (MEECN)					
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	ОСО	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
T64: Special Projects	4.800	5.170	5.251	-	5.251	5.435	5.523	5.524	5.592	Continuing	Continuing
Quantity of RDT&F Articles											

# A. Mission Description and Budget Item Justification

The mission is performing classified work. All aspects of this project are classified and require special access. Detailed information on this project is not contained in this document.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Special Projects	4.800	5.170	5.251
FY 2011 Accomplishments: Classified.			
FY 2012 Plans: Classified.			
FY 2013 Plans: Classified.			
Accomplishments/Planned Programs Subtotals	4.800	5.170	5.251

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Classified.

# E. Performance Metrics

Classified.

PE 0303131K: Minimum Essential Emergency Communications

Network...

Defense Information Systems Agency

R-1 Line #204

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**DATE:** February 2012 **PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

Vide

PE 0303131K: Minimum Essential Emergency

T64: Special Projects

BA 7: Operational Systems Development

Communications Network (MEECN)

Support (\$ in Millions)				FY 2	2012		2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering & Integration	C/CPFF	Verizon:Arlington, VA	44.739	5.170	Dec 2011	5.251	Dec 2012	-		5.251	Continuing	Continuing	Continuing
		Subtotal	44.739	5.170		5.251		-		5.251			
			Total Prior Years Cost	FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	44.739	5.170		5.251		-		5.251	-		

Remarks

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Defer	nse Informat	tion Systems	Agency				DATE: Febi	ruary 2012	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop		R-1 ITEM N PE 030313 Communica		n Essential E	• .	PROJECT T70: Strategic C3 Support					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
T70: Strategic C3 Support	5.840	7.344	7.680	-	7.680	7.849	7.925	7.924	8.010	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

This project supports the mission of the NC3 Systems Engineer to the Joint Staff and provides Executive Leadership and NC3 support for the Department of Defense (DoD) Chief Information Officer (CIO) National Leadership Command Capability (NLCC) Management Office. Systems Analysis supports long range planning and vulnerability assessments to ensure the Nuclear C3 System is adequate under all conditions of stress or war and recommends investment strategies to evolve the Nuclear Command and Control System (NCCS) to achieve desired capabilities. Operational Assessments of fielded systems and weapon platforms provides the sole means for verification of nuclear C3 systems' performance in support of plans and procedures, operation orders, training, equipment, and end-to-end system configuration. Assessments provide strategic and theater level C3 interfaces into the nuclear C3 System. Supporting efforts assure positive control of nuclear forces and connectivity between the Secretary of Defense and strategic and theater forces. Systems Engineering provides the Senior Leadership C3 System (SLC3S) with technical and management advice, planning and engineering support, and Test & Evaluation (T&E). Leading Edge Command, Control, Communications, Computers, and Intelligence (C4I) technology is assessed for all communication platforms supporting Executive Travelers and Senior Leaders to include the interoperability of hardware and operational procedures. These elements support the President's and other DoD command centers and aircraft (e.g., Air Force One and the National Airborne Operations Center (NAOC)). Reduction or elimination of funding would seriously degrade DISA's ability to perform the systems engineering functions supporting the maintenance and evolution of MEECN. DISA would not be able to provide nuclear C3 planning assistance to the Joint Staff or NII, nor perform assessments of the nuclear C3 system.

Title: Systems Analysis  FY 2011 Accomplishments: Funded updates to the Program Tracking Report, and the NC3 Architecture Diagrams and Scenarios document; and additional development of the NC3 future architecture.  FY 2012 Plans: Funding will update the Program Tracking Report, NC3 Architecture Diagrams and NC3 Scenarios document; and initiate updates of the NC3 Electronic Warfare Assessment report. In addition, funding will support engineering, documenting, and assessing the current NC3 architectures and vulnerabilities; update the NC3 future architecture; develop NC3 roadmap; and engineer communication and technology improvements for the NC3 system.	B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Funded updates to the Program Tracking Report, and the NC3 Architecture Diagrams and Scenarios document; and additional development of the NC3 future architecture.  FY 2012 Plans:  Funding will update the Program Tracking Report, NC3 Architecture Diagrams and NC3 Scenarios document; and initiate updates of the NC3 Electronic Warfare Assessment report. In addition, funding will support engineering, documenting, and assessing the current NC3 architectures and vulnerabilities; update the NC3 future architecture; develop NC3 roadmap; and engineer	Title: Systems Analysis	1.244	2.360	2.696	
Funding will update the Program Tracking Report, NC3 Architecture Diagrams and NC3 Scenarios document; and initiate updates of the NC3 Electronic Warfare Assessment report. In addition, funding will support engineering, documenting, and assessing the current NC3 architectures and vulnerabilities; update the NC3 future architecture; develop NC3 roadmap; and engineer	Funded updates to the Program Tracking Report, and the NC3 Architecture Diagrams and Scenarios document; and additional				
	Funding will update the Program Tracking Report, NC3 Architecture Diagrams and NC3 Scenarios document; and initiate updates of the NC3 Electronic Warfare Assessment report. In addition, funding will support engineering, documenting, and assessing the current NC3 architectures and vulnerabilities; update the NC3 future architecture; develop NC3 roadmap; and engineer				

PE 0303131K: Minimum Essential Emergency Communications Network...

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Infor	rmation Systems Agency		DATE: Fe	bruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303131K: Minimum Essential Emergency Communications Network (MEECN)	PROJEC T70: Strat	CT rategic C3 Support			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013	
The increase between FY 2011 and FY 2012 of +\$1.116 is due to an NC3 architecture in support of the evolution of the Defense and Nation		future				
FY 2013 Plans: Funding will provide contracts to update the Program Tracking Report and finish production of the NC3 Electronic Warfare Assessment repolecumenting, and assessing the current NC3 architectures and vulne enhancing the NC3 roadmap; and continued engineering of communications.	ort. Additionally, funding will continue to support engerabilities; further expanding the NC3 future architec	gineering, ture;				
The increase between FY 2012 and FY 2013 of +\$0.336 is due to an	increase in NC3 architecture support for DNLCC.					
Title: Operational Assessments			2.885	3.297	3.297	
FY 2011 Accomplishments: Funding provided continued planning and conduct of recurring NC3 of	operational assessments.					
FY 2012 Plans: Funding provides planning, executing, analyzing and reporting on an	nually recurring operational assessments of the NC3	3 system.				
The increase between FY 2011 and FY 2012 of +\$0.412 is due to an provided to the Joint Staff.	n increase in the scope of NC3 operational assessment	ents				
FY 2013 Plans: Funding will continue the planning and executing of recurring operations.	onal assessments of the NC3 system.					
Reduction or elimination of funding would seriously degrade DISA's a supporting the maintenance and evolution of MEECN. DISA would n Joint Staff, nor perform assessments of the nuclear C3 system.		e to the				
Title: Systems Engineering			1.711	1.687	1.687	
FY 2011 Accomplishments: Funding continued the development of the decision support tool and Capability (NLCC) Enterprise Model, and engineering support for airly						
FY 2012 Plans: Funding expands the NLCC Enterprise Model and continues engineer	ering for airborne command centers and other aircraf	t.				
				l		

PE 0303131K: Minimum Essential Emergency Communications Network...

Defense Information Systems Agency

R-1 Line #204

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information	tion Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303131K: Minimum Essential Emergency	T70: Strate	gic C3 Support
BA 7: Operational Systems Development	Communications Network (MEECN)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
The decrease between FY 2011 and FY 2012 of -\$0.024 is due to reduced requirements for support to airborne systems and command centers.			
FY 2013 Plans: Funding will continue the development of the NLCC Enterprise Model to support OSD requirements, and continue engineering for airborne command centers and other aircraft.			
Accomplishments/Planned Programs Subtotals	5.840	7.344	7.680

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• O&M, DW/PE 0303131K: O&M,	9.611	9.377	11.050	0.000	11.050	9.473	9.898	10.183	10.356	Continuing	Continuing
DW										_	

### **D. Acquisition Strategy**

Full and open competition resulted in contract vehicles with Raytheon, Arlington, VA; Science Applications Int'l Corporation (SAIC), McLean, VA; SRA International, Fairfax, VA; Pragmatics, Mclean, VA; and Booz Allen & Hamilton (BAH), Falls Church, VA.

#### **E. Performance Metrics**

Performance is measured by compliance with contract deliverables schedules for specifically included products, such as: operational assessment plans, operational reports; revisions to the EAP-CJCS Volumes VI and VII; Nuclear C3 System Description documents, and Nuclear C3 Architecture Diagrams. In addition, performance of the Nuclear C3 System is directly measured by the operational assessments funded by this program element. These periodic assessments evaluate the connectivity used for the five functions of NC2: Situation Monitoring, Planning, Decision Making, Force Execution, and Force Management. Assessment results are used by the Joint Staff to direct changes in system engineering and integration, programmatic execution, and training.

PE 0303131K: Minimum Essential Emergency Communications Network...

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

**Project Cost Totals** 

35.146

7.344

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303131K: Minimum Essential Emergency Communications Network (MEECN)

7.680

**PROJECT** 

T70: Strategic C3 Support

7.680

**DATE:** February 2012

Support (\$ in Millions)				FY 2	2012		2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering 1	C/CPAF	SAIC:McLean, VA	4.999	2.360	Feb 2012	2.696	Feb 2013	-		2.696	Continuing	Continuing	Continuing
Systems Engineering 2	C/CPAF	Raytheon Company :Arlington, VA	16.879	3.297	Feb 2012	3.297	Feb 2013	-		3.297	Continuing	Continuing	Continuing
Systems Engineering 3	C/CPFF	Pragmatics:McLean, VA	6.468	0.981	Nov 2011	0.981	Nov 2012	-		0.981	Continuing	Continuing	Continuing
Systems Engineering 4	C/FP	Raytheon Company:Arlington, VA	2.527	0.426	Aug 2012	0.426	Aug 2013	-		0.426	Continuing	Continuing	Continuing
Systems Engineering 5	C/CPFF	Booz, Allen & Hamilton:Falls Church, VA	4.273	0.280	Nov 2011	0.280	Nov 2012	-		0.280	Continuing	Continuing	Continuing
		Subtotal	35.146	7.344		7.680		-		7.680			
			Total Prior Years Cost	FY 2	2012		2013 ise		2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

PE 0303131K: Minimum Essential Emergency Communications Network...

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

PE 0303131K: Minimum Essential Emergency Communications Network (MEECN)

DATE: February 2012

PROJECT

T70: Strategic C3 Support

		FY 2011			FY	2012	2		FY 2	2013		F	FY 2	014			FY 2	2015		FY 2016				FY 2017				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
NC3 Program Tracking Report																												
Systems Analysis Documents																												
NC3 Architecture																												
Operational Assessment																												
NLCC Enterprise Model																												
Aircraft/Command Center Engineering																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 0303131K: Minimum Essential Emergency Communications Network (MEECN)

T70: Strategic C3 Support

**DATE:** February 2012

# Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
NC3 Program Tracking Report	2	2011	3	2017
Systems Analysis Documents	1	2011	4	2017
NC3 Architecture	1	2011	4	2017
Operational Assessment	1	2011	4	2017
NLCC Enterprise Model	1	2011	4	2017
Aircraft/Command Center Engineering	1	2011	4	2017



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303140K: Information Systems Security Program

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	5.500	-	-	-	-	-	-	-	Continuing	Continuing
IA3: Information Systems Security Program	-	5.500	-	-	-	-	-	-	-	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Community Data Center (CDC) provides research, designs, builds, tests, demonstrates, and evaluates an innovative system to analyze a significant portion of the DoD's and associated network traffic for anomalous network behavior using unique techniques and processes. This unique capability, that addresses the massive data overload associated with analyzing network traffic and raw data, significantly improves the ability of the DoD to operate, defend, and protect its networks. The CDC research achieves this goal by using augmented and sessionized network traffic, non-traditional approaches, advanced IT algorithms, and the compiled expertise of cyber operators, analysts, investigators, and defenders to develop a near-real-time "top down" ability to view and analyze the network for the discovery, identification, and analysis of anomalous patterns of activity not humanly detectable, that could represent illegal or improper behavior, and are significant threats to the network.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	5.500	-	-	-
Current President's Budget	-	5.500	-	-	-
Total Adjustments	-	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			

# **Change Summary Explanation**

This funding supports Audit Extraction Module (AEM) and Cross Domain Enterprise Solution (CDES). The funding will be used to construct the data integration, correlation, reduction, and analysis capabilities within the Community Data Center (CDC) supporting the AEM audit event analysis and log aggregation as well as the CDES defensive requirements.

One year funding received in FY 2012.

PE 0303140K: *Information Systems Security Program* Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 6

R-1 Line #209

Volume 5 - 199

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Just	khibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency											
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop	& Evaluation	n, Defense-V	Vide		I <b>OMENCLA</b> OK: Informat	TURE ion Systems	Security	PROJECT IA3: Informa	ation Systen	ns Security P	Program	
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
IA3: Information Systems Security Program	-	-	-	-	-	-	-	Continuing	Continuing			
Quantity of RDT&E Articles												

### A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

The Community Data Center (CDC) provides research, designs, builds, tests, demonstrates, and evaluates an innovative system to analyze a significant portion of the DoD's and associated network traffic for anomalous network behavior using unique techniques and processes. This unique analysis capability, that addresses the massive data overload associated with analyzing network traffic and raw data, significantly improves the ability of the DoD to operate, defend, and protect its networks. The CDC research achieves this goal by using augmented and sessionized network traffic, non-traditional approaches, advanced IT algorithms, and the compiled expertise of cyber operators, analysts, investigators, and defenders to develop a near-real-time "top down" ability to view and analyze the network for the discovery, identification, and analysis of anomalous patterns of activity not humanly detectable, that could represent illegal or improper behavior, and are significant threats to the network.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	oco	Total
Title: Information Systems Security Program	-	5.500	-	-	-
Articles:			0	0	0
FY 2011 Accomplishments:					
N/A					
FY 2012 Plans:					
Funding will improve CDC data aggregation and analytics to help reduce the risk of "insider threats". The funds					
will design and develop information exchange and system interfaces to existing data feeds, design, develop and					
implement a capability for detecting pre-defined malicious insider activities performed by users or administrators					
in near real time by using attack patterns based on log and log like data. It supports analysis of available data access to personnel and provide limited support for analyzing how the data is used.					
access to personner and provide inflited support for analyzing flow the data is used.					
The designed solution works with current DISA collection systems, particularly HBSS and SenSage. The funds					
provide enhancements to these systems for identity management and tracking capabilities to associate network					
attributes (e.g. – IP addresses) with individuals and organizations in DoD, detection capabilities by creating					
models or normal user behavior which can be fed into the expert system or used by operational analysts for					
forensics, and developing an expert system to correlate suspicious events with identity measures for generating a gauge of suspicion.					
a gauge of suspicion.					

PE 0303140K: *Information Systems Security Program* Defense Information Systems Agency

Page 2 of 6

R-1 Line #209

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0303140K: Information Systems Security IA3: Information Systems Security Program BA 7: Operational Systems Development Program

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
FY 2013 Base Plans: N/A					
FY 2013 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	-	5.500	-	-	-

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	<u>FY 2013</u>					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• O&M, DW/PE 0303140K: : <i>O&amp;M</i> ,	9.446	0.000	4.500		4.500	4.500	4.500	4.500	4.500	Continuing	Continuing
DM											

 Procurement, DW/PE 7.187 0303140K:: Procurement, DW

# D. Acquisition Strategy

This funding supports contracts for creating system architecture, interfaces and operation design, and software development.

### **E. Performance Metrics**

- 1. Increase volume of log data storage by FY11 = 75%, FY12 = 90%, FY13 = 100%.
- 2. Increase analyst productivity through data analysis automation 25% in FY12 and 40% in FY13.

PE 0303140K: Information Systems Security Program **Defense Information Systems Agency** 

**UNCLASSIFIED** Page 3 of 6

R-1 Line #209

Volume 5 - 201

Continuing Continuing

**DATE:** February 2012 Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

PE 0303140K: Information Systems Security

PROJECT

IA3: Information Systems Security Program

Product Development	(\$ in Millio	ns)		FY 2	2012		2013 ise	FY 2		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
	Subtotal					-		-		-	0.000	0.000	0.00
	· ·				· · · · · · · · · · · · · · · · · · ·					*			
Test and Evaluation (\$	in Millions	·)		FY 2	2012		2013 ise	FY 2		FY 2013 Total			
Test and Evaluation (\$  Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2	2012 Award Date						Cost To	Total Cost	
	Contract Method	Performing	Years		Award Date	Ва	Award	00	CO Award	Total			Target Value of Contract Continuing

	Total Prior Years Cost	FY 2	012		2013 ise		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	-	5.500		-		-		-			

Remarks

PE 0303140K: Information Systems Security Program Defense Information Systems Agency

**UNCLASSIFIED** Page 4 of 6

R-1 Line #209

APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluati 03A 7: Operational Systems Development	ion, Defense-Wide	Э	PE		140K	MENC (: Inforr			ems	Secur	rity		ROJEC 3: Info		tion S	Syste	ms S	Secu	ırity F	Prog	ram
	FY 2011		FY 2	012		FY 20	13		FY 20	)14		FY 2	2015		FY	201	6	$\overline{\mathbf{T}}$	FY 2	017	,
	1 2 3	4 1	2	3 4	4 1	2	3 4	1	2	3 4	1	2	3	4	1 2	2 3	4	1	2	3	4
Sensage HBSS w/DLP										,		,			,						
Lab Pilot																					-
CDC Field Testing and Final Report																					
Statistical Modeling																					
Data Collection																		-			

Field Testing and Final Report

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency

**DATE:** February 2012

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

PE 0303140K: Information Systems Security
Program

IA3: Information Systems Security

# Schedule Details

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Sensage HBSS w/DLP				
Lab Pilot	1	2012	2	2012
CDC Field Testing and Final Report	2	2012	3	2012
Statistical Modeling				
Data Collection	1	2012	2	2012
Field Testing and Final Report	2	2012	4	2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303150K: Global Command and Control System

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	26.183	56.680	36.575	-	36.575	23.694	14.000	11.368	10.423	Continuing	Continuing
CC01: Global Command and Control System-Joint (GCCS-J)	26.183	56.680	36.575	-	36.575	23.694	14.000	11.368	10.423	Continuing	Continuing

#### Note

\*The FY 2012 total includes a request of \$2.000 million in OCO funding.

### A. Mission Description and Budget Item Justification

Based on the termination of the Net Enabled Command Capability (NECC) Program and the renewed focus on the existing Global Command and Control System – Joint (GCCS-J), this submission reflects the shift in the GCCS-J program from funding only the GCCS-J Program Management Office (PMO) activities to sustaining a portfolio of Joint command and control (C2) activities within DISA in support of the overall Department. These Joint C2 activities include GCCS-J, Joint Planning and Execution Services (JPES), and the support to the development and sustainment of the Joint C2 architecture.

GCCS-J. The GCCS-J suite of mission applications/systems provides critical joint warfighting C2 capabilities by presenting an integrated, near real-time picture of the battle space for planning and execution of joint military and multinational operations. GCCS-J is used by all nine combatant commands (COCOMs) at sites around the world, supporting joint and coalition operations. Additionally, through the continued evolution of the GCCS Family of Systems (FoS), the Services are also utilizing components of the GCCS-J infrastructure to build their Service unique variants thus reducing the number of unique components. Funding will be used to evolve existing capabilities within the GCCS-J operational baselines with the goal of reducing cost to the field through the use of enterprise hosting and increasing data sharing through the availability of common services, while enhancing the existing functionality available to the user today. GCCS-J entered into sustainment with the closeout of Block V in August 2009.

JPES. JPES is a set of capabilities that address components of the DoD's Adaptive Planning Roadmap (13 Dec 2005) and Adaptive Planning II (5 Mar 2008). JPES produces enhancements to the Joint Operations Planning and Execution System (JOPES), focused adaptive planning capabilities, and provides a set of core infrastructure services necessary to provide the warfighter an interoperable environment where functionality can be easily added as mission needs dictate.

Joint C2 Architecture. The Joint C2 Architecture is a foundational element of the Joint C2 capabilities for the Department, containing a set of net-centric tenets associated with data, functional service and the C2 infrastructure that is based on a Service Oriented Architecture (SOA) design pattern. Each year, the DISA architecture team produces a transitional architecture that documents the current state of C2 capabilities and anticipated changes/enhancements either in progress or planned by the C2 community. The yearly updates document the use of enterprise services and standards in the development, integration and implementation of Joint C2 capabilities across the Department.

The GCCS-J Overseas Contingency Operations for Integrated Imagery and Intelligence (I3) provides operational enhancements to the existing GCCS-J I3/Common Operating Picture (COP) baseline in direct support of United States Central Command (USCENTCOM) identified requirements. This includes access to additional

PE 0303150K: Global Command and Control System Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 15

R-1 Line #211

Volume 5 - 205

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide PE 03031

BA 7: Operational Systems Development

PE 0303150K: Global Command and Control System

data sources or tracks, ensures visualization of this intelligence data on the COP, and enhancements to capabilities unique to the USCENTCOM Area of Responsibility (AOR).

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	26.247	56.739	44.762	-	44.762
Current President's Budget	26.183	56.680	36.575	-	36.575
Total Adjustments	-0.064	-0.059	-8.187	-	-8.187
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	-0.064	-0.059	-8.187	-	-8.187

# **Change Summary Explanation**

The decrease in FY11 of -\$0.064 is due to realignment to higher Agency priorities.

The decrease in FY12 of -\$0.059 supports higher Agency priorities.

The decrease of -\$8.187 million in base funding is due to curtailed development of the C2 Adaptive Planning tools and movement of selected Joint Planning and Execution System applications to sustainment.

PE 0303150K: Global Command and Control System Defense Information Systems Agency

UNCLASSIFIED
Page 2 of 15

R-1 Line #211

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Jus	stification: PE	3 2013 Defer	nse Informat	ition Systems Agency						DATE: February 2012			
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Tes BA 7: Operational Systems Develo	Vide		I <b>OMENCLA</b> OK: <i>Global C</i>		d Control	PROJECT CC01: Global Command and Control System-Joint (GCCS-J)							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
CC01: Global Command and Control System-Joint (GCCS-J)	26.183	56.680	36.575	-	36.575	23.694	14.000	11.368	10.423	Continuing	Continuing		
Quantity of RDT&E Articles													

### A. Mission Description and Budget Item Justification

Global Command and Control System – Joint (GCCS-J) is DOD's Joint Command and Control (C2) system of record and provides the foundation for migration of service-unique C2 systems into a Joint, interoperable environment. GCCS-J incorporates the core planning and assessment tools required by combatant commanders and their subordinate the Joint Task Force (JTF) Commanders while meeting the readiness support requirements of the Services. Adaptive Planning and Execution Joint Planning Services are being developed to modernize the adaptive planning functions in a net centric environment. GCCS-J is focused on funding a portfolio of C2 activities within DISA in support of the overall Department. Additionally, DISA continues to provide support for the operational system to ensure continued access to information integration and decision-support capabilities that enable the exercise of authority and direction over assigned and attached forces, while operating in a net-centric, collaborative information environment. DISA, through its Joint C2 entities, continues to provide critical C2 capabilities to the Commander-in-Chief, Secretary of Defense, National Military Command Center, Combatant Commands (COCOMs), Joint Force Commanders, and Service Component Commanders. The DISA portfolio includes funding in support of GCCS-J, Joint Planning and Execution Services (JPES), and the development and sustainment of the Joint C2 Architecture.

Based on the termination of the Net Enabled Command Capability (NECC) Program and the renewed focus on the existing Global Command and Control System – Joint (GCCS-J), this budget submission reflects the shift in the GCCS-J program element from funding only the GCCS-J Program Management Office (PMO) activities to sustaining a portfolio of Joint Command and Control (C2) activities within DISA in support of the overall DoD. These Joint C2 activities include GCCS-J, Joint Planning and Execution Services (JPES), and the support to the development and sustainment of the Joint C2 architecture.

GCCS-J. The GCCS-J suite of mission applications/systems provides critical joint warfighting C2 capabilities by presenting an integrated, near real-time picture of the battle space for planning and execution of joint military and multinational operations. GCCS-J is used by all nine combatant commands at sites around the world, supporting joint and coalition operations. Additionally, through the continued evolution of the GCCS Family of Systems (FoS), the Services utilize components of the GCCS-J infrastructure to build their Service unique variants thus reducing the number of unique components. Funding will be used to evolve existing capabilities within the GCCS-J operational baselines with the goal of reducing cost to the field through the use of enterprise hosting and increasing data sharing through the availability of common services, while enhancing the existing functionality available to the user today.

JPES. JPES is a set of capabilities that address components of the DOD's Adaptive Planning Roadmap (13 December 2005) and Adaptive Planning Roadmap II (5 March 2008). JPES produces enhancements to the Joint Operations Planning and Execution System (JOPES), focused adaptive planning capabilities, and provides a set of core infrastructure services necessary to provide the warfighter a fully interoperable environment where functionality can be easily added as mission needs dictate.

PE 0303150K: Global Command and Control System Defense Information Systems Agency

UNCLASSIFIED
Page 3 of 15

R-1 Line #211

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Informa	ition Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303150K: Global Command and Control	CC01: Glob	al Command and Control System-
BA 7: Operational Systems Development	System	Joint (GCC	S-J)

Joint C2 Architecture. The Joint C2 Architecture is a foundational element of the Joint C2 capabilities for the Department, containing a set of net-centric tenets associated with data, functional service and the C2 infrastructure that is based on a Service Oriented Architecture (SOA) design pattern. Each year, the DISA architecture team produces a transitional architecture that documents the current state of C2 capabilities, anticipated changes/enhancements either in progress or planned by the C2 community. The yearly updates document the use of enterprise services and standards in the development, integration and implementation of Joint C2 capabilities across the Department.

The GCCS-J Overseas Contingency Operations (OCO) for Integrated Imagery and Intelligence (I3) provides operational enhancements to the existing GCCS-J I3/ Common Operating Picture (COP) baseline in direct support of United States Central Command (USCENTCOM) identified requirements. This includes access to additional data sources or tracks, ensures visualization of this intelligence data on the COP, and enhancements to capabilities unique to the USCENTCOM Area of Responsibility (AOR).

	FY 2011	FY 2012	Base	oco	Total
Title: Development and Strategic Planning	12.492	21.364	18.406	-	18.406
<b>Description:</b> This area primarily supports the GCCS-J suite of mission applications/systems to provide critical joint warfighting C2 capabilities and battlespace awareness to the warfighters. The Services utilitze modernized components of the GCCS-J framework to help improve the capabilities of their unique service variants.					
FY 2011 Accomplishments: GCCS-J executed modernization activities which resulted in significant progress for the Joint C2 Common User Interface, Cross Domain Services, and Enterprise Common Operational Picture (COP) initiatives. This progress included the synchronization of two common client frameworks and the elimination of duplicative client functions.					
FY 2012 Plans: Continued migration to Net-centric Joint C2 capabilities and migration from local enclaves to reusable enterprise software deployments. Continued integration, testing and fielding of technical refresh activities in support of the GCCS-J baselines (Global & JOPES) required to maintain the security posture of the system and provide critical operational support for the combatant commands. Continued support for the interoperability between GCCS-J and the FoS to ensure access of joint command and control data by the combatant commands, external interfaces and Services who are now using the Global infrastructure components to put Service unique applications on top of. This includes software fixes, integration and testing necessary to maintain interoperability between GCCS-J and the FoS. Provide integration of Global Force management Data Initiative (GFM DI) to support creation of authoritative data sources for all authorized Department of Defense (DoD) force structure data, facilitating the unique identification of organizations, billets, crews, and chain of command links within the GCCS-J system for display and consumption.					

PE 0303150K: Global Command and Control System Defense Information Systems Agency

B. Accomplishments/Planned Programs (\$ in Millions)

UNCLASSIFIED
Page 4 of 15

R-1 Line #211 Volume 5 - 208

FY 2013

FY 2013

FY 2013

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Inform	mation Systems Agency		D	ATE: Febru	ary 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303150K: Global Command and Co System	ntrol C	ROJECT CC01: Global oint (GCCS-		l and Control Syster			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total		
The increase of +\$8.872 from FY 2011 to FY 2012 will support technic FoS interoperability between GCCS-J and the Service GCCS systems implementation of GFM DI data within the GCCS-J system to support enhanced mission tracks and operational information updates.	s and external applications; and							
If not funded for FY 2012, critical C2 mission enhancements supported the Combatant Commands will not be achieved. Failure to fund these USCENTCOM, USEUCOM, and USSOUTHCOM who are using agile exercises. It would result in limited data access and impair their ability on different security domains. These domains were requested by misunanticipated operational needs such as coalition tracks to help reduced.	e enhancements especially impact client to conduct operations and field y to share and visualize data residing sion operators to support emerging and							
FY 2013 Base Plans: Continued integration, testing and fielding of technical refreshment accommands. Continue transition of local global enclaves to reusable eand integration necessary to maintain interoperability between GCCS	enterprise deployments. Continue testing							
The decrease of -\$2.958 from FY 2012 to FY 2013 will be transferred system reliability at a mission acceptable level. GCCS-J RDT&E mod replacement of expensive, legacy COTS products with more cost effe software alternatives, and client consolidation. They will also enable the Services to leverage components of the GCCS-J infrastructure to effort also includes activities necessary to effectively transition the FC development, integration and test of GCCS-J modernization efforts spenterprise COP, and infrastructure components necessary to shift C2 for increased efficiency and cost avoidance.	dernization efforts are targeted to identify ctive open source COTS hardware and the GCCS-J Family of Systems (FoS), and build their Service-unique variants. This is in synch with GCCS-J to accelerate pecifically related to JC2CUI, Agile Client,							
Title: Joint Planning and Execution Services (JPES)		13.69 <sup>-</sup>	1 35.316	18.169	-	18.169		
<b>Description:</b> JPES is a collection of capabilities supporting joint polic structures, that are supported by communications and information ted Execution Community (JPEC). JPEC uses these capabilities to monit employment, and sustainment, redeployment, and demobilization activated at full maturity, the JPES capabilities will be integrated with other adapted.	hnology used by the Joint Planning and tor, plan, execute mobilization, deployment, vities associated with joint operations.							

PE 0303150K: *Global Command and Control System* Defense Information Systems Agency

UNCLASSIFIED
Page 5 of 15

R-1 Line #211

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APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303150K: Global Command and Co	ontrol C	ROJECT C01: Global pint (GCCS-		and Contro	l System-
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
facilitate the rapid development and sustainment of plans and a sean net-centric environment. The JPES program consists of a core set of JPES Framework (JFW) and a variety of mission applications to inclinteractive Gaming System (IGS), Joint Force Protection (JFP) and the (JCRM).	of infrastructure services referred to as the ude the Rapid TPFDD Builder (RTB), the					
FY 2011 Accomplishments:  JPES funding was used to continue development of the RTB, IGS and a net-centric service that assists the Combatant Commanders, their sin day-to-day operations, crisis action planning and contingency plan management services that provide a bridge between current policy for where access is based on attributes of the individual and the creation data and selected other JPES applications. Additionally, the Integrate enhanced to provide a web-based Course of Action (COA) developm (M&S) enabling better analysis and increased planning fidelity.	service components and DoD joint activities ning. JFW focused on creating permissions or role-based access and future policy of a data virtualization layer for JOPES ed Gaming System (IGS) application was					
FY 2012 Plans: In FY 2012, the JCRM application will transition to DISA from the Jointesting and release of enhancements identified by the Adaptive Plans						
The increase of +\$21.625 between FY 2011 and FY 2012 is associated development activities for the JPES Capabilities. This funding will activities for the JPES Capabilities. This funding will active Development and Analysis Tool (RFFDAT). RFFDAT is a redefeand capabilities not currently present in RTB. Funds will also support that will be merged with RFFDAT. Enhancements will be made to the support the accelerated development of the JPES Framework (JFW) of the broader Adaptive Planning Community.	celerate development of the Rapid Force fined version of RTB with additional features rt the enhancements of IGS services e Joint Force Projection (JFP) tool and to					
FY 2013 Base Plans:						

PE 0303150K: *Global Command and Control System* Defense Information Systems Agency

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information	tion Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303150K: Global Command and Control	CC01: Glob	pal Command and Control System-
BA 7: Operational Systems Development	System	Joint (GCC	S-J)

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
The decrease of -\$17.147 from FY 2012 to FY 2013 is due to an OSD-directed slow-down in the development of planning applications residing within the JPES program. Beginning in FY 2013.					
Accomplishments/Planned Programs Subtotals	26.183	56.680	36.575	-	36.575

## C. Other Program Funding Summary (\$ in Millions)

_	-	-	FY 2013	FY 2013	FY 2013				Cost To
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017 Complete Total Cost
<ul> <li>PE 0303150K: Operation &amp;</li> </ul>	92.077	112.666	129.080	18.000	147.080	130.890	132.025	127.642	127.961 Continuing Continuing
Maintenance, Defense-Wide									
<ul><li>Procurement, DW/PE 0303150K:</li></ul>	6.246	5.324	0.000		0.000	0.000	0.000	0.000	0.000 Continuing Continuing
Procurement, Defense-Wide									

### D. Acquisition Strategy

All development, integration, and migration efforts within the portfolio are primarily supported through Cost Reimbursable Task Orders issued under competitively awarded contracts. Use of performance-based contract awards is maximized while use of Time and Material (T&M) contracts is minimized to those providing programmatic support versus software development, integration, or testing. Acquisition Strategies are structured to retain contractors capable of satisfying cost, schedule, and performance objectives. Contract awards incorporate provisions requiring contractors to establish and manage specific earned value data. This strategy mitigates risk by requiring monthly Contract Performance Reviews (CPRs) and utilizing award fee contracts where appropriate to incentivize performance. Both GCCS-J and JPES apply formal acquisition rigor to include reporting requirements, as appropriate, by acquisition program designation.

#### E. Performance Metrics

Global Command and Control System-Joint (GCCS-J) assesses performance using the sustainment and synchronization activities in FY 2011 – FY13. Each activity addresses outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities. These enhancements may modify existing mission applications, new candidate solutions provided by executive agents, technical refresh actions to minimize COTS end-of-life issues, and/or interfacing with additional high value data sources.

Cost & Schedule Management: The GCCS-J program employs a tailored subset of earned value concepts that fit within American National Standards Institute (ANSI) Standard 748. Contractors are required to plan, budget, and schedule resources in time-phased "planned value" increments constituting a cost and schedule measurement baseline. This approach encourages contractors to use effective internal cost and schedule management control systems. The PMO evaluates performance by conducting thorough Post-award Contract Reviews (PCRs) and monthly CPRs. The GCCS-J Program Manager (PM) also conducts weekly critical path reviews of the GCCS-J release schedules to ensure tasks are on track and to mitigate risk across the entire program. Management structure for JPES and the Joint C2 architecture are similar to the standards identified above for GCCS-J.

PE 0303150K: Global Command and Control System Defense Information Systems Agency

UNCLASSIFIED
Page 7 of 15

R-1 Line #211

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Informa	tion Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303150K: Global Command and Control	CC01: Glob	pal Command and Control System-
BA 7: Operational Systems Development	System	Joint (GCC	S-J)

Activity: Effectively communicate with external command and control systems

FY11(Results) All interfaces passed testing and completed releases:

- Global 4.2.0.7
- JOPES 4.2.1 in progress
- JOPES 4.2.1 Update 1 in progress
- · Audit log and RAS Query Tool (RQT) fixes
- SORTS 4.2.0.1
- GCCS-J PMO transferred SORTS to OUSD (P&R) DIO effective 1 Oct 11

FY12(Planned) 100% successful test of new critical system interfaces, as well as continued 100% successful test of critical current system interfaces.

FY13 (Estimated) 100% successful test of new critical system interfaces, as well as continued 100% successful test of critical current system interfaces.

Activity: Fuse select C2 capabilities into a comprehensive, interoperable system eliminating the need for inflexible, duplicative, stovepipe C2 systems

FY11(Results) GCCS-J executed modernization activities which resulted in significant progress for the Joint C2 Common User Interface, Cross Domain Services, and Enterprise COP initiatives. This progress includes the synchronization on two common client frameworks and the elimination of duplicative client functions resulting in direct sustainment cost reduction for reinvestment in capability modernization.

- Global 4.2.0.7 Update 1 (combined with Up 3)
- Global 4.2.0.7 Update 2
- # Fixes to the POINT/Like-Associations issue; synchronization of event records between the GMI and POINT DBs
- Global 4.2.0.7 Update 3
- #JOPES 4.2.1 client compatibility for FFWEB, JRE, TPLNC &JFRG. To be released in conjunction with JOPES 4.2.1
- Global 4.2.0.7 Update 4
- # SA fixes (IPTH 2.4.0.12 & 4.2.0.7 fixes)
- Global 4.2.0.7 Emergency Patches
- # ITS Middle Tier Fix (ITSMT) and ITS Web (ITSWEB)
- # MSFIX (addresses Nodal Storm/Missile fix)
- # ATO fix
- # CTI Hotfix FAA transition to TFMGD
- # IGC Fix: Transition from GTN to IGC
- SORTS 4.2.0.1 Update 1
- # Resolves problems associated with the historic database update
- # Update provides SQL scripts to create a data update of the historic database from the Master SORTS database

PE 0303150K: Global Command and Control System Defense Information Systems Agency

UNCLASSIFIED
Page 8 of 15

R-1 Line #211

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information	tion Systems Agency		DATE: February 2012							
APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT										
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303150K: Global Command and Control	CC01: Glob	pal Command and Control System-							
BA 7: Operational Systems Development	System	Joint (GCC	S-J)							

- Releases in progress
- # SORTS 4.2.0.1 Update 2
- # Contains fixes to SORTS, SORTDB, RAS-IT and RAS-JT
- # Based on Priority PBIs submitted by users and validated by JSJ3

FY12(Planned) GCCS-J to continue planned migration to Net-centric Joint C2 capabilities while reducing sustainment costs for reinvestment in modernization with the transition from use of local Global enclaves to reusable enterprise deployments.

FY13(Estimated) GCCS-J to continue planned migration to Net-centric Joint C2 capabilities while reducing sustainment costs for reinvestment in modernization with the transition from use of local Global enclaves to reusable enterprise deployments.

Activity: The availability of the Strategic Server Enclaves enable enhanced capabilities to the user community

FY11(Results) New software release was implemented to the Enclaves.

FY12(Planned) A release of emerging warfighter requirements to Strategic Server Enclaves in FY12

- Three JOPES updates and software patches (FY 12)
- JOPES 4.2.1.1 (FY 12)

Emergent release to support the Air Force Deliberate and Crisis Action Planning and Execution Segments (DCAPEs), interface changes and emerging requirements

FY13(Estimated) A release of emerging warfighter requirements to Strategic Server Enclaves in FY13.

PE 0303150K: Global Command and Control System Defense Information Systems Agency

Page 9 of 15

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303150K: Global Command and Control

System

**PROJECT** 

CC01: Global Command and Control System-

**DATE:** February 2012

Joint (GCCS-J)

Product Development (	in Millio	ns)		FY 2	2012	FY 2 Ba	2013 se	FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 1	C/CPFF	NGMS:Reston, VA	14.834	2.155	Nov 2011	3.300	Nov 2012	-		3.300	Continuing	Continuing	20.289
Product Development 2	FFRDC	MITRE:McLean, VA	6.918	0.159	Mar 2012	-		-		-	0.00	7.077	7.077
Product Development 3	SS/FFP	Dynamic Systems:Los Angeles, CA	3.189	-		-		-		-	0.00	3.189	3.189
Product Development 4	C/CPFF	Pragmatics:McLean, VA	27.239	1.500	Mar 2012	2.500	Mar 2013	-		2.500	Continuing	Continuing	31.239
I3 Engineering Services & SW Development	C/TBD	NGIT:Various	0.811	1.000	Jan 2012	-		-		-	Continuing	Continuing	1.811
Product Development 6	C/CPIF	BAH:McLean, VA	3.369	-		-		-		-	0.00	3.369	3.369
Product Development 7	TBD	JPES Framework:Various	4.378	6.018	Jan 2012	5.300	Dec 2012	-		5.300	Continuing	Continuing	Continuing
Product Development 8	TBD	RTB Development:Various	4.976	12.807	Jan 2012	4.500	Jan 2013	-		4.500	Continuing	Continuing	Continuing
Product Development 9	TBD	IGS Development:Various	5.118	11.948	Jan 2012	4.700	Jan 2013	-		4.700	Continuing	Continuing	Continuing
Product Development 10	TBD	SAIC:Falls Church, VA	2.810	2.016	Jan 2012	-		-		-	Continuing	Continuing	Continuing
Product Development 11	MIPR	SSC:San Diego, CA	7.353	0.432	Jan 2012	5.700	Jan 2013	-		5.700	Continuing	Continuing	Continuing
Product Development 12	C/CPFF	NGMS:Reston, VA	53.352	4.049	Jan 2012	5.800	Dec 2012	-		5.800	Continuing	Continuing	Continuing
Product Development 13	MIPR	NGIT:Various	1.772	-		-		-		-	0.00	1.772	1.772
Product Development 14	C/CPFF	NGMS:Reston, VA	62.191	-		-		-		-	0.00	62.191	62.191
Product Development 15	C/CPIF	Booz Allen Hamilton:McLean, VA	3.283	-		-		-		-	0.00	3.283	3.283
Product Development 16	C/CPFF	Booz Allen Hamilton:Various	0.431	-		-		-		-	0.00	0.431	0.431
Product Development 17	C/CPAF	Booz Allen Hamilton:Falls Church, VA	1.229	-		-		-		-	0.00	1.229	1.229
Product Development 18	C/CPAF	AB Floyd:Alexandria, VA	12.477	-		-		-		-	0.00	12.477	12.477
Product Development 19	C/CPAF	Femme Comp Inc:Chantilly, VA	7.249	-		-		-		-	Continuing	Continuing	7.249
Product Development 20	C/CPFF	SAIC:Falls Church, VA	5.876	-		-		-		-	Continuing	Continuing	5.876

PE 0303150K: *Global Command and Control System* Defense Information Systems Agency

UNCLASSIFIED
Page 10 of 15

R-1 Line #211

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303150K: Global Command and Control

System

**PROJECT** 

CC01: Global Command and Control System-

**DATE:** February 2012

Joint (GCCS-J)

Product Development	(\$ in Millio	ns)		FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 21	C/CPIF	Booz Allen Hamilton:McLean, VA	3.394	-		-		-		-	Continuing	Continuing	3.394
Product Development 22	MIPR	JDISS:Various	6.039	-		-		-		-	Continuing	Continuing	6.039
Product Development 23	C/FFP	NGMS:Reston, VA	4.790	-		-		-		-	Continuing	Continuing	4.790
Product Development 24	MIPR	SPAWAR:Charleston, SC	5.270	-		-		-		-	0.00	5.270	5.270
Product Development 25	MIPR	Dept of Energy, Army Research Lab, PD Intelligence Fusion, GSA/FAS:Various	5.710	-		-		-		-	0.00	5.710	5.710
Product Development 26	C/CPAF	Tactical 3-D COP:Various	3.200	-		-		-		-	0.00	3.200	3.200
Product Development 27	SS/FFP	JITC:Various	20.400	-		-		-		-	0.00	20.400	20.400
Product Development 28	TBD	TBD - JCRM:TBD	-	2.500	Jan 2012	-		-		-	Continuing	Continuing	2.500
		Subtotal	277.658	44.584		31.800		-		31.800			

Support (\$ in Millions)				FY 2	2012		2013 Ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Support 1	C/T&M	Oracle:Various	0.727	0.276	Jan 2012	-		-		-	Continuing	Continuing	Continuing
Support 2	TBD	JC2 Common Interface:Various	1.774	1.834	Jan 2012	1.200	Oct 2012	-		1.200	Continuing	Continuing	Continuing
Support Costs - Engineering Support 3	FFRDC	MITRE:Various	0.754	-		-		-		-	0.00	0.754	0.754
Support Costs - Engineering Support 4	C/CPFF	Pragmatics:McLean, VA	0.724	1.000	Nov 2011	0.850	Nov 2012	-		0.850	Continuing	Continuing	Continuing
Support Costs - Engineering Support 5	C/CPFF	IPA:College Park, MD	0.283	-		-		-		-	0.00	0.283	0.283
Support Cost 6	C/FFP	STA :Falls Church, VA	1.342	0.780	Dec 2011	-		-		-	Continuing	Continuing	Continuing
Support Cost 7	TBD	Pragmatics:McLean, VA	0.064	-		-		-		-	0.00	0.064	0.064

PE 0303150K: *Global Command and Control System* Defense Information Systems Agency

UNCLASSIFIED
Page 11 of 15

R-1 Line #211

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

**TEMC Test** 

Church, VA

Support:Various **DISA TEMC:Falls** 

DISA FSO:Falls

STRATCOM:Offut, NE

0.229

0.643

0.770

0.800

0.328

0.385

MIPR

MIPR

**MIPR** 

**MIPR** 

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

R-1 ITEM NOMENCLATURE

PE 0303150K: Global Command and Control

**PROJECT** 

CC01: Global Command and Control System-

0.00

Continuing

Continuing

Continuing

0.229

Continuing

Continuing

Continuing Continuing

0.229

Continuing

Continuing

**DATE:** February 2012

BA 7: Operational Syste	ms Develo	pment		Sys	tem				Joint (	GCCS-J)			
Support (\$ in Millions)				FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	5.668	3.890		2.050		-		2.050			
Test and Evaluation (\$	in Millions	s)		FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Test & Evaluation 1	C/TBD	SAIC:Falls Church, VA	0.744	-		-		-		-	0.00	0.744	0.744
Test & Evaluation 2	MIPR	JITC:Ft. Huachuca, AZ	20.424	3.655	Oct 2011	2.236	Oct 2012	-		2.236	Continuing	Continuing	Continuing
Test & Evaluation 3	MIPR	DIA:Various	6.854	0.370	Feb 2012	-		-		-	Continuing	Continuing	Continuing
Test & Evaluation 4	MIPR	DAA:Various	1.226	1.116	Apr 2012	-		-		-	Continuing	Continuing	Continuing
Test & Evaluation 5	C/CPFF	SAIC:Falls Church, VA	9.681	-		-		-		-	0.00	9.681	9.681
Test & Evaluation 6	C/CPAF	SAIC:Falls Church, VA	23.133	-		-		-		-	0.00	23.133	23.133
Test & Evaluation 7	C/CPFF	Pragmatics:McLean, VA	0.308	-		-		-		-	0.00	0.308	0.308
Test & Evaluation 8	MIPR	JITC:Various	0.005	-		-		-		-	0.00	0.005	0.005
Test & Evaluation 9	MIPR	JITC:Various	0.138	-		-		-		-	0.00	0.138	0.138
Test & Evaluation 10	MIPR	DISA FSO:Various	0.277	-		-		-		-	0.00	0.277	0.277

Test & Evaluation 14	MIPR	Church, VA	0.800	0.400	Jan 2012	-	-	-	Continuing	Continuing	Continuing
Test & Evaluation 15	TBD	TQI :Falls Church, VA	0.849	0.849	Jan 2012	-	-	-	Continuing	Continuing	Continuing
Test & Evaluation 16	TBD	TQI:Falls Church, VA	0.494	-		-	-	-	Continuing	Continuing	0.494
Test & Evaluation 17	MIPR	Slidell:Various	0.436	-		-	-	-	0.00	0.436	0.436
		Subtotal	67.011	7.103		2.236	-	2.236			

Jan 2012

Jan 2012

0.400 Jan 2012

PE 0303150K: Global Command and Control System **Defense Information Systems Agency** 

Test & Evaluation 11

Test & Evaluation 12

Test & Evaluation 13

Test & Evaluation 14

**UNCLASSIFIED** Page 12 of 15

R-1 Line #211

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303150K: Global Command and Control

System

**PROJECT** 

CC01: Global Command and Control System-

**DATE:** February 2012

Joint (GCCS-J)

Management Services	(\$ in Millio	ons)		FY 2	2012	FY 2 Ba	2013 se	FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	MIPR	SSC Atlantic:Charleston, SC	1.412	1.103	Dec 2011	0.489	Dec 2012	-		0.489	Continuing	Continuing	Continuing
		Subtotal	1.412	1.103		0.489		-		0.489			
			Total Prior Years Cost	FY 2	2012	FY 2 Ba	2013 se	FY 2	2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	351.749	56.680		36.575		-		36.575			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense	nformation	Systems A	∖geı	ncy										DA	TE: F	ebru	ary :	2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-BA 7: Operational Systems Development	-Wide	R-1 ITE PE 0303 System	315					d and	Cont	rol	CC	<b>ROJE</b> 201: <i>int (</i> 0	Glob		Commi	and (	and	Cont	rol S	yster	n-
FY 1 2	2011	FY 2012	4	1	FY 201	3	1 1	Y 201	_	1	FY 2	2015	4	1	FY 20 <sup>-</sup>		. 1	FY 2	2017	7	

Development and Strategic Planning

Integration and Test

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE
PE 0303150K: Global Command and Control SystemSystem

DATE: February 2012

CC01: Global Command and Control SystemJoint (GCCS-J)

# Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
Development and Strategic Planning	1	2011	4	2016
Integration and Test	1	2011	4	2016



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303153K: Defense Spectrum Organization

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	19.112	28.908	24.278	-	24.278	17.980	18.095	18.057	18.275	Continuing	Continuing
JS1: Joint Spectrum Center	19.112	28.908	24.278	-	24.278	17.980	18.095	18.057	18.275	Continuing	Continuing

### A. Mission Description and Budget Item Justification

Electromagnetic Spectrum Management enables information dominance through effective spectrum operations. In direct support of Combatant Commanders, Assistant Secretary of Defense for Networks and Information Integration (ASD/NII), Military Services, and Defense Agencies, the Defense Spectrum Organization (DSO), a component of DISA, provides a full array of electromagnetic spectrum services and capabilities, ranging from short notice on-the-ground operational support at the forward edge, to long range planning in pursuit of national strategic objectives. The DSO is the center of excellence for electromagnetic spectrum analysis and the development of integrated spectrum plans and strategies to address current and future needs for DoD spectrum access. In addition, DSO serves as DoD's spectrum advocate at national and international forums and conducts extensive outreach to both industry and government. DSO also implements enterprise spectrum management capabilities to enhance spectrum efficiency and agility to improve spectrum-dependent capabilities in support of United States and Coalition operations. This includes acquiring, implementing and sustaining the Global Electromagnetic Spectrum Information System (GEMSIS) which provides an integrated catalog of joint net-centric spectrum management tools and services.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	20.991	29.154	24.037	-	24.037
Current President's Budget	19.112	28.908	24.278	-	24.278
Total Adjustments	-1.879	-0.246	0.241	-	0.241
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.246			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	-1.879	-	0.241	-	0.241

## **Change Summary Explanation**

The FY 2011 decrease of -\$1.879 reflects administrative efficiencies and supports higher Agency priorities.

The FY 2012 decrease of -\$0.246 is due to reprioritizing resources to support higher Agency priorities.

The FY 2013 increase of +\$0.241 reflects inflationary adjustments.

PE 0303153K: *Defense Spectrum Organization* Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 12

R-1 Line #212

Volume 5 - 221

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Just	ion Systems Agency					DATE: February 2012					
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide				PE 0303153K: Defense Spectrum Organization				JS1: Joint Spectrum Center			
BA 7: Operational Systems Development											
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
JS1: Joint Spectrum Center	19.112	28.908	24.278	_	24.278	17.980	18.095	18.057	18.275	Continuing	Continuing
Quantity of RDT&E Articles											

## A. Mission Description and Budget Item Justification

The Defense Spectrum Organization's (DSO) Joint Spectrum Center (JSC) designs, develops, and maintains DoD automated spectrum management systems, evaluation tools, and databases. The JSC databases are the prime sources of information for DoD use of the Electromagnetic (EM) spectrum. The JSC provides technical measurement and analysis in support of DoD spectrum policy decisions to ensure the development, acquisition, and operational deployment of systems are compatible with other spectrum dependent systems operating within the same EM environment. Additional focus is centered on improving future warfighter EM spectrum utilization through technological innovation accomplished by researching, studying, and steering the direction of research and development (R&D) emerging technology efforts from a spectrum perspective.

DSO's Global Electromagnetic Spectrum Information System (GEMSIS) is a net centric capability that will provide commanders with an increased common picture of spectrum situational awareness of friendly and hostile forces while transparently deconflicting competing mission requirements for spectrum use. This capability will enable the transformation from the current preplanned and static assignment strategy into autonomous and adaptive spectrum operations.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: JSC Data and Data Software (formally called Spectrum Knowledge Resources)	8.66	0 7.952	8.037	
<b>Description:</b> The JSC Data and Data Software (JDADS) program supports development of spectrum modeling and simulat capabilities, spectrum database development, and spectrum data transformation and standardization. This program provide the Combatant Commands and Military Services with the spectrum management tools and associated databases to manage spectrum resources at the strategic and operational level. It also provides the DoD acquisition community with tools to concellectromagnetic Environmental Effects (E3) evaluations and spectrum supportability risk assessments.	s e			
FY 2011 Accomplishments: In FY 2011, a version of Joint Data Access Web Server (JDAWS) was developed to improve data sharing with NATO. This implemented interface enhancements to accommodate evolving DoD and NATO spectrum data standard changes. Also income was the development and initial deployment of the SPECTRUM XXI Online (SXXIO) infrastructure to spectrum managers in the Military Departments (MILDEPs) and COCOMs. SXXIO capabilities provided a set of enhanced frequency nomination a assignment algorithms and associated default data that affords the opportunity to make more spectrally efficient assignment while precluding co-channel and adjacent signal interference.	eluded nd			
FY 2012 Plans:				

PE 0303153K: *Defense Spectrum Organization* Defense Information Systems Agency

UNCLASSIFIED
Page 2 of 12

R-1 Line #212

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Inform	mation Systems Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303153K: Defense Spectrum Organization	PROJECT JS1: Joint	Spectrum C	enter	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
FY 2012 resources are migrating capabilities to new hardware and operand NATO spectrum data standard in other aspects of the JDADS propare being developed and the program is implementing enhanceed mosystems. All developed capabilities are being documented and tested Enterprise Computing Center (DECC) site. SXXIO continues to be encommands (COCOMS).	ogram. Additional background environment data sou onitoring transactions with Military Departments' (MIL d by subject matter users before being hosted at a D	irces .DEPs) efense			
The decrease between FY 2011 and FY 2012 of -\$0.708 is due to the priorities as well as administrative efficies.	e reprioritizing of resources to support higher Agency	,			
FY 2013 Plans:  DoD spectrum data sharing services will be enhanced through implement data quality enhancements and improved workflow for data capture. management capabilities with the incorporation of improved assignment supportability risk assessment tool will include user upgrades to the swith scenario development, and secure remote access by connection.  The increase of \$0.085 between FY2012 and FY2013 is an adjustment.	GEMSIS will continue to build out its suite of spectruent and data services. Improvements to the spectrue cenario editing capability, "Wizards" to assist novice to the SIPRNET.	um m			
Title: DoD E3 Program			3.358	3.200	3.23
<b>Description:</b> The DoD Electromagnetic Environmental Effects (E3) P Development System (JCIDS) process and the The DoD Electromagn Capabilities Integration and Development System (JCIDS) process an and Spectrum Supportability (SS) are incorporated into the development National Security Systems. The E3 Program also supports the described Database (JOERAD) and Hazards of Electromagnetic Radiation to Ot (EME) surveys in support of the COCOMS and Joint Task Forces (JT capabilities to perform real-time risk assessments to evaluate platform operational EM environment. JOERAD enables operators to make crip of ordnance within complex EM environments. A Spectrum Supportate managers (PMs) and materiel developers (MATDEVs) on all program D) systems or equipment per DoDI 4650.1. The assessment is accordinated assessment is accordinated by the complex in the complex is a program of the complex in the complex is accordinate to the complex in the complex is a complex in the complex in the complex is a complex in the complex i	netic Environmental Effects (E3) Program supports the day the DoD acquisition process to ensure that E3 content, testing, and procurement of information technology evelopment of the Joint Ordnance E3 Risk Assessment (HERO) electromagnetic environmental effect). JOERAD develops algorithms and provides analysystem safety and identify equipment limitations in tical decisions about the hazards associated with the bility Risk Assessment (SSRA) is performed by progras that are acquiring or incorporating spectrum-dependent.	ne Joint Introl ogy ent ects ytical the e use eam indent (S- cal, and			

PE 0303153K: *Defense Spectrum Organization* Defense Information Systems Agency

UNCLASSIFIED
Page 3 of 12

R-1 Line #212

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Infor	mation Systems Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303153K: Defense Spectrum Organization	PROJECT JS1: Joint	T Spectrum (	Center	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
electromagnetic environmental effects (E3) and assess spectrum suppoperational environment.  FY 2011 Accomplishments:  FY 2011 resources continued the conversion of JOERAD to a network improvements. Three shipboard installations, training and validation completed in FY 2011 along with HERO Impact Assessments and fo 400 critical research/analysis efforts supporting DoD acquisitions.	rk-connected capability, JOERAD 10.0, incorporating of CONUS based emitter complement for JOERAD w	data vere also			
FY 2012 Plans: FY 2012 resources are completing development of JOERAD 10.0 an JOERAD 10.0 is undergoing testing prior to deployment and training.					

The decrease of -\$0.158 between FY 2011 and FY 2012 is the result of administrative efficiences being realized.

DSO is conducting approximately 400 critical research/analysis efforts supporting DoD acquisitions.

This funding supports DSO initiation of development of the Initial Operational Capability (IOC) version of the E3 Evaluation and Spectrum Supportability Risk Assessment Tool. This will provide acquisition program managers with the ability to identify and assess an acquisition's potential to affect the required performance of the newly acquired system or other existing systems within the operational EME. The IOC version of the SSRA tool is based on Release 3.x of the spectrum modeling and simulation testbed developed under the Spectrum Technology Testbed Initiative (STTI). These improvements will include developmental efforts focusing on improving the Graphical User Interface (GUI) and the ease of use, improving the mapping tools, and enhancing system performance.

ordnance safety database validation. DSO is developing enhanced Ordnance radio frequency (RF) safety requirements for DoD.

#### FY 2013 Plans:

FY 2013 resources will support ordnance susceptibility data gathering and improvements to feed automated tools to guide ordnance handling and storage. DSO will conduct CONUS base emitter surveys for ordnance safety database validation. DSO will update ordnance radio frequency (RF) safety requirements for DoD. DSO will execute approximately 400 critical research/ analysis efforts supporting DoD acquisitions. In FY 2013, DSO will enhance the SSRA tool. Planned improvements include user requested upgrades to the scenario editing capability, "Wizards" to assist novice users with scenario development, and secure remote access via connection to the SIPRNET. [Note: SIPRNET access depends on the accreditation of the connection at the ITT Bowie facility. SIPRNET access will also require a DIACAP accreditation and Authority to Operate.

PE 0303153K: *Defense Spectrum Organization* Defense Information Systems Agency

UNCLASSIFIED
Page 4 of 12

R-1 Line #212

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Infor	rmation Systems Agency		DATE: Fel	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303153K: Defense Spectrum Organization	PROJEC JS1: Joint		enter	
B. Accomplishments/Planned Programs (\$ in Millions) The increase of +\$0.034 between FY2012 and FY2013 is an adjustn	nent for inflationary projections		FY 2011	FY 2012	FY 2013
Title: Emerging Spectrum Technologies (EST)	iona ion illinguoridity projectione.		1.272	4.228	4.169
<b>Description:</b> DSO has the responsibility to investigate emerging spectro improve future warfighter EM spectrum utilization through technologidentify the opportunities and risks associated with emerging spectrum development, influence and lead technology development in order to spectrum policies incorporate optimal technology to meet DoD missing focus on Dynamic Spectrum Access (DSA). DSA is realized through enable wireless devices to dynamically adapt their spectrum access availability, propagation environment, and application performance responsibility.	ogical innovation. The goal of the EST program is to m-related technologies in the early stages of the tech maximize DoD spectrum utilization, and ensure that on requirements. Within EST there has been an increase wireless networking architectures and technologies according to criteria such as policy constraints, spect	nology eased that			
FY 2011 Accomplishments:  FY 2011 funds focused DSA research on spectrum sharing techniqu specific to advanced radar systems. DSA research efforts initiated in and technical parameters to demonstrate the effective coexistence of developing extensions to evolving DoD and NATO spectrum data states.	n FY 2010 were completed. DSO developed a frame of DSA enabled radios with legacy systems. DSO also	work o began			
FY 2012 Plans: In FY 2012, DSO, in coordination and collaboration with the MILDEP Administration (NTIA), is initiating development of the revised spectro procedures for demonstrating the ability to effectively coexist with leg the various entities developing tools for spectrum and network manamanage DSA enabled systems are available within those tools.	es and the National Telecommunications and Informat um certification process for DSA capable systems, ind gacy systems. DSO is expanding the coordination be	tion cluding tween			
The increase of +\$2.956 between FY 2011 and FY 2012 supports DS technologies to enable expanded spectrum sharing with commercial broadband expansion, and unlock under-utilized spectrum as recommendations to track emerging technologies and will publish two Technologies to DoD.	systems to mitigate potential impacts from the nation mended in the President's wireless broadband memo	al . DSO			
FY 2013 Plans: In FY 2013 the DSO EST efforts will identify technology applications sharing in increasingly congested and contested environments, deve	elop requirements for advanced spectrum manageme				

PE 0303153K: Defense Spectrum Organization Defense Information Systems Agency

related capabilities to optimize spectrum access through use of ESTs. DSO will evaluate the implications of EST on existing

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Informa	ation Systems Agency		DATE: Fel	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303153K: Defense Spectrum Organization	PROJECT JS1: Joint		enter	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
policy and regulatory paradigms and develop recommendations for char required changes to those paradigms.	nges to promote the use of emerging technologies	to make			
The decrease of -\$0.059 between FY 2012 and FY 2013 is due to reduce	ction contractor services in the technology monitor	ing area.			
Title: Spectrum Data Sharing Capability			2.357	5.500	3.539
<b>Description:</b> FY 2011 funds initiated establishment of an authoritative of (SM) information and an automated spectrum data capture and quality of development of the long-term data sharing solution to US Central Comm (JUON) 06-53745201-00, Radio Frequency Spectrum Management. The Counter Radio Electronic Warfare (CREW) deconfliction and spectrum is automated data access capabilities; provide business process engines of with NATO.	control process. The spectrum data enhancement nand's (USCENTCOM) Joint Urgent Operational National Na	initiated leed itomated ure;			
FY 2011 Accomplishments:  FY 2011 resources planned and contracted for enhancements to the Sp to the evolving DoD and NATO spectrum data standard and began to de parameters. A statistical assessment capability was planned and contra federation of E-Space data assets and emerging Global Force Manager	evelop a transactional data repository for equipme acted for the Data Quality Assessments (DQA) cap	nt pability,			
FY 2012 Plans:  During FY 2012 contracts are being executed for the Spectrum Data Ca capability, and federation of external data sources (E-SPACE and GFM) capability to be hosted on the SIPRNET at a DECC site, and the Joint S (SI) is being updated to import data directly from Stepstone to the JSDR planned and coordinated with the Service FMOs to manage and track S prototype statistical assessment capability is being expanded and a prot with supporting Service Interface for Stepstone. A data default Service effort, a prototype implementation of the spectrum ABAC is being pursue to Stepstone and JSDR to augment the current AKO Single Sign On (SS ABAC attribute database and maintenance capabilities will be developed users before being hosted at a DECC site.	). In addition, funds are transitioning Stepstone to spectrum Data Repository (JSDR) Service Interfact. Business process management work flow is beintepstone records. Under the DQA effort, the FY 2 totype assessment capability is being developed a Interface is being developed for SXXI-O. Under the transition of the coordination with other DISA elements for approximately method and provide role based access. A process.	ng 011 llong ne ABAC oplication ototype			

PE 0303153K: *Defense Spectrum Organization* Defense Information Systems Agency

UNCLASSIFIED
Page 6 of 12

R-1 Line #212

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Inform	mation Systems Agency		DATE: Fel	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	•		
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	PE 0303153K: Defense Spectrum Organization	JS1: Joint S	Spectrum C	enter	
B. Accomplishments/Planned Programs (\$ in Millions)  The increase of +\$3.143 between FY 2011 and FY 2012 is for the expension of the service interface for Stepstone.	pansion of the prototype statistical assessment capa		FY 2011	FY 2012	FY 2013
FY 2013 Plans:					
The spectrum data capturing tool will continue development to enhand management capabilities. Implementation of additional regulatory condoctory of DSO spectrum database products is also planned. The Joint Data Acquery capabilities, as well as, leverage additional DoD and Federal spectrum data standard will continue to evolve adding new spectrum data sharing communities. Antiquated manual methods will not keep pace with recommunities. The decrease of -\$1.961 from FY 2012 to FY 2013 is the programment of the programment o	mpliance checks and data quality enhancements acrecess Web Server (JDAWS) tool will implement enhancement enhancement at above trum database sources. The DoD and NATO speng elements of interest to the EW and intelligence quired op-tempo.	ross all anced ectrum			
required. <b>Title:</b> Global Electromagnetic Spectrum Information System (GEMSIS)	S)		2.465	7.528	5.29
<b>Description:</b> The Global Electromagnetic Spectrum Information Syst commanders with an increased common picture of spectrum situation transparently deconflicting competing mission requirements for spectrum current preplanned and static assignment strategy into autonomorphic properties.	em (GEMSIS) is a net centric capability that will provinal awareness of friendly and hostile forces while rum use. This capability will enable the transformation				
FY 2011 Accomplishments: In FY 2011, DSO finalized the GEMSIS Catalog of Services architects B or C for GEMSIS Increment 2. DSO developed, tested, and deploy HNSWDO to a DECC.					
FY 2012 Plans: The focus in FY 2012 is on providing Block 1 identified capabilities to centric spectrum management capability and access to the Joint Spectrum.		a net-			
The increase of +\$5.063 in FY 2012, is due to DSO implementing the transition, modify and upgrade, integrate, test, and field to Services, C increased capabilities beyond Increment 1 and will significantly enhar standardized capabilities.	COCOMs and DoD Agencies. Increment 2 will provide				
Startaaraizea aapabiitties.					

PE 0303153K: *Defense Spectrum Organization* Defense Information Systems Agency

UNCLASSIFIED
Page 7 of 12

R-1 Line #212

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Infor	rmation Systems Agency		DATE: Feb	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303153K: Defense Spectrum Organization	PROJECT JS1: Joint S	pectrum C	enter	
B. Accomplishments/Planned Programs (\$ in Millions)		F	FY 2011	FY 2012	FY 2013
In FY 2013, DSO will expand on Increment 2 by implementing Block Desktop, enhanced frequency assignment and spectrum manageme and access to web services from the Afloat Electromagnetic Spectrum. The decrease of -\$2.229 between FY 2012 and FY 2013 is due to continuous control of the control	ent tools, expand Joint Spectrum Data Repository cap m Operations Program.				
capabilities into the Integrated Spectrum Desktop.	ompletion of initial integration enorts tying functional				
Title: Spectrum Common Operating Picture (SCOP)			1.000	0.500	-
<b>Description:</b> Spectrum Common Operating Picture (SCOP) will provof the spectrum and other related data sets currently used to support provide a clear visualization of the spectrum environment, similar to hand related data. There is no comprehensive automated tool or serve priorities with the benefit of a common display of timely and relevant operational and tactical planners and commanders in the field with a Service Oriented Architecture-based web service tied to a GIS driver intensive data gathering, correlation and visualization methods are not risk to warfighters and mission accomplishment. SCOP will substantified days to minutes/seconds. That situational awareness will enable real planning factors, resulting in more effective mission planning for the splanners, electronic warfare planners, and intelligence collection.	t spectrum planning and operations, and layer this day how a Geographic Information System (GIS) layers go vice available today that allows decision makers to set spectrum information. The proposed capability would comprehensive layered picture of spectrum use through by robust, accurate information. Current manual an ot responsive to operational requirements and place of ally reduce analysis and presentation time, from weel all time decisions based on the area of operation and re-	ta to eospatial t d provide ugh a id time undue ks/ mission			
FY 2011 Accomplishments: FY 2011 resources completed software development efforts that enh focused tool. Efforts addressed development of the visualization engassurance tasks and testing.					
FY 2012 Plans: In FY 2012, DSO is deploying the Initial Operational Capability (IOC)	version of SCOP to DoD's spectrum operational com	nmunity.			
The decrease of -\$0.500 between FY 2011 and FY 2012 is due to re	duced software development which will address				
enhancements required to achieve the Full Operational Capability (F					

PE 0303153K: *Defense Spectrum Organization* Defense Information Systems Agency

UNCLASSIFIED
Page 8 of 12

R-1 Line #212

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE
PE 0303153K: Defense Spectrum Organization
PROJECT
Solution Systems Center

PS 1: Joint Spectrum Center

### C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• O&M, DW/PE 0303153K: <i>O&amp;M</i> ,	30.424	41.579	42.879		42.879	44.457	45.299	45.859	42.607	Continuing	Continuing
DW											

### D. Acquisition Strategy

Engineering support services for DSO are provided by the use of a contract. No in-house government capability exists, nor is it practical to develop one that can provide the expertise necessary to fulfill the mission and responsibilities of DSO. Full and open competition was used for the acquisition of the current contract with ITT Industries, Inc. GEMSIS' acquisition approach is to obtain capabilities by adopting existing capabilities, buying commercial products, or developing new capabilities by delivering incrementally within the context of a streamlined and adaptive acquisition approach.

### **E. Performance Metrics**

- 1. Formal Earned Value Measurement System (EVMS) measures will be applied to large software development efforts
- 2. On-time software version releases
- 3. Software development PCRs closed on schedule
- 4. On-time deployments to users
- 5. Number of spectrum data sources added
- 6. Percent quality improvement of spectrum data
- 7. Percent increase of user access to spectrum data via web services

PE 0303153K: *Defense Spectrum Organization* Defense Information Systems Agency

Page 9 of 12

R-1 Line #212

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0303153K: Defense Spectrum Organization | JS1: Joint Spectrum Center BA 7: Operational Systems Development FY 2013 FY 2013 FY 2013 Support (\$ in Millions) FY 2012 oco Total Base **Total Prior** Contract Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item Activity & Location** Contract & Type Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Technical Engineering ITT Industries. C/CPIF 80.068 27.602 Oct 2011 22.525 Oct 2012 22.525 Continuing Continuing Continuing Services 1 Inc:Bowie, MD Technical Engineering MIPR Various:Various 2.505 0.345 Oct 2011 0.355 Oct 2012 0.355 Continuing Continuing Continuing Services 2 22.880 Subtotal 82.573 27.947 22.880

Test and Evaluation (\$ i	in Millions	3)		FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation	MIPR	JTIC:Ft. Huachuca	1.212	0.300	Oct 2011	0.400	Oct 2012	-		0.400	Continuing	Continuing	Continuing
		Subtotal	1.212	0.300		0.400		-		0.400			

Management Services (	\$ in Millio	ons)		FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	FFRDC	MITRE:Ft. Monmouth, NJ	5.490	0.661	Nov 2011	0.998	Oct 2012	-		0.998	Continuing	Continuing	Continuing
		Subtotal	5.490	0.661		0.998		-		0.998			

	Total Prior Years			FY	2013	FY	2013	FY 2013	Cost To		Target Value of
	Cost	FY 2	2012	Ва			00	Total	Complete	Total Cost	
Project Cost Totals	89.275	28.908		24.278		-		24.278			

Remarks

PE 0303153K: Defense Spectrum Organization **Defense Information Systems Agency** 

**UNCLASSIFIED** Page 10 of 12

R-1 Line #212

**DATE:** February 2012 Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

PROJECT

PE 0303153K: Defense Spectrum Organization | JS1: Joint Spectrum Center

		FY	201 <sup>′</sup>	I		FY	2012	2		FY	2013	3	FY 2014			1	FY 2015					FY 2016					FY 2017				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
Spectrum XXI Online (SXXIO) Fielding										,												,			,						
SXXIO Version Releases																												_			
Joint Ordnance E3 Risk Assessment Database (JOERAD) Version 10.0 Deployment																															
Dynamic Spectrum Access (DSA) Research Projects																															
Spectrum Data Sharing Capability Deployments																															
GEMSIS Host Nation Spectrum Worldwide Database Online (HNSWDO) Version 3.1.5 Fielding																															
GEMSIS Coalition Joint Spectrum Management Planning Tool (CJSMPT) Version 2.1.2 Deployment																															
Increment Two GEMSIS Event																															

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303153K: Defense Spectrum Organization | JS1: Joint Spectrum Center

**PROJECT** 

**DATE:** February 2012

# Schedule Details

	Sta	art	Er	nd
Events	Quarter	Year	Quarter	Year
Spectrum XXI Online (SXXIO) Fielding	4	2011	4	2012
SXXIO Version Releases	4	2012	4	2016
Joint Ordnance E3 Risk Assessment Database (JOERAD) Version 10.0 Deployment	2	2012	4	2012
Dynamic Spectrum Access (DSA) Research Projects	4	2011	4	2016
Spectrum Data Sharing Capability Deployments	4	2011	4	2016
GEMSIS Host Nation Spectrum Worldwide Database Online (HNSWDO) Version 3.1.5 Fielding	4	2011	4	2011
GEMSIS Coalition Joint Spectrum Management Planning Tool (CJSMPT) Version 2.1.2 Deployment	3	2011	4	2011
Increment Two GEMSIS Event	1	2012	4	2016

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303170K: Net-Centric Enterprise Services (NCES)

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	3.505	1.830	2.924	-	2.924	3.360	1.516	1.515	1.535	Continuing	Continuing
T57: Net-Centric Enterpise Services (NCES)	3.505	1.830	2.924	-	2.924	3.360	1.516	1.515	1.535	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Program Executive Office (PEO) for Global Information Grid (GIG) Enterprise Services (GES) provides a portfolio of enterprise level services that enable communities of interest and mission applications to make their data and services visible, accessible, and understandable to other anticipated and unanticipated users. The PEO GES portfolio supports 100 percent of the active duty military and Government civilians; 258 thousand embedded contract personnel; 75 percent of the active Guard and Reserve; and 25 percent of the Guard and Reserve users. This meets the Department's requirement to support 2.5 million users on the Non-Classified Internet Protocol Router Network (NIPRNet) and 300 thousand users on the Secret Internet Protocol Router Network (SIPRNet). The PEO GES portfolio of services continues to expand through the transition of local services to the DoD enterprise and providing enhanced functionality that allows DoD personnel to go anywhere in the DoD, login, and be productive, the implementation of an access control infrastructure that enables secure information sharing throughout the DoD, and the integration of pre-planned product improvements to existing enterprise services keeping them relevant to the end-users' missions.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	3.366	1.830	0.977	-	0.977
Current President's Budget	3.505	1.830	2.924	-	2.924
Total Adjustments	0.139	-	1.947	-	1.947
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	0.139	_	1.947	-	1.947

# **Change Summary Explanation**

The FY 2011 increase of +\$0.139 supports the testing and integration of emerging commercial technologies into operational enterprise services.

The increase of +\$1.947 in FY 2013 is attributable to analysis of industry standards, specifications and rapid integration of emerging commercial technologies into existing operational enterprise service. In addition, the transitioning of services from local to enterprise; risk mitigation; and enhancements to concept of operations and tactics, techniques, and procedures for initiatives addressing deployable services.

PE 0303170K: *Net-Centric Enterprise Services (NCES)* Defense Information Systems Agency

Page 1 of 10

R-1 Line #213

Volume 5 - 233

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Jus	xhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency										
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development					OMENCLAT OK: Net-Cent		e Services	PROJECT T57: Net-Centric Enterpise Services (NCES)			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
T57: Net-Centric Enterpise Services (NCES)	3.505	1.830	2.924	-	2.924	3.360	1.516	1.515	1.535	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

The Program Executive Office (PEO) for Global Information Grid (GIG) Enterprise Services (GES) continues to expand their portfolio of services that currently includes the capabilities delivered by the Net-Centric Enterprise Services (NCES) Program, a resilient and flexible access control infrastructure that enables secure information sharing in the DoD, and the transition and operationalization of local services into the larger Department of Defense (DoD) enterprise. Critical Warfighter, Business, and Intelligence Mission Area services within the PEO GES portfolio include an enterprise Collaboration capability supporting over 500,000 DoD users, User Access (Portal) supporting two million users, Enterprise Search that exposes data sources throughout the DoD, and Service Oriented Architecture Foundation (SOAF). The PEO GES portfolio also includes the Strategic Knowledge Integration Web (SKIWeb) providing decision and event management support to all levels of a widespread user-base that ranges from the Combatant Commanders to the Joint Staff to Coalition partners on the SIPRNet and DoD Visitor that allows personnel to "go anywhere in the DoD, login, and be productive." The individual suite of capabilities within the portfolio of services provides the user with the flexibility to couple the services in varying ways to support their mission needs. This flexibility provides unprecedented access to web and application content, critical imagery, intelligence and warfighter information, and stores critical data in a secure environment. The PEO GES portfolio of enterprise services delivers tangible benefits to the Department by providing capabilities that are applied by U.S. Forces, Coalition forces, and Allied forces to produce Net-Centricity and support full spectrum joint and expeditionary campaign operations. These benefits include:

- Enhanced collaborative decision-making processes;
- Improved information sharing and integrated situational awareness;
- Ability to share and exchange knowledge and services between enterprise units and commands;
- Ability to share and exchange information between previously unreachable and unconnected sources;
- Ability to "go anywhere in the DoD, login, and be productive;
- Knowledge exchange to enable situational awareness, determine the effects desired, select a course of action, the forces to execute it, and accurately assess the effects of that action; and
- Improved ability to effectively operate inside the most capable adversaries' decision loop.

The portfolio contains capabilities that are also key enablers to the Defense Information Systems Agency's (DISA) mission of providing a global net-centric Enterprise infrastructure in direct support of joint Warfighter, National level leaders, and other mission and coalition partners across the full spectrum of operations. This support is outlined in the DISA Campaign Plan as "Enhance core Application Level Services".

- · Enhanced collaborative decision-making processes;
- Improved information sharing and integrated situational awareness;
- Ability to share and exchange knowledge and services between enterprise units and commands;
- Ability to share and exchange information between previously unreachable and unconnected sources;

PE 0303170K: *Net-Centric Enterprise Services (NCES)*Defense Information Systems Agency

UNCLASSIFIED
Page 2 of 10

R-1 Line #213

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information	tion Systems Agency	<b>DATE</b> : February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303170K: Net-Centric Enterprise Services	T57: Net-Centric Enterpise Services (NCES)
BA 7: Operational Systems Development	(NCES)	

- Knowledge exchange to enable situational awareness, determine the effects desired, select a course of action, the forces to execute it, and accurately assess the effects of that action; and
- Improved ability to effectively operate inside the most capable adversaries' decision loop.

The portfolio contains capabilities that are also key enablers to the Defense Information Systems Agency's (DISA) mission of providing a global net-centric enterprise infrastructure in direct support of joint Warfighter, National level leaders, and other mission and coalition partners across the full spectrum of operations.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Test and Evaluation	3.505	1.830	2.924
FY 2011 Accomplishments:  FY 2011 funding supported the transition and enhancement of SKIWeb which provided event-based information in a globally accessible, operationally relevant, near real-time capability which enabled Combatant Commanders, Component Commanders, and other users to collaboratively share data, plan strategies, develop courses of action (COA) and quickly adjust those plans and COAs as situations develop. In addition, funding provided for test enhancements and upgraded services from Joint Capability Technology Demonstrations (JCTDs), Advanced Concept Technology Demonstrations (ACTDs), or Pre-Planned Product Improvements (P3I(s)) before final insertion into the PEO GES portfolio of services baseline to support Warfighter mission needs.			
FY 2012 Plans: FY 2012 funding supports the final development and operational testing required to complete the transition and enhancement of SKIWeb into an enterprise service. In addition, the funding will supports operational testing required for enhancements, upgrades, or added functionality to operational enterprise services.			
The decrease of -\$1.675 from FY 2011 to FY 2012 is attributable to completing the development and testing required for the transition of SKIWeb to enhanced the baseline capability (-\$0.911 million) and the expected reduction in operational testing (-\$0.764 million) required for enhancements, upgrades, or added functionality to operational enterprise services.			
FY 2013 Plans: FY 2013 funding will support the operational testing and evaluation of enterprise services and the transitioning of local services into the Department of Defense (DoD) enterprise infrastructure. The funding will also support the analysis of industry standards and specifications for enhancements and added functionality to existing operational enterprise services ensuring their continuing relevance to the missions of the end-users and the framework for information sharing across the DoD.			
The increase of +1.094 from FY 2012 to FY 2013 is attributable to analysis of industry standards, specifications and rapid integration of emerging commercial technologies into existing operational enterprise service and services transitioning from			

PE 0303170K: *Net-Centric Enterprise Services (NCES)* Defense Information Systems Agency

UNCLASSIFIED
Page 3 of 10

R-1 Line #213

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303170K: Net-Centric Enterprise Services	T57: Net-Co	entric Enterpise Services (NCES)
BA 7: Operational Systems Development	(NCES)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
local services to enterprise services; risk mitigation; and enhancements of concept of operations and tactics, techniques, and procedures for initiatives addressing deployable services.			
Accomplishments/Planned Programs Subtotals	3.505	1.830	2.924

# C. Other Program Funding Summary (\$ in Millions)

		-	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• O&M, DW/PE 0303170K: O&M,	120.293	149.939	142.184		142.184	144.568	143.879	144.488	144.488	Continuing	Continuing
DW											-
Procurement, DW/PE 0303170K:	4.391	3.429	2.828		2.828	2.815	2.810	2.811	2.811	Continuing	Continuing
Procurement, DW											

#### D. Acquisition Strategy

The PEO GES portfolio of services is leveraging portions of the acquisition approach approved for the NCES Program. Based on the approved NCES acquisition strategy, PEO GES will adopt proven specifications, best practices, and interface definitions to buy new network-based services or applications that are delivered, hosted, and managed in accordance with Service Level Agreements (SLAs) and that ensure available, reliable, and survivable services to support the warfighter's mission.

The PEO-GES is using a streamlined acquisition approach to ensure that the required acquisitions contain only those requirements that are essential to meet the warfighter mission and that they can be acquired in a cost effective and time constrained manner that meets the defined mission need. This strategy will enable PEO GES to rapidly field low to moderate risk capabilities to meet end-user operational needs through an agile requirements collection and engineering process that can support the acquisition, testing, and fielding of needed requirements in minimum time. The benefits of this acquisition approach include:

- Satisfy time-urgent needs of the warfighter or theater commander.
- Provides early and continual involvement of the user.
- Evaluate the portfolio to determine optimum funding approach to rapidly deploy urgently needed services within the funding profile.
- Effective control processes that lower cost and maintains schedule.
- Provides multiple, rapidly executed increments or releases of capability.
- Early dialogue between the requirements and acquisition communities to expedite technical, programmatic, and financial solutions.
- Enabling "insight" not "oversight" to identify and resolve problems early and ensure both the acquisition process and deployed service meets performance goals.
- Enabling agility in selecting modular, open-systems approach.

The PEO GES business strategy will strike a balance between ensuring accountability using acquisition best practices and deploying urgently needed services to the warfighter on a schedule that will support their mission requirements. The goal is to facilitate the DoD net-centricity vision where users and Programs of Record easily

PE 0303170K: *Net-Centric Enterprise Services (NCES)* Defense Information Systems Agency

Page 4 of 10

R-1 Line #213

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303170K: Net-Centric Enterprise Services	T57: Net-C	entric Enterpise Services (NCES)
BA 7: Operational Systems Development	(NCES)		

access enterprise services from maritime, airborne, and land-based locations worldwide. PEO GES will work with the user community to understand how their portfolio of services must evolve to remain relevant to the Warfighter, Business, and Intelligence Mission Area mission requirements. By partnering with the DoD Components and Mission Areas, PEO GES will rapidly deliver functionality and capability at the lowest possible cost and risk in the shortest possible timeframe.

#### **E. Performance Metrics**

PEO GES uses continuous monitoring to ensure the portfolio of services they deliver and manage meets the users' needs, is delivered in a cost effective manner, and is responsive to evolving mission requirements. This ensures the services meet the mission needs of the stakeholders, are delivered, improved, and sustained in a cost effective manner, and continues to add functionality that keeps the capability relevant to the missions supported. These continuous monitoring areas include:

#### Activity:

• Customer Perspective (Determine the customers' (Warfighter, business, and DoD Portion of the Intelligence Mission Area) needs and provide available, reliable, and survivable services that support evolving missions; solicit continual feedback from the customer on the utility, effectiveness, suitability, and relevancy of all delivered services)

#### **Expected Outcome:**

Receive an overall customer satisfaction rating of three or better on a scale of 1 to 5 where 1 is "no mission effectiveness" and 5 is "maximum mission effectiveness".

#### Activity:

• Financial Perspective (Satisfy Clinger-Cohen Act of 1996, DISA and DoD Cost Strategic Goals, determine if PEO GES funding is sufficient to deliver services that support the customers' mission needs, effectively support preplanned product improvements (P3I), and reduce sustainment costs; use feedback from the customer perspective to determine when a service is no longer relevant to their mission requirements)

### **Expected Outcome:**

Usage of the portfolio of core and shared enterprise services continue to expand to support anticipated and unanticipated user demand; investment in duplicative services declines; additional POR/COIs reduce development costs through reuse of enterprise services; maintenance of an overall return on investment (ROI) that is ≥ 1 or the capability provides a significant mission benefit from the customer perspective that the lower ROI is offset.

### Activity:

• Requirements Satisfaction (Continue to expand, modernize, and add new functionality to the user and machine facing portfolio of deployed services; identify, transition, and operationalize local services that can satisfy new mission requirements or supplement an existing service that has lost market share and is not cost effective to update; periodically re-validate service requirements with the user community to identify enhancements required to support evolving mission needs).

# **Expected Outcome:**

Continue to improve the performance of the portfolio of services while adding functionality, integrating local services into the enterprise infrastructure, and extending access to additional unanticipated users.

PE 0303170K: *Net-Centric Enterprise Services (NCES)* Defense Information Systems Agency

UNCLASSIFIED
Page 5 of 10

R-1 Line #213

	ONOE/ROOM IED	
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information	ation Systems Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303170K: Net-Centric Enterprise Services	T57: Net-Centric Enterpise Services (NCES)
BA 7: Operational Systems Development	(NCES)	
The management areas are designed to ensure that problems can be		
These metrics associated with these management areas provide quan		
and responsive to current and future Warfighter missions in a cost-effe		
value of services to the Warfighter. They will be used to determine the		
when necessary, they provide the necessary artifacts to make decision	•	itus capabilities that are not performing as
expected or where the user demand has slipped or never grew to the	level of keeping the service cost effective.	

PE 0303170K: *Net-Centric Enterprise Services (NCES)* Defense Information Systems Agency

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303170K: Net-Centric Enterprise Services | T57: Net-Centric Enterpise Services (NCES)

(NCES)

**PROJECT** 

**DATE:** February 2012

Product Development (\$ in Millions)		ns)	s)		2012	FY 2 Ba		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 1	MIPR	MIT (CTO):Hanscom Air Force Base, MA	0.821	-		-		-		-	Continuing	Continuing	0.871
Product Development 2	C/Various	TBD:TBD	0.546	-		0.225	Jan 2013	-		0.225	Continuing	Continuing	0.586
Product Development 3	C/Various	FGM:Reston, VA	0.173	-		-		-		-	Continuing	Continuing	0.175
Product Development 4	MIPR	NSA:Fort Meade, MD	0.900	-	Mar 2012	0.150	Oct 2012	-		0.150	Continuing	Continuing	Continuing
Product Development 5	MIPR	SPAWAR:North Charleston, SC	0.083	-		0.202	Oct 2012	-		0.202	Continuing	Continuing	0.083
Product Development 6	MIPR	SKIWEB:San Diego, CA	1.600	0.889	Mar 2012	0.100	Dec 2012	-		0.100	Continuing	Continuing	2.489
Product Development 7	C/Various	FGM:Reston, VA	8.699	-		-		-		-	Continuing	Continuing	8.699
Product Development 8	MIPR	JEDS:Bethesda, MD	2.566	-		-		-		-	Continuing	Continuing	2.566
Product Development 9	C/Various	BAH:Mclean, VA	3.084	-		-		-		-	Continuing	Continuing	3.084
Product Development 10	C/FPIF	CSC:Falls Church, Va	15.051	-		-		-		-	Continuing	Continuing	30.235
Product Development 11	C/FP	Various:Various	7.132	-		1.919	Nov 2012	-		1.919	Continuing	Continuing	7.132
Product Development 12	C/Various	SOLERS:Arlington, VA	4.143	-		-		-		-	Continuing	Continuing	5.143
Product Development 13	C/CPIF	CSD:Pensacola, FL	8.417	-		-		-		-	Continuing	Continuing	8.417
Product Development 14	C/FPIF	ICES:Fort Meade, MD	4.071	-		-		-		-	Continuing	Continuing	5.457
Product Development 15	C/FP	Various:Various	0.341	-		-		-		-	Continuing	Continuing	0.950
Product Development 16	C/FPIF	IBM:Armonk, NY	4.339	-		-		-		-	Continuing	Continuing	5.248
Product Development 17	C/FPIF	CARAHSOFT:Reston, Va	5.634	-		0.300	Jul 2013	-		0.300	Continuing	Continuing	10.934
Product Development 18	C/FPIF	Various:Various	1.501	-		-		-		-	Continuing	Continuing	1.501
Product Development 19	MIPR	ARMY:Arlington, VA	9.756	-		-		-		-	Continuing	Continuing	11.110
Product Development 20	C/FP	NORTHRUP GRUMMAN:Falls Church, VA	3.167	-		-		-		-	Continuing	Continuing	3.167
		Subtotal	82.024	0.889		2.896		-		2.896			

PE 0303170K: Net-Centric Enterprise Services (NCES) **Defense Information Systems Agency** 

**UNCLASSIFIED** Page 7 of 10

R-1 Line #213

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303170K: Net-Centric Enterprise Services | T57: Net-Centric Enterpise Services (NCES)

(NCES)

**PROJECT** 

**DATE:** February 2012

Test and Evaluation (\$	ion (\$ in Millions)			FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation 1	MIPR	JITC:Fort Huachuca, AZ	28.838	0.941	Jan 2012	-		-		-	Continuing	Continuing	Continuing
Test & Evaluation 2	MIPR	SPAWAR:North Charleston, SC	18.070	-		-		-		-	Continuing	Continuing	18.070
Test & Evaluation 3	MIPR	JFCOM:Norfolk, VA	0.210	-		-		-		-	Continuing	Continuing	0.232
Test & Evaluation 4	C/Various	SAIC:Arlington, VA	11.541	-		0.028		-		0.028	Continuing	Continuing	11.541
Test & Evaluation 5	MIPR	TE:Fort Meade, MD	0.512	-		-		-		-	Continuing	Continuing	0.512
		Subtotal	59.171	0.941		0.028		-		0.028			

Management Services	(\$ in Millio	ns)		FY 2	2012		2013 se	1	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services 1	C/T&M	DSA:Aberdeen, MD	12.351	-		-		-		-	Continuing	Continuing	12.351
Management Services 2	FFRDC	MITRE:Ft Monmouth, NJ	15.072	-		-		-		-	Continuing	Continuing	15.072
Management Services 3	C/FP	CSD:Pensacola, FL	23.056	-		-		-		-	Continuing	Continuing	23.056
Management Services 4	C/CPFF	SRA:Fairfax, Va	1.478	-		-		-		-	Continuing	Continuing	1.478
Management Services 5	C/Various	BAH:McLean, Va	10.224	-		-		-		-	Continuing	Continuing	10.224
Management Services 6	C/Various	SOLERS:Arlington, VA	4.853	-		-		-		-	Continuing	Continuing	4.853
Management Services 7	C/CPFF	Pragmatics:Mclean, VA	1.735	-		-		-		-	Continuing	Continuing	1.735
Management Services 8	C/CPFF	MMI:Armonk, NY	2.689	-		-		-		-	Continuing	Continuing	2.689
Management Services 9	C/FP	Various:Various	24.756	-		-		-		-	Continuing	Continuing	24.756
	·	Subtotal	96.214	-		-		-		-			96.214

_									
	Total Prior								Target
	Years		FY 2013	FY	2013	FY 2013	Cost To		Value of
	Cost	FY 2012	Base	0	co	Total	Complete	Total Cost	Contract
Project Cost Totals	237.409	1.830	2.924	-		2.924			

Remarks

PE 0303170K: Net-Centric Enterprise Services (NCES) **Defense Information Systems Agency** 

**UNCLASSIFIED** Page 8 of 10

R-1 Line #213

Exhibit R-4, RDT&E Schedule Profile: PB 2	013 Defe	ense	Infor	mati	ion S	Syste	ems /	Age	ncy												DA	<b>∖TE</b> :	Feb	ruai	ry 2	012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evalua BA 7: Operational Systems Development	ation, Def	ense	-Wia	le		PE	1 ITE 030 CES	317	_					erpri	se S	ervi	ces		<b>ROJE</b> 7: <i>N</i>			ric E	nterµ	oise	Ser	vice	s (N	CES,
		FY	2011	1		FY 2	2012			FY 2	2013	3		FY 2	2014			FY 2	2015	<u> </u>		FY 2	2016			FY :	2017	,
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SKIWeb Transition												,																
SKIWeb Enhancements																												
Technology Innovation																												
Service Integration and Testing																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303170K: Net-Centric Enterprise Services	T57: Net-Co	entric Enterpise Services (NCES)
BA 7: Operational Systems Development	(NCES)		

# Schedule Details

	St	art	Eı	nd
Events	Quarter	Year	Quarter	Year
SKIWeb Transition	1	2011	4	2011
SKIWeb Enhancements	4	2011	4	2012
Technology Innovation	1	2013	4	2014
Service Integration and Testing	1	2013	4	2017

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303610K: Teleport Program

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	5.935	6.418	6.050	-	6.050	5.610	5.533	5.536	5.597	Continuing	Continuing
NS01: Teleport Program	5.935	6.418	6.050	-	6.050	5.610	5.533	5.536	5.597	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Department of Defense (DoD) Teleport system is a Satellite Communications (SATCOM) gateway that links the deployed warfighter to the sustaining base. It provides high-throughput, multi-band, and multi-media telecommunications services for deployed forces. The system provides centralized integration capabilities, contingency capacity, and the necessary interfaces to access the Defense Information System Network (DISN) in a seamless, interoperable, and economical manner. The Teleport system is an upgrade of satellite telecommunication capabilities at selected DoD gateways indentified as Standardized Tactical Entry Point (STEP) sites. Each Teleport investment increases the warfighters' ability to communicate with a worldwide interconnected set of information capabilities, which is vital for the DoD to maintain a persistent presence among its adversaries.

The Teleport program began fielding system capabilities incrementally using a multi-generational, evolutionary development approach. Generation 1 fielded capabilities for C, X, Ku, Ultra High Frequency (UHF)-band, Extremely High Frequency (EHF) (Low Data Rate [LDR] & Medium Data Rate [MDR]) band, and integrated military Ka-band into the Teleport system. Generation 1 added Commercial Satellite Communication (COMSATCOM) and expanded the Military Satellite communication (MILSATCOM) terminal, baseband equipment, and serial circuit based network services segment capabilities to six Standard Tactical Entry Point (STEP) sites. Generation One (FY2002 – FY2010) fielded capabilities in four Full Deployment Decision (FDD) events. FDD 1 completed in March 2004 and implemented C, X, and Ku band capability at six sites. FDD 2 completed in November 2006 and implemented UHF-band capability at four sites. FDD 3, completed in March 2007, implemented additional C, Ku, and UHF band capabilities, and added EHF and limited Internet Protocol (IP) capabilities. FDD 4 completed in August 2010 integrated military Ka-band SATCOM capabilities into Teleport. Generation Two (FY2006 – FY2010) added additional military Ka band and legacy capability and implemented IP Net-Centric communications to increase capacity at the Teleport sites. A Full Deployment was recommended by DISA on 23 December 2010.

A Teleport Acquisition Decision Memorandum (ADM) dated March 2, 2010 approved the Materiel Development Decision (MDD) for the next increment of Teleport, Generation 3. The current Teleport Generation 3 Production APB was signed 13 September 2010. The baseline is based on the three Gen 3 phases, satellite availability, and user availability for testing.

Phase 1: Gateway Advanced Extremely High Frequency (AEHF) [Extended Data Rate (XDR)] terminals. This enhancement provides the President, Secretary of Defense, and Combatant Commanders with survivable, anti-jam communications through all peacetime and combat operations.

Phase 2: Gateway Wideband Global SATCOM X/Ka-band terminals. This enhancement provides deployed commanders with sufficient bandwidth to rapidly transmit the largest video and data products to the battlefield warfighter, including Unmanned Aerial Vehicle (UAV) streaming video, digital imagery intelligence, and mapping and weather products and services.

PE 0303610K: *Teleport Program*Defense Information Systems Agency

Page 1 of 14

R-1 Line #215

Volume 5 - 243

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303610K: Teleport Program

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

Phase 3: Mobile User Objective System (MUOS) to Legacy ultra high frequency systems interoperability. This enhancement allows tactical warfighters using the most capable and cost effective narrowband capabilities to communicate with users possessing outdated technology until those legacy systems are replaced.

Mobile User Objective System (MUOS) Legacy Gateway Component (MLGC): The MLGC program will provide the capability to interconnect all services between legacy UHF satellite systems and the MUOS. To sustain the current UHF SATCOM constellation capabilities, the MUOS satellites will also offer a legacy UHF communications payload that will provide capabilities to existing deployed UHF terminals. This will provide the warfighter the voice and data communications bridging between these satellite systems supporting maritime, airborne, and ground mobile tactical operations.

Mobile User Objective System to Defense Switched Network (DSN): The MUOS to DSN project will allow MUOS users the ability to place secure but unclassified calls within the DSN network. Currently, MUOS users can only place secure classified calls to DSN users which only make up approximately 3% of the DSN users. The MUOS to DSN project will enable the Warfighter to place a secure but unclassified call to any DSN user. A reduction in funding would impact design and development efforts. Without this capability, warfighters in the field environment will have limited communication ability with the DSN network. Specifically, warfighters using the MUOS radio will be limited to placing calls to DSN users with auto secure cryptographic telephones.

Generic Discovery Server Enclave: The purpose of the Generic Discovery Server (GDS) Enclave effort is to provide a dynamic discovery service capability for non-secret security enclaves (Cipher Text and Plain Text addresses). Presently, dynamic discovery services are only being provided for Secret-US only enclave. A decrease in funding will impact project initiation and procurement of required hardware and software. Without the GDS capability, the warfighters ability to communicate will be impacted. Specifically, a significant burden will be placed on communication planners and limit the flexibility of swapping terminals with users in the field. Static address tables will have to be used for thousands of unclassified users, reducing the flexibly to reach a user in a dynamic environment.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	6.880	6.418	5.987	-	5.987
Current President's Budget	5.935	6.418	6.050	-	6.050
Total Adjustments	-0.945	-	0.063	-	0.063
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	-0.945	-	0.063	-	0.063

# **Change Summary Explanation**

The FY 2011 decrease of -\$0.945 supports ISOM mission requirements.

PE 0303610K: *Teleport Program*Defense Information Systems Agency

UNCLASSIFIED
Page 2 of 14

R-1 Line #215

Volume 5 - 244

**DATE:** February 2012

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense In	nformation Systems Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0303610K: Teleport Program	
The FY 2013 increase of +\$0.063 is due to inflationary adjustr	ments.	

PE 0303610K: *Teleport Program*Defense Information Systems Agency

Exhibit R-2A, RDT&E Project Ju	stification: PE	3 2013 Defei	nse Informa	tion Systems	s Agency				DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Development	st & Evaluatio	n, Defense-V	Vide		NOMENCLATOR: Teleport	_		PROJECT NS01: Telej	port Program	1	
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
NS01: Teleport Program	5.935	6.418	6.050	-	6.050	5.610	5.533	5.536	5.597	Continuing	Continuing
Quantity of RDT&F Articles											

### Note

Total RDT&E line includes Mobile User Objective System (MUOS) funding in FYs 2011 through 2014.

### A. Mission Description and Budget Item Justification

The Department of Defense (DoD) Teleport system is a Satellite Communications (SATCOM) gateway that links the deployed warfighter to the sustaining base. It provides high-throughput, multi-band, and multi-media telecommunications services for deployed forces. The system provides centralized integration capabilities, contingency capacity, and the necessary interfaces to access the Defense Information System Network (DISN) in a seamless, interoperable, and economical manner. The Teleport system is an upgrade of satellite telecommunication capabilities at selected DoD gateways indentified as Standardized Tactical Entry Point (STEP) sites. Each Teleport investment increases the warfighters' ability to communicate with a worldwide interconnected set of information capabilities, which is vital for the DoD to maintain a persistent presence among its adversaries.

A Teleport Acquisition Decision Memorandum (ADM) dated 2 March 2010 approved the Materiel Development Decision (MDD) for the next increment of Teleport, Generation 3. The ADM approved using a three phased approach to decouple the dependencies between the enhancements and minimize risk to the overall program.

Phase 1: Gateway Advanced Extremely High Frequency (AEHF) [Extended Data Rate (XDR)] terminals. Teleport Generation 3 Phase 1 will provide AEHF XDR capability to warfighters worldwide, by installing terminals from the Navy Multiband Terminal (NMT) program at Teleport and other gateway sites. To realize this capability, the TPO will procure 19 terminals from the NMT program, installing one terminal at the Teleport test bed, and fielding 18 terminals at Teleport/gateway sites in the FY10-15 timeframe.

Phase 2: Gateway Wideband Global SATCOM (WGS) X/Ka-band terminals. Teleport Generation 3 Phase 2 will provide enhanced WGS X/Ka capability to warfighters worldwide, by installing terminals from the Modernization of Enterprise Terminal (MET) program at Teleport and other gateway sites. This gateway enhancement allows Teleport to refresh end-of-life Defense Satellite Communications System (DSCS) terminals and remain interoperable with tactical WGS X/Ka-band users. Additionally, it enables the Teleport system to maintain operational availability consistent with Generation 2 requirements and reduce the overall life-cycle cost of X/Ka capabilities across the DoD. To realize this capability, the TPO will procure and field 14 METs at Teleport/gateway sites beginning in FY12.

Phase 3: MUOS to Legacy Ultra High Frequency (UHF) systems interoperability. Teleport Generation 3 Phase 3 will provide interoperability between MUOS users and Legacy UHF users by installing MUOS-to-Legacy UHF SATCOM Gateway Component (MLGC) suites of equipment at Teleport/gateway sites. The equipment suites from the MLGC program will enable translation between the two UHF waveforms, duplex operating modes, crypto algorithms, and vocoders. To realize this capability, six MLGC suites will be fielded at Teleport/gateway sites in the FY10-15 timeframe. The equipment suites will be fielded in accordance with a planned Generation 3 Phase 3 CDR architecture.

PE 0303610K: *Teleport Program*Defense Information Systems Agency

Page 4 of 14

R-1 Line #215

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Inform	CTIVITY Test & Evaluation, Defense-Wide  R-1 ITEM NOMENCLATURE PE 0303610K: Teleport Program PE 0303610K: Teleport Program PROJECT NS01: Teleport Program	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303610K: Teleport Program	NS01: Teleport Program
BA 7: Operational Systems Development		

The Mobile User Objective System (MUOS) is the next generation Department of Defense (DoD) Ultra High Frequency (UHF) SATCOM system that will provide the warfighter with modern worldwide mobile communication services, utilizing the Code Division Multiple Access (CDMA) waveform for use in the military UHF SATCOM band. The MLGC program will provide the capability to interconnect all services between legacy UHF satellite systems and the MUOS. This will provide the warfighter the voice and data communications bridging these satellite systems supporting maritime, airborne, and ground mobile tactical operations.

Without Phase 1, the warfighter will not have reachback to DISN services using the higher data rate capabilities of the AEHF satellite constellation providing DoD's most secure and interoperable SATCOM capability. Warfighters will be forced to lower data rate modes of operation over AEHF that would constrain applications and services requiring the increased data rates provided with the XDR mode.

Without Phase 2, Teleport and other gateway sites will have insufficient capacity to fully utilize the advance WGS capabilities. The current complement of enterprise terminals are approaching end of life and without a replacement program, warfighters will be forced to conduct operations with limited assets resulting in possible mission failure.

Without Phase 3, MUOS will not be interoperable with existing UHF SATCOM equipment and Tactical users deployed in harm's way will be unable to efficiently communicate with one another and their commanders through existing legacy systems. Without the MLGC program, warfighters utilizing the current UHF satellite systems and services will not be able to communicate with the warfighters equipped with the MUOS capable services. This means that all military forces operating with legacy radios will be unable to communicate to military forces operating with MUOS radios. The direct impact of this and based on the mission of the warfighter will force the warfighter to carry two separate terminals depending on their specific mission and network requirements. Further, the warfighter will be forced to continue operating in their existing environment (either Legacy UHF or MUOS), delaying the phase out/end of life for UHF legacy terminals and delaying the planning for the fielding, training and transition of the MUOS capability. The warfighter will be forced to standup separate networks based on the deployed terminals. This results in a lack of coordination, risk to forces, and risk to mission success in tactical missions globally.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Teleport Program	5.935	6.418	6.050	-	6.050
FY 2011 Accomplishments:  Technology Refresh and Generation 3 (\$3.845): Funding allowed the program to continue the technology refreshment schedule and testing activities required to sustain Gens 1 and 2 fielded capabilities and complete an evaluation of the existing Teleport Management & Control System (TMCS) to revise the architecture to enhance security. SEPM efforts continued the program's acquisition plan to purchase Commercial-Off-The-Shelf (COTS) and Government-Off-The-Shelf (GOTS) equipment to integrate Gen 3 Phase 1 and Phase 2 with the system's architectural design. Engineers refined Gen 3 designs and specifications and began test planning efforts Phase 1 at the program's test facility, the Joint Satellite Communications Engineering Center (JSEC). The program prepared acquisition documentation for Gen 3 Phase 2 to refresh end-of-life DSCS terminals with					

PE 0303610K: *Teleport Program*Defense Information Systems Agency

UNCLASSIFIED
Page 5 of 14

R-1 Line #215

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

PE 0303610K: Teleport Program NS01: Teleport Program

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
METs to remain interoperable with WGS X/Ka-band users to achieve an Acquisition Decision Memorandum for an initial quantity procurement prior to Milestone C. MUOS to DISN (\$1.310): Our Emerging Technologies office performed initial research, development, test, and evaluation of the MUOS to DISN system design and implementation. MLGC (\$0.300): The MLGC program continued to mature the vendor design and commenced development, conducted successful Systems Requirement Review (SRR) Preliminary Design Review (PDR) and Management and Control (M&C) Demonstration to demonstrate the systems' readiness for delivery. Held two Program Management Reviews and Initial Program Baseline Review. GDS Enclave (\$0.110): Obtained Key Decision Point (KDP) to proceed. Initiated a design for a dynamic discovery service capability for non-secret security enclaves (Cipher Text and Plain Text addresses), and developed key acquisition documentation. MUOS to DSN (\$0.370): Obtained Key Decision Point (KDP) to proceed and developed key acquisition documentation.					
FY 2012 Plans:  Technology Refresh (\$2.122) and Generation 3 (\$2.886): Continue a technology refreshment schedule and testing activities required to sustain Gens-1/2 fielded capabilities and schedule and test the refined Management & Control system. Conduct final tests for MUOS-DISN for initial operational capability at two Teleport sites. Continue preparation of engineering and program documentation to support a Gen 3 Phase 2 Milestone C decision for enhanced X/Ka capability. Oversee progress and of the MLGC activities, update the Gen 3 Phase 3 schedule accordingly, and participate in design and strategy reviews held by the Emerging Technologies office for MUOS to Legacy capability. MLGC (\$0.400): Continue program office support, support a Milestone C decision, conduct a Critical Design Review (CDR), commence factory testing and address any technical issues during the installation and testing of the two EDMs. MUOS to DISN (\$0.400): Develop initial research, development, test, and evaluation of the MUOS to UHF system design and implementation. MUOS to DSN (\$0.470): Following a KDP A, commence system design and development, conduct a System Requirement Review (SRR), a Preliminary Design Review (PDR), a Critical Design Review (CDR), and commence factory testing. GDS Enclave (\$0.140): Continue to mature a dynamic discovery service capability for non-secret security enclaves (Cipher Text and Plain Text addresses). Following KDP A, commence system design and development, conduct a System Requirement Review (SRR), a Preliminary Design Review (PDR), a Critical Design Review (PDR					
The increase of +\$0.483 between FY 2011 and FY 2012 is due to a slight shift in efforts to continue a technology refreshment schedule designed to support Gens 1 and 2 fielded capabilities and the installation of a refined Management & Control System.					
FY 2013 Base Plans:					

PE 0303610K: *Teleport Program*Defense Information Systems Agency

UNCLASSIFIED
Page 6 of 14

R-1 Line #215

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide PE 0303610K: Teleport Program NS01: Teleport Program

BA 7: Operational Systems Development

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Technology Refresh (\$2.177) and Generation 3 (\$3.153): Funding will allow the program to continue a technology refreshment schedule and testing activities required to sustain Gens-1/2 fielded capabilities. Funding will support pre-Milestone C documentation development for Gen 3 Phase 3 and the Milestone C decision to include schedule updates, a Critical Design Review, and a life cycle cost estimate. MLGC (\$0.100): Funding will support documentation and planning for an MLGC Milestone C decision, finalizing the design, schedule, and cost estimates. MUOS to DISN (\$0.240): Funding will continue efforts to develop initial research, development, test, and evaluation of the MUOS to UHF system design and implementation. MUOS to DSN (\$0.290): Plan is to commence efforts to obtain a KDP B and C Decision and to install and test, and declare Initial Operational					
Capability (IOC). GDS Enclave (\$0.090): Plan is to commence efforts to obtain a KDP B and C Decision, install and test, and declare Initial Operational Capability (IOC).  The decrease of -\$0.368 between FY 2012 and FY 2013 is due to reduced planning, engineering and testing required to support Gen 1 and 2 technology refresh.					
Accomplishments/Planned Programs Subtotals	5.935	6.418	6.050	-	6.050

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	Base	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• O&M, DW/PE0303610K: <i>O&amp;M</i> ,	13.237	27.146	15.611	9.465	25.076	15.688	16.002	15.510	15.734	Continuing	Continuing
DW											
<ul><li>Procurement, DW/PE0303610K:</li></ul>	68.709	58.050	46.950	5.260	52.210	68.932	54.177	40.615	23.093	Continuing	Continuing
Procurement, DW											

# **D. Acquisition Strategy**

The TPO utilizes the DoD preferred evolutionary acquisition approach to acquire COTS and modified COTS equipment when possible. The two TPO procuring agencies, Program Manager Defense Communications and Army Transmission Systems (PM DCATS), and the Space and Naval Warfare Systems Command (SPAWAR) provide direct contracting support. Required assistance from other Departments including Army, Navy, and Air Force is acquired via Military Interdepartmental Purchase Request (MIPR) for both organic and contracted support. The TPO maximizes the use of performance-based contracts and requires contractors to establish and manage specific earned value data to mitigate risk and monitor deviations from cost, schedule, and performance objectives. Performance is evaluated thorough Post-award contract reviews, performance assessment during quarterly program reviews. The MUOS to Legacy Gateway Component (MLGC) program will use various contract types to employ the vendor best suited to deliver the program's capabilities to the warfighter.

PE 0303610K: *Teleport Program*Defense Information Systems Agency

UNCLASSIFIED
Page 7 of 14

R-1 Line #215

Volume 5 - 249

**DATE:** February 2012

**PROJECT** 

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Informat	ion Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	<b>PROJECT</b>	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303610K: Teleport Program	NS01: Telep	port Program
BA 7: Operational Systems Development			

### **E. Performance Metrics**

Tech Refresh and Generation 3 Cost and Schedule Performance Metrics:

Teleport manages and tracks its cost and schedule performance parameters using a tailored Earned Value Management System (EVMS) process, integrating the program plan, the program schedule, Work Breakdown Structure (WBS), and financial data. Progress is monitored/documented monthly showing percentages complete for schedule and cost. Formal updates with changes to the schedule are documented against the program baseline.

Tech Refresh and Generation 3 Program Metrics:

Performance metrics have been established in four measurement areas: 1) customer results, 2) mission and business results, 3) processes and activities, and 4) technology. Specific measurement indicators and units of measure vary by measurement area, and metrics in each of the aforementioned areas are measured annually. In FY2011, all targets have been met. Teleport will use the same measurement areas for performance metrics in FY2012 and FY2013.

PE 0303610K: *Teleport Program*Defense Information Systems Agency

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303610K: Teleport Program

PROJECT

NS01: Teleport Program

**DATE:** February 2012

<b>Product Development</b>	(\$ in Millio	ns)		FY 2	2012		2013 ise	FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical & Design Services	IA	SSC Atlantic:Various	-	0.140	Feb 2012	0.140	Feb 2013	-		0.140	Continuing	Continuing	Continuing
Engineering Technical & Design Services	Various	Various:Various	-	0.400	May 2012	0.240	May 2012	-		0.240	Continuing	Continuing	Continuing
Engineering Services	C/CPFF	STF Ltd.:Fredericksburg, VA	0.297	-		-		-		-	0.000	0.297	Continuing
Engineering Services	IA	SPAWAR Atlantic:Charleston, SC	0.075	-		-		-		-	0.000	0.075	Continuing
		Subtotal	0.372	0.540		0.380		-		0.380			

Support (\$ in Millions)				FY 2	2012		2013 Ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Office Support	C/FFP	BAH:McLean, VA	13.210	-		-		-		-	Continuing	Continuing	Continuing
Program Office Support	SS/CPFF	SAIC:Falls Church, VA	0.166	-		-		-		-	0.000	0.166	0.166
Program Office Support	C/CPAF	STF:Fredericksburg, VA	0.157	-		-		-		-	0.000	0.157	0.157
Program Office Support	IA	SPAWAR:DCATS	1.221	-		-		-		-	0.000	1.221	1.221
Contractor Program Office Support	MIPR	SSC Atlantic, STF:Charleston, SC	0.582	0.400	Oct 2011	0.100	Oct 2012	-		0.100	Continuing	Continuing	Continuing
Program Office Support	IA	CERDEC:Various	-	0.003	Jan 2012	0.003	Jan 2013	-		0.003	Continuing	Continuing	Continuing
Engineering Technical & Design Services	IA	PM DCATS:Ft. Belvoir, VA	0.352	0.294	Feb 2012	0.294	Feb 2013	-		0.294	Continuing	Continuing	Continuing
Systems Engineering Program Management Support (G3P2/3)	TBD	TBD:TBD	-	1.751	Sep 2012	1.751	Sep 2013	-		1.751	Continuing	Continuing	Continuing
Systems Engineering Program Management Support (Tech Refresh)	TBD	TBD:TBD	0.365	0.751	Sep 2012	0.751	Sep 2013	-		0.751	Continuing	Continuing	Continuing
Engineering Technical Support	TBD	TBD:TBD	-	0.564		0.380		-		0.380	Continuing	Continuing	Continuing

PE 0303610K: *Teleport Program*Defense Information Systems Agency

UNCLASSIFIED
Page 9 of 14

R-1 Line #215

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

**DATE:** February 2012

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 0303610K: Teleport Program

NS01: Teleport Program

Support (\$ in Millions)				FY 2	012	FY 2 Ba	2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Office Support	IA	SSC Atlantic:Various	-	0.090	Jan 2012	0.090	Jan 2013	-		0.090	Continuing	Continuing	Continuing
Program Office Support	Various	Various:Various	-	1.066	Jan 2012	1.342	Jan 2013	-		1.342	Continuing	Continuing	Continuing
Program Office Engineering	Various	TBD:TBD	-	0.300	Jan 2012	0.300	Jan 2013	-		0.300	Continuing	Continuing	Continuing
		Subtotal	16.053	5.219		5.011		-		5.011			

Test and Evaluation (\$ i	n Millions	s)		FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Testing Support Services	MIPR	JITC:Ft. Huachuca	8.079	0.659	Dec 2012	0.659	Dec 2012	-		0.659	Continuing	Continuing	Continuing
		Subtotal	8.079	0.659		0.659		-		0.659			

	Total Prior		•	EV.	2040	F.V.	2040	EV 0040	O 4 T -		Target
	Years			FY 2	2013	FY	2013	FY 2013	Cost To		Value of
	Cost	FY 2	2012	Ва	ise	0	co	Total	Complete	Total Cost	Contract
Project Cost Totals	24.504	6.418		6.050		_		6.050			

Remarks

PE 0303610K: *Teleport Program*Defense Information Systems Agency

UNCLASSIFIED
Page 10 of 14

R-1 Line #215

**DATE:** February 2012 Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303610K: Teleport Program

PROJECT

NS01: Teleport Program

		FΥ	201	1		FY	201	2		FY 2	2013			FY	2014			FY	201	5		FY	2010	;		FY 2	017	,
	1	2	3	4	1	2	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Teleport Program						'					,																	
Generation Two-FD																												
Technology Refresh-Generation Three																												
Generation Three-Phase 2 Milestone C WGS X/Ka																												
Generation Three-Phase 3 Milestone C MUOS – Legacy																												
Generation Three-Phase 3 FDD MUOS - Legacy																												
MUOS to Legacy Gateway Component																												
MLGC Contract award																												
SRR																												
PDR																												
CDR																												
Phase 1 Testing – Vendor Site																												
Phase 2 Testing – First Article Testing																												
Phase 3 Operational Assessment – Northwest																												
Ms C Decision																												
MUOS to Defense Switched Network																												
Acquisition Documentation																												
Key Decision Point (MS B Equivalent)																												
Commence Development																												
SRR																												
PDR																												

: Research, Development, Test & Evaluation: : Operational Systems Development	JII, DC	,,,,,,,	. ,,,,	10		'	_ 000	,001	OIX.	1010	oort F	, og,	um	,				1	301:	1010	0011	, , ,	gran					
		FY	′ 201 <sup>,</sup>	1		FY	2012			FY 2	013		F	FY 20	014			FY 2	2015			FY 2	2016			FY 20	)17	
		1 2	2 3	4	1	2	3	4	1	2	3 4	4 ′	1	2	3 4	4	1	2	3	4	1	2	3	4	1	2	3	4
CDR																												
Factory Testing																												
KDP B																												
Installation																												
T&E (DT/OT)																												
KDP C																												
IOC																												
eneric Discovery Server																												
Acquisition Documentation																												
Key Decision Point (MS B Equivalent)																												
Commence Development																												
SRR																												
PDR																												
CDR																												
Factory Testing																												
KDP B																												
Installation																												
T&E (DT/OT)																												
KDP C																												
IOC																												

PE 0303610K: *Teleport Program*Defense Information Systems Agency

UNCLASSIFIED
Page 12 of 14

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY R-1

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303610K: Teleport Program

**PROJECT** 

NS01: Teleport Program

**DATE:** February 2012

# Schedule Details

	Sta	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Teleport Program				
Generation Two-FD	2	2011	2	2011
Technology Refresh-Generation Three	2	2011	2	2014
Generation Three-Phase 2 Milestone C WGS X/Ka	2	2012	3	2012
Generation Three-Phase 3 Milestone C MUOS – Legacy	2	2013	3	2013
Generation Three-Phase 3 FDD MUOS - Legacy	4	2014	2	2015
MUOS to Legacy Gateway Component				
MLGC Contract award	1	2011	1	2011
SRR	2	2011	2	2011
PDR	3	2011	3	2011
CDR	1	2012	1	2012
Phase 1 Testing – Vendor Site	4	2012	1	2013
Phase 2 Testing – First Article Testing	1	2013	2	2013
Phase 3 Operational Assessment – Northwest	2	2012	3	2012
Ms C Decision	2	2013	2	2013
MUOS to Defense Switched Network				
Acquisition Documentation	3	2011	4	2011
Key Decision Point (MS B Equivalent)	4	2011	4	2011
Commence Development	4	2011	4	2011
SRR	1	2012	1	2012
PDR	1	2012	2	2012
CDR	3	2012	3	2012

PE 0303610K: *Teleport Program*Defense Information Systems Agency

UNCLASSIFIED
Page 13 of 14

R-1 Line #215

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303610K: Teleport Program

PROJECT

ROJECT

NS01: Teleport Program

**DATE:** February 2012

	Sta	art	En	ıd
Events by Sub Project	Quarter	Year	Quarter	Year
Factory Testing	3	2012	1	2013
KDP B	1	2013	1	2013
Installation	1	2013	1	2013
T&E (DT/OT)	1	2013	3	2013
KDP C	3	2013	3	2013
IOC	3	2013	4	2013
Generic Discovery Server			,	
Acquisition Documentation	3	2011	4	2011
Key Decision Point (MS B Equivalent)	4	2011	4	2011
Commence Development	4	2011	4	2011
SRR	1	2012	1	2012
PDR	1	2012	2	2012
CDR	3	2012	3	2012
Factory Testing	3	2012	1	2013
KDP B	1	2013	1	2013
Installation	1	2013	1	2013
T&E (DT/OT)	1	2013	3	2013
KDP C	3	2013	3	2013
IOC	3	2013	4	2013

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0305103K: Cybersecurity Initiative

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	2.240	4.341	4.189	-	4.189	4.305	4.360	4.361	4.408	Continuing	Continuing
XXX: Cybersecurity Initiative	2.240	4.341	4.189	-	4.189	4.305	4.360	4.361	4.408	Continuing	Continuing

# A. Mission Description and Budget Item Justification

This is a classified program. Details will be provided upon request.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.251	4.341	4.144	-	4.144
Current President's Budget	2.240	4.341	4.189	-	4.189
Total Adjustments	-0.011	-	0.045	-	0.045
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-	-			
<ul> <li>Other Adjustment</li> </ul>	-0.011	-	0.045	-	0.045

# **Change Summary Explanation**

Classified.

PE 0305103K: Cybersecurity Initiative Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 2

R-1 Line #222

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency  DATE: February 2012													
	APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT			
	0400: Research, Development, Test & Evaluation, Defense-Wide				PE 0305103K: Cybersecurity Initiative				XXX: Cybersecurity Initiative				
	BA 7: Operational Systems Development												
COST (\$ in Millions)	COST (f in Milliana)			FY 2013	FY 2013	FY 2013					Cost To		
	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost		
	XXX: Cybersecurity Initiative	2.240	4.341	4.189	-	4.189	4.305	4.360	4.361	4.408	Continuing	Continuing	

# A. Mission Description and Budget Item Justification

Classified.

Quantity of RDT&E Articles

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Cybersecurity Initiative	2.240	4.341	4.189
Description: Classified.			
FY 2011 Accomplishments: Classified.			
FY 2012 Plans: Classified.			
FY 2013 Plans: Classified.			
Accomplishments/Planned Programs Subtotals	2.240	4.341	4.189

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Classified.

# E. Performance Metrics

Classfied.

PE 0305103K: *Cybersecurity Initiative* Defense Information Systems Agency

UNCLASSIFIED Page 2 of 2

R-1 Line #222

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0305208K: Distributed Common Ground/Surface Systems

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	3.485	3.154	3.247	-	3.247	3.384	3.441	3.441	3.480	Continuing	Continuing
NF1: Distributed Common Ground/ Surface Systems	3.485	3.154	3.247	-	3.247	3.384	3.441	3.441	3.480	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

Joint Interoperability Test Command (JITC) coordinates with the Military Services and Defense Intelligence Agencies on performing Joint/Distributed Common Ground/ Surface System (DCGS) testing and analysis to include event coordination, configuration, instrumentation and integration functions on the Distributed Development and Test Enterprise (DDTE) as part of the DCGS Governance. Under the DCGS Governance, this effort is referred to as the DCGS Test and Evaluation (T&E) Focus Team and is composed of three parts: The DDTE Focus Group, providing and sustaining a distributed development network; the Strategy Focus Group, looking at current and future net-enabled enterprise testing and evaluation methods; and the Execution Focus Group which leverages the Strategy Focus Groups methodologies in execution of test events such as the annual DCGS demonstration, EMPIRE CHALLENGE. These program components enable improved systems engineering and test and evaluation throughout all phases of the DCGS life-cycle culminating in the DCGS Enterprise becoming a contributing member of the Defense Intelligence Information Enterprise (DI2E).

DCGS Programs of Record (PoRs) and Coalition partners use the DDTE network to integrate architecture, standards, and capabilities for implementation of the DCGS Integration Backbone (DIB) and supports the migration to net-centricity, including DCGS Enterprise services for the following PoRs: DCGS-Army (DCGS-A), DCGS-Navy (DCGS-N), Air Force DCGS (AF DCGS), DCGS-Marine Corps (DCGS-MC), DCGS-Special Operations Forces (DCGS-SOF) and the DCGS Intelligence Community (DCGS-IC). Net-enabled enterprise testing is designed to more closely simulate the complexities of an actual combat environment. JITC engineered the DDTE network to support the assessment of the DCGS Enterprise under the DCGS Governance. National Agency capabilities supporting DCGS include Imagery Intelligence (IMINT), Signals Intelligence (SIGINT), Measurement and Signature Intelligence (MASINT) and Human Intelligence (HUMINT), which are integrated and tested in the DDTE domain.

JITC operates the DDTE, providing DCGS PoRs a virtual operationally relevant environment maintaining connectivity between national agency, coalition partners and Service facilities. DDTE allows robust integration of modeling and simulation T&E capabilities across Joint/DCGS events without bringing vulnerabilities to the operational Command and Control (C2) network known as Secret Internet Protocol Router Network (SIPRNET). DDTE has enabled vast improvements in systems engineering, instrumentation and test and evaluation throughout all phases of the DCGS life cycle.

PE 0305208K: Distributed Common Ground/Surface Systems Defense Information Systems Agency

UNCLASSIFIED
Page 1 of 7

R-1 Line #235

Volume 5 - 259

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0305208K: Distributed Common Ground/Surface Systems

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	3.513	3.154	3.259	-	3.259
Current President's Budget	3.485	3.154	3.247	-	3.247
Total Adjustments	-0.028	-	-0.012	-	-0.012
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	-0.028	-	-0.012	-	-0.012

#### **Change Summary Explanation**

C Accomplishments/Planned Programs (\$ in Millions)

The FY 2011 reduction of -\$0.028 supports higher agency priorities.

The FY 2013 reduction of -\$0.012 is due to the increased utilization of DCO and teleconferences in lieu of travel and adjustments for inflation.

C. Accomplishments/Flaimed Frograms (\$\pi\$ in \text{willions})	F 1 2011	F1 2012	FY 2013
Title: Distributed Common Ground/Surface Systems (DCGS)	3.485	3.154	3.247
FY 2011 Accomplishments: Provided DDTE support and enhanced functionality with ever expanding capability to include our Coalition partners through data sharing. DCGS Enterprise T&E support included six Enterprise-level test and evaluations for the DCGS PoRs, National Agencies and Coalition Partners, as well as Development and instrumentation for data collection and testing support on the 15 DCGS network domains, operational testing support, and interoperability testing/certification as required. The T&E Focus Team validated that the five Enterprise Maturity Model criteria was as defined and testable across the entire DCGS Enterprise.			
FY 2012 Plans: As part of the DCGS Governance, the Chair of the DCGS T&E Focus Team, including the DDTE Focus Group, DCGS T&E Strategy Focus Group and the DCGS T&E Execution Focus Group continues to support DDTE and DI2E enhanced functionality with T&E capability, as well as DDTE support and enhanced functionality with capability to include more Coalition partners through data sharing. DCGS Enterprise T&E support includes nine Enterprise-level test and evaluations for the DCGS PoRs, National Agencies and Coalition Partners. Continuing development and instrumentation for data collection and testing support on the 15 DCGS network domains and enclaves, operational testing support, and interoperability testing/certification as required. These efforts are measured by the ever expanding Enterprise Maturity Model defined by the DCGS community in FY 2010 and FY 2011.			

**EV 2013** 

**DATE:** February 2012

EV 2011 EV 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0305208K: Distributed Common Ground/Surface Systems

BA 7: Operational Systems Development

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
The decrease of -\$0.331 from FY 2011 to FY 2012 is in support of the Agency's proposed savings to support the SECDEF initiative on improving DoD business operations.			
FY 2013 Plans: The Chair of the DCGS T&E Focus Team, as part of the DCGS Governance, will continue to support DDTE and enhanced functionality with ever expanding T&E capability, as well as DDTE support and enhanced functionality with capability to include more Coalition partners through data sharing. DCGS Enterprise T&E support will continue to include Enterprise-level test and evaluations for the DCGS PoRs, National Agencies and Coalition Partners ,as well as continuing development and instrumentation for data collection and testing support on the 15 DCGS network domains and enclaves, operational testing support, and interoperability testing/certification as required. These efforts will continue to be measured by the Enterprise Maturity Model defined by the DCGS community.			
The increase of +\$0.093 from FY 2012 to FY 2013 is due to the aggregate effect of the Agency's proposed FY 2012 savings to support the SECDEF initiative on improving DoD business operations and increased utilization of DCO and teleconferences in lieu of travel costs in FY 2013.			
Accomplishments/Planned Programs Subtotals	3.485	3.154	3.247

#### D. Other Program Funding Summary (\$ in Millions)

N/A

# E. Acquisition Strategy

DCGS uses an evolutionary acquisition approach constructed under the DCGS Governance. JITC will support the effort by leveraging its existing three prime contracts, with multiple sub-contracts, to support this project. These competitively-awarded, performance-based, non-personal-services contracts provide maximum flexibility for JITC supporting its numerous customers for cost and technical effectiveness, and allows for expansion and contraction of staff years as workload increases and decreases. The current prime contractors that support this effort are Northrop Grumman Mission Systems, Northrop Grumman Information Technology (to be Task N and Task M pending novation), and INTEROP Joint Venture.

#### F. Performance Metrics

Test and Evaluation Focus Team metrics will ensure DCGS Enterprise T&E support, to include nine Enterprise-level tests and evaluations, for the six DCGS PoRs, and five actively participating Coalition Partners, and interoperability testing/certification as required. Currently, out of eight DCGS base-lined PoRs' software versions systems, two hold Joint Staff (JS) Interoperability (IOP) Certification under development and four are in prototype status. DCGS T&E Focus Team and JITC will continue to collect data on these systems towards overall JS IOP Certification as they develop. JITC's NIL plans on increasing the queries captured across the 15 DDTE nodes in DCGS Enterprise during FY 2013's test events from 130,000 in FY 2010 to over 300,000. This effort provides the basis for the DCGS Enterprise

PE 0305208K: Distributed Common Ground/Surface Systems Defense Information Systems Agency

UNCLASSIFIED
Page 3 of 7

R-1 Line #235

Volume 5 - 261

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Info	ormation Systems Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	PE 0305208K: Distributed Common Ground/	•
Assessment, allowing OUSD(I) to measure the five levels of maturity of Team will be expanding data collection instrumentation via DDTE to in		

PE 0305208K: *Distributed Common Ground/Surface Systems* Defense Information Systems Agency

R-1 Line #235

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0305208K: Distributed Common Ground/

Surface Systems

PROJECT

NF1: Distributed Common Ground/Surface

**DATE:** February 2012

Systems

Support (\$ in Millions)								FY 2013 OCO					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
In-House Contracts	Various	N/A:N/A	16.350	0.766	Oct 2011	-		-		-	Continuing	Continuing	Continuing
		Subtotal	16.350	0.766		-		-		-			

Test and Evaluation (\$	Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering/Technical Services 1	C/T&M	Interop:Ft. Hua, AZ	3.247	-		-		-		-	Continuing	Continuing	Continuing
Engineering/Technical Services 2	C/T&M	NGMS:Ft. Hua, AZ	11.078	-		-		-		-	Continuing	Continuing	Continuing
Engineering/Technical Services 3	C/T&M	NGIT:Ft. Hua, AZ	3.178	-		-		-		-	Continuing	Continuing	Continuing
TBD	TBD	TBD:TBD	-	2.388	Oct 2011	3.247	Oct 2012	-		3.247	Continuing	Continuing	Continuing
		Subtotal	17.503	2.388		3.247		-		3.247			

	Total Prior										Target
	Years			FY	2013	FY 2	2013	FY 2013	Cost To		Value of
	Cost	FY 2	2012	Ва	Base		осо		Complete	<b>Total Cost</b>	Contract
Project Cost Totals	33.853	3.154		3.247		-		3.247			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency  DATE: February 2012											
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, BA 7: Operational Systems Development			RE Common Ground/	PROJECT NF1: Distributed Common Ground/Surface Systems							
	FY 2011 1 2 3 4 1	FY 2012 2 3 4	FY 2013 1 2 3 4	FY 2014 1 2 3 4	FY 2015 1 2 3 4	FY 2016 1 2 3 4	FY 2017 1 2 3 4				
DCGS T&E IPT											
Connectivity to Other Testbeds & Test Event Conduct											
Operation and Maintenance Support											

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE
PE 0305208K: Distributed Common Ground/
Surface Systems

PROJECT
NF1: Distributed Common Ground/Surface
Systems

#### Schedule Details

	Start		End		
Events	Quarter	Year	Quarter	Year	
DCGS T&E IPT	1	2011	4	2017	
Connectivity to Other Testbeds & Test Event Conduct	1	2011	4	2017	
Operation and Maintenance Support	1	2011	4	2017	



# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



# **Defense Logistics Agency**

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



Defense Logistics Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 27′
Program Element Table of Contents (by Budget Activity then Line Item Number)	Volume 5 - 273
Program Element Table of Contents (Alphabetically by Program Element Title)	Volume 5 - 27
Acronyms	Volume 5 - 27
Exhibit R-2's	Volume 5 - 283



#### UNCLASS1

# Defense Logistics Agency FY 2013 President's Budget (Published Version) Exhibit R-1 FY 2013 President's Budget (Published Version) Total Obligational Authority (Dollars in Thousands)

12 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

32 0603264\$ Agile Transportation for the 21st Century (AT21) - Theater Capability 03 3,892 3,892 U 47 0603712\$ Generic Logistics R&D Technology Demonstrations 03 24,605 24,605 U 48 0603713\$ Deployment and Distribution Enterprise Technology 03 30,678 30,678 U 50 0603720\$ Microelectronics Technology Development and Support 03 72,234 72,234 U Advanced Technology Development (ATD) 131,409 131,409  128 0605070\$ DDD Enterprise Systems Development and Demonstration 05 133,104 133,104 U System Development and Demonstration (SDD) 133,104 133,104 133,104  158 0605502\$ Small Business Innovative Research 06 U RDT&E Management Support  245 0708011\$ Industrial Preparedness 07 27,044 27,044 U 246 0708012\$ Logistics Support Activities 07 4,711 4,711 U Operational Systems Development  Total Defense Logistics Agency 296,268 296,268	Line No 	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	s e c
48 0603713S Deployment and Distribution Enterprise Technology 03 30,678 30,678 U 50 0603720S Microelectronics Technology Development and Support 03 72,234 72,234 U Advanced Technology Development (ATD) 131,409 131,409  128 0605070S DOD Enterprise Systems Development and Demonstration 05 133,104 133,104 U System Development and Demonstration (SDD) 133,104 133,104  158 0605502S Small Business Innovative Research 06 U RDT&E Management Support  245 0708011S Industrial Preparedness 07 27,044 27,044 U 246 0708012S Logistics Support Activities 07 4,711 4,711 U Operational Systems Development 31,755 31,755	32	0603264S	Agile Transportation for the 21st Century (AT21) - Theater Capability	03	3,892		3,892	U
50 0603720S       Microelectronics Technology Development and Support       03       72,234       72,234       U         Advanced Technology Development (ATD)       131,409       131,409       131,409         128 0605070S       DOD Enterprise Systems Development and Demonstration       05       133,104       133,104       U         System Development and Demonstration (SDD)       133,104       133,104       133,104       U         158 0605502S       Small Business Innovative Research       06       U       U         RDT&E Management Support       245 0708011S       Industrial Preparedness       07       27,044       27,044       U         246 0708012S       Logistics Support Activities       07       4,711       4,711       U         Operational Systems Development       31,755       31,755	47	0603712S	Generic Logistics R&D Technology Demonstrations	03	24,605		24,605	U
Advanced Technology Development (ATD)  131,409  131,409  131,409  133,104  133,104  133,104  158 0605502S	48	0603713S	Deployment and Distribution Enterprise Technology	03	30,678		30,678	U
128 0605070S DOD Enterprise Systems Development and Demonstration 05 133,104 133,104 U  System Development and Demonstration (SDD) 133,104 133,104 U  158 0605502S Small Business Innovative Research 06 U  RDT&E Management Support  245 0708011S Industrial Preparedness 07 27,044 27,044 U  246 0708012S Logistics Support Activities 07 4,711 4,711 U  Operational Systems Development 31,755 31,755	50	0603720s	Microelectronics Technology Development and Support	03	72,234		72,234	U
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158 0605502S Small Business Innovative Research  RDT&E Management Support  245 0708011S Industrial Preparedness  07 27,044 27,044 U  246 0708012S Logistics Support Activities  Operational Systems Development  31,755 31,755	128	0605070s	DOD Enterprise Systems Development and Demonstration	05	133,104		133,104	U
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245 0708011S       Industrial Preparedness       07       27,044       U         246 0708012S       Logistics Support Activities       07       4,711       U         Operational Systems Development       31,755       31,755	158	0605502S	Small Business Innovative Research	06				U
246 0708012S Logistics Support Activities 07 4,711 4,711 U  Operational Systems Development 31,755 31,755	RI	DT&E Manage	ement Support					
Operational Systems Development 31,755 31,755	245	0708011s	Industrial Preparedness	07	27,044		27,044	U
Operational Systems Development	246	0708012S	Logistics Support Activities	07	4,711		4,711	U
Total Defense Logistics Agency 296,268 296,268	Oj	perational	Systems Development		31,755		31,755	
	Total	l Defense L	ogistics Agency		296,268	<b></b>	296,268	



Defense Logistics Agency • President's Budget Submission FY 2013 • RDT&E Program

# Program Element Table of Contents (by Budget Activity then Line Item Number)

**Budget Activity 03: Advanced Technology Development (ATD)** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	y Program Element Number	Program Element Title Page
32	03	0603264S	Agile Transportation for the 21st Century (AT21) Theater CapabilityVolume 5 - 283
47	03	0603712S	Logistics Research and Development Technology (Log R&D)Volume 5 - 287
48	03	0603713S	Deployment and Distribution Enterprise Technology
50	03	0603720S	Microelectronics Technology Development and Support (DMEA)Volume 5 - 327

**Budget Activity 05: Development & Demonstration (SDD)** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title	Page
128	05	0605070S	DoD Enterprise Systems Development and DemonstrationVolume	5 - 337

Defense Logistics Agency • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 06: RDT&E Management Support

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activi	ty Program Element Number	Program Element Title	Page
158	06	0605502S	Small Business Innovative Research (SBIR)	Volume 5 - 383

**Budget Activity 07: Operational Systems Development** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
245	07	0708011S	Industrial Preparedness Manufacturing Technology (IP ManTech)Volume (	5 - 387
246	07	0708012S	Logistics Support Activities (LSA)	5 - 423

Defense Logistics Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Logistics Support Activities (LSA)	0708012S	246	07Volume 5 - 423
Agile Transportation for the 21st Century (AT21) Theater Capability	0603264S	32	03Volume 5 - 283
Deployment and Distribution Enterprise Technology	0603713S	48	03Volume 5 - 305
DoD Enterprise Systems Development and Demonstration	0605070S	128	05Volume 5 - 337
Industrial Preparedness Manufacturing Technology (IP ManTech)	0708011S	245	07Volume 5 - 387
Logistics Research and Development Technology (Log R&D)	0603712S	47	03Volume 5 - 287
Microelectronics Technology Development and Support (DMEA)	0603720S	50	03Volume 5 - 327
Small Business Innovative Research (SBIR)	0605502S	158	06Volume 5 - 383



#### ACRONYM LISTING

USMIRS- USMEPCOM INTEGARTED RESORCE MANAGEMENT SYSTEM

2D - TWO DIMENSIONAL

3D - THREE DIMENSIONAL

AC - ADVANCED CONCEPT

**ACAT- ACQUISITION CATEGORY** 

**ACOI- ACCESSIONS COMMUNITY OF INTEREST** 

ACOS- AUTONOM OUS TECHNOLOGIES FOR UNMANNED AIR SYSTEMS

**ACTD - ADVANCED CONCEPT TECHNOLOGY DEMONSTRATION** 

ADMITT - ADVANCED DOMESTIC MASK INSPECTION TOOLS AND TECHNOLOGY

**ADS - ATLANTIC DIVING SUPPLY** 

**AED - ALTERNATE ENERGY DEVELOPMENT** 

AESA- ACTIVE ELECTRONIC SCANNED ARRAY

AFE - ALTERNATIVE FUEL ENGINE

AFIT - AIR FORCE INSTITUTE OF TECHNOLOGY

AFRL - AIR FORCE RESEARCH LAB

AIDC - AUTOMATED INFORMATION AND DATA COLLECTION

AIN - ALUMINUM NITRADE

AIT- AUTOMATED IDENTIFICATION TECHNOLOGY

ALD - ATOMIC LAYER DEPOSITION

ALEA - AIRBORNE LAW ENFORCEMENT ASSOCIATION

AMCOM - ARMY MATERIAL COMMAND

AMRAMM- ADVANCED MEDIUM RANGE AIR TO AIR MISSLE

AMS - AEROSPACE MATERIAL SPECIFICATION

ARC-AUTOMATED RECORDS CHECK

ARMS - ADVANCED RECONFIGURABLE MANUFACTURING OF SEMICONDUCTORS

AS- ACQUISITION STRATEGY

ASIC - APPLICATION SPECIFIC INTEGRATED CIRCUIT

AT21 - AGILE TRANSPORTATION FOR THE 21ST CENTURY

ATSP3 - ADVANCED TECHNOLOGY SUPPORT PROGRAM III

AV - ASSET VISIBILITY

AWACS - AIRBORNE WARNING AND CONTROL STATION

**BAA - BROAD AGENCY ANNOUNCEMENT** 

**BATTNET - BATTERY NETWORK** 

BEA- BUSINESS ENTERPRISE ARCHITECTURE

BEIS- BUSINESS ENTERPRISE INFORMATION SYSTEM

**BLT-BOND LINE THICKNESS** 

BSCM - BEAM STEERING CONTROL MODULE

**BST - BARIUM STRONTIUM TITANATE** 

**BTA - BUSINESS TRANSFORMATION AGENCY** 

C - CENTIGRADE

**C&T - CLOTHING AND TEXTILES** 

C2 - COMMAND AND CONTROL

CAD- COMPUTER AIDED DESIGN

CAF- CENTRAL ADJUDICATION FACILITY

CAGE - COMMERCIAL AND GOVERNMENT ENTITY CODE

CANDID- COMPUTER ADAPTIVE NETWORK DEFENSE IN DEPTH

CBCT - COOPER BASED CASTING TECHNOLOGY APPLICATIONS

CCS - CARBON CAPTURE AND SEQUESTRATION

CDCIE - CROSS DOMAIN COLLABORATIVE INFO ENVIRONMENT

CDUM - CUSTOMER DRIVEN UNIFORM MANUFACTURING

CG(X) - NEXT GENERATION CRUISER

CIE - CLOTHING AND INDIVIDUAL EQUIPMENT

CIF - CENTRAL ISSUE FACILITY

CIW - COLABORATIVE INFO WORKSPACE

CMOS - COMPLEMENTARY METAL OXIDE SEMICONDUCTORS

CMS - COALITION MOBLITY SYSTEM

CMS - CONGRESSIONALLY MANDATED STUDY

COCOM- COMBATANT COMMAND

**COEX - COMMUNITY OF EXCHANGE** 

**CONOPS - CONCEPT OF OPERATIONS** 

**CONUS - CONTINENTAL UNITED STATES** 

COP - COMMON OPERATIONAL PICTURE

CORANET - COMBAT RATIONS NETWORK FOR TECHNOLOGY IMPLEMENTATION

COS - COMMERCIAL OFF THE SHELF

COTS- COMMERCIAL OFF THE SHELF

CMIS - COUNTER-NARCOTICS MANAGEMENT INFORMATION SYSTEMS

CPFF - COST PLUS FIXED-FREE

CPOF - COMMAND POST OF THE FUTURE

CRADA - COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

**CSL - CATALST SUPPORT LAYER** 

**CWB - COLD WEATHER BIODIESEL** 

D2 - DEPLOYMENT AND DISTRIBUTION

DBASE- DEFENSE BUSINESS SYSTEMS ACQUISITION STAFF

DC - DIRECT CURRENT

DCAS - DEFENSE CASH ACCOUNTABILITY

DCD/DCW- DFAS CORPORATE DATABASE/DFAS CORPORATE WAREHOUSE

DCSC - DEFENSE SUPPLY CENTER COLUMBUS

DCSP - DEFENSE SUPPLY CENTER PHILADELPHIA

DCSR - DEFENSE SUPPLY CENTER RICHMOND

DDOC - DEPLOYMENT DISTRIBUTION OPERATIONS CENTER

DDR&E - DIRECTOR, DEFENSE RESEARCH & ENGINEERING

**DDXX - DEPLOYABLE DISTRIBUTION CENTER** 

**DESC - DEFENSE ENERGY SUPPORT CENTER** 

DFAR- DEFENSE FINANCIAL MANAGEMENT REGULATION

DFAS- DEFENSE FINANCE AND ACCOUNTING SERVICES

DHS - DEPARTMENT OF HOMELAND SECURITY

**DIA- DEFENSE AGENCIES INITIATIVE** 

DISA- DEFENSE INFORMATION SYSTEMS AGENCY

DISS- DEFENSE INFORMATION SYSTEM FOR SECURITY

**DLA - DEFENSE LOGISTICS AGENCY** 

DLIR - DEFENSE LOGISTICS INFORMATION RESEARCH

**DLIS - DEFENSE LOGISTICS INFORMATION SERVICE** 

DMDC- DEFENSE MANPOWER DATA CENTER

DMEA - DEFENSE MICROELECTRONICS ACTIVITY

DMFC - DIRECT METHANOL FUEL CELL

DMLSS-W - DEFENSE MEDICAL LOGISTICS STANDARD SUPPORT BLANKET PURCHASE

**AGREEMENT** 

**DMLT - DEFENSE MEDICAL LOGISTICS TRANSFORMATION** 

DMSMS - DIMINISHING MANUFACTURING SOURCE AND MATERIAL SHORTAGE

DoD - DEPARTMENT OF DEFENSE

DOD EMALL- DEPARTMENT OF DEFENSE ELECTRONIC MALL

DOE - DESIGN OF EXPERIMENT

DOJ – DEPARTMENT OF JUSTICE

DOORA- DLA OFFICE OF OPERATIONS RESEARCH AND RESOURCE ANALYSIS

**DOP - DISTRIBUTION PROCESS OWNER** 

DORRA - DEFENSE LOGISTICS AGENCY OFFICE OF OPERATIONS RESEARCH AND RESOURCE

ANALYSIS

DOTLMS PF- DOCTRICE ORGANIZATION TRAINING LEADERSHIP AND EDUCATION

DP - DYNAMIC PARTNERING

**DPNM - DISTRIBUTION PROCESS NODAL MODEL** 

**DPO- DISTRIBUTION PROCESS OWNER** 

DR - DISASTER RELIEF

DRAS- DEFENSE RETIRED AND ANNUITANT PAY SYSTEM

DRMS - DEFENSE REUTILIZATION AND MARKETING SERVICE

DTMO- DEFENSE TRAVEL MANAGEMENT OFFICE

DTS- DEFENSE TRAVEL SYSTEM

**DUSD - DEPUTY UNDER SECRETARY OF DEFENSE** 

DVD- DIRECT VENDOR DELIVERY

EA- ECONOMIC ASSUMPTIONS

EA - EXECUTIVE AGENT

**EBS- ENTERPRISE BUSINESS SOLUTIONN** 

**EDA- ELECTRONIC DOCUMENT ACCESS** 

EDW- ENTERPRISE DATA WAREHOUSE

**EFT- ELECTRONIC FUNDS TRANSFER** 

**EMALL - ELECTRONIC MALL** 

EMFST- ELECTRONICS AND MATERIALS FOR FLEXIBLE SENSORS AND TRANSPORTATION

**EML - EXPEDITIONARY MEDICAL LOGISTICS** 

EO - ELECTRO-OPTIC

**EPA - ENERGY POLICY ACT** 

**ERP - ENERGY READINESS PROGRAM** 

**ESA - ENGINEERING SUPPORT ACTIVITES** 

**EUVL - EXTREME ULTRAVIOLET LITHOGRAPHY** 

**FAME - FATTY ACID METHYL ESTER** 

FBAR - FILM BULK ACOUSTIC RESONATOR

FC - FUEL CELL

FCC - FAME CROSS CONTAMINATION

FDA - FOOD AND DRUG ADMINISTRATION

FDTPI- FIRST DESTINATION TRANSPORTATION 7 PACKAGING INITIATIVE

FEFMIA- FEDERAL FINANCIAL MANAGEMENT IMPROVEMENT ACT

FFRDC- Federally Funded Research and Development Center

FIB - FOCUSED ION BEAM

FLIS - FEDERAL LOGISTICS INFORMATION SYSTEM

FOB - FORWARD OPERATING BASE

FOC- FULL OPERATING CAPABILITY

**FOS- FAMILY OF SYSTEMS** 

**FPS- FINANCIAL PARTNER SYSTEM** 

FSG - FEDERATED SOFTWARE GROUP

FTE - FULL TIME EQUIVALENT

FWBT- FUNDS BALANCE WITH TREASURY

**FYDP- FUTURE YEAR DEVELOPMENT PLAN** 

**GA - GAP ANALYSIS** 

GaAs - GALLIUM ARSENIDE

GaN - GALLIUM NITRIDE

GAO - GOVERNMENT ACCOUNTABILITY OFFICE

GCCs- GEOGRAPHIC COMBATANT COMMANDERS

GDE - GAS DIFFUSION ELECTRODE

GFP - GOVERNMENT FURNISHED PROPERTY

GIDEP - GOVERNMENT INDUSTRY DATA EXCHANGE PROGRAM

GIS - GEOGRAPHIC INFORMATION SYSTEM

GITI - GLOBAL INFOTEK, INCORPORATED

**GPS - GOLBAL POSITIONING SYSTEM** 

**GSA- GENERAL SERVICES ADMINISTRATION** 

GSG- GOVERNMENT STEERING GROUP

GTAS - GOVERNMENT TREASURY ACCOUNT ADJUSTED TRIAL BALANCE

HA - HUMANITARIAN ASSISTANCE

HAVE- HUMANITARIAN ASSISTANCE/DISASTER REIF ASSET VISIBILITY EXPERIMNT

HPA - HIGH POWER AMPLIFIER

HRM- HUMAN RESOURCE MANAGEMENT

HSCDS- HIGH SPEED CONTAINER DELIVERY SYSTEM

**HSIO- HIGH SPEED ION OPTICS** 

IACP - INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE

IBEX2- INDUSTRIAL BASE EXTENSION AND EXECUTION

IC - INTEGRATED CIRCUITS

IC- INTEGRATED CIRCUITS

ICU-FST - IMPROVED COLLAPSIBLE URETHANE FUEL STORAGE TANKS

IDIQ - INDEFINITE DELIVERY INDEFINITE QUANTITY

**IGT- INTER GOVERNMENTAL TRANSFER** 

Inain - Idium Aluminum Nitride

InGaN - INDIUM GALLIUM NITRIDE

IP - INDUSTRIAL POLICY

IP- INTELLECTUAL PROPERTY

IP Man Tech - INDUSTRIAL PREPAREDNESS MANUFACTURING TECHNOLOGY

IPI- INFRASTRUCTURE AND PROCESS IMPROVEMENT

IPO- IVENTORY POLICY OPTIMIZATION

IPV- PRODUCT SUPPORT VENDORMBE

IR - INFARED

ISO - INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

**IT - INFORMATION TECHNOLOGY** 

**ITV - IN TRANSIT VISIBILITY** 

**IUID- ITEM UNIQUE IDENTIFIER** 

JAIT - JOINT AUTOMATIC IDENTIFICATION TECHNOLOGY

JCIDS - JOINT CAPABILITY INTEGRATED DEVELOMPMENT SYSTEM

JCTD - JOINT CAPABILITY TECHNOLOGY DEMONSTRATION

JDDE - JOINT DEPLOYMENT AND DISTRIBUTION ENTERPRISE JDMTP - JOINT DEFENSE MANUFACTURING TECHNOLOGY PANEL

JFCOM - JOINT FORCES COMMAND

JMIDS - JOINT MODULAR INTERMODAL DISTRIBUTION SYSTEM

JP-8 - JET PROPULSION FUEL

JPADS - JOINT PRECISION AIR DROP

JPAS- JOINT PERSONNEL ADJUDICATION SYSTEM

JRADS - JOINT RECOVERY AND DISTRIBUTION SYSTEM

JTIC- JOINT INTEROPERAABILITY TEST COMMAND

JTRS - JOINT TACTICAL RADIO SYSTEM

JVS- JOINT VERIFICATION SYSTEM

KIFC - KANSAS INTELLIGENCE FUSION CENTER

**KPP - KEY PERFORMANCE PARAMETERS** 

L&MR - LOGISTICS & MATERIAL READINESS

LAV - LIGHT ARMORED VEHICLE

LEAS - LAW ENFORCEMENT AGENCIES

LEEDS - LAW ENFORCEMENT EQUIPMENT DATABASE SYSTEM

LESO - LAW ENFORCEMENT SUPPORT OFFICE

LIA - LOGISTICS INFO AGENCY

LIRC - LOGISTICS INFORMATION REVIEW CONCEPT

LIRC- LOGISTICS INFORMATION REVIEW CONCEPT

LMI - LOGISTICS MANAGEMENT INSTITUTE

**LRIP - LOW RATE INITIAL PRODUCTION** 

**LUT-LIMITED USER TESTING** 

MAE - MATERIAL ACQUSITION ELECTRONICS

MATTS - MARINE ASSET TAGGING AND TRACKING SYSTEM

MBE - MOLECULAR BEAM EPITAXY

MBE- MODEL BASE ENTERPRISE

MCCD - MARINE CORPS COMBAT DEVELOPMENT COMMAND

MCM - MULTI CHIP MODULES

MEA - MEMBRANE ELECTRODE ASSEMBLY

MEMS - MICRO ELECTRO MECHANICAL SYSTEM

MEP- MANUFACTURING TECHNOLOGY EXTENSION PARTNERSHIP

MEPS- MILITARY ENTRANCE PROCESSING STATION

MILSPEC - MILITARY SPECIFICATION

MLG - MAIN LANDING GEAR

MLL - MASK LESS LITHOGRAPHY

MLN - MEDICAL LOGISTICS NETWORK

mm - MILLIMETER

MMIC - MONOLITHIC MICROWAVE INTEGRATED CIRCUITS

MMPDS - METALLIC MATERIALS PROPERTIES DEVELOPMENT AND STANDARDIZATION

MOA- MEMORANDUM OF AGREEMENT

MOCVD - METAL ORGANIC CHEMICAL VAPOR DEPOSITION

MOSA- MODULAR OPEN SYSTEM ARCHITECTURE

MPO - METAL PROCESS OPTIMIZATION

MRAM - MAGNETIC RANDOM ACCESS MEMORY

MRE - MEALS READY TO EAT

MRL - MANUFACTURING READINESS LEAVELS

MRV- MOVEMENT REQUIREMENTS VISIBILITY

MTBF - MEAN TIME BETWEEN FAILURE

NAVSEA - NAVAL SEA SYSTEMS COMMAND

NCSU- NORTH CAROLINA STATE UNIVERSITY

NDAA - NATIONAL DEFENSE AUTHORIZATION ACT

NDSU- NORTH DAKOTA STATE UNIVERSITY

NFTD - NATIONAL FORGING TOOLING DATABASE

NII - NETCENTRIC INFRASTRUCTURE AND IMPLEMENTATION

NIL - NANO IMPRINT LITHOGRAPHY

NIST- NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

NLG - NOSE LANDING GEAR

nm - NANOMETER

NoMaDD - NODE MANAGEMENT AND DEPLOYABLE DEPOT

NOR- NEGATIVE OPERATING RESULTS

NRL - NAVAL RESEARCH LAB

NSA - NATIONAL SECURITY AGENCY

NSN - NATIONAL STOCK NUMBER

NTOA - NATIONAL TACTICAL OFFICERS ASSOCIATION

O&M - OPERATION AND MAINTENANCE

OCA - OTHER CONGRESSIONAL ADDS

OCO - OVERSEAS CONTINGENCY OPERATIONS

ODUSD - OFFICE OF THE DEPUTY UNDERSECRETARY OF DEFENSE

ONR - OFFICE OF NAVAL RESEARCH

OPNAV - OPEARTIONAL NAVY (OFFICE OF THE CHIEF OF NAVAL OPERATIONS)

ORTA - OFFICE OF RESEARCH AND TECHNOLOGY APPLICATIONS

PACOM - PACIFIC COMMAND

PAO - PUBILC AFFAIRS OFFICER

PDIT - PRODUCT DATA INTEGRATION TECHNOLOGIES

PDK - PORTABLE DEPLOYMENT KIT

PDR- PRELIMANARY DESIGN REVIEW

PDW - PROCUREMENT, DEFENSE WIDE

PKI- PUBLIC KEY INFRASTRUCTURE

PLT- PRODUCTION LEAD TIME

PM - PROGRAM MANAGER

PM/DS- PART MANAGEMENT/DATA SHARING

PMO - PROGRAM MANAGEMENT OFFICE

PPI - PLANNED POSITION INDICATION

PQDR- PRODUCT QUALITY DEFICIENCY REPORT

PR- PURCHASE REQUEST

PR- PURCHASE REQUEST

PrCB - PRINTED CIRCUIT BOARD

PROACT - PROCUREMENT READINESS OPTIMIZATION-ADVANCED CASTING TECHNOLOGY

PROFAST - PROCUREMENT READINESS OPTIMIZATION-FORGING ADVANCE SYSTEM

**TECHNOLOGY** 

Pt - PLATINUM

PTC- PRODUCT TEST CENTER

PV - PRIME VENDOR

QN - QUALITY NOTICE

**R&D - RESEARCH AND DEVELOPMENT** 

R2Q - RP2 QUALIFICATION (ROCKET KEROSENE)

**R3 - REUTILIZATION RISK REDUCTION** 

RDCIC - REGIONAL DEFENSE COMMAND INTEGRATION CENTER

RDT&E - RESEARCH, DEVELOPMENT, TEST & EVALUTATION

**RF - RADIO FREQUENCY** 

RFID - RADIO FREQUENCY IDENTIFICATION DEVICE

RICE- REPORTS INTERFACE CONVERSION EXTENTIONS

RM - REFORMED METHANOL

**ROI - RETURN ON INVESTMENT** 

SAPCO - SPECIAL ACCESS PROGRAMS COORDINATION OFFICE

SAR - SYNTHETIC APERTURE RADAR

SAW - SURFACE ACOUSTIC WAVE

SBIR - SMALL BUSINESS INNOVATIVE RESEARCH

SCM - SUPPY CHAIN MANAGEMENT

 ${\tt SDR-STRATEGIC\ DISTRIBUTION\ \&\ REUTILIZATION}$ 

SDR - SUPPLY DISCREPANCY REPORT

SDVOSB - SERVICE DISABLED VETERAN OWNED BUSINESS

SFIS- STANDARD FINANCIAL INFORMATION STRUCTURE

SHS - SELF PROPAGATING HIGH TEMPERATURE SYNTHESIS

SiC - SILICON CARBIDE

SLPC - SINGLE LOAD PLANNING CAPABILITY

SME - SUBJECT MATTER EXPERT

SPRs-SOFTWARE PROBLEM REPORTS

SPX- STOCK PLANNING SYSTEM

SRD - SYSTEM REQUIREMENTS DOCUMENT

SSC- SERVICE SUPPORT CONTRACT

SSO - SINGLE SIGN ON

STO - STOCK TRANSPORT ORDER

STP - SHORT TERM PROJECT

SWNT - SINGLE WALLED CARBON NANOTUBE

T/R - TRANSMIT/RECEIVE

TAG - THE ADJUGENT GENERAL

TARDEC - THE UNITED STATES ARMY TANK AUTOMOTIVE RESEARCH, DEVELOPMENT AND

ENGINEERING CENTER

TAV - TOTAL ASSET VISIBILITY

TDP - TECHNICAL DATA PACKAGE

TEES (TAMU) - TEXAS ENGINEERING EXPERIMENT STATIONS (TEXAS A&M UNIVERSITY)

TENTNET - TENT NETWORK FOR TECHNOLOGY IMPLEMENTATION

TFBSO - TASK FORCE TO IMPROVE BUSINESS AND STABILITY OPERATIONS

TMS-TRANSPORTATION MANAGEMENT SYSTEM

TQ - TECHNICAL QUALITY

TRL - TECHNOLOGY READINESS LEVEL

TSA - THERMAL STABILITY ADDITIVES

TTN - TRANSPORTATION TRACKING NUMBER

TWMS - TIMEWISE MANAGEMENT SYSTEMS

TWT - TRAVELING WAVE TUBES

UAV - UNMANNED AERIAL VEHICLE

**UGR- UNITIZED GROUP RATIONS** 

um - MICRO MILLIMETER

**URG - UNITIZED GROUP RATIONS** 

**US - UNITED STATES** 

USA TACOM – UNITED STATES ARMY TACTICAL COMMAND

USDA - UNITED STATES DEPARTMENT OF AGRICULTURE

**USMC - UNITED STATES MARINE CORPS** 

USMEPCOM- UNITED STATES MILITARY ENTRANCE PROCESSING COMMAND

USP - UNITED STATES PHARMACOPIA

USSGL- UNITED STATES STANDARD GENERAL LEDGER

USSOCOM- UNITED STATES SOUTHERN COMMAND

USTRANSCOM - UNITED STATES TRANSPORTATION COMMAND

VED - VIRTUAL ENTERPRISE DEVELOPMENT

VHP - VEHICLE FUEL CELL AND HYDROGEN LOGISTICS PROGRAM

VINS - VET BIZ INITIATIVE FOR NATIONAL SUSTAINMENT

VIPS- VIRTUAL INTERACTIVE PROCESSING SYSTEM

VR- VIRTUAL REALITY

WAWF- WIDE AREA WORK FLOW

WSS - WEAPON SYSTEM SUSTAINMENT

XML - EXTENSABLE MARKUP LANGUAGE

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 3: Advanced Technology Development (ATD)

#### R-1 ITEM NOMENCLATURE

PE 0603264S: Agile Transportation for the 21st Century (AT21) Theater Capability

**DATE:** February 2012

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.745	0.987	3.892	-	3.892	7.692	7.702	7.894	7.921	Continuing	Continuing
1: Agile Transportation for the 21st Century (AT21) Theater Capability	0.745	0.987	3.892	-	3.892	7.692	7.702	7.894	7.921	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Geographic Combatant Commanders (GCCs) lack an automated capability to (1.) manage transportation planning and execution processes for cargo and passenger movement within their respective theaters of operation or (2.) match global movement requirements against available lift assets to produce an optimized transportation schedule that meets delivery requirements. AT21 Increment 3 Theater Capability will provide continuous visibility, collaboration, automated processes, alerts and an exception management capability supporting transportation planning and execution for theater force and sustainment movements. When fully implemented, it will provide opportunities to streamline cargo movement by optimizing capacity and provide complete visibility by synchronizing theater movements with strategic movements.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	0.750	0.998	3.849	-	3.849
Current President's Budget	0.745	0.987	3.892	-	3.892
Total Adjustments	-0.005	-0.011	0.043	-	0.043
<ul> <li>Congressional General Reductions</li> </ul>	-0.005	-0.003			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-0.008			
<ul> <li>Departmental Fiscal Guidance</li> </ul>	-	-	0.043	-	0.043

# **Change Summary Explanation**

FY 2012 FFRDC(f) Reduction: -\$0.003 million

FY 2012 SBIR/STTR Transfer (Reduction): -\$0.008 million

FY 2013 Departmental Fiscal Guidance: \$0.043 million

UNCLASSIFIED
Page 1 of 3

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0603264S: Agile Transportation for the 21st Century (AT21) Theater Capability BA 3: Advanced Technology Development (ATD) C. Accomplishments/Planned Programs (\$ in Millions) FY 2011 FY 2012 FY 2013 Title: Agile Transportation for the 21st Century (AT21) Theater Capability 0.745 0.987 3.892 FY 2011 Accomplishments: Performed collaboration and analysis effort with selected COCOMs to scope initial process improvement and optimization efforts for targeted theater of operation. Developed Concept of Operations, select contractors to demonstrate proof of concept, select contractor and begin COTS prototype development. Began development of a theater tool to improve decision-making by providing prioritized courses of action to meet logistics delivery timelines - Movement Requirements Visibility - Theater, Joint Capabilities Technology Demonstration (MRV-T JCTD). FY 2012 Plans: Continue to demonstrate proof of concept through use of COTS products and complete work on prototype devleopment. Continue development of a theater tool to improve decision-making by providing prioritized courses of action to meet logistics delivery timelines - Movement Requirements Visibility - Theater, Joint Capabilities Technology Demonstration (MRV-T JCTD). FY 2013 Plans: Continue to demonstrate proof of concept through use of COTS products and complete work on prototype devleopment. Continue development of a theater tool to improve decision-making by providing prioritized courses of action to meet logistics delivery timelines - Movement Requirements Visibility - Theater, Joint Capabilities Technology Demonstration (MRV-T JCTD). **Accomplishments/Planned Programs Subtotals** 0.745 0.987 3.892 D. Other Program Funding Summary (\$ in Millions) FY 2013 FY 2013 FY 2013 Cost To FY 2011 FY 2012 OCO FY 2014 FY 2015 FY 2016 FY 2017 Complete Total Cost Line Item Base Total 0603713S: Deployment and 0.120 0.500 Continuina Continuina Distribution Enterprise Technology MRV-T Joint Capability Technology Demonstration (JCTD) • 0603648D8Z: OSD (RFD) 2.332 2.250 Continuing Continuing Movement Requirement Visibility-Theater (MRV-T) Joint Capability Technology Demonstration (JCTD) E. Acquisition Strategy Milestone B decisions for Increment 3 is planned in FY 2011 with acquisition strategy included in Milestone B activities.

PE 0603264S: Agile Transportation for the 21st Century (AT21) T... **Defense Logistics Agency** 

UNCLASSIFIED Page 2 of 3

R-1 Line #32

Volume 5 - 284

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense L	ogistics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603264S: Agile Transportation for	the 21st Century (AT21) Theater Capability
F. Performance Metrics	·	
Critical enterprise-level transportation management and execution of	capabilities to improve performance in theate	er transportation planning and execution operations in
support of broader Joint Deployment Distribution Enterprise (JDDE)	improvements being implemented in the la	rger AT21 program.

PE 0603264S: *Agile Transportation for the 21st Century (AT21) T...* Defense Logistics Agency



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 3: Advanced Technology Development (ATD)

#### R-1 ITEM NOMENCLATURE

PE 0603712S: Logistics Research and Development Technology (Log R&D)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	19.910	23.260	24.605	-	24.605	20.615	20.899	21.242	21.595	Continuing	Continuing
1: Medical Logistics Network (MLN)	2.744	2.796	2.900	-	2.900	2.948	2.998	3.049	3.101	Continuing	Continuing
2: Weapon System Sustainment (WSS)	5.462	5.564	5.765	-	5.765	5.859	5.961	6.064	6.167	Continuing	Continuing
3: Supply Chain Management (SCM)	3.868	3.443	3.811	-	3.811	3.360	3.344	3.386	3.435	Continuing	Continuing
4: Strategic Distribution & Reutilization (SDR)	3.486	5.571	5.806	-	5.806	3.787	3.853	3.919	3.986	Continuing	Continuing
5: Energy Readiness Program (ERP)	2.113	3.606	3.966	-	3.966	2.265	2.305	2.344	2.384	Continuing	Continuing
6 : Defense Logistics Information Research (DLIR)	2.237	2.280	2.357	-	2.357	2.396	2.438	2.480	2.522	Continuing	Continuing
7: Tent Network for Technology Implementation (TENTNET)	-	-	-	-	-	-	-	-	-	Continuing	Continuing

# A. Mission Description and Budget Item Justification

The central idea of the Focused Logistics Joint Functional Concept "is to build sufficient capacity into the sustainment pipeline, exercise sufficient control over the pipeline from end to end, and provide a high degree of certainty to the supported joint force commander that sustainment, and support will arrive where needed and on time." The Defense Logistics Agency (DLA) Research and Development (R&D) program helps achieve this vision by pioneering advanced logistics concepts and business processes that provides the leanest possible infrastructure, the use of the best commercial and government sources, and the application of business practices. The Logistics R&D program develops and demonstrates high risk, high payoff technology that will provide a significantly higher level of support at lower costs, than would be otherwise attainable. The program has a proven track record of implementation and benefits. One example is the Department of Defense (DOD) Electronic MALL (EMALL). DOD EMALL was the first web based, distributed architecture on-line ordering capability. It has been adopted by the Army, Navy and the Department of Homeland Security. DLA's overall Log R&D program has demonstrated positive net present value and a positive return on investment.

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

UNCLASSIFIED
Page 1 of 18

R-1 Line #47

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603712S: Logistics Research and Development Technology (Log R&D)

**DATE:** February 2012

BA 3: Advanced Technology Development (ATD)

APPROPRIATION/BUDGET ACTIVITY

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	20.542	23.887	24.350	-	24.350
Current President's Budget	19.910	23.260	24.605	-	24.605
Total Adjustments	-0.632	-0.627	0.255	-	0.255
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.064			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-0.563			
Departmental Fiscal Guidance	-0.603	-	0.255	-	0.255
<ul> <li>Efficiency Initiatives SSC Reduction (OSD Withhold)</li> </ul>	-0.029	-	-	-	-

## **Change Summary Explanation**

FY2012 FFRDC(f) Reduction: -\$0.064 million

FY2012 SBIR/STTR Transfer (Reduction): -\$0.563 million

FY2013 Departmental Fiscal Guidance: \$0.255 million

Exhibit R-2A, RDT&E Project Justi			DATE: Febr	uary 2012							
APPROPRIATION/BUDGET ACTIVI		R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test	PE 0603712S: Logistics Research and				1: Medical Logistics Network (MLN)						
BA 3: Advanced Technology Develop	oment (ATD)			Development Technology (Log R&D)							
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ III MIIIIOTIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
1: Medical Logistics Network (MLN)	2.744	2.796	2.900	-	2.900	2.948	2.998	3.049	3.101	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

The Medical Directorate's mission is to develop and implement the critical logistics and medical supply chain business practices that ensure the cost-effective and efficient distribution of medical material to the full range of Military Health System operations.

The Medical Logistics Network (MLN) anticipates future medical logistical requirements and develops strategies and tools to meet these requirements. Operating in the unique DoD-Commercial medical logistics environment, the Medical Logistics Network supports innovative projects that improve this partnership and enhance the medical logistics enterprise support to the Warfighter.

Title: Medical Logistics Network Accomplishments/Plans	2.744	2.796	2.900
FY 2011 Accomplishments:  Netcentric Infrastructure and Implementation (NII) – Provided the Defense Medical Logistics enterprise with a .NET web service provisioning Netcentric Framework based on Service-Oriented Architecture (SOA). A service-oriented information environment allows the timely exchange of data among business systems in an efficient and effective manner. It also enables authoritative data sources distributed throughout the Enterprise to be leveraged, and reduces unnecessary replication of data repositories. The Netcentric Framework limits ad hoc design, discourages stove-pipe development, and reduces the development lifecycle of web services. It also adds a metrics logging capability to provide feedback on the value of web services and identify future enhancements of the capability. In May 2011, the Netcentric Framework was transitioned to the Defense Medical Logistic Standard Support Wholesale (DMLSS-W) team.			
Defense Medical Logistics Transformation (DMLT) – Developed enterprise architecture (EA) products to support the business process reengineering project on Medical Equipment Life Cycle Management. Project deliverables included (To-Be) process models, opportunities for improvement, and a Functional Capabilities Document. The plan was approved by the DML board of directors and transitioned to the Joint Medical Logistics Functional Development Center (JMLFDC) for Analysis of Alternatives (AoA) consideration and implementation resourcing.			
FY 2012 Plans:  DMLT will support business process reengineering projects on: 1) Expeditionary Medical Supply Chain Support; 2) Life Cycle Management of Materiel Item Data. Process models will serve as basis for detailed system requirements development and will transition to JMLFDC for implementation.			

UNCLASSIFIED
Page 3 of 18

FY 2011

FY 2012

FY 2013

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603712S: Logistics Research and	1: Medical	Logistics Network (MLN)
BA 3: Advanced Technology Development (ATD)	Development Technology (Log R&D)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
MLN has three new approved charters which will be in full development in FY 12. These projects will develop processes and tools to reengineer the often manual, laborious medical business practices associated with: 1) determining "fair and reasonable" pricing for medical products; 2) performing analytical queries of source medical business data; and 3) identifying contracting/sourcing opportunities for medical products based upon best-value criteria that include Federal price, market share, and product life cycle/clinical attributes.			
FY 2013 Plans: In FY2013 the three new projects will be in their second year, delivering enhancements to extend the first year's accomplishments. We will look to extend the processes and tools for fair and reasonable pricing to other supply classes such as Subsistence, and broaden the scope of strategic sourcing opportunities to other classes of medical products such as medical equipment.			
Accomplishments/Planned Programs Subtotals	2.744	2.796	2.900

#### C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

DMLT: Currently in its final year. New work for the three approved charters will be competitively bid as task orders on the Defense Logistics Standard Support Blanket Purchase Agreement (DMLSS-W BPA).

#### **E. Performance Metrics**

DMLT: 1) The percentage of requirements supported by architecture products – Eighty-seven percent of the MedSurg Prime Vendor Program's Gen IV Requirements are supported by architecture products. 2) Measurement of compliance with laws and regulations (e.g. Clinger-Cohen Act) that require complete enterprise architecture. 3) Percentage alignment between Balanced Scorecard Transformation Initiatives and Enterprise Architecture.

**UNCLASSIFIED** PE 0603712S: Logistics Research and Development Technology (Log... **Defense Logistics Agency** 

Exhibit R-2A, RDT&E Project Just	tification: PE	3 2013 Defe	nse Logistic	s Agency					DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Tes BA 3: Advanced Technology Develo	t & Evaluation	*	Vide	PE 060371	IOMENCLA 2S: Logistics Int Technolog	Research a		PROJECT 2: Weapon	System Sus	tainment (W	SS)
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2: Weapon System Sustainment (WSS)	5.462	5.564	5.765	-	5.765	5.859	5.961	6.064	6.167	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

Support Defense Logistics Agency (DLA) Strategic Plans Goals 1.) Warfighter Support) and 2.) Internal Process. The program spans multiple weapon systems and supply chains to improve internal processes, provide new methods, reduce costs and lead times, and ultimately, improve readiness for DLA customers.

The program is focused in three initiatives:

- 1.) Planning Process Improvement: The program improves elements of current inventory policy models, assesses potential benefits of new technologies and seeks more efficient approaches to deliver customer requirements while reducing inventory and order fulfillment costs.
- 2.) Technical/Quality Process Improvement: The program improves internal efficiency and customer satisfaction through new tools and methods to proactively address supply issues resulting from current technical/quality processes.
- 3.) Procurement Process Improvement: The program will demonstrate tailored data collection and business processes for well-defined subsets of suppliers and procurement types to improve supplier responsiveness, cycle time and cost.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Weapon System Sustainment Accomplishments/Plans	5.462	5.564	5.765	
FY 2011 Accomplishments:  Planning Process Improvement: The Peak Policy pilot at DLA Aviation continued through the year and continued to show impressive performance improvements over the control group of all N items in aviation; e.g., at the end of FY2011 Peak reduced the number of Procurement Requests (PRs) by 41.3% while the control group PRs increased by 9.3%, and Peak reduced the number of Unfilled Orders by 40.4% while the control group reduced by 13.8%. Efforts to transition Peak Policy and the Next Generation Inventory Model (Next Gen) for R items included participation in two different Forecastability Assessments, wherein the two models performed better than all competing approaches in both. Requirements were successfully developed for an integrated stocking model that integrates Next Gen for R items and the Peak Policy for N items with a more effective method of managing the movement of items between the R and N categories, and the results were delivered to the Planning Process Owner. An effort was initiated to support the roll out of Inventory Policy Optimization (IPO) to the Air Force through a range of analyses to better understand the software, resolve problems and improve its performance. Efforts to develop new projects in the Planning Process area were initiated working with the Process Owner and Sub Process Owners.				

UNCLASSIFIED
Page 5 of 18

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logis	stics Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603712S: Logistics Research and Development Technology (Log R&D)	PROJECT 2: Weapor	ECT pon System Sustainment (WSS)		VSS)
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Technical/Quality Process Improvement: The FY 2010 projects deali specific review procedures for assessing PQDRs to identify systemic and the effort to define process improvements for specific notifications and transition planning and support activities undertaken. Efforts were the Counterfeit Parts strategic roadmap project into daily use within the sites, as well as HQ. The Parts Management/Data Sharing project inic creation of a new DoD process for component standardization, with the Group. The CAGE Hopping analysis effort was completed with a number that the T/Q process owner accepted and incorporated into a new Dedemonstrate the feasibility of product marking with DNA to prevent interproject to develop a DLA-wide approach for enhancing customer serving recommendations accepted by the T/Q Process Owner. A new Product those recommendations into daily policy and processes.  Procurement Process Improvement: The project to assess the feasible technology to improve GFP inventory accuracy was completed and the (WAWF)-focused project initiated in FY2010 was completed to undersolirect Vendor Delivery (DVD) and Industrial Product-Support Vendor supplier invoices and recommend alternatives to address those issue Support Pilot project was initiated to evaluate the capabilities of a nur practice early – before award if possible. The results of the pilot will support capability.	quality issues so that the root causes can then be a to customers of quality alerts were successfully be initiated to transition the recommendations result the DLA Aviation, Land & Maritime, and Troop Supstiated in FY 2010 was completed and transitioned the first step being formation of a Connectors Worksher of business process improvement recommensecision Support Pilot project. A project was initiated troduction of counterfeit parts in the supply chain. Vice by the Product Test Centers was completed a functive transitioned to J-74. The Wide Area Worksher of using RFID or other automatic identification are results transitioned to J-74. The Wide Area Worksher of the recommendations delivered to J-33. A mober of commercially available tools to detect frau	e evaluated, completed ting from port through ting dations d to The nd the nsition			
Planning Process Improvement: A decision will be made whether to operation or to continue or expand it. Efforts will continue to develop Policy and Next Gen either as DLA capabilities or as part of the JDA validate the benefits of a multi-echelon version of Next Gen applicable year, and the results will become part of the transition planning. IPO to IPO. A new project will be initiated to demonstrate the feasibility of Foreign Military Sales (FMS) items in order to greatly improve support manage the ordering and delivery of parts for DLA wholesale stock wand its benefits in cost reduction and support to the warfighter.	a plan with the Planning Process Owner to transit suite of planning tools. The FY2010 project to deve to wholesale and retail levels will be completed support efforts will be completed and the results transplying the Prime Vendor concept to the manager to FMS customers. Another new project wherein	ion Peak elop and early in the ansitioned lement of a suppliers			

UNCLASSIFIED
Page 6 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	stics Agency		DATE: Fel	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			(0.0)
0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	PE 0603712S: Logistics Research and Development Technology (Log R&D)	2: Weapor	pon System Sustainment (WSS)		/SS)
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Other new FY2012 projects in the planning process area will be initial the planning process team in FY2011 and early FY2012. One of three					
Technical/Quality Process Improvement: The PQDR Analysis Tool was part of the product Data Reporting and Evaluation Program at NA available throughout DoD. The projects to transition the Counterfeit Fimprovements will be completed during the year. Efforts to support the feasibility of DMA marking to deter counterfeiting will continue throug the T/Q interest of areas of modern technical data, supply chain risk joint planning with the T/Q process owner, and activities initiated as a transition in FY2012.	VSEA Portsmouth, whose intention is to ultimately mearts Strategic Roadmap and Product Verification Probe Connectors Working Group and to demonstrate the FY2012. New project starts will be defined and initiand incorporation of green considerations in procure	ake it ocess e iated in ments by			
Procurement Process Improvement: The Decision Support Pilot projavailable tools to detect fraudulent practices early – before award if psupport capability will be continued through the year. Efforts will be nadditional projects for initiation in FY2012 and FY2013. No projects to	ossible – and define requirements for a DLA-wide de nade to work with J7 procurement policy personnel to	ecision			
FY 2013 Plans: Planning Process Improvement: Efforts to transition Peak Policy and Supplier Managed Inventory and FMS Prime Vendor projects, and ar as appropriate. New projects for FY2013 will be initiated as a result this team in FY2012 and FY2013.	ny other new starts in FY2012, will be continued or co	oncluded			
Technical/Quality Process Improvement: The Connectors working Grequired follow-on efforts defined. New starts in FY2012 will be continuil be initiated as a result of planning efforts joint with the T/Q Proce	nued or concluded as appropriate. New projects for				
Procurement Process Improvement: The Decision Support Pilot projinitiated. New starts in FY2012 will be continued or concluded as appropolicy personnel to identify additional projects for initiation in FY2013	propriate. Efforts will be made to work with J7 procur				
	Accomplishments/Planned Programs S		5.462	5.564	5.76

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

UNCLASSIFIED
Page 7 of 18

R-1 Line #47

UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	istics Agency		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603712S: Logistics Research and Development Technology (Log R&D)	PROJECT 2: Weapon	System Sustainment (WSS)		
C. Other Program Funding Summary (\$ in Millions) N/A					
D. Acquisition Strategy N/A					
E. Performance Metrics  The metric is percent of completing demonstration projects transitio completing projects will transition.	oning per year. In FY 2011, six of seven complete	ed projects transi	tioned. In FY2012, 4 of 6		

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

UNCLASSIFIED
Page 8 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency										ruary 2012	l
7							PROJECT				
						3: Supply Chain Management (SCM)					
BA 3: Advanced Technology Devel	opment (ATD)		Development Technology (Log R&D)								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3: Supply Chain Management (SCM)	3.868	3.443	3.811	-	3.811	3.360	3.344	3.386	3.435	Continuing	Continuing

## A. Mission Description and Budget Item Justification

R Accomplishments/Planned Programs (\$ in Millions)

DLA operates in a very dynamic environment. To meet customer expectations DLA must be able to address problems in a timely manner and be able to respond to emerging opportunities. The Supply Chain Management Program within R&D provides the Agency with the resources needed to quickly take advantage of new ideas emerging from the Center Commanders, Process Owners, or Staff Directors.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Supply Chain Management Accomplishments/Plans	3.868	3.443	3.811
FY 2011 Accomplishments:  During FY 11 the Supply Chain Management will be conducting a number of supply chain analyses to identify emerging strategies for achieving DLA goals. These analyses will be aimed at improving interface among DLA, DLA's customers, and the DLA supplier base. In particular, SCM will be examining the emerging technologies associated with engineering data capture, archiving, and discrimination.			
FY 2012 Plans: During FY 12 Supply Chain Management will invest in the technologies to implement advanced Supply Chain Management techniques into DLA's Supply Chains. DLA is expecting to reduce the Production Lead-time needed to produce critical DLA Land and Maritime items.			
FY 2013 Plans: During FY 13 Supply Chain Management will invest in the technologies to implement advanced Supply Chain Management techniques into DLA's Supply Chains. DLA is expecting to reduce the Production Lead-time needed to produce critical DLA Land and Maritime items.			
Accomplishments/Planned Programs Subtotals	3.868	3.443	3.811

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Competitive Broad Area Announcement.

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

UNCLASSIFIED
Page 9 of 18

R-1 Line #47

EV 2011

EV 2012

xhibit R-2A, RDT&E Project Justification: PB 2013 Defense Log	hibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency		
PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603712S: Logistics Research and	3: Supply Chain Management (SCM)	
A 3: Advanced Technology Development (ATD)	Development Technology (Log R&D)		
. Performance Metrics		'	
Implementation of advanced technologies into DLA's supply chain	operations.		

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

UNCLASSIFIED
Page 10 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency								<b>DATE</b> : February 2012				
APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE							PROJECT					
	0400: Research, Development, Test & Evaluation, Defense-Wide PE 0603712S: Logistics Research and 4.					4: Strategic Distribution & Reutilization (SDR)						
	BA 3: Advanced Technology Develo	pment (ATD)			Development Technology (Log R&D)							
	COST (f in Millians)			FY 2013	FY 2013	FY 2013					Cost To	
	COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
	4: Strategic Distribution &	3.486	5.571	5.806	-	5.806	3.787	3.853	3.919	3.986	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This program, which through FY13 is completing improvements and extensions to DLA distribution and disposition capabilities—especially for deployed warfighters—will shift focus in FY14 to developing and implementing improvements to DLA Distribution and DLA Disposition Services in the Continental United States (CONUS). This will include technology enhancements to operations and processes in distribution centers and disposition offices. Transition organizations are DLA Distribution and DLA Disposition Services.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Strategic Distribution & Reutilization (SDR) Accomplishments / Planned Program	3.486	5.571	5.806
FY 2011 Accomplishments: Established and transitioned DLA Disposition Services Simulation Lab. Developed first phase of Stock Positioning Extended (SPX) improvements to the Integrated Consumable Item Support (ICIS) system to facilitate expeditionary stock planning. Developed and planned demonstration of distribution capabilities to support overseas disaster recovery missions. Conducted business case analysis of First-Destination Transportation & Packaging Initiative (FDTPI) concept in preparation for concept trials. Planned implementation of the Industrial Base Extension & Execution (IBex2) system.			
FY 2012 Plans: Complete, demonstrate, and assess SPX and humanitarian distribution capabilities. Begin initial trials of FDTPI. Begin development, demonstration, and transition of IBex2 capabilities. Support technology transition planning.			
FY 2013 Plans: Complete transition SPX, humanitarian distribution, and IBex2 capabilities. Complete FDTPI trials and transition successful practices into operations. Roadmap technology insertions in distribution and disposition operations.			
Accomplishments/Planned Programs Subtotals	3.486	5.571	5.806

## C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

Reutilization (SDR)

N/A

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

UNCLASSIFIED
Page 11 of 18

R-1 Line #47

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logis	RDT&E Project Justification: PB 2013 Defense Logistics Agency				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603712S: Logistics Research and Development Technology (Log R&D)	PROJECT 4: Strategic Distribution & Reutilization (SDR)			
E. Performance Metrics N/A					

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

Exhibit R-2A, RDT&E Project Justi		<b>DATE:</b> Febr	uary 2012								
APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE						TURE		PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide PE 0603712S: Logistic					•					<b>'</b> )	
BA 3: Advanced Technology Develop	oment (ATD)			Development Technology (Log R&D)							
COST (\$ in Millions)	COST (\$ in Millions)			FY 2013	FY 2013				<b>-</b> >/ <b>-</b> 0 /-	Cost To	
(4	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
5: Energy Readiness Program (ERP)	2.113	3.606	3.966	-	3.966	2.265	2.305	2.344	2.384	Continuing	Continuing

### A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

Program Management Office Support (PMO) for developing program strategies and goals, preparing documentation for the program, and performing quick reaction studies, including Congressionally Mandated Studies (CMS), and analysis. Alternate Energy Development (AED) to include test and certification to support the addition of synthetic and alternative fuels to mobility fuel specifications and acquisition plan; renewable fuels studies and planning; continued study of directives related to the implementation of alternative fuels and renewable energy. Improving Class IIIB supply chain through Current Product Improvement (CPI) (e.g. the study and development of fuel additives; studies to increase sources of supply), and Infrastructure & Process Improvement (IPI) (e.g. the development of analytical tools).

217 to compliant of transcription (4 m ministro)	1 1 2011	1 1 2012	1 1 2010
Title: Energy Readiness Program (ERP) Accomplishments/Plans	2.113	3.606	3.966
FY 2011 Accomplishments: In FY 5 projects were completed and 4 project transitioned (80%) Continued PMO support in program implementation and planning (\$.329 PMO/CMS), Continued support of alternative/renewable energy solution study, test, and demonstration, and initiated study of alternative fuel feedstocks (\$0.844 AED). Continued support of Aerospace Kerosene Qualification Model Development (\$0.15 IPI). Continued support of testing and approval of additional +100 Thermal Stability Additives (\$.300 CPI). Initiated collapsible nitrile fuel storage tank study (\$.5 IPI).			
FY 2012 Plans: Continued PMO support in program implementation and planning (\$.469 PMO/CMS), Continued support of alternative/renewable energy solution study, test, and demonstration (\$.7 AED). Support of increased use of commercial specification fuel to increase sources of supply and reduce cost (\$1.5 CPI). Continued support to developed improved petroleum quality surveillance processes by testing equipment to monitor quality of biodiesel, and aviation fuel (\$1 IPI).			
FY 2013 Plans: Continued PMO support in program implementation and planning (\$.566 PMO/CMS). Continued support of alternative/ renewable energy solution study, test, and demonstration (\$1. AED). Continued support Class IIIB supply chain through product improvement to increase sources, improve quality, and reduce cost. (\$1.4 CPI). Continue to support infrastructure & process improvements (\$1 IPI).			
Accomplishments/Planned Programs Subtotals	2.113	3.606	3.966

FY 2011 FY 2012 FY 2013

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics	s Agency		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603712S: Logistics Research and	5: Energy R	Readiness Program (ERP)	
BA 3: Advanced Technology Development (ATD)	Development Technology (Log R&D)			

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N//A

## E. Performance Metrics

FY12 – Transition of 30% of completed demonstration programs.

FY13 - Transition of 30% of completed demonstration programs.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									DATE: February 2012		
0400: Research, Development, Test & Evaluation, Defense-Wide PE 0603712S: Logistics Research and					PROJECT 6 : Defense (DLIR)	Logistics Int	formation Re	esearch			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
6 : Defense Logistics Information 2.237 2.280 2.35 Research (DLIR)				-	2.357	2.396	2.438	2.480	2.522	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Defense Logistics Information Research (DLIR) program objective is to research, identify, and implement potential or existing technologies using high-risk, high-payoff tools, methods, techniques, and products. The DLIR program partners with commercial industry to perform short-term projects (STPs) in various logistics business areas which align with the Defense Logistics Agency's (DLA's) strategic vision. DLIR improves functional and business processes using the latest technologies available, which support the nation's warfighter. The technical areas of interest are:

1.) Development of Logistics Data Interoperability & Availability. Enhances the functionality and compatibility of data in a complex data environment using supply chain relationships and lifecycle management to allow flexible visibility. 2.) Next Generation Automated Electronic Commerce and Sourcing. The Next Generation Automated Electronic Commerce and Sourcing technical area of interest focuses on employing the best of breed processes, practices, and technology to enable and/or streamline electronic commerce from the customer's point-of-need to point-of-satisfaction.

DLIR is working several short term projects in the first area of interest only.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Defense Logistics Information Research (DLIR) Accomplishments/Plans	2.237	2.280	2.357
FY 2011 Accomplishments:  DLIR successfully completed a large portion of exchanging Model Based (3D) technical data on the A-10 wing replacement project. This effort relates to Technical Data Package (TDP) business process improvement and enabling Logistical Product Data to be automatically extracted from Model Based tech data being delivered by Original Equipment Manufacturers. The intent is to move away from paper-based technical data and move to computer-based models to obtain data. This will allow DLA to obtain more and better quality data.			
DLIR successfully developed a web based contractor hosted Parametric search tool that allows DLA the opportunity to enhance Parts Management.			
These tools are being pursued in order to provide Defense Logistics Information Service with more productive and efficient technologies by enhancing the use of information technology and reducing the human footprint required. Using advanced technologies to capture technical data and identifying what technical data is needed for logistics will improve the quantity and quality of logistics information. This will enable DLA Logistics Information Service to manage its resources better and provide more			

UNCLASSIFIED
Page 15 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logist	D	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603712S: Logistics Research and	6 : Defense L	ogistics Information Research
BA 3: Advanced Technology Development (ATD)	Development Technology (Log R&D)	(DLIR)	
	•	•	

B. Accomplishments/Planned Programs (\$ in Millions) services by reducing costs and improving productivity. It will also reduce costs by improving the quality and quantity of logistics information.	FY 2011	FY 2012	FY 2013
FY 2012 Plans:  DLIR plans to enhance the Model Based effort mentioned above to become more robust and scalable. Additionally, we will work to establish an enterprise wide technology and requirements roadmap so DLA may be able to take advantage of this new data paradigm.			
For the Parametric search tool, DLIR is developing a Functional Requirements Document that will capture requirements from all functional users and enable portions of the technology and application to reside behind the DLA firewall.			
FY 2013 Plans: Continue to work on automated tools and processes that allow DLA to extract data from multiple sources seamlessly			
Accomplishments/Planned Programs Subtotals	2.237	2.280	2.357

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

## E. Performance Metrics

Improved quality of logistics data.

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

UNCLASSIFIED
Page 16 of 18

R-1 Line #47

Volume 5 - 302

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Te. BA 3: Advanced Technology Devel	ent, Test & Evaluation, Defense-Wide PE 0603712S: Logistics Research and					PROJECT 7: Tent Network for Technology Implementation (TENTNET)					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	1 1 20 10   1 1 20 10				FY 2017	Cost To Complete	Total Cost
7: Tent Network for Technology Implementation (TENTNET)	-	-	-	-	-	-	-	-	-	Continuing	Continuing

## A. Mission Description and Budget Item Justification

The purpose of the TENTNET program is to significantly improve supply chain surge capabilities for military tent requirements. The program is building a community of practice amongst DLA, academia, and industry to help identify supply chain bottlenecks and structure short term R&D projects to address these bottlenecks.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: TENTNET Accomplishments/Plans	-	-	-
<b>Description:</b> E-Mall Access for TENTNET: This project will make it possible for MilSpec Tent information to be available to all EMALL users. It will expand the number of tent and shelter products that have rich technical and performance information available on DOD EMALL. The project is structured to benefit the entire tent manufacturing community by making their product more visible and, more importantly, it will improve the quality of product information available to the warfighter. Plans include completing data collection and web design for three additional MILSPEC tents, complete modifications, and develop web-based training capability.			
Extension of Supply Chain Simulation project: This represents additional tasking for an existing project. The project will simulate the capability of the tent supply chain to surge production under varying conditions and requirements. We expect this project to produce an effective decision making tool for DLA's Industrial Capabilities Programs allowing program management to evaluate the effect of placing buffer stocks at various levels within the supply chain. Anticipate completion by Sept 2011.  FY 2011 Accomplishments:			
Funds realigned to SCM.			
Accomplishments/Planned Programs Subtotals	_	_	_

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

UNCLASSIFIED
Page 17 of 18

R-1 Line #47

	UNCLASSIFIED		
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logic	stics Agency	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603712S: Logistics Research and Development Technology (Log R&D)	PROJECT 7: Tent Network for Technology Implementation (TENTNET)	
The goal of the program is to transition positive project results to inc will develop a set of key performance parameters (KPPs) at the ons improvement involved.			

PE 0603712S: Logistics Research and Development Technology (Log... Defense Logistics Agency

UNCLASSIFIED
Page 18 of 18

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603713S: Deployment and Distribution Enterprise Technology

BA 3: Advanced Technology Development (ATD)

	, ,										
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	28.761	29.717	30.678	-	30.678	30.763	31.097	31.918	32.461	Continuing	Continuing
1: Capabilities Based Logistics	4.268	3.074	-	-	-	-	-	-	-	Continuing	Continuing
2: Deployment and Distribution Velocity Management	3.599	3.270	-	-	-	-	-	-	-	Continuing	Continuing
3: Cross Domain Intuitive Planning	1.106	1.302	-	-	-	-	-	-	-	Continuing	Continuing
4: End-to-End Visibility	1.654	1.642	3.067	-	3.067	3.054	3.090	3.126	3.205	Continuing	Continuing
5: Distribution Planning and Forecasting	4.400	4.104	-	-	-	-	-	-	-	Continuing	Continuing
6: Joint Transportation Interface	8.022	6.895	-	-	-	-	-	-	-	Continuing	Continuing
7: Distribution Protection/Safety/ Security	5.712	9.430	-	-	-	-	-	-	-	Continuing	Continuing
8: Command and Control/ Optimization/Modeling and Simulation	-	-	16.687	-	16.687	16.742	16.911	17.357	17.652	Continuing	Continuing
9: Cyber	-	-	1.821	-	1.821	1.826	1.845	1.894	1.926	Continuing	Continuing
10: Global Access	-	-	9.103	-	9.103	9.141	9.251	9.541	9.678	Continuing	Continuing

#### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

## A. Mission Description and Budget Item Justification

Overseas Contingency Operations (OCO) lessons learned and daily operations indicate that current distribution and logistics processes remain outdated and are rarely capable of providing required warfighter support in an agile, efficient and economical manner. Designation of United States Transportation Command (USTRANSCOM) as the Distribution Process Owner (DPO) and shift within the Department to transform the distribution and logistics processes, demands the examination and improvement of the entire supply chain. Unpredictable and extended global distribution routes, limited visibility of sustainment requirements, force packaging limitations, lift constraints, anti-access/aerial denial, complex supply chains, as well as non-networked battlefield command and control (C2), planning, and decision support tools impede timely warfighter logistical support. The centralization of distribution and logistics intermodal research and development facilitates the development/fielding of transformational enhancements to validated distribution capability gaps. The USTRANSCOM Research, Development, Test, & Evaluation (RDT&E) program explores and matures promising technologies to enhance support to combatant commanders and other customers of Department of Defense's (DOD's) distribution and transportation systems.

UNCLASSIFIED
Page 1 of 21

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

**DATE**: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603713S: Deployment and Distribution Enterprise Technology

BA 3: Advanced Technology Development (ATD)

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	29.109	41.976	30.342		30.342
_				-	
Current President's Budget	28.761	29.717	30.678	-	30.678
Total Adjustments	-0.348	-12.259	0.336	-	0.336
<ul> <li>Congressional General Reductions</li> </ul>	-0.182	-0.081			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-12.000			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.124	-0.178			
Departmental Fiscal Guidance	-	-	0.336	-	0.336
Efficiency Initiatives SSC Reduction (OSD)	-0.042	-	-	-	-
Withhold)					

## **Change Summary Explanation**

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

FY2012 FFRDC(f) Reduction: -\$0.081 million

FY2012 Congressional Directed Reduction: -\$12.0 million

FY2012 SBIR/STTR Transfer (Reduction): -\$0.178 million

FY2013 Departmental Fiscal Guidance: \$0.336 million

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									<b>DATE</b> : Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE							PROJECT				
0400: Research, Development, Test & Evaluation, Defense-Wide PE 0603713S: Deployment and Distribution						1: Capabilities Based Logistics					
BA 3: Advanced Technology Develo	opment (ATD)			Enterprise 1	Technology						
COST (\$ in Milliana)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
1: Capabilities Based Logistics	4.268	3.074	-	-	_	-	-	-	-	Continuing	Continuing

#### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

The Department requires procedures and technologies which provide enterprise-level capabilities critical to the distribution system to improve performance of the end-to-end DOD supply chain in direct support of the full range of military operations. Ability to rapidly respond to customers' changing demands, with a reliably high level of service. These needs include: capabilities which enhance any supply or transportation mission (aeromedical, air refueling, joint logistics over-the-shore, and seabasing); analysis, tailoring and implementation of selected best enterprise-level practices from industry; and tools/procedures to optimize transportation plus supply (distribution) plans and schedules in support of an entire operation. This project addresses the required mission support to combatant commanders and other customers in the area of capability-based logistics.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Capabilities Based Logistics	4.268	3.074	-	
FY 2011 Accomplishments:  Began development of capability to link together dissimilar types of service ship-to-shore causeways. Support AT21 Cooperative Research and Development Agreement (CRADA) efforts. Commenced incremental development of a collaboration with other research labs and academia to focus on augmentation of human intelligence with advanced computer capabilities.				
FY 2012 Plans: Continue to develop ship-to-shore causeways linkage system to support deployment/sustainment of the warfighter in austere locations and joint logistics over the shore. Support AT21 Cooperative Research and Development Agreement (CRADA) efforts. Continue the incremental collaboration with other research labs and academia to focus on augmentation of human intelligence with advanced computer capabilities.				
Accomplishments/Planned Programs Subtotals	4.268	3.074	_	

# C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

N/A

UNCLASSIFIED

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Log	istics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology	PROJECT 1: Capabilities Based Logistics
E. Performance Metrics  Critical enterprise-level distribution system capabilities to improve I requirements.	DOD supply chain performance. Plus focus on rese	earch and development to address warfighting

PE 0603713S: Deployment and Distribution Enterprise Technology Defense Logistics Agency

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY  0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)  R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology  PROJECT 2: Deployment and Distribution Velocity Management							e PE 0603713S: Deployment and Distribution				city
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	1 1 20 10   1 1 20 10				FY 2017	Cost To Complete	Total Cost
2: Deployment and Distribution Velocity Management	3.599	3.270	-	-	-	-	-	-	-	Continuing	Continuing

#### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

DOD requires procedures/technologies targeted at optimizing throughput at the nodes and through the conduits of the deployment and distribution supply chains, from origin to point of use and return to include: inventory management enhancers (includes node cargo management/tracking); materiel handling innovations (including methods of reducing handling); improved physical access to nodes (includes aircraft all-weather visual systems); port throughput enhancements (includes in-port time reduction methods); and innovative delivery methods (for example, precision airlift, autonomous re-supply). This project addresses required mission support to combatant commanders and other customers of DOD's distribution and transportation systems in the area of deployment/distribution velocity management.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Deployment and Distribution Velocity Management	3.599	3.270	-
FY 2011 Accomplishments: Conducted user evaluation and commence transition activities associated with a common joint cargo handling system, Joint Recovery abd Distribution System (JRaDS) that meets or exceeds the requirements for multiple joint operational concepts. Commenced Joint Capability Demonstration (JCTD) to demonstrate the military application of a commercially available Transportation Management System (TMS) to meet shortfalls in the theater distribution process. Completed development of unique identification number for commodities in supply chain. Commenced partnership with Lincoln Labs for information technology system integration and prototype development.			
FY 2012 Plans: Complete JRaDS development effort and transition capability. Continue demonstration of the military application of a commercial TMS. Continued partnership with Lincoln Labs for information technology system integration and prototype development. Commence a fully integrated solution to plan/order/ship/track/pay for commercial services.			
Accomplishments/Planned Programs Subtotals	3.599	3.270	-

## C. Other Program Funding Summary (\$ in Millions)

N/A

PE 0603713S: Deployment and Distribution Enterprise Technology Defense Logistics Agency

UNCLASSIFIED
Page 5 of 21

R-1 Line #48

Volume 5 - 309

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	istics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology	PROJECT 2: Deployment and Distribution Velocity Management
D. Acquisition Strategy N/A		
E. Performance Metrics		
Increase force projection and sustainment velocity. Plus focus on r	research and development to address warfighting re	equirements.

PE 0603713S: *Deployment and Distribution Enterprise Technology* Defense Logistics Agency

Exhibit R-2A, RDT&E Project Just	s Agency					<b>DATE:</b> February 2012					
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide				PE 0603713S: Deployment and Distribution				3: Cross Domain Intuitive Planning			
BA 3: Advanced Technology Develo	pment (ATD)	1		Enterprise 1	Technology						
COST (¢ in Milliana)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
3: Cross Domain Intuitive Planning	1.106	1.302	-	-	-	-	-	-	-	Continuing	Continuing

#### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

Procedures/technologies which improve decision-making and collaboration within the supply chain, from the planning stage to real-time execution and retrograde operations, without need for highly specialized operators of the tools. Projects in this area address following areas: decision support tools for any echelon of the supply chain or decision-maker, distribution process simulations and models for analysis and training, distribution demand forecasting/execution monitoring tools, online training, automated decision-maker support (e.g., queuing, alerting, recommended courses of action), automated status monitoring with information fusion and drilldown capability, and resilient C2 infrastructure capabilities. This project will provide required mission support to combatant commanders and other distribution/ transportation customers in the area of collaborative planning/execution/information sharing/decision support tools.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Cross Domain Intuitive Planning	1.106	1.302	-	
FY 2011 Accomplishments: Completed efforts to enhance Fusion Center Operations through work flow engineering. Completed development/assessment to link USMC tactical maintenance status/report information to strategic systems. Began to develop capability to predict maintenance and logistics issues/demand forecasting to optimize supply chain. Commenced efforts to translate commercial gaming into militarily useful capabilities.				
FY 2012 Plans: Complete development of capability to predict maintenance and logistics issues/demand forecasting to optimize supply chain. Begin to develop a planner's capability to fine-tune the pairing of air movement requirements and resources to maximize aircraft utilization efficiency.				
Accomplishments/Planned Programs Subtotals	1.106	1.302	-	

## C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logis	stics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	PE 0603713S: Deployment and Distribution Enterprise Technology	3: Cross Domain Intuitive Planning
E. Performance Metrics		
Improve decision-making and collaboration within the supply chain	and focus on research and development to addres	s warfighting requirements.

PE 0603713S: Deployment and Distribution Enterprise Technology Defense Logistics Agency

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency								<b>DATE:</b> February 2012				
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT				
0400: Research, Development, Test & Evaluation, Defense-Wide			PE 0603713S: Deployment and Distribution				4: End-to-End Visibility					
BA 3: Advanced Technology Develo	pment (ATD)	)		Enterprise 1	Technology							
COST (¢ in Millions)			FY 2013	FY 2013	FY 2013					Cost To		
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost	
4: End-to-End Visibility	1.654	1.642	3.067	-	3.067	3.054	3.090	3.126	3.205	Continuing	Continuing	

#### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

Enhanced end-to-end visibility of all aspects of the projection and sustainment is required to improve the effectiveness/efficiency of deployment/distribution/ redeployment operations to ensure warfighter support and confidence. This requires investigation into next generation Automated Information Technology (AIT)/Total Asset Visibility (TAV) technologies and/or container security to improve end-to-end distribution visibility and enhance planning/ execution and transform sustainment operations. Includes the ability to determine immediate, reliable, and accurate shipment status through system access or event management. Develop an overarching process and system architecture which will automate and integrate existing and innovative new programs across the supply chain to provide complete In Transit Visibility (ITV) data, to include visibility of non-DOD cargo during humanitarian/disaster relief operations. The ability of USTRANSCOM to supply transportation support for homeland defense and/or disaster relief depends on effective ways to link with other governmental and civilian agencies. Also need to explore the many barriers across the Joint Deployment and Distribution Enterprise (JDDE), to include non-DOD government entities, coalition partners, non-government organizations, and commercial industry, which can create confusion/conflict or detract from the optimization of the JDDE.

	2011	1 1 2012	1 1 2010
Title: End-to-End Visibility	1.654	1.642	3.067
FY 2011 Accomplishments:  Completed next generation Portable Deployment Kit (PDK) effort designed to provide end-to-end visibility in austere/mobile environments. Completed development with Army/Logistics Info Agency of a mobile AIT capability in a military environment in all environments. Started effort to provide capability to read Radio Frequency Identification (RFID) tags from standoff distances thus increasing theater visibility coverage without increasing infrastructure. Started and completed effort to gain visibility of non-DOD goods during disaster/humanitarian relief operations.			
FY 2012 Plans:  Continue effort to provide capability to read RFID tags from standoff distances thus increasing theater visibility coverage without increasing infrastructure. Begin JCTD to continue development and provide a mobile AIT capability in a military environment and austere locations. Start JCTD to expand on gains made in FY11 on gianing visibility of non-DOD goods during disaster/ humanitarian relief operations. Start JCTD with Army/Logistics Info Agency to expand development of a mobile AIT capability in a military environment in all environments.			
FY 2013 Plans:			

FY 2011

FY 2012

FY 2013

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603713S: Deployment and Distribution	4: End-to-E	nd Visibility
BA 3: Advanced Technology Development (ATD)	Enterprise Technology		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Complete effort to provide capability to read RFID tags from standoff distances thus increasing theater visibility coverage without			
increasing infrastructure.			
Complete JCTD to provide a mobile AIT capability in a military environment and austere locations.			
Accomplishments/Planned Programs Subtotals	1.654	1.642	3.067

# C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

N/A

## E. Performance Metrics

Provide end-to-end visibility of all aspects of the projection and sustainment of forces and equipment. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Just	s Agency	Agency				DATE: February 2012					
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)							PROJECT 5: Distribution Planning and Forecasting				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
5: Distribution Planning and Forecasting	4.400	4.104	-	-	-	-	-	-	-	Continuing	Continuing

### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

There is a lack of collaborative distribution planning, based on an understanding of aggregated customer requirements, for optimizing the end-to-end distribution process. Planning, forecasting and collaboration are insufficiently advanced to fully synchronize people, processes and assets to execute planned operations. Automated tools should be able to dynamically analyze/predict demand and provide input to advanced distribution planning systems. Project investigates the need for flexible end-to-end enhanced modeling and simulation and collaborative decision support tools.

Title: Distribution Planning and Forecasting	4.400	4.104	-
FY 2011 Accomplishments:  Commenced process to determine parts failure/usage patterns and mission type/environment to initiate sustainment support actions. Commenced effort to build a highly configurable, agile Distribution Process Nodal Model capable of expressing and analyzing complex and detailed distribution processes at nodes. Commenced integration of projection and sustainment planning and decision support tools into a federate suite. Continued Modeling and Simulation (M&S) innovation. Commence leveraging existing collaboration & situational awareness technologies to provide dynamic planning and course of action development/ execution capabilities.			
FY 2012 Plans: Continue integration of projection and sustainment planning and decision support tools into a federate suite. Complete effort to build a highly configurable, agile Distribution Process Nodal Model capable of expressing and analyzing complex and detailed distribution processes at nodes. Continue process to determine parts failure/usage patterns and mission type/environment to initiate sustainment support actions. Continued M&S innovation. Continue to leverage existing collaboration & situational awareness technologies to provide dynamic planning and course of action development/execution capabilities. Commence Joint Flow Analysis System for Transportation (JFAST) modernization to provide full-spectrum transportation adaptive planning and analysis in a collaborative, web-accessible, service oriented environment. Continue partnership with Lincoln Labs for information technology system integration and prototype development.			
Accomplishments/Planned Programs Subtotals	4.400	4.104	-

UNCLASSIFIED
Page 11 of 21

FY 2011

FY 2012

FY 2013

	UNCLASSIFIED	
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logis	stics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology	PROJECT 5: Distribution Planning and Forecasting
C. Other Program Funding Summary (\$ in Millions)		
N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics		
Planning based on an understanding of customer requirements for requirements.	optimizing the distribution process. Plus focus on r	esearch and development to address wartighting

PE 0603713S: *Deployment and Distribution Enterprise Technology* Defense Logistics Agency

UNCLASSIFIED
Page 12 of 21

R-1 Line #48

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic				s Agency					DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)			111111111111111111111111111111111111111				PROJECT 6: Joint Transportation Interface				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
6: Joint Transportation Interface	8.022	6.895	-	-	-	-	-	-	_	Continuing	Continuing

#### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

Synchronizing strategic/theater delivery capabilities to meet increasingly dynamic customer needs. Transportation information exchange across the DOD is inhibited by the disparity of systems, differing data standards, and insufficient interfaces. Queries and retrieval of status and shipment information cannot be executed due to lack of connectivity between the various components of the supply chain. The ability to maintain situational awareness of movements at macro/micro (drill down) levels, with associated force and sustainment cargo on board; to track force packages progress, and rapidly determine the impact of any delays or changes to sailing progress and arrival at port of debarkation; and to conduct "what -if" impact assessment of possible changes to delivery asset's course, speed or departure/arrival information as it relates to force or force package delivery/impact of any change on the closure of force packages in theater is required. The ability of USTRANSCOM to supply transportation support for homeland defense and/or disaster relief depends on effective ways to link with other governmental and civilian agencies. Also need to explore the many barriers across the Joint Deployment and Distribution Enterprise (JDDE), to include non-DOD government entities, coalition partners, non-government organizations, and commercial industry, which can create confusion/conflict or detract from the optimization of the JDDE.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Joint Transportation Interface	8.022	6.895	-	
FY 2011 Accomplishments:  Completed Coalition Mobility System (CMS) JCTD transition efforts. Completed multi-year development of an automated data quality analysis capability linked to the Enterprise Data Warehouse (EDW) that will enable end-to-end analysis of data quality and system performance. Continued development/commence assessment of cognitive-based visualization, alerting and optimization engine effort. Continued demonstration of semantic solutions. Commenced transition of cross domain suite of tools for joint warfighter with text chat language, translation, whiteboard, audio and Extensible Markup Language (XML) guard functionality and commence transition activities. Commenced development of tool that will increase Aerial Refueling asset and aircrew usage efficiency by increasing visibility of requirements, allocations, and asset and aircrew disposition enabling more optimal and synchronized management. Developed data quality and standardization for decision support utilizing semantic technology. Developed cyber security methods. Commenced efforts to translate social networking and crowd sourcing technologies into militarily useful capabilities. Start effort to tests IT systems in a lab environment prior to connecting systems to live networks.				
FY 2012 Plans: Continue development of tool that will increase Aerial Refueling asset and aircrew usage efficiency by increasing visibility of requirements, allocations, assets, and aircrew disposition enabling more optimal and synchronized management. Complete				

UNCLASSIFIED
Page 13 of 21

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logisti		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603713S: Deployment and Distribution	6: Joint Trai	nsportation Interface
BA 3: Advanced Technology Development (ATD)	Enterprise Technology		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
development/commence assessment of cognitive-based visualization, alerting and optimization engine effort. Complete semantic technology solution. Continue data quality and standardization for decision support utilizing semantic technology. Continue efforts to translate social networking and crowd sourcing technologies into militarily useful capabilities. Commence capability to make Single Mobility System (SMS) data available via web services vice SMS application. Start effort to integrate basic web mapping capabilities with high end analytic services. Continue effort to tests IT systems in a lab environment prior to connecting systems to live networks.			
Accomplishments/Planned Programs Subtotals	8.022	6.895	-

## C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

N/A

# E. Performance Metrics

Synchronizing, through information exchange, strategic/theater delivery capabilities to meet warfighter needs. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)				R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology				PROJECT 7: Distribution Protection/Safety/Security				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
7: Distribution Protection/Safety/ Security	5.712	9.430	-	-	-	-	-	-	-	Continuing	Continuing	

### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

The Theater Commander has not always been able to provide the appropriate security in a timely manner during deployment. In some cases there are insufficient security assets to oversee convoy security in-country; therefore, all movement requirements are competing for the same limited resources. Additionally need to explore new, portable methods of detecting hazardous/asymmetric materials in very small quantities to support safe logistics operations. Also explore technologies to enhance the capability to deliver personnel/materiel to anti-access/austere airfields and seaports.

Title: Distribution Protection/Safety/Security	5.712	9.430	-
FY 2011 Accomplishments:  Continued to develop/mature technologies to improve the accuracy and the methods of airdropped supplies and incrementally field military useful technologies. Continued to develop manned/unmanned systems for point of need delivery. Develop a low cost, one time use airdrop system that will provide assistance in the form of food and water directly to populated areas within initial days of a humanitarian disaster. Commenced joint precision airdrop from helicopter sling-load effort. Partnered to develop manned and unmanned technologies that delivery cargo/logistics/sustainment to the point of need (Autonomous Technologies for Unmanned Air Systems (ATUAS) JCTD and High Speed Container Delivery System (HSCDS) JCTD). Commenced effort to decontaminate aircraft exposed to chemical warfare agents. Commence anti-piracy automated information system to increase visibility/tracking of vessels as sea. Continued investigation of the development of hybrid technologies in support of logistics.			
FY 2012 Plans: Complete joint precision airdrop from helicopter sling-load. Continue improving the accuracy and methods of joint precision airdrop. Continue to develop manned/unmanned systems for point of need delivery. Continue effort to decontaminate exposed to chemical warfare agents. Tests HSCDS JCTD capabilities. Continue to develop a low cost, one time use airdrop system that will provide assistance in the form of food and water directly to populated areas within initial days of a humanitarian disaster. Continue to develop manned and unmanned technologies that delivery cargo/logistics/sustainment to the point of need (ATUAS) JCTD. Complete anti-piracy automated information system to increase visibility/tracking of vessels as sea.			
Accomplishments/Planned Programs Subtotals	5.712	9.430	-

UNCLASSIFIED
Page 15 of 21

FY 2011

FY 2012

FY 2013

	UNCLASSIFIED	
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logis	stics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology	PROJECT 7: Distribution Protection/Safety/Security
C. Other Program Funding Summary (\$ in Millions)  N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics  Providing the appropriate security in a timely manner during deploys requirements.	ment and distribution operations. Plus focus on res	search and development to address warfighting

PE 0603713S: *Deployment and Distribution Enterprise Technology* Defense Logistics Agency

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency								DATE: Febr	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)					IOMENCLA 3S: Deploym Technology		ribution	PROJECT 8: Command and Control/Optimization/ Modeling and Simulation			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
8: Command and Control/ Optimization/Modeling and Simulation	-	-	16.687	-	16.687	16.742	16.911	17.357	17.652	Continuing	Continuing

#### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

Capabilities which improve deployment, distribution and supply chain decision-making/collaboration (planning stage to real-time execution and retrograde operations) without need for highly specialized operators. Projects in this area address the following: decision support tools, distribution process simulations/analytics, distribution demand forecasting/execution monitoring, training, automated decision-maker support (e.g., queuing, alerting, courses of action), automated status monitoring with information fusion and drilldown capability, and resilient C2 infrastructure capabilities. Current planning, forecasting and collaboration capabilities do not permit full synchronization of people, processes and assets to execute planned operations. Automated tools must be able to dynamically analyze/predict demand and provide input to advanced distribution planning systems. Transportation information exchange across the DOD is inhibited by disparate systems, multiple data standards and insufficient interfaces. The ability to maintain situational awareness of movements at macro/micro (drill down) levels, with associated force and sustainment cargo on board; to track force packages progress, and rapidly determine the impact of any delays or changes to sailing progress and arrival at port of debarkation; and to conduct "what -if" impact assessment of possible changes to delivery asset's course, speed or departure/arrival information as it relates to force or force package delivery/impact of any change on the closure of force packages in theater is required. This project addresses the required mission support to combatant commanders and other customers in the area of C2, Optimization, and Modeling and Simulations.

B. Accomplishments/Planned Programs (\$ in Millions)	FY	Y 2011	FY 2012	FY 2013
Title: Command and Control/Optimization/Modeling and Simulation		-	-	16.687
FY 2013 Plans: Continue process to determine parts failure/usage patterns and mission type/environment to initiate sustainment so Continue development and spiral transition of collaboration & situational awareness technologies to provide dynar course of action development/execution capabilities. Commence Joint Flow Analysis System for Transportation (JFAST) modernization to provide full-spectrum transportation and analysis in a collaborative, web-accessible, service oriented environment. Continue partnership with for information technology system integration and prototype development. Continue capability to make Single Mo (SMS) data available via web services vice SMS application. Continue effort to integrate basic web mapping capa	ortation adaptive a Lincoln Labs bility System			
high end analytic services. Continue efforts to translate social networking and crowd sourcing technologies into m	nilitarily useful			

UNCLASSIFIED
Page 17 of 21

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	<b>DATE:</b> February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603713S: Deployment and Distribution	8: Comman	d and Control/Optimization/
BA 3: Advanced Technology Development (ATD)	Enterprise Technology	Modeling ar	nd Simulation

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
capabilities. Continue to develop a planner's capability to fine-tune the pairing of air movement requirements and resources to maximize aircraft utilization efficiency.			
Accomplishments/Planned Programs Subtotals	-	-	16.687

## C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

N/A

### **E. Performance Metrics**

Project performance metrics are specific to each effort and include measures identified in the metric project plans. Project completions and success are monitored against schedules and deliverables stated in the proposals and statements of work. >80% transition rate of proven technologies to increase force projection and sustainment velocity and enhance effectiveness and efficiency of DOD logistics/supply chain operations.

PE 0603713S: Deployment and Distribution Enterprise Technology Defense Logistics Agency

UNCLASSIFIED
Page 18 of 21

R-1 Line #48

Volume 5 - 322

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency										uary 2012	
APPROPRIATION/BUDGET ACTIV	ROPRIATION/BUDGET ACTIVITY					TURE	PROJECT				
0400: Research, Development, Test & Evaluation, Defense-Wide					3S: Deploym	ent and Dist	ribution	9: Cyber			
BA 3: Advanced Technology Develo	pment (ATD)	)		Enterprise 7	Technology						
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)  FY 2011  FY 2012  Base				oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
9: Cyber	-	-	1.821	-	1.821	1.826	1.845	1.894	1.926	Continuing	Continuing

#### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

USTRANSCOM requires mission assurance in a persuasive/dynamic cyber environment. Projects in this area address the following: procedures/technologies which improve cyber surveillance and control of networks across multiple domains; ability to continue critical network operations in contested unclassified and classified network environments; ability to differentiate between valid and unauthorized users; determine and quantify the trustworthiness of hardware/software systems; rapidly analyze & correlate data regarding malicious activities; select/evoke real-time defense actuators; automated reasoning capabilities that address data quality issues that are currently manual, difficult, and time consuming to resolve; and ability to rapidly return to a known/safe operating state.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Cyber	-	-	1.821
FY 2013 Plans:			
Continue Lincoln Labs partnership to explore cyber security enhancements.			
Accomplishments/Planned Programs Subtotals	-	-	1.821

## C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

#### E. Performance Metrics

Project performance metrics are specific to each effort and include measures identified in the metric project plans. Project completions and success are monitored against schedules and deliverables stated in the proposals and statements of work. >80% transition rate of proven technologies to increase force projection and sustainment velocity and enhance effectiveness and efficiency of DOD logistics/supply chain operations.

UNCLASSIFIED
Page 19 of 21

Exhibit R-2A, RDT&E Project Just	Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency										DATE: February 2012			
APPROPRIATION/BUDGET ACTIV	R-1 ITEM N	IOMENCLAT	TURE		PROJECT									
0400: Research, Development, Test	PE 060371	3713S: Deployment and Distribution 10: Global Access												
BA 3: Advanced Technology Develop	pment (ATD <sub>)</sub>	)		Enterprise Technology										
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To				
COST (\$ III WIIIIOTIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost			
10: Global Access	-	-	9.103	-	9.103	9.141	9.251	9.541	9.678	Continuing	Continuing			

#### Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

### A. Mission Description and Budget Item Justification

DOD requires procedures/technologies targeted at optimizing throughput at the nodes and through the conduits of the deployment and distribution supply chains, from origin to point of use and return to include: inventory/cargo management; materiel handling innovations; improved physical node access (includes aircraft all-weather visual systems); port throughput enhancements; innovative delivery methods (e.g., precision airlift, autonomous re-supply); and cargo/container security. This project addresses required mission support to combatant commanders and other customers of DOD's distribution and transportation systems in the area of deployment/ distribution velocity management, manned/unmanned systems to the point of effect, and increased global reach in austere/anti-access environments.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Global Access	-	-	9.103
FY 2013 Plans: Complete current efforts improving the accuracy and methods of joint precision airdrop. Complete effort to investigate effects of chemical agents on aircraft materials and structures. Complete/transition High Speed Container Delivery System (HSCDS) capabilities. Complete development of manned and unmanned technologies that delivery cargo/logistics/sustainment to the point of need (Autonomous Technologies for Unmanned Air Systems (ATUAS)) JCTD. Complete ship-to-shore causeways linkage system to support deployment/sustainment of the warfighter in austere locations and joint logistics over the shore. USTRANSCOM supports development of airship/hybrid airship viability through studies and limited technical or operational demonstrations.			
Accomplishments/Planned Programs Subtotals	-	-	9.103

# C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Log	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	PE 0603713S: Deployment and Distribution Enterprise Technology	10: Global Access
E. Performance Metrics		
Project performance metrics are specific to each effort and include against schedules and deliverables stated in the proposals and sta sustainment velocity and enhance effectiveness and efficiency of D	tements of work. >80% transition rate of proven ted	

PE 0603713S: Deployment and Distribution Enterprise Technology Defense Logistics Agency



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY R-1

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 3: Advanced Technology Development (ATD)

#### R-1 ITEM NOMENCLATURE

PE 0603720S: Microelectronics Technology Development and Support (DMEA)

**DATE:** February 2012

COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ III WIIIIOTIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
Total Program Element	26.484	59.895	72.234	-	72.234	83.170	83.924	80.242	82.021	Continuing	Continuing
1: Technology Development	26.484	26.291	27.415	-	27.415	27.844	28.171	28.463	29.116	Continuing	Continuing
2: 90nm Next Generation Foundry	-	-	10.000	-	10.000	20.000	20.000	15.000	15.327	Continuing	Continuing
3: Trusted Foundry	-	33.604	34.819	-	34.819	35.326	35.753	36.779	37.578	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Defense Microelectronics Activity (DMEA) provides a vital service as the joint Department of Defense (DoD) Center for microelectronics acquisition, adaptive operations and support - advancing future microelectronics research, development, technologies and applications to achieve the Department's strategic and national security objectives. An important part of the DMEA mission is to research current and emerging microelectronics issues with a focus on warfighters' needs. To this end, DMEA is integrally involved in the development of capabilities and resultant products based on technologies whose feasibility has been demonstrated but which have yet to be applied to real-world and military applications.

DMEA resolves microelectronics technology issues in weapon systems by quickly developing and executing appropriate solutions to not only keep a system operational but elevate it to the next level of sophistication or to meet new threats. DMEA provides critical microelectronics design and fabrication skills to ensure that the DoD is provided with systems capable of ensuring technological superiority over potential adversaries. DMEA provides critical, quick turn solutions for DoD, intelligence, special operations, cyber and combat missions as well as microelectronic components that are unobtainable in the commercial market. DMEA's knowledge of varying military requirements across a broad and diverse range of combatant environments and missions—along with its unique technical perspective—allows it to develop, manage and implement novel microelectronic solutions to enhance mission capability. DMEA can then use these cutting-edge technology capabilities and products in the solutions it develops for its military clientele. After many years of performing analogous efforts, the technical experience, mission knowledge, and practical judgment that are gained from preceding efforts are often incorporated into subsequent technology maturation projects.

Microelectronics technology is a vital and essential technology for all operations within the DoD. DMEA operates the DoD's only microelectronic foundry—a "flexible foundry"—with a unique business model that incorporates industry partnership to serve the DoD where industry, alone, has not. A microelectronic foundry is the factory that takes raw silicon and produces an integrated circuit or "chip." The fabrication of an integrated circuit consists of multiple processing steps to form and connect many transistors and other circuit components to form the desired function. Each type of chip requires a different "recipe" (process) in the foundry. Semiconductor companies spend great amounts of time and resources developing proprietary recipes. They abandon these and develop new recipes as new generations of smaller and more powerful microelectronic components are needed.

The DMEA mission focuses on providing DoD systems with microelectronics components that are no longer provided by industry—called "legacy" components. Most domestic semiconductor foundries will discontinue low-volume, high-mix integrated circuits in as little as two years because, by then, there is little or no profit margin left; but the DoD requires an assured supply chain for its systems for 20 years or more. Working alongside industry, DMEA has created a model partnership that provides this capability for the DoD. DMEA's unique flexible foundry supports the DoD with a wide variety of integrated circuits using various processes that were

UNCLASSIFIED
Page 1 of 9

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603720S: Microelectronics Technology Development and Support (DMEA)

**DATE:** February 2012

BA 3: Advanced Technology Development (ATD)

developed by commercial manufacturers and which are now assured to remain in one location for as long as they are needed. To obtain these processes, DMEA works closely with U.S. semiconductor industry partners to acquire process licenses. These Government-held licenses allow for the transfer to DMEA of industry-developed intellectual property (IP) and the related processes for DoD needs. These licenses ensure no commercial conflicts by including industry's first right of refusal. DMEA always looks to industry first to see if it can provide the required components. If not, only then does DMEA provide the necessary prototypes and low volume production. A critical element required to make this business model work effectively is protection of the industry partners' valuable IP and processes. DMEA is Government owned and operated, providing the structure and confidence that an industry partner's IP is protected from potential competitors. This strategic and cooperative industry partnership approach allows DMEA to use industry-developed IP and processes by acquiring, installing, and applying them toward meeting the immediate and long-term needs of the DoD. This unique capability is essential to all major weapon systems, combat operations, and support needs. As such, DMEA serves the DoD, other US Agencies, industry and Allied nations.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	27.157	91.132	81.651	-	81.651
Current President's Budget	26.484	59.895	72.234	-	72.234
Total Adjustments	-0.673	-31.237	-9.417	-	-9.417
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-30.000			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.279	-1.075			
FFRDC Reduction	-0.013	-0.162	-	-	-
<ul> <li>Economic Assumptions Reduction</li> </ul>	-0.137	-	-	-	-
Civilian Pay Reduction	-0.229	-	-0.322	-	-0.322
<ul> <li>Efficiency Initiatives SSC Reduction (OSD Withhold)</li> </ul>	-0.015	-	-	-	-
<ul> <li>EA-08 Non-Pay, Non-Fuel Purchase Inflation</li> </ul>	-	-	0.905	-	0.905
ASD (R&E) Directed S&T Reduction	-	-	-10.000	-	-10.000

## **Change Summary Explanation**

FY 2013 Enhancements 90nm Next Generation Foundry Program: \$20.000M

The increase to the FY 2013-2017 Research, Development, Test and Evaluation (RDT&E) budget for PE0603720S is due to a newly-approved Program issue, the 90nm Next Generation Foundry Program, which is fully funded with offsets from ASD(R&E) programs.

PE 0603720S: *Microelectronics Technology Development and Suppor...*Defense Logistics Agency

Page 2 of 9

R-1 Line #50

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense L	ogistics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603720S: Microelectronics Techr	nology Development and Support (DMEA)
FY2012 FFRDC(f) Reduction: -\$0.162 million	,	
FY2012 SBIR/STTR Transfer (Reduction): -\$1.075 million		
FY2013 Departmental Fiscal Guidance: \$0.583 million		
FY2013 ASD (R&E) S&T Directed Reduction (Taken from 90r	nm Next Generation Foundry Program): -\$	10.000 million

PE 0603720S: *Microelectronics Technology Development and Suppor...*Defense Logistics Agency

UNCLASSIFIED
Page 3 of 9

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									DATE: Febr	uary 2012		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT				
	0400: Research, Development, Test	esearch, Development, Test & Evaluation, Defense-Wide PE 0603720S: Microelectronics Technology 1: Technology Development						PE 0603720S: Microelectronics Technology			nent	
	BA 3: Advanced Technology Develo	pment (ATD)		Development and Support (DMEA)								
	COST (¢ in Milliana)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost	
	1: Technology Development	26.484	26.291	27.415	-	27.415	27.844	28.171	28.463	29.116	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Microelectronics Technology Development and Support funds provide the resources to design, develop, and demonstrate microelectronics concepts, technologies and applications to extend the life of weapon systems and solve operational problems (e.g., reliability, maintainability, performance, and assured supply). This includes researching current and emerging microelectronics issues with a focus on warfighters' needs and providing for the development and long-term support structure necessary to ensure rapid prototyping, insertion, and support of microelectronics technologies into fielded systems, particularly as the technologies advance. DMEA maintains critical microelectronics design and fabrication skills to ensure that the DoD is provided with systems capable of ensuring technological superiority over potential adversaries. These funds provide an in-house technical staff of skilled and experienced microelectronics personnel working in state-of-the-practice facilities providing technical and application engineering support for the implementation of advanced microelectronics research technologies from reverse engineering through design, fabrication, test, assembly, integration and installation. DMEA provides an in-house capability to support these strategically important microelectronics technologies within the DoD with distinctive resources to meet DoD's requirements across the entire spectrum of technology development, acquisition, and longterm support. This includes producing components to meet the DoD's requirements for ultra-low volume, an extended availability timeframe, and a trusted, assured, and secure supply of microelectronics. DMEA's capabilities make it a key resource in the intelligent and rapid application of advanced technologies to add needed performance enhancements in response to the newest asymmetric threats and to modernize aging weapon systems. DMEA will comply with DoD Strategic Objective 3.5-2D for any demonstration programs at DMEA.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Technology Development Accomplishments/Plans	26.484	26.291	27.415	
FY 2011 Accomplishments:  DMEA designed, developed, and demonstrated microelectronics concepts, advanced technologies, and applications to solve operational problems. DMEA applied advanced technologies to add performance enhancements in response to the newest asymmetric threats and to modernize aging weapon systems. DMEA accredited trusted sources and the ARMS foundry provided a contingency means to ensure DoD can acquire critical trusted integrated circuits in a variety of process technologies and geometry node-sizes.				
FY 2012 Plans:  DMEA will continue to design, develop, and demonstrate microelectronics concepts, advanced technologies, and applications to solve operational problems. DMEA will apply advanced technologies to add performance enhancements in response to the newest asymmetric threats and to modernize aging weapon systems.  FY 2013 Plans:				

UNCLASSIFIED PE 0603720S: Microelectronics Technology Development and Suppor...

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics	hibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency								
0400: Research, Development, Test & Evaluation, Defense-Wide	R-1 ITEM NOMENCLATURE PE 0603720S: Microelectronics Technology Development and Support (DMEA)	PROJECT 1: Technolo	gy Development						

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
DMEA will continue to design, develop, and demonstrate microelectronics concepts, advanced technologies, and applications to solve operational problems. DMEA will apply advanced technologies to add performance enhancements in response to the newest asymmetric threats and to modernize aging weapon systems.			
Accomplishments/Planned Programs Subtotals	26.484	26.291	27.415

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

# **E. Performance Metrics**

N/A

Exhibit R-2A, RDT&E Project Just	xhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									DATE: February 2012			
	APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide						R-1 ITEM NOMENCLATURE PROJECT						
BA 3: Advanced Technology Develo	viae	PE 0603720S: Microelectronics Technology Development and Support (DMEA)				2: 90nm Next Generation Foundry							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
2: 90nm Next Generation Foundry	_	-	10.000	-	10.000	20.000	20.000	15.000	15.327	Continuing	Continuing		

### A. Mission Description and Budget Item Justification

The Department of Defense (DoD) requires the ability to develop semiconductor technologies down to 90 nanometer (nm) node sizes with the Defense Microelectronics Activity (DMEA) low-volume production-capable foundry capability. This is a critical, time-sensitive requirement to support the DoD's strategy to provide an assured (always available) and trusted source of integrated circuits for critical weapon systems, sensors, and specialized electronic equipment. The capability enhancement to DMEA's existing microelectronics foundry will cover a multitude of feature sizes down to 90nm and will be the only assured supply in the world to satisfy critical DOD and US Government program issues for the foreseeable future.

Market demand for more advanced technology drives the need to make microelectronics with more capabilities in smaller sizes. The way this size is measured is called "node size". In addition to utilizing various processes, industry constantly develops newer processes with ever smaller node sizes. The pace of this progress follows what is known as "Moore's Law": the transistor density of integrated circuits doubles every two years.

Most domestic semiconductor foundries will discontinue low-volume, high-mix integrated circuits in as little as two years because there is little or no profit margin left. 90nm is a key node size for defense applications but industry forecasts show that the commercial industry will substantially decrease the production of 90nm chips by 2014, thereby making acquisition of this essential technology extremely difficult or impossible in the future. To keep 90nm technology available, DMEA must immediately begin to extend its current capability to 90nm to allow sufficient time to buy equipment, get the processes in place, transfer IP, etc., and ensure the DoD's ability to use this technology by then. This will also allow DMEA to purchase used equipment at extremely low prices from commercial sources that are closing or have already closed their 90nm process lines. Without enhancing the existing foundry at DMEA to 90nm, in four years the DoD will be without a trusted and assured source for repeatable procurement of the state-of-the-practice integrated circuits that comprise a vast majority of the U.S. arsenal's microelectronics. This, in turn, will severely impact real-world operations. In the meantime, if a Trusted Supplier is available to make a requested component, DMEA will utilize that source of supply first. This enhancement of DMEA capabilities is absolutely necessary to provide assured and secure microelectronics design and fabrication for trusted microelectronics systems and semiconductor components to ensure DOD technological superiority over potential adversaries.

The current DMEA foundry capability will accommodate node sizes down to 180nm. Due to physical limitations in the current DMEA lithography and fabrication equipment, the state-of-the-practice processes down to 90nm that need to be incorporated require an expansion in equipment and facilities to handle the smaller node sizes as well as the larger silicon wafers. This Project will fund expenses associated with planning and implementing the 90nm capability. Initial costs will include design and trade studies, costs associated with implementing force protection standards, floor plan layout and planning activities. Further, it will fund the outfitting of the selected property with the required force protection standards, infrastructure, tenant improvements, furniture, and equipment.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: DMEA 90nm Next Generation Foundry	-	-	10.000

PE 0603720S: *Microelectronics Technology Development and Suppor...*Defense Logistics Agency

Page 6 of 9

R-1 Line #50

Volume 5 - 332

APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603720S: Microelectronics Technology Development and Support (DMEA)	PROJEC 2: 90nm	•	tion Foundry	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
FY 2011 Accomplishments: N / A.					
<b>FY 2012 Plans:</b> N / A.					
FY 2013 Plans:					

**Accomplishments/Planned Programs Subtotals** 

DMEA will install the acquired equipment, acquire additional equipment and begin its installation, acquire process licenses for

process technologies specific to the new facility, begin to process test wafer and initialization lots.

# C. Other Program Funding Summary (\$ in Millions)

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency

N/A

## D. Acquisition Strategy

N/A

## E. Performance Metrics

N/A

10.000

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency  DATE: February 2012													
APPROPRIATION/BUDGET ACTIV	ITY			R-1 ITEM N	IOMENCLAT	ΓURE		PROJECT					
0400: Research, Development, Test	PE 0603720	OS: Microele	ctronics Teci	hnology	3: Trusted F	Foundry							
BA 3: Advanced Technology Develo	BA 3: Advanced Technology Development (ATD)					Development and Support (DMEA)							
COST (¢ in Millions)			FY 2013	FY 2013	FY 2013					Cost To			
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost		
3: Trusted Foundry	-	33.604	34.819	-	34.819	35.326	35.753	36.779	37.578	Continuing	Continuing		

#### A. Mission Description and Budget Item Justification

The Department of Defense (DoD) and National Security Agency (NSA) require uninterruptible access to state-of-the-art design and manufacturing processes to produce custom integrated circuits designed specifically for military purposes. Under DODI 5200.39, Application Specific Integrated Circuits (ASICs) in critical/essential systems need to be procured from trusted sources in order to avoid counterfeit, tampered, or sabotaged parts. Worldwide competition from foreign, state-subsidized manufacturing facilities (foundries) is making fabless semiconductor companies the norm in the U.S. Sophisticated off-shore design and manufacturing facilities with economic incentives of state subsidies and engineering labor rates vastly less than engineering rates in the U.S. have resulted in outsourcing of electronics components and integrated circuits. These trends threaten the integrity and worldwide leadership of the U.S. semiconductor industry by eliminating many domestic on-shore suppliers and reducing access to trusted fabrication sources for advanced technology. These trends are of acute concern to the defense and intelligence community. Secure communications and cryptographic applications depend heavily upon high performance semiconductors where a generation of improvement can translate into a significant force multiplier and capability advantage. Important defense technology investments and demonstrations carry size, weight, power, and performance goals that can only be met through the use of the most sophisticated semiconductors.

The Trusted Foundry program provides DoD and NSA with trusted state-of-the-art microelectronics design and manufacturing capabilities necessary to meet the performance and delivery needs of their customers. The program will also provide the Services with a competitive cadre of trusted suppliers that will meet the needs of their mission critical/essential systems for trusted integrated circuit components. NSA, in their role as the Trusted Access Program Office, has successfully looked to commercial sources to satisfy their requirements. Access to trusted suppliers is imperative to ongoing and future DoD/NSA systems, and most centrally, Trusted Foundry access is absolutely necessary to meet secure communication and cryptographic needs for state-of-the-art semiconductor technologies.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Trusted Foundry	-	33.604	34.819
FY 2011 Accomplishments: The Trusted Foundry project was not assigned to DMEA in FY 2011. Under OSD PE 0605140D8Z, the program performed the following: Established a cadre of trusted suppliers for the critical trusted components and services needed for appropriate defense systems. Enhanced Trusted Foundry products to include key specialty processes requested by DoD programs, such as high voltage, extreme environments, and embedded non-volatile memory. Enhanced trusted design activities to encompass new processing capabilities. The program was funded in FY 2011 at \$34.512M.			
FY 2012 Plans:  Begin to develop a capability for the reverse engineering of application-specific integrated circuits (ASICs) and continuously refine the utilized methods for efficiency, accuracy, and applicability to multiple processes. Enhance the cadre of trusted suppliers for the critical trusted components and services needed for appropriate defense systems. Enhance Trusted Foundry products to			

UNCLASSIFIED
Page 8 of 9

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	xhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT								
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603720S: Microelectronics Technology	3: Trusted F	-Foundry							
BA 3: Advanced Technology Development (ATD)	Development and Support (DMEA)									

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
include key specialty processes requested by DoD programs, such as high voltage, extreme environments, and embedded non-volatile memory. Enhance trusted design activities to encompass new processing capabilities. Establish a line of trusted catalog components that can be purchased by Defense contractors.			
FY 2013 Plans:  Award a new contract to provide Trusted access to state-of-the-art microelectronics technologies for DoD and NSA needs.  Continue the development of a capability for the reverse engineering of application-specific integrated circuits (ASICs) and continuously refine the utilized methods for efficiency, accuracy, and applicability to multiple processes. Enhance the cadre of trusted suppliers for the critical trusted components and services needed for appropriate defense systems. Enhance Trusted Foundry products to include key specialty processes requested by DoD programs, such as high voltage, extreme environments, and embedded non-volatile memory. Enhance trusted design activities to encompass new processing capabilities. Expand a line of trusted catalog components that can be purchased by Defense contractors.			
Accomplishments/Planned Programs Subtotals	-	33.604	34.819

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

## E. Performance Metrics

N/A

PE 0603720S: *Microelectronics Technology Development and Suppor...*Defense Logistics Agency

UNCLASSIFIED
Page 9 of 9

R-1 Line #50



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM N

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE
PE 0605070S: DoD Enterprise Systems Development and Demonstration

**DATE:** February 2012

= 1											
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	4.209	94.155	133.104	-	133.104	64.059	61.021	32.592	33.301	Continuing	Continuing
1: Business Enterprise Information System (BEIS)	-	2.000	5.749	-	5.749	3.360	1.106	1.046	1.131	Continuing	Continuing
2: Defense Business Systems Acquisition (DBASE) Staff	-	0.375	1.190	-	1.190	0.949	0.852	0.805	0.867	Continuing	Continuing
3: Defense Agencies Initiative (DAI)	0.395	54.450	63.460	-	63.460	31.592	47.885	22.420	22.802	Continuing	Continuing
4: Defense Information System for Security (DISS)	0.268	20.600	24.927	-	24.927	6.786	5.838	4.765	4.847	Continuing	Continuing
5: Defense Travel System (DTS)	-	1.000	2.841	-	2.841	0.259	0.255	0.242	0.283	Continuing	Continuing
6: Virtual Interactive Processing System (VIPS)	1.693	13.000	10.172	-	10.172	-	-	-	-	Continuing	Continuing
7: Wide Area Work Flow (WAWF)	-	1.000	2.014	-	2.014	1.899	1.873	1.851	1.882	Continuing	Continuing
8: Defense Retired and Annuitant Pay System (DRAS)	1.850	1.730	17.294	-	17.294	14.166	1.502	1.463	1.489	Continuing	Continuing
9: Enterprise Funds Distribution (EFD)	0.003	-	5.457	-	5.457	5.048	1.710	-	-	Continuing	Continuing

# A. Mission Description and Budget Item Justification

The mission of the DoD Enterprise Systems is to coordinate and enable business transformation efforts across the Department of Defense (DoD. The DLA recognizes that DoD's business enterprise must be closer to its warfighting customers than ever before. Joint military requirements drive the need for greater commonality and integration of business and financial operations.

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 1 of 45

R-1 Line #128

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605070S: DoD Enterprise Systems Development and Demonstration

BA 5: Development & Demonstration (SDD)

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	134.285	131.746	-	131.746
Current President's Budget	4.209	94.155	133.104	-	133.104
Total Adjustments	4.209	-40.130	1.358	-	1.358
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.130			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-40.000			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	4.209	-			
SBIR/STTR Transfer	-	-			
Departmental Fiscal Guidance	-	-	1.358	-	1.358

## **Change Summary Explanation**

FY2012 FFRDC(f) Reduction: -\$0.130 million

FY2012 Congressional Directed Reduction: -\$40.0 million

FY2013 Departmental Fiscal Guidance: \$1.358 million

Exhibit R-2A, RDT&E Project Just	ification: Pl	3 2013 Defei	nse Logistic	s Agency					<b>DATE:</b> Febr	ruary 2012	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 5: Development & Demonstration	PE 060507	IOMENCLATOS: DoD Ent nt and Demo	erprise Syste	ems	PROJECT 1: Business (BEIS)	CT ess Enterprise Information System					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1: Business Enterprise Information System (BEIS)	-	2.000	5.749	-	5.749	3.360	1.106	1.046	1.131	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

Program Mission: The BEIS builds upon the mature, existing infrastructure of DFAS Corporate Database/DFAS Corporate Warehouse (DCD/DCW), Defense Departmental Reporting System (DDRS), and Defense Cash Accountability System (DCAS) to provide timely, accurate, and reliable business information from across the DoD to support auditable financial statements as well as provide detailed information visibility for management in support of the Warfighter.

Concept/Scope: Ensure data compliance with SFIS standards; provide security-defined, enterprise-level access to information for ad hoc management queries; and produce external financial management reports/statements based on standardized data. BEIS provides solutions to these goals by:

- Establishing the authoritative source for Standard Financial Information Structure (SFIS) values and providing for standardization by implementing SFIS and United States Standard General Ledger (USSGL) compliant financial reporting capabilities for Audited Financial Statements and Budgetary Reports.
- Providing an enterprise-wide information environment that will serve as the single source for enterprise-wide financial information.
- Serving as the DoD-wide system for Treasury Reporting.
- Providing decision makers with significantly greater access to financial information through data visibility and business intelligence (e.g., Executive Dashboard). The BEIS functional baseline encompasses a family of services organized into six distinct lines of business:
- Financial Reporting Services: BEIS will provide SFIS compliant financial statements and budgetary reports for DoD.
- Cash Accountability Reporting Services: BEIS will provide SFIS compliant reports of the Department's cash position to the Treasury.
- Enterprise Level Business Intelligence Services: BEIS will provide data aggregation services, collecting select transaction level data from DoD systems of record to support business intelligence. BEIS will also deliver corporate business intelligence capabilities such as contingency reporting, status of funds reporting and management dashboards.
- Integration Support Services: This support will be funded by the requesting activity on a fee-for-service basis.
- Reference Data Services: BEIS will establish a centralized repository for maintaining and exposing referential data to the DoD enterprise. This encompasses the SFIS Library data, Master Appropriation data, Corporate Electronic Funds Transfer (EFT) data, and the Transportation Global Edit Table data.
- General Ledger Services: BEIS will provide general ledger (i.e., financial management information) services for USSOCOM and select Defense Agencies. Impact: BEIS will provide DoD enterprise-wide financial visibility to meet Enterprise Transition Plan milestones. It will serve as the centralized financial data source and the single source for enterprise Audited Financial Statements and Budgetary Reports. Through the BEIS enterprise business intelligence capability, DoD decision makers will gain improved visibility into the information they need to make strategic budget decisions. The BEIS financial management capabilities will be used by the Military Services, Defense Agencies, and the Under Secretary of Defense (Comptroller). Modernization efforts for the functionality identified for BEIS Family of Systems (FoS) Increment 1 was completed in FY10. However, there are further enhancements/product improvements required to accomplish deployment/implementation of BEIS Increment 1 capabilities in order to achieve Full Operating Capability (FOC), as well as additional modernization efforts associated with BEIS Increment II capability which require out-year funding.

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Page 3 of 45

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logic	stics Agency		D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	I	ROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	PE 0605070S: DoD Enterprise Systems Development and Demonstration		: Business E BEIS)	nterprise In	formation S	System
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Defense Enterprise Information System (BEIS)		-	2.000	5.749	-	5.749
<b>Description:</b> Formerly organized under the BTA.						
FY 2011 Accomplishments: N / A						
FY 2012 Plans: First year of funding under DLA:						
Financial Reporting Services:  - Incremental development and testing of Government Treasury According - Commence SFIS Compliant Budgetary Reporting for Defense Agen Undistributed Cash, Undistributed Funding, DARPA Consolidated Resulting TI 97 Reports, and AFS Interface Testing)  • Customer base using WAAS-DFAS Accounting System  • Customer base using WAAS-DoDEA Accounting System Cash Accountability Reporting Services:  - Continue design/development of PowerBuilder to Web (PB2Web)/P	cies (Entails BRAC data on 390 file, eporting, SOCOM BLII Conversion Table,					
FY 2013 Base Plans: FY 2013 Base Plans: Continue with Financial Reporting Services: - Complete SFIS Compliant Budgetary Reporting for Defense Agenci Undistributed Cash, Undistributed Funding, DARPA Consolidated Re Unique TI 97 Reports, and AFS Interface Testing) • Customer base using WAAS-WHS Accounting System - USACE - TI 96 - Support Deployment SFIS Compliant Reporting for Classified Agencash Accountability Reporting Services: - Complete PowerBuilder to Web (PB2Web)/PKI Initiative	eporting, SOCOM BLII Conversion Table,					
FY 2013 OCO Plans: N / A.						
Accon	plishments/Planned Programs Subtotals	-	2.000	5.749	_	5.749

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 4 of 45

R-1 Line #128 Volume 5 - 340

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	s Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605070S: DoD Enterprise Systems	1: Business	Enterprise Information System
BA 5: Development & Demonstration (SDD)	Development and Demonstration	(BEIS)	

### C. Other Program Funding Summary (\$ in Millions)

N/A

#### **D. Acquisition Strategy**

BEIS leveraged existing infrastructure in DoD's investment in DCD/DCW, DDRS, and DCAS. BEIS formally implemented a portfolio management approach to program management that helped to ensure a management strategy was in place to better reallocate assets within the portfolio. BEIS has and will continue to deliver needed capabilities more rapidly and efficiently using a Family of Systems concept providing a functional baseline organized into six distinct lines of business: General Ledger Services, Business Integration Services, Reference Data Services, Enterprise Level Business Intelligence Services, Cash Accountability and Reporting Services, and Financial Reporting Services. Capabilities are being developed incrementally with multiple releases per year to meet the Enterprise Transition Plan milestones provided to Congress. At end of FY11, BEIS has achieved FOC for the following system components/services: DCD/DCW, to include General Ledger Services, Business Integration Services, Reference Data Services, and Enterprise Level Business Intelligence Services. Based on the list of requirements, an overall schedule is produced which includes integrated activities as well as identified products and milestones. Contracts are competitively awarded to keep costs down. Intra-governmental services are being used where possible for infrastructure support by the Defense Finance and Accounting Service (DFAS) Technical Services Organization and Defense Information Systems Agency (DISA) Information Processing Center.

#### **E. Performance Metrics**

N/A

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...* Defense Logistics Agency

Page 5 of 45

Exhibit R-4, RDT&E Schedule Profile: PB 2013	Defer	nse l	Logi	stics	s Ag	jend	СУ														D	ATE	: Feb	orua	ry 2	.012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, BA 5: Development & Demonstration (SDD)	Defe	nse	-Wia	le		P	PE 06	0507	70S	: Dol	DΕ	ATUF Interp	rise	•	tems			1:	R <b>OJ</b> I Bus BEIS)	ines	•	nter	prise	Info	rma	ation	Sy:	stem
		FY	2011	1		FY	2012	2		FY	201	3		FY 2	2014			FY	2015	5		FY	2016		Τ	FY	201	7
	1	2	3	4	1	2	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
N/A							·	,		,				,							,	·			-			
Business Enterprise Information System (BEIS)																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605070S: DoD Enterprise Systems

Development and Demonstration

**PROJECT** 

1: Business Enterprise Information System

**DATE:** February 2012

(BEIS)

## Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
N/A		-		
Business Enterprise Information System (BEIS)	1	2012	4	2017

Exhibit K-ZA, KDT&L PTOJECT 303	unication. Fi	2012 Delei	ise Logistic	s Agency					DAIL. I GOI	uary 2012	
APPROPRIATION/BUDGET ACTIV	/ITY			R-1 ITEM N	IOMENCLAT	ΓURE		PROJECT			
0400: Research, Development, Tes	t & Evaluatio	n, Defense-V	Vide	PE 0605070	OS: DoD Ent	erprise Syste	ems	2: Defense	Business Sy	stems Acqu	isition
BA 5: Development & Demonstration	n (SDD)			Developme	nt and Demo	onstration		(DBASE) S	taff		
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2: Defense Business Systems Acquisition (DBASE) Staff	-	0.375	1.190	-	1.190	0.949	0.852	0.805	0.867	Continuing	Continuing
Quantity of RDT&E Articles											

## A. Mission Description and Budget Item Justification

Exhibit R-24 PDT&F Project Justification: PR 2013 Defense Logistics Agency

The Defense Business Systems Acquisition (DBASE) Staff is a core team of highly qualified individuals that are charged with developing and maintaining a portfolio of programs designed to meet the needs of the Department of Defense (DoD). The Staff mission is to provide expert acquisition strategy, advise, oversight, and hands-on assistance to all of the DoD Enterprise Systems. The primary focus is to 1) enhance the consistency of processes, 2) promote excellence in innovation with the following key focus areas:

- -Program and acquisition strategy
- -Information assurance
- -Systems engineering and testing
- -Risk Identification and mitigation strategies
- -Sustainability, supportability and logistics

This will result in being able to provide assurance that the controls implemented within the various systems are effective and operate as the functional proponents require.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	oco	Total
Title: DBASE Staff	-	0.375	1.190	-	1.190
Description: Formerly organized under the BTA.					
FY 2011 Accomplishments: N / A					
FY 2012 Plans: Focus efforts to enhance the consistency of processes, and promote excellence key focus areasProgram and acquisition strategy					
-Information assurance -Risk Identification & mitigation strategies -Program training packages					

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 8 of 45

R-1 Line #128

Volume 5 - 344

DATE: February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	s Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605070S: DoD Enterprise Systems	2: Defense	Business Systems Acquisition
BA 5: Development & Demonstration (SDD)	Development and Demonstration	(DBASE) S	taff

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
-Sustainability, supportability and logistics					
Provide systems informational support to the on-going DoD FIAR audits – specifically the SBR.					
Begin preliminary activities to support a SSAE 16 assessment.					
FY 2013 Base Plans: Continue to focus efforts to enhance the consistency of processes, and promote excellence in innovation.					
Complete SSAE 16 assessment preparations.					
Accomplishments/Planned Programs Subtotals	-	0.375	1.190	-	1.190

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

## **E. Performance Metrics**

N/A

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 9 of 45

R-1 Line #128

E	chibit R-4, RDT&E Schedule Profile: PB 2013	Defer	nse	Logi	stics	s Ag	enc	у														D	AT	E:	Feb	ruai	ry 2	012		
04	PPROPRIATION/BUDGET ACTIVITY 00: Research, Development, Test & Evaluation, 5: Development & Demonstration (SDD)	Defe	ense	-Wid	le		Р	<b>R-1   1</b> PE 06 Deve	3050	70S	: Do	D E	nter	pris	se S	/sterr	s		2	PROJ II Dei DBA	fens	se Bu		nes	s Sy	yste	ms	Acq	uisi	ion
			FY	2011	I		FY	201	2		FY	201	3		F	201	4		FY	201	5		F`	Y 20	016			FY	201	7
		1	2	3	4	1	2	3	4	1	2	3	4		1 2	2 3	4	1	2	3	4	1		2	3	4	1	2	3	4
	N/A																													
	Defense Business Systems Acquisition																													

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY R-1

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605070S: DoD Enterprise Systems

Development and Demonstration

PROJECT

2: Defense Business Systems Acquisition

DATE: February 2012

(DBASE) Staff

## Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
N/A				
Defense Business Systems Acquisition (DBASE) Staff	1	2012	4	2017

Exhibit R-2A, RDT&E Project Ju	stification: PE	3 2013 Defer	nse Logistic	s Agency					<b>DATE:</b> Febr	uary 2012	
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 5: Development & Demonstrat	st & Evaluation	n, Defense-V	Vide	PE 0605070	IOMENCLAT OS: DoD Ent nt and Demo	erprise Syste		PROJECT 3: Defense	Agencies Ini	tiative (DAI)	
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3: Defense Agencies Initiative (DAI)	0.395	54.450	63.460	-	63.460	31.592	47.885	22.420	22.802	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

The mission of the Defense Agencies Initiative (DAI) program is to modernize the participating Defense Agencies' financial management processes by streamlining financial management capabilities, eliminating material weaknesses, and achieving financial statement auditability for the Agencies and field activities across the DoD. DAI will transform the budget, finance, and accounting operations of the participating Defense Agencies to achieve accurate and reliable financial information for financial accountability and efficient decision making. The DAI implementation approach is to deploy a standardized system solution that effectively addresses the requirements depicted in such tools as the Federal Financial Management Improvement Act (FFMIA) and the DoD Business Enterprise Architecture (BEA), while leveraging the out-of-the-box capabilities of the selected commercial off-the-shelf (COTS) product. The DAI business solution, once implemented, will provide a near real-time, web-based system from a .mil environment of integrated business processes that will enable in excess of 100,000 Defense Agency financial managers, program managers, auditors, and Defense Finance and Accounting Service (DFAS) representatives to make sound financial business decisions to support the warfighter.

DAI will implement a compliant COTS business solution with common business processes and data standards for the following business functions: procure to pay; order to cash; acquire to retire; budget to report; cost accounting; as well as time and labor. Grants financial management, budget formulation, and re-sales accounting will be implemented by full Deployment. The Defense Agencies are committed to leveraging their resources and talents to build an integrated system that supports standardized processes and proves that the DoD is capable of using a single architecture and foundation to support multiple, diverse components.

#### The benefits of DAI are:

- Common business processes and data standards;
- Access to real-time financial data transactions;
- Significantly reduced data reconciliation requirements;
- Enhanced analysis and decision support capabilities;
- Standardized line of accounting with the use of Standard Financial Information Structure (SFIS); and
- Use of USSGL Chart of Accounts to resolve DoD material weaknesses and deficiencies.

The system integration services for the DAI will include the following:

Project management; Blueprinting; Design, Build, and Unit Test; Reports, Interfaces, Conversion, Extensions (RICE); Testing (integration, functional, performance, conversion, security, user acceptance, operational); End-User Training/Change Management; System Deployment; Conversion; Information Assurance; Sustainment; Data Service; Help Desk Support; Studies and Analysis Support; and Site Surveys.

PE 0605070S: DoD Enterprise Systems Development and Demonstrati...
Defense Logistics Agency

Page 12 of 45

R-1 Line #128

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	stics Agency		D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0605070S: DoD Enterprise Systems Development and Demonstration		OJECT Defense Ag	encies Initia	ative (DAI)	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Defense Agencies Initiative (DAI)		0.395	54.450	63.460	_	63.460
Description: Formerly organized under the BTA.						
FY 2011 Accomplishments:  In FY 2011, delivered Release 1.1.2 full financial capabilities to the M Uniformed Services University of the Health Sciences (USU). Deliver Defense Threat Reduction Agency (DTRA), Defense Technology Servisoner of War/Missing Personnel Office (DPMO), and Defense Services to Pay (P2P) pilot called One Stop Portal that enables vendo Area Workflow (WAWF) portal. This process ensures invoices contamore perfect matching, reduces errors and speeds up invoice recond	red DAI Time and Labor capabilities to curity Administration (DTSA), Defense curity Services (DSS). DAI incorporated a pors to use DAI data directly from the Wide in correct accounting and contract data for					
PY 2012 Plans: Deliver Release 2.0 full financial capabilities to the DTRA, TMA, DTS due to BRAC. Deployed time and labor to FY13 implementing agency (DARPA); National Defense University (NDU); and the Office development of the DAI production baseline (maturing core functional Gaps, and the Reports, Interfaces, Conversions, Extensions and Wo required for FY13 implementing agencies and other required change (three are using time and labor capabilities only). Continue program and prepare FY13 implementing agencies for implementation of DAI sustainment preparations, development and testing). Continue analysinfrastructure for upgrade to Oracle R12 to include performance and	cies; Defense Advanced Research Projects e of Economic Adjustment (OEA). Continue ality, Business Enterprise Architecture (BEA) rkflows (RICEW)) to achieve capabilities s for current eleven operational agencies activities to test developmental products (site surveys, training, infrastructure and sis necessary to prepare software and					
FY 2013 Base Plans: Deliver Release 3.0 full financial capabilities to DARPA, Defense Seconderes Media Activity (DMA). The FY14 implementing agencies: Defense Human Resources Activity (DHRA), Department of Defense Defense Education Activity (DODEA), Defense Acquisition University Agency (DISA) will implement Time and Labor capabilities. Continue baseline (maturing core functionality, incorporating BEA gaps, and R for FY14 implementing agencies. Continue program activities to test FY14 implementing agencies for implementation of DAI (site surveys)	efense Finance Accounting Service (DFAS), Inspector General (DODIG), Department of (DAU) and Defense Information Systems edevelopment of the DAI production ICEW) to achieve capabilities required developmental products and prepare					

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 13 of 45

R-1 Line #128

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	s Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide	R-1 ITEM NOMENCLATURE PE 0605070S: DoD Enterprise Systems	PROJECT 3: Defense	Agencies Initiative (DAI)
BA 5: Development & Demonstration (SDD)	Development and Demonstration		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
preparations, development and testing). Begin upgrade of software and infrastructure to Oracle R12 to include data analysis and migration.					
FY 2013 OCO Plans: N / A.					
Accomplishments/Planned Programs Subtotals	0.395	54.450	63.460	-	63.460

## C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

DAI is being developed and implemented using an incremental strategy including major annual software releases to accommodate upgrades and fixes as required by deployed and implementing agencies as governed by its Functional Sponsor and Milestone Decision Authority.

The program management office (PMO) is responsible for all aspects of program control and execution. The DAI PMO will use a combination of contract types as directed by the contractual environment to support the delivery and sustainment of required capabilities.

#### **E. Performance Metrics**

In FY2012, the DAI program office was scheduled to deploy full financial capabilities to four major agencies: DTRA, DTSA, DPMO and TMA. These agencies were successfully deployed on schedule in the first quarter FY2012. The DAI program office will deploy the time and labor capability to three more major agencies: (DARPA, NDU, and OEA) and begin the advance planning for all the FY13 full financials implementing agencies.

**Major Performers** 

DISA

Ogden, Utah

**Production Support** 

DISA

Columbus, OH

Development and Test, and Coop Hosting Support

DISA

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED

Page 14 of 45 R-1 Line #128

Volume 5 - 350

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

**R-1 ITEM NOMENCLATURE** 

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)

PE 0605070S: DoD Enterprise Systems Development and Demonstration

3: Defense Agencies Initiative (DAI)

Indian Head, MD and Fort Huachuca, AZ

Test Management and ITT Lead Services, Test tool, Information Exchange/Interfaces, GEX Instance and limited Operational Assessment Support.

Northrop Grumman

McLean, VA

Interfaces/GEX

**DLT Solutions** 

Herndon, VA

Application and database Management Support

IBM

Bethesda, MD

Global Model Development-Procure to Pay, Budget 2 Report and Order to Fulfill

CACI INC, Federal

Chantilly, VA

Global Model Development-Cost Accounting, Time and Labor and Acquire to Retire

Computer Sciences Corp

Falls Church, VA

Global Model Development-Reports, Interfaces, Conversions and Information Assurance

PE 0605070S: DoD Enterprise Systems Development and Demonstrati... **Defense Logistics Agency** 

**UNCLASSIFIED** Page 15 of 45

Volume 5 - 351 R-1 Line #128

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Logistics Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605070S: DoD Enterprise Systems

3: Defense Agencies Initiative (DAI)

BA 5: Development & Demonstration (SDD)

Development and Demonstration

Г		FY 2	2011			FY :	2012	<u> </u>		FY 2	2013			FY 2	2014	<u> </u>		FY 2	2015			FY 2	2016			FY 2	2017	,
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

N/A.

Defense Agencies Initiative (DAI)

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY R-1

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605070S: DoD Enterprise Systems

Development and Demonstration

PROJECT

3: Defense Agencies Initiative (DAI)

**DATE:** February 2012

## Schedule Details

	St	art	E	nd	
Events by Sub Project	Quarter	Year	Quarter	Year	
N/A.					
Defense Agencies Initiative (DAI)	4	2011	4	2017	

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Defer	nse Logistics	s Agency					DATE: Febr	uary 2012	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 5: Development & Demonstration	t & Evaluation	Development and Demonstration (DISS)								Security	
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
4: Defense Information System for Security (DISS)	0.268	20.600	24.927	-	24.927	6.786	5.838	4.765	4.847	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

Defense Information System for Security (DISS) will improve information sharing capabilities, accelerate clearance processing timelines, reduce security vulnerabilities, and increase DoD's security mission capability. The DISS mission is to consolidate the DoD security mission into an Enterprise System that will automate the implementation of improved national investigative and adjudicative standards to eliminate costly and inefficient work processes and increase information collaboration across the community. DISS is currently under development and will replace the Joint Personnel Adjudication System (JPAS), a legacy system. When fully deployed this will be a secure, authoritative source for the management, storage and timely dissemination of and access to personnel clearances with the flexibility to provide additional support structure for future DoD security process growth. When deployed, it will accelerate the clearance process, reduce security clearance vulnerabilities, decrease back-end processing timelines, and support simultaneous information sharing within various DoD entities as well as among a number of authorized federal agencies. DISS will provide improved support to the Insider Threat and Personal Identity programs and will be comprised of capabilities that are currently part of the Joint Personnel Adjudication System (JPAS) and will create a robust and real-time capability for all DoD participants in the Military Departments, and DoD Agencies. It will also include automated records check (ARC) functionality and the creation of an adjudicative case management capability with e-Adjudication functionality. DISS will provide near continuous intra-Central Adjudication Facility (CAF) communications on a web-based enabled platform utilizing a unified architecture with security management.

The DISS program specifically addresses the requirements of Section 3001(e) of PL 108-458, Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA). Additionally the DISS program supports the FY12 DoD Strategic Management Plan (SMP)'s Business Goal 6: "Re-engineer / use end-to-end business processes to reduce transaction times, drive down costs, and improve service."

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	OCO	Total
Title: Defense Information System for Security (DISS)	0.268	20.600	24.927	-	24.927
Description: Formerly organized under the BTA.					
FY 2011 Accomplishments:					
N / A.					
FY 2012 Plans:					

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 18 of 45

R-1 Line #128

Volume 5 - 354

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	s Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605070S: DoD Enterprise Systems	4: Defense	Information System for Security
BA 5: Development & Demonstration (SDD)	Development and Demonstration	(DISS)	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
CATS V3 deployment to Air Force adjudication facility, deliver ACES release 2.4.3 capabilities, obtain hardware required to support JVS development efforts for the four environments: pre-production, production, development/ test and disaster recovery, purchase of software components, plan installation and configuration management tools usage, initiate test and development of Enterprise Services (Release 2- how component systems are integrated into one overarching system), DISS C&A, initiate Milestone B documentation, initiate Production and Test Readiness Reviews, continue change management/ communications outreach efforts, risk management, and schedule management.					
FY 2013 Base Plans: Initiate CATS and ACES physical transfer of infrastructure, obtain hardware required to support JVS development efforts for the four environments: pre-production, production, development/test and disaster recovery. Purchase software components, install and configure configuration management tools, complete test and development of Enterprise Services (Release 2- how component systems are integrated into one overarching system), and initiate Joint Verification System (Release 3 - security clearance management function). Finalize DISS C&A, complete Milestone B and initiate Milestone C documentation, complete Production and Test Readiness Reviews, continue change management/communications outreach efforts, risk management, and schedule management.					
Accomplishments/Planned Programs Subtotals	0.268	20.600	24.927	-	24.927

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

The Defense Information System for Security (DISS) is being developed as a family of systems utilizing the DoD, OPM and OMB Joint Reform Team new personnel security clearance and suitability determination process inside the Department of Defense (DoD). DISS will improve information sharing capabilities, accelerate clearance processing timelines, reduce security vulnerabilities, and increase DoD's security mission capability. DISS is being implemented through an evolutionary acquisition approach based on increments. The deployment of each increment to DISS allows the fielding of added capabilities and provides an approach which limits the Government's risk.

### **E. Performance Metrics**

N/A

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 19 of 45

R-1 Line #128

Volume 5 - 355

Exhibit R-4, RDT&E Schedule Profile: PB 2013	Defer	nse l	Logi	stics	s Ag	ency	у														D	ΑTI	<b>E</b> : Fe	brua	ıry 2	2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, BA 5: Development & Demonstration (SDD)	Defe	nse	-Wia	le		PI	- <b>1 IT</b> I E 060 evelo	0507	70S	: Dol	D Er	nterp	rise	-	tems	3		4:	ROJ : Def DISS	ens	-	forn	natior	ı Sys	ster	n for	Sec	curity
		FY	2011	1		FY	2012	2		FY 2	201:	3		FY	2014			FY	201	5		FY	201	6		FY	201	7
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	2 3	4	1	2	3	4
N/A.										,				·					,									
Defense Information System for Security (DISS)																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 5: Development & Demonstration (SDD)

PATE: February 2012

R-1 ITEM NOMENCLATURE
PE 0605070S: DoD Enterprise Systems
Development and Demonstration (DISS)

PROJECT
4: Defense Information System for Security
(DISS)

## Schedule Details

	St	art	Eı	nd	
Events by Sub Project	Quarter	Year	Quarter	Year	
N/A.					
Defense Information System for Security (DISS)	4	2012	4	2017	

Exhibit R-2A, RDT&E Project Jus	tification: Pl	B 2013 Defei	nse Logistic	s Agency					<b>DATE:</b> Febi	uary 2012	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Tes BA 5: Development & Demonstration	t & Evaluatio	n, Defense-V	Vide	PE 060507	IOMENCLATOS: DoD Entent and Demo	erprise Syste		PROJECT 5: Defense	Travel Syste	m (DTS)	
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
5: Defense Travel System (DTS)	-	1.000	2.841	-	2.841	0.259	0.255	0.242	0.283	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

The Defense Travel System (DTS) is a fully integrated, electronic, end-to-end financial management system that automates temporary duty travel for the Department of Defense (DoD). DTS meets unique DoD mission, security and financial system requirements within the guidelines of Federal and DoD travel policies and regulations. DTS automates travel authorizations, reservations and arrangements, voucher processing, payment, reconciliation, accountability and archiving. DTS employs Digital Signature and Login/Authentication which requires users to provide a signed response using a valid DoD Public Key Infrastructure (PKI) certificate to gain access to the DTS application. Travel documents created in DTS are digitally signed with the user's PKI certificate to provide a means of identifying the signer, verifying the document's integrity, and enforcing non-repudiation of the signature by the signer.

DTS is a Major Automated Information System (MAIS), Acquisition Category (ACAT) 1AC program. DTS delivers capability by evolutionary acquisition utilizing incremental development; recognizing up front the need for future capability improvements. DTS has a flexible design so that each increment builds upon its core functionality, dependent on available, mature technology providing increasing capabilities to travelers, travel administrators, and process owners. Full Operational Capability (FOC) was declared in March 2010. Future capability improvements will be implemented as P3I beginning FY11.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Defense Travel System (DTS)	-	1.000	2.841	-	2.841
Description: Formerly organized under the BTA.					
FY 2011 Accomplishments: N / A					
FY 2012 Plans: First year of funding under the DLA:					
<ul> <li>Continue "work-off" of development related Software Problem Reports (SPRs)</li> <li>Continue development, testing and integration of Financial Partner System (FPS) interfaces, test and integrate software releases, FPS system changes</li> <li>Continue development of new functionality to allow phase out legacy travel systems</li> <li>Continue to update Interface Control Documents and Memorandums of Agreement (MOA) and Perform Limited User Testing (LUT)</li> </ul>					

UNCLASSIFIED
Page 22 of 45

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	s Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	PE 0605070S: DoD Enterprise Systems Development and Demonstration	5: Defense	Travel System (DTS)

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
- Continue Program Management and Engineering support to include acquisition compliance reporting, acquisition subject matter expertise, business case analysis, metrics, system analysis, requirements support, contract execution, contract documentation and test management oversight.					
FY 2013 Base Plans:  - Continue "work-off" of development related Software Problem Reports (SPRs)  - Continue development, testing and integration of Financial Partner System (FPS) interfaces, test and integrate software releases, FPS system changes  - Continue development of new functionality to allow phase out legacy travel systems  - Continue to update Interface Control Documents and Memorandums of Agreement (MOA) and Perform Limited User Testing (LUT)  - Continue Program Management and Engineering support to include acquisition compliance reporting, acquisition subject matter expertise, business case analysis, metrics, system analysis, requirements support, contract execution, contract documentation and test management oversight.					
Accomplishments/Planned Programs Subtotals	-	1.000	2.841	-	2.841

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

DTS prime contract will be completed within the coming year and separate contracts will be awarded for hosting and sustainment/development.

## E. Performance Metrics

N/A

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 23 of 45

R-1 Line #128

Volume 5 - 359

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide 5: Defense Travel System (DTS) PE 0605070S: DoD Enterprise Systems

BA 5: Development & Demonstration (SDD) Development and Demonstration

**DATE:** February 2012

		FY	2011	1		FY	2012			FY	2013	3		FY 2	2014			FY 2	2015	5		FY 2	2016	;		FY 2	2017	,
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
N/A.																				,				,				
Defense Travel System (DTS)																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY R-1

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605070S: DoD Enterprise Systems

Development and Demonstration

**PROJECT** 

5: Defense Travel System (DTS)

**DATE:** February 2012

## Schedule Details

	Start En			
Events by Sub Project	Quarter	Year	Quarter	Year
N/A.		-		
Defense Travel System (DTS)	1	2012	4	2017

Exhibit R-2A, RDT&E Project Just	xhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency								DATE: February 2012			
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 5: Development & Demonstratio	t & Evaluation	n, Defense-V	Vide	PE 0605070	OMENCLAT OS: DoD Entent ont and Demo	erprise Syst	ems	PROJECT 6: Virtual In	PROJECT 6: Virtual Interactive Processing System (VIP			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
6: Virtual Interactive Processing System (VIPS)	1.693	13.000	10.172	-	10.172	-	-	-	-	Continuing	Continuing	
Quantity of RDT&E Articles												

### A. Mission Description and Budget Item Justification

The Virtual Interactive Processing System (VIPS) will modernize and automate the Information Technology (IT) capabilities for qualifying Applicants into the Military Service during wartime, peacetime, and mobilization. VIPS will enable a responsive, flexible and efficient means to qualify Applicants to meet manpower resource requirements for the uniformed Services, Coast Guard, and National Guard routine and contingency operations. VIPS will be the future accessioning system to be used by the US Military Entrance Processing Command (USMEPCOM) and will replace their legacy system, USMEPCOM Integrated Resource System (USMIRS). USMEPCOM serves as the single entry point for determining the physical, aptitude, and conduct qualifications of candidates for enlistment. VIPS will provide the capability to electronically acquire, process, store, secure, and seamlessly share personnel data across the Accessions Community of Interest (ACOI). When fully implemented, VIPS will reduce the cycle time required to induct enlistees to meet the needs of Homeland Defense, reduce the number of visits to the Military Entrance Processing Stations (MEPS), reduce manual data entry errors, and reduce attrition through better pre-screening practices. GAO has reported that better pre-screening practices will yield cost savings and cost avoidance of \$83M per year for the VIPS automated elements, when Increment 2.0 is deployed. The overall annual estimated cost avoidance is \$479M across the DoD as referenced in the 1997 GAO Study 97-39 Military Attrition: DoD could save Millions by Better Screening Enlisted Personnel. The implementation of a Modular Open System Architecture (MOSA) approach will enable accession data to be securely available to applicants and ACOI partners such as Recruiting and Training Commands, Defense Manpower Data Center (DMDC), Military Health System, Human Resource Management (HRM), and Defense Travel Management Office (DTMO). VIPS will support compliance with Department of Defense (DoD) direction for a net-centric environment and take advantage of automated data capture technology, e.g., medical equipment with the capability to capture and electronically transmit exam results. The accessioning system of the future will be location independent, virtually paper-free, and automated to assist with bringing the right people at the right time to operational commanders. The VIPS Program has not yet been baselined.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	OCO	Total
Title: Virtual Interactive Processing System (VIPS)	1.693	13.000	10.172	-	10.172
Description: Formerly organized under the BTA.					
FY 2011 Accomplishments: The VIPS PMO key events for FY2011 include completing development and acceptance testing of a Rapid Operational Capability (Medical Pre-Screen 2807-2 Form), convened a Preliminary Design Review (PDR), received an interim Milestone B Acquisition Decision Memorandum (ADM), and were designated as a Pre-MAIS program by Acquisition Technology and Logistics (AT&L).					

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 26 of 45

R-1 Line #128

Volume 5 - 362

0040

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	stics Agency		D	ATE: Febru	ary 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0605070S: DoD Enterprise Systems Development and Demonstration		PROJECT 6: Virtual Interactive Processing System (VIPS						
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total			
Additionally, the VIPS PMO matured acquisition documentation in an System Requirements Specification (SRS), Requirements Traceabilit Business Capability Lifecycle (BCL), and continued to refine the DOI compliance.	ty Matrix (RTM), Business Case for the								
FY 2012 Plans: The VIPS PMO plans to accomplish the following in FY12: Successfu Report (CCR) per Section 244SC of Title 10, United States Code and requirements and related acquisition activities in support of a revised acquisition documentation to achieve a Milestone B ADM and will demanaging architecture and requirements in FY2012.	d will complete the development of the Increment 1.0. Preparing and drafting								
Execute Program Management and Engineering support which include acquisition subject matter expertise, business case analysis, metrics, contract execution, contract documentation, investment activities, and Increment 1.0.	, system analysis, requirements support,								
FY 2013 Base Plans: In FY2013 the VIPS PMO plans to conduct a Critical Design Review demonstrations. This will be provided to the test community. Addition the development of the system and draft acquisition documentation in the revised Increment 1.0.	ally in FY2013 the VIPS PMO will complete								
Continuing with executing Program Management and Engineering so compliance reporting, acquisition subject matter expertise, business requirements support, contract execution, contract documentation, in oversight for a revised Increment 1.0.	case analysis, metrics, system analysis,								
Accon	nplishments/Planned Programs Subtotals	1.693	13.000	10.172	-	10.172			

# C. Other Program Funding Summary (\$ in Millions)

N/A

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 27 of 45

R-1 Line #128 Volume 5 - 363

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	cs Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605070S: DoD Enterprise Systems	6: Virtual In	teractive Processing System (VIPS)
BA 5: Development & Demonstration (SDD)	Development and Demonstration		

### D. Acquisition Strategy

In accordance with BCL, the VIPS Program will use an incremental approach to satisfy USMEPCOM's requirements. Requirements have been articulated to support the development of the core platform for VIPS as well as capabilities to fully assess a candidate into the military. The revised Increment 1.0 content provides sufficient capability to retire the legacy system, USMEPCOM Integrated Resource System (USMIRS) through a series of capability deployments beginning in FY2014. Future increments will address the full VIPS capabilities necessary to realize the Return on Investment (ROI).

Originally the VIPS Increment 1.0 was procured under a single contract, competitively awarded to provide both a core infrastructure and business functions to support the accessions process. The VIPS PMO awarded a single Increment 1.0 contract on September 30, 2010 that will initially provide for the design of VIPS Increment 1.0 through PDR. The prime contractor also completed the design, development, and acceptance testing of the ROC prototype. Once the CCR report is completed, the program will seek a Milestone B decision. Following a successful Milestone B decision, the Government will assess appropriate contracting options to complete design, testing, deployment, fielding and training support. The system integration will include management of the technical configuration baseline and sustainment across VIPS. The VIPS PMO has adopted rigorous cost controls using earned value management and a comprehensive risk management program to manage program execution.

### **E. Performance Metrics**

N/A

PE 0605070S: DoD Enterprise Systems Development and Demonstrati...
Defense Logistics Agency

UNCLASSIFIED
Page 28 of 45

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Logistics Agency

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605070S: DoD Enterprise Systems

6: Virtual Interactive Processing System (VIPS)

BA 5: Development & Demonstration (SDD)

Development and Demonstration

**FY 2011** FY 2017 FY 2012 FY 2013 FY 2014 FY 2015 **FY 2016** 4 2 2 2 4 3 3 3 1

N/A

Virtual Interactive Processing System (VIPS)

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605070S: DoD Enterprise Systems

Development and Demonstration

PROJECT

6: Virtual Interactive Processing System (VIPS)

**DATE:** February 2012

## Schedule Details

	St	Start Er			
Events by Sub Project	Quarter	Year	Quarter	Year	
N/A					
Virtual Interactive Processing System (VIPS)	4	2011	4	2017	

Exhibit R-2A, RDT&E Project Just	t <b>ification:</b> Pl	3 2013 Defei	nse Logistic					DATE: February 2012						
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 5: Development & Demonstratio	& Evaluatio	n, Defense-V	Vide	PE 060507	NOMENCLATOS: DoD Entent and Demo	erprise Syst	ems	PROJECT 7: Wide Area Work Flow (WAWF)						
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost			
7: Wide Area Work Flow (WAWF)	-	1.000	2.014	-	2.014	1.899	1.873	1.851	1.882	Continuing	Continuing			
Quantity of RDT&E Articles														

### A. Mission Description and Budget Item Justification

B Accomplishments/Planned Programs (\$ in Millions)

WAWF is the DoD enterprise system for secure electronic submission, acceptance and processing of invoices. It is mandated for use by all DoD Services and Agencies for electronic invoicing by DFAR 252.232-7003. WAWF processes over 86 million transactions worth \$301B per year and saves DoD millions of dollars annually in processing cost and avoided interest (over \$77.6 M in FY10). WAWF brings together the invoice, the receiving report, and the contract from EDA to provide the accounting and entitlement systems with the three-way match needed to authorize payment. WAWF is also the Enterprise data entry point for the Item Unique Identifier (IUID) and Government Furnished Property (GFP) programs, the source of receipt and acceptance data for Service Enterprise Resource Planning Systems (ERP), and is central for the Business Enterprise Architecture (BEA) enterprise solutions for Standard Financial Information Structure (SFIS) and Inter Governmental Transfer (IGT). The benefits to DoD are a single face to industry suppliers, global accessibility of documents, reduced need for re-keying, improved data accuracy, real-time processing, secure transactions with audit capability, and faster processing resulting in reduced interest penalties. For vendors, benefits include the capability to electronically submit invoices, reduction of lost or misplaced documents, and online access to contract payment records.

EV 2012 EV 2012 EV 2012

Volume 5 - 367

<b>B.</b> Accomplishments/Planned Programs (\$ in willions)			F 1 2013	FY 2013	F1 2013
	FY 2011	FY 2012	Base	oco	Total
Title: Wide Area Work Flow (WAWF)	-	1.000	2.014	-	2.014
Description: Formerly organized under the BTA.					
FY 2011 Accomplishments: N / A					
<ul> <li>FY 2012 Plans:</li> <li>Continue System/Program Testing and Analysis including integration of multiple systems developed for multiple organizations by multiple vendors into the Electronic Commerce Infrastructure.</li> <li>Continue Joint Interoperability Test Command (JITC) developmental, system/integration, and Operational Acceptance Testing for each version release of WAWF systems.</li> </ul>					
FY 2013 Base Plans: Continue System/Program Testing and Analysis including integration of multiple systems developed for multiple organizations by multiple vendors into the Electronic Commerce Infrastructure Continue Joint Interoperability Test Command (JITC) developmental, system/integration, and Operational					

PE 0605070S: DoD Enterprise Systems Development and Demonstrati... UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605070S: DoD Enterprise Systems

Development and Demonstration

PROJECT

7: Wide Area Work Flow (WAWF)

DATE: February 2012

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Acceptance Testing for each version release of WAWF systems.					
Accomplishments/Planned Programs Subtotals	-	1.000	2.014	-	2.014

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

### **E. Performance Metrics**

N/A

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Logistics Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605070S: DoD Enterprise Systems

7: Wide Area Work Flow (WAWF)

BA 5: Development & Demonstration (SDD)

Development and Demonstration

		FY	201 <sup>2</sup>	1		FY	2012	2		FY	201	3		FY 2	2014	ļ		FY 2	2015	5		FY	2016	6		FY	2017	7
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
N/A																											'	
Wide Area Work Flow (WAWF)																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

R-1 ITEM NOMENCLATURE

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605070S: DoD Enterprise Systems

**PROJECT** 

BA 5: Development & Demonstration (SDD)

Development and Demonstration

7: Wide Area Work Flow (WAWF)

# Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
N/A		-		
Wide Area Work Flow (WAWF)	1	2012	4	2017

Exhibit R-2A, RDT&E Project Just	tification: PE	3 2013 Defer	nse Logistic	s Agency					<b>DATE:</b> Febr	ruary 2012			
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Tesi BA 5: Development & Demonstratio	Vide	PE 0605070	IOMENCLATOS: DoD Ent nt and Demo	erprise Syste	PROJECT 8: Defense (DRAS)	ense Retired and Annuitant Pay System							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
8: Defense Retired and Annuitant Pay System (DRAS)	1.850	1.730	17.294	-	17.294	14.166	1.502	1.463	1.489	Continuing	Continuing		
Quantity of RDT&E Articles													

# A. Mission Description and Budget Item Justification

The primary objective of Defense Retired and Annuitant Pay System 2(DRAS 2) is to establish and maintain retired military pay accounts. DRAS 2 will replace the current Defense Retiree and Annuitant Systems and selected manual processes with proven state of the market technology using Clinger-Cohen guidance for selection of the solution. Rapid fielding techniques will be used to close gaps in delivered capability where DFAS executive management has demonstrate a clear financial benefit to modification of delivered capabilities.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Defense Retired and Annuitant Pay System (DRAS)	1.850	1.730	17.294	-	17.294
Description: New program to the DLA.					
FY 2011 Accomplishments: N / A					
FY 2012 Plans: This is a new military retiree pay system which will focus on three primary objectives:					
-Establish ritired military pay systemReplace antiquated legacy systemAtomate many manually intensive processes.					
FY 2013 Base Plans: Continue with the FY 2012 three primary objectives:					
-Establish ritired military pay systemReplace antiquated legacy systemAtomate many manually intensive processes.					
Accomplishments/Planned Programs Subtotals	1.850	1.730	17.294	-	17.294

**UNCLASSIFIED** PE 0605070S: DoD Enterprise Systems Development and Demonstrati... Page 35 of 45

R-1 Line #128

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	stics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605070S: DoD Enterprise Systems	8: Defense Retired and Annuitant Pay System
BA 5: Development & Demonstration (SDD)	Development and Demonstration	(DRAS)
C. Other Program Funding Summary (\$ in Millions)  N/A		
D. Acquisition Strategy N / A		
E. Performance Metrics N / A		

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

R-1 Line #128

Exhibit R-4, RDT&E Schedule Profile: PB 2013 [	Defer	ise	Logi	stics	s Ag	ency	y														DA	ATE	: Feb	ruar	y 20	012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, BA 5: Development & Demonstration (SDD)	Defe	nse	-Wid	le		PE	- <b>1 IT</b> E 060 evelo	0507	'0S:	Do	D Er	nterp	rise	-	tems	3		8:	R <b>OJ</b> I Defe RAS	ense		tirec	d and	l Anı	าuite	ant F	ay :	Syste
		FY	2011	1	$\overline{\mathbf{T}}$	FY	2012	2		FY	2013	3		FY 2	2014			FY:	2015		$\overline{\mathbb{T}}$	FY	2016			FY 2	2017	7
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
N/A																												
Defense Retired and Annuitant Pay System (DRAS)																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 5: Development & Demonstration (SDD)

PATE: February 2012

R-1 ITEM NOMENCLATURE
PE 0605070S: DoD Enterprise Systems
Development and Demonstration (DRAS)

# Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
N/A				
Defense Retired and Annuitant Pay System (DRAS)	4	2011	4	2017

Exhibit R-2A, RDT&E Project Jus	stification: PE	3 2013 Defe	nse Logistic	s Agency					<b>DATE:</b> Feb	ruary 2012		
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Tes BA 5: Development & Demonstration	PE 0605070	OMENCLAT OS: DoD Ento nt and Demo	erprise Syste	ems	PROJECT 9: Enterprise Funds Distribution (EFD)							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
9: Enterprise Funds Distribution (EFD)	0.003	-	5.457	-	5.457	5.048	1.710	-	-	Continuing	Continuing	
Quantity of RDT&E Articles												

### A. Mission Description and Budget Item Justification

Enterprise Funds Distribution (EFD) is a multi-service/multi-agency solution established as a key initiative to provide full visibility of funds distributed through echelon I and II for the Military Departments and at all levels for the Defense Agencies to improve and modernize the OUSD(C) funds distribution process. Funds distribution by its nature is a key enabler of financial visibility within DoD enterprise systems. The concept of a fully visible enterprise funds distribution process serves as a reference where planned and coordinated funds development and execution takes place.

Within the current OUSD(C) environment, the Directorates have a diverse set of stove-piped budget execution and funds distribution processes and systems. This lack of standardization and integration limits the visibility of funding information, introduces manual efforts and undue complexities into the management of budget authority, and impedes the flow of funding documents. This environment made the implementation of internal controls difficult, negatively impacted the accuracy and timeliness of information while making the processes of integrating and obtaining management information arduous. The current environment relies heavily on manual processing and on disconnected standalone systems for the processing of Funding Authorization Documents (FADs) and reprogramming actions.

The envisioned operational environment solves these problems by enabling lifecycle program value management in a web-based application utilizing an authoritative database with single-source data entry and automated workflow. Capabilities within this integrated environment will enable the automation of all funds distribution and funds control processes within OUSD(C) using authoritative and highly visible data. Specifically, capabilities include managing apportionments, distributing budget authority to the Military Departments and Defense Agencies, managing rescissions and continuing resolutions, creating and tracking reprogramming actions, and establishing program baselines and budget authority needed to support changes in funding priorities throughout the year.

The operational environment includes organizational elements down to the echelon II level responsible for managing DoD and Component appropriations operating in an unclassified environment. The web-based application provides pre-planning, apportionment, reprogramming, rescission, continuing resolution, reporting of enterprise-level funds control and distribution of appropriated funding.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Enterprise Funds Distribution (EFD)	0.003	-	5.457	-	5.457
Description: EFD will distribute funds to the Military Departments and the Defense Agencies.					
FY 2011 Accomplishments:					

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

Page 39 of 45

R-1 Line #128

	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Log	istics Agency		D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0605070S: DoD Enterprise Systems Development and Demonstration	I	ROJECT Enterprise	Funds Distr	ibution (EFI	D)
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
N / A.						
FY 2012 Plans:						
Currently there is no funding for Phase II and III of EFD. EFD achiev 2010. The Congressional Tracking and Continuing Resolution capal operational environment; however, the Budget Enactment capability environment due to continuing resolutions and has further delayed a FY2011 budget enactment and the need to accommodate additional Phase II of EFD until at least FY12 assuming initial funding can be o will be completed in FY 2013.	bilities have performed successfully in an has not been exercised in an operational n operational assessment. The delays in the business processes will delay the start of					
Functionality for EFD in Phase 1:						
# Full visibility of appropriated funds as funds pass through and acro # An improved funds distribution processes at echelon I and II for all # Standardized funds distribution data across the enterprise # Automated audit trail between the President's budget submission a Item (BLI) level	DoD appropriations					
# Automated processing of OUSD(C) funds authorization documents # Automated tracking of reprogrammed funds # Automated tracking of distributed funds # An authoritative "program value" data source at the BLI level # Access to funds distribution functionality and data	s (FADs)					
Functionality for EFD in Phase II  # Automated funds distribution capability for Defense Agencies (TI-9  # Interfaces with Service Funds Distribution Systems  # ERP interfaces  # Interface with DDRS-Budgetary  # Interface with Treasury	7, echelon III and below)					
Potential functionality For EFD in Phase III						

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

UNCLASSIFIED
Page 40 of 45

R-1 Line #128

	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	stics Agency		D	ATE: Febru	ary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0605070S: DoD Enterprise Systems Development and Demonstration	I	ROJECT Enterprise	-unds Distri	ibution (EFL	D)
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
# Revolving Funds # Trust Funds # BRAC # General Ledger account identification to support 132 and 133 repo # US Army Corps of Engineers (TI 96)	rting					
EFD operational environment organizations include the Office of the Management and Budget (OMB), U.S Treasury, Congressional Comheadquarters (Army, Navy, Air Force). After the OMB apportionment issued at the Echelon I and II level. These funds are then further sub Components.	mittees, Defense Agencies, and Component, funding authorization documents are					
(U) Issue:						
Currently there is no funding for Phase II and III of EFD. EFD achieve 2010. The Congressional Tracking and Continuing Resolution capal operational environment; however, the Budget Enactment capability environment due to continuing resolutions and has further delayed at FY2011 budget enactment and the need to accommodate additional Phase II of EFD until at least FY12 assuming initial funding can be of will be completed in FY 2013. Phase II provides the additional lower	bilities have performed successfully in an has not been exercised in an operational operational assessment. The delays in the business processes will delay the start of					
FY 2013 Base Plans: Phase III addresses residual functions related to funds distribution ar completed during FY 14. EFD Phase II enables replacement of a combination of manual procedure. Defense Wide (PBAS-FD DW). PBAS is built on mature mainframe language. The risk of using outdated technology increases as the sy configuring EFD to support TI-97 funds distribution at echelons III an PBAS-FD DW.	esses and PBAS-Funds Distribution technology and programmed in COBOL estem ages. EFD Phase 2 plans included					
EFD Phase III addresses a number of residual functions currently pe Funds, Revolving Funds, BRAC, etc. Final determination of which ele						

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...* **U** Defense Logistics Agency

UNCLASSIFIED
Page 41 of 45

R-1 Line #128

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605070S: DoD Enterprise Systems	9: Enterpris	se Funds Distribution (EFD)
BA 5: Development & Demonstration (SDD)	Development and Demonstration		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
into EFD or another solution will be based on an analysis of both technical and functional requirements. This analysis will occur likely during FY12.					
RDT&E funding is requested for FY 13 - FY 15 to support development / implementation of EFD phases II and III.					
FY 2013 OCO Plans:					
N/A.					
Accomplishments/Planned Programs Subtotals	0.003	-	5.457	-	5.457

## C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A.

#### **E. Performance Metrics**

Functionality for EFD in Phase 1:

- # Full visibility of appropriated funds as funds pass through and across different levels of the enterprise
- # An improved funds distribution processes at echelon I and II for all DoD appropriations
- # Standardized funds distribution data across the enterprise
- # Automated audit trail between the President's budget submission and appropriation enactments at Budget Line Item (BLI) level
- # Automated processing of OUSD(C) funds authorization documents (FADs)
- # Automated tracking of reprogrammed funds
- # Automated tracking of distributed funds
- # An authoritative "program value" data source at the BLI level
- # Access to funds distribution functionality and data

Functionality for EFD in Phase II

- # Automated funds distribution capability for Defense Agencies (TI-97, echelon III and below)
- # Interfaces with Service Funds Distribution Systems
- # ERP interfaces

UNCLASSIFIED
Page 42 of 45

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...* Defense Logistics Agency

R-1 Line #128

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	stics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)	PE 0605070S: DoD Enterprise Systems Development and Demonstration	9: Enterprise Funds Distribution (EFD)
# Interface with DDRS-Budgetary	,	
# Interface with Treasury		
Potential functionality For EFD in Phase III # Revolving Funds # Trust Funds # BRAC # General Ledger account identification to support 132 and 133 rep	portina	
# US Army Corps of Engineers (TI 96)		

PE 0605070S: *DoD Enterprise Systems Development and Demonstrati...*Defense Logistics Agency

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Logistics Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605070S: DoD Enterprise Systems

9: Enterprise Funds Distribution (EFD)

BA 5: Development & Demonstration (SDD)

Development and Demonstration

FY 2011 FY 2013 FY 2017 FY 2012 FY 2014 FY 2015 **FY 2016** 2 3 4 1 2 1 2 4 1 2 3 1 2 3 4 1 2 3 4 1 2 3 3 4 3 4

Enterprise Funds Distribution (EFD)

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605070S: DoD Enterprise Systems

Development and Demonstration

**PROJECT** 

9: Enterprise Funds Distribution (EFD)

**DATE:** February 2012

# Schedule Details

	St	art	End		
Events	Quarter Year		Quarter	Year	
Enterprise Funds Distribution (EFD)	4	2011	4	2015	



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605502S: Small Business Innovative Research (SBIR)

BA 6: RDT&E Management Support

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	1.108	2.367	-	-	-	-	-	-	-	Continuing	Continuing
1: Small Business Innovative Research (SBIR)	1.108	2.367	-	-	-	-	-	-	-	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

Defense Logistics Agency's (DLA's) ability to deliver Americans the right logistics solution in every transaction requires more than successful management of the Department's wholesale supplies and suppliers. It requires supply chain excellence. Our military's ability to generate and sustain combat readiness indefinitely, anywhere on the globe requires that DLA-managed material flow seamlessly and as needed from the nation's industrial base to where it is ultimately used.

DLA's Small Business Innovative Research (SBIR) program seeks to solicit high-risk research and development proposals from the small business community. All selections shall demonstrate and involve a degree of technical risk where the technical feasibility of the proposed work has not been fully established. Phase I proposals should demonstrate the feasibility of the proposed technology and the merit of a Phase II for a prototype or at least a proof-of-concept demonstration. Phase II selections will be strongly influenced on future market possibilities and commercialization potential demonstrated.

PE 0605502S: Small Business Innovative Research (SBIR) Defense Logistics Agency

UNCLASSIFIED
Page 1 of 4

R-1 Line #158 **Volume 5 - 383** 

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

**R-1 ITEM NOMENCLATURE** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605502S: Small Business Innovative Research (SBIR)

BA 6: RDT&E Management Support

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	1.108	2.367	-	-	-
Total Adjustments	1.108	2.367	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Generic Logistics Research and</li> </ul>	0.475	0.563	-	-	-
Development Technology Demonstrations					
SBIR Transfer					
<ul> <li>Industrial Prepareness Manufacturing</li> </ul>	0.509	0.543	-	-	-
Technology SBIR Transfer					
<ul> <li>Deployment and Distribution Enterprise</li> </ul>	0.124	0.186	-	-	-
Technology & AT21 (USTRANSCOM) SBIR					
Transfer					
Microelectronics Technology Development	-	1.075	-	-	-
and Support (DMEA) SBIR Transfer					

# **Change Summary Explanation**

FY 2012 Generic Logistics Research and Development Technology Demonstrations SBIR Transfer: \$0.563 million

FY 2012 Industrial Prepareness Manufacturing Technology SBIR Transfer: \$0.543 million

FY 2012 Deployment and Distribution Enterprise Technology & AT21 (USTRANSCOM) SBIR Transfer: \$0.186 million

FY 2012 Microelectronics Technology Development and Support (DMEA) SBIR Transfer: \$1.075 million

Exhibit R-2A, RDT&E Project Ju	ustification: ₽E	3 2013 Defer	nse Logistic	s Agency					DAIE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support								PROJECT 1: Small Business Innovative Research (SBIR)			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1: Small Business Innovative Research (SBIR)	1.108	2.367	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

# A. Mission Description and Budget Item Justification

Accomplishments/Planned Programs (\$ in Millions)

Defense Logistics Agency's (DLA's) ability to deliver Americans the right logistics solution in every transaction requires more than successful management of the Department's wholesale supplies and suppliers. It requires supply chain excellence. Our military's ability to generate and sustain combat readiness indefinitely, anywhere on the globe requires that DLA-managed materiel flow seamlessly and as needed from the nation's industrial base to where it is ultimately used.

DLA's Small Business Innovative Research (SBIR) program seeks to solicit high-risk research and development proposals from the small business community. All selections shall demonstrate and involve a degree of technical risk where the technical feasibility of the proposed work has not been fully established. Phase I proposals should demonstrate the feasibility of the proposed technology and the merit of a Phase II for a prototype or at least a proof-of-concept demonstration. Phase Il selections will be strongly influenced on future market possibilities and commercialization potential demonstrated.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: SBIR Accomplishments/Plans	1.108	2.367	-	
FY 2011 Accomplishments:				
In FY2011, the DLA SBIR program awarded seven new Phase I contracts and two new Phase II contracts. All seven Phase I contracts are in execution.				
Approximately eight Phase II contracts remain in-execution. Funded projects cover a wide range of advanced manufacturing				
technologies that have the				
potential to make a significant impact on discrete item cost on the items that DLA procures.				
Phase II projects include the following technologies:				
*Advanced automation process for graphite fiber in composite aerospace components				
*Laser Assisted Machining with Integrated Dynamic Tooling				
*Automated conversion of 2dimensional technical data to 3 dimensional models				
*High Quality, High Productivity Composite and Multilayer Drilling				1
*Reduced Cost and lead-time for cast metal components using innovative tooling techniques and advanced pattern materials				
*Premature Cure Indication for QwikSealR Pre-Sealed Fastener Technology				1
*Light-weight, lower-cost and improved aerospace alloys using hollow nano-spheres				1
*Cryogenic Grinding System for the High Productivity Grinding of Advanced Materials				ı

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605502S: Small Business Innovative Research (SBIR)	PROJECT 1: Small Bu	usiness Innovative Research (SBIR)

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Phase I projects include the following technologies:  *Powder metallurgical process for titanium hydraulic fittings  *Laser assisted machining for structural ceramic parts  *Injection molding process for high temperature polymers reinforced with nano metals  *Innovative process to make tooling for composite parts  *Net-shape process for making titanium parts  *Self-calibrating, adaptive precision grinding system for bearing manufacture  *Innovative coating process for making high temperature magnet wire used in electric motors			
FY 2012 Plans: Due to the rapid and significant decrease in SBIR funding, the plan for the FY2012 SBIR program is to narrow the broad-based manufacturing research topic to support a more narrow area of the defense manufacturing base. Specifically, the new topic will act a high-risk feeder program to DLA's BATTNET President Budget Program. Furthermore, the FY2011 Phase I SBIR projects will provided the opportunity to compete for Phase II awards in FY2012.			
FY 2013 Plans: To continue execution of all active Phase I and Phase II SBIR Projects. And to select between 2 and 6 new Phase I SBIR proposals from the BATTNET feeder Topic that will be solicited in the DOD-wide 2013.3 Broad Agency Announcement.			
Accomplishments/Planned Programs Subtotals	1.108	2.367	-

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Small Business Innovative Research (SBIR).

# **E. Performance Metrics**

N/A.

PE 0605502S: Small Business Innovative Research (SBIR) Defense Logistics Agency

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY R-1

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

#### R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)

**DATE:** February 2012

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	21.123	22.498	27.044	-	27.044	24.781	25.151	25.551	25.979	Continuing	Continuing
1: Combat Rations (CORANET)	1.868	1.731	2.047	-	2.047	2.089	2.122	2.157	2.194	Continuing	Continuing
2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)	4.091	3.778	4.488	-	4.488	4.578	4.656	4.733	4.813	Continuing	Continuing
3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)	2.522	2.316	2.728	-	2.728	2.784	2.830	2.877	2.926	Continuing	Continuing
4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)	1.188	1.102	1.308	-	1.308	1.335	1.358	1.380	1.403	Continuing	Continuing
5: Material Acquisition Electronics (MAE)	10.507	11.846	14.465	-	14.465	11.987	12.184	12.371	12.575	Continuing	Continuing
6: Battery Network (BATTNET)	0.947	1.725	2.008	-	2.008	2.008	2.001	2.033	2.068	Continuing	Continuing

# A. Mission Description and Budget Item Justification

The Defense Logistics Agency (DLA) Industrial Preparedness Manufacturing Technology (IP ManTech) Program supports the development of a responsive, world-class manufacturing capability to affordably meet the warfighters' needs throughout the defense system life cycle. IP ManTech: Provides the crucial link between invention and product application to speed technology transitions. Matures and validates emerging manufacturing technologies to support low-risk implementation in industry and Department of Defense (DoD) facilities, e.g. depots and shipyards. Addresses production issues early by providing timely solutions. Reduces risk and positively impacts system affordability by providing solutions to manufacturing problems before they occur.

DLA ManTech includes Combat Rations Network for Technology Implementation (CORANET), Customer Driven Uniform Manufacturing (CDUM), Procurement Readiness Optimization—Advanced Casting Technology (PRO-ACT), Procurement Readiness Optimization—Forging Advance System Technology (PRO-FAST), and Material Acquisition Electronics (MAE) and Battery Network (BATTNET). As well as, Other Congressional Add (OCA) programs that are Congressionally Directed efforts.

UNCLASSIFIED
Page 1 of 35

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)

**DATE:** February 2012

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	21.798	23.103	26.762	-	26.762
Current President's Budget	21.123	22.498	27.044	-	27.044
Total Adjustments	-0.675	-0.605	0.282	-	0.282
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.062			
<ul> <li>Congressional Directed Reductions</li> </ul>	_	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-0.543			
Departmental Fiscal Guidance	-0.645	-	0.282	-	0.282
Efficiency Initiatives SSC Reduction (OSD Withhold)	-0.030	-	-	-	-

# **Change Summary Explanation**

FY2012 FFRDC(f) Reduction: -\$0.062 million

FY2012 SBIR/STTR Transfer (Reduction): -\$0.543 million

FY2013 Departmental Fiscal Guidance: \$0.282 million

	Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency  DATE: February 2012											
	APPROPRIATION/BUDGET ACTIV	TTY			R-1 ITEM N	OMENCLAT	TURE		PROJECT			
	0400: Research, Development, Test	Vide	PE 070801	1S: <i>Industria</i>	l Preparedne	ess	1: Combat Rations (CORANET)					
	BA 7: Operational Systems Develop		Manufacturing Technology (IP ManTech)									
	COST (f in Millians)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)  FY 2011  FY 2012  Base  OC						Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
	1: Combat Rations (CORANET)	1.868	1.731	2.047	-	2.047	2.089	2.122	2.157	2.194	Continuing	Continuing

### A. Mission Description and Budget Item Justification

Quantity of RDT&E Articles

In FY 2009, DLA Troop Support Subsistence sold \$4.75 billion in subsistence goods and services to the Department of Defense, making it the largest supply chain managed by DLA Troop Support. Sales in subsistence continue to grow, largely due to requirements for overseas contingency operations. The Combat Rations Program is focused on improving the manufacturing technologies related to the production and distribution of the combat rations that are at the forefront of these operations, including Meals Ready to Eat (MREs) as well as Unitized Group Rations (UGR). The objectives are increased readiness, improved quality, and better ration variety. CORANET research efforts also help control the cost of the combat rations. The CORANET program engages all elements of the supply chain including producers, military Services, Army Natick Soldier Center, United States Department of Agriculture (USDA), US Army Veterinary Command, US Army Public Health Command, DLA Logistics R&D, DLA Troop Support Subsistence and academia to research and transition improved technologies for operational rations.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Combat Rations Accomplishments/Plans	1.868	1.731	2.047
FY 2011 Accomplishments:  Explore continuous retort processing. Transition knurled seal technology for retort pouches. Develop a dimensional tear test for MREs.			
FY 2012 Plans: Develop new short term projects.			
FY 2013 Plans: Transition MRE Assembly Improvement (fit) working on assembly process modifications I, Test Methodology Directional Tear, Non-destructive Test for Measuring Tray Compressibility, Continuous Retort Processing.			
Develop new Short term projects for MRE Menu Bag Assembly Line Automation, Microwave Thermal Assisted Technology for Tray Pack Food Process Validation Projects for menu items for Institutional Packaging for MATS, Process Validation Projects for menu items for Individual Size Packages for MATS Part II of the Assembly Automation of UGR Packaging.			
Accomplishments/Planned Programs Subtotals	1.868	1.731	2.047

# C. Other Program Funding Summary (\$ in Millions)

N/A

PE 0708011S: Industrial Preparedness Manufacturing Technology (... Defense Logistics Agency

UNCLASSIFIED
Page 3 of 35

R-1 Line #245

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0708011S: Industrial Preparedness	1: Combat Rations (CORANET)
BA 7: Operational Systems Development	Manufacturing Technology (IP ManTech)	
D. Acquisition Strategy		
N/A		
E. Performance Metrics	income and a company of military company actions	The conference of the still to the section 500/ of
Performance metrics include improved quality, decreased cost and		The performance objective is to transition 50% of
completed projects to the industrial base. Cost benefit analysis is	performed on the CORANET portions annually.	

PE 0708011S: Industrial Preparedness Manufacturing Technology (... Defense Logistics Agency

UNCLASSIFIED Page 4 of 35

R-1 Line #245

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

PROJECT

1: Combat Rations (CORANET)

**DATE:** February 2012

Support (\$ in Millions)				FY 2	2012	FY 2 Ba	2013 se	FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Clemson University:Clemson, South Carolina	0.030	0.010	Dec 2011	0.010	Dec 2012	-		0.010	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	Dairy Management Incorporated:Des Plaines, Illinois	0.030	0.010	Dec 2011	-		-		-	Continuing	Continuing	Continuing
c. Manufacturing Process Support Costs	C/CPFF	Master Packaging:Tampa, Florida	0.030	0.010	Dec 2011	0.010	Dec 2012	-		0.010	Continuing	Continuing	Continuing
d. Manufacturing Process Support Costs	C/CPFF	Michigan State University:East Lansing, Michigan	0.462	0.010	Dec 2011	0.100	Dec 2012	-		0.100	Continuing	Continuing	Continuing
e. Manufacturing Process Support Costs	C/CPFF	Rutgers State University of New Jersey Division of Grants & Contract Accounting:New Brunswick, New Jersey	3.317	0.515	Dec 2011	0.500	Dec 2012	-		0.500	Continuing	Continuing	Continuing
f. Manufacturing Process Support Costs	C/CPFF	SOPAKO, Incorporated:Mullins, South Carolina	0.213	0.050	Dec 2011	0.050	Dec 2012	-		0.050	Continuing	Continuing	Continuing
g. Manufacturing Process Support Costs	C/CPFF	University of Illinois:Urbana, Illinois	0.095	0.050	Dec 2011	0.137	Dec 2012	-		0.137	Continuing	Continuing	Continuing
h. Manufacturing Process Support Costs	C/CPFF	University of Tennessee:Knoxville, Tennessee	1.084	0.360	Dec 2011	0.200	Dec 2012	-		0.200	Continuing	Continuing	Continuing
i. Manufacturing Process Support Costs	C/CPFF	Texas Engineering Experiment Station, Office of Sponsored Research, Texas A&M University:College Station, Texas	1.476	0.360	Dec 2011	0.400	Dec 2012	-		0.400	Continuing	Continuing	Continuing

PE 0708011S: Industrial Preparedness Manufacturing Technology (... Defense Logistics Agency

UNCLASSIFIED
Page 5 of 35

R-1 Line #245

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

**PROJECT** 

1: Combat Rations (CORANET)

**DATE:** February 2012

Support (\$ in Millions)	)			FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
j. Manufacturing Process Support Costs	C/CPFF	Cadillac Products Incorporated:Troy, Michigan	0.075	0.010	Dec 2011	0.010	Dec 2012	-		0.010	Continuing	Continuing	Continuing
k. Manufacturing Process Support Costs	C/CPFF	Ohio State University Research Foundation:Columbus, Ohio	0.045	0.010	Dec 2011	-		-		-	Continuing	Continuing	Continuing
I. Manufacturing Process Support Costs	C/CPFF	Oregon Freeze Dry Incorporated:Albany, Oregon	0.045	0.010	Dec 2010	0.010	Dec 2012	-		0.010	Continuing	Continuing	Continuing
m. Manufacturing Process Support Costs	C/CPFF	Research and Development Associates:San Antonio, Texas	0.333	0.150	Dec 2011	0.010	Dec 2012	-		0.010	Continuing	Continuing	Continuing
n. Manufacturing Process Support Costs	C/CPFF	Sterling Foods, Limited:San Antonio, Texas	0.045	0.010	Dec 2011	0.010	Dec 2012	-		0.010	Continuing	Continuing	Continuing
o. Manufacturing Process Support Costs	C/CPFF	Virginia Polytechnic Institute and State University:Blacksburg, Virginia	0.317	0.043	Dec 2011	0.100	Dec 2012	-		0.100	Continuing	Continuing	Continuing
p. Manufacturing Process Support Costs	C/CPFF	Washington State Universtiy:Pullman, Washington	0.151	0.050	Dec 2011	0.300	Dec 2012	-		0.300	Continuing	Continuing	Continuing
q. Manufacturing Process Support Costs	C/CPFF	Logistics Management Institute:McLean, Virginia	0.179	0.053	Dec 2011	0.075	Dec 2012	-		0.075	Continuing	Continuing	Continuing
r. Manufacturing Process Support Costs	C/CPFF	Ameriqual, Inc.:Evansville, Indiana	0.030	0.010	Dec 2011	0.050	Dec 2012	-		0.050	Continuing	Continuing	
s. Manufacturing Process Support Costs	C/CPFF	Wornick:McAllen, Texas	0.090	0.010	Dec 2011	0.050	Dec 2012	-		0.050	Continuing	Continuing	
s. Manufacturing Process Support Costs	C/CPFF	Impact Associates:Knoxville, TN	0.025	-		0.025	Dec 2012	-		0.025	Continuing	Continuing	

PE 0708011S: Industrial Preparedness Manufacturing Technology (... **Defense Logistics Agency** 

**UNCLASSIFIED** Page 6 of 35

R-1 Line #245

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

**PROJECT** 

1: Combat Rations (CORANET)

**DATE:** February 2012

Support (\$ in Millions)				FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	8.072	1.731		2.047		-		2.047			
			Total Prior Years Cost	FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	8.072	1.731		2.047		-		2.047			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY
0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

DATE: February 2012

PROJECT
1: Combat Rations (CORANET)

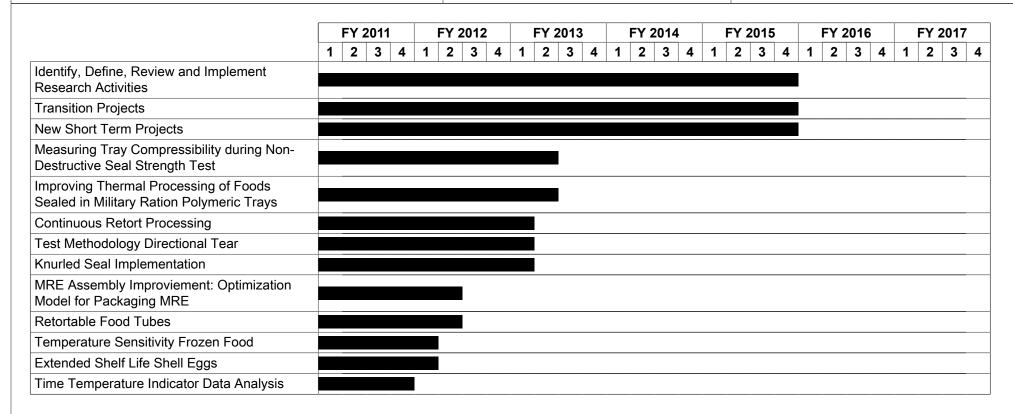


Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

**PROJECT** 

1: Combat Rations (CORANET)

**DATE:** February 2012

# Schedule Details

	Sta	art	End		
Events	Quarter	Year	Quarter	Year	
Identify, Define, Review and Implement Research Activities	1	2011	4	2015	
Transition Projects	1	2011	4	2015	
New Short Term Projects	1	2011	4	2015	
Measuring Tray Compressibility during Non-Destructive Seal Strength Test	1	2011	2	2013	
Improving Thermal Processing of Foods Sealed in Military Ration Polymeric Trays	1	2011	2	2013	
Continuous Retort Processing	1	2011	1	2013	
Test Methodology Directional Tear	1	2011	1	2013	
Knurled Seal Implementation	1	2011	1	2013	
MRE Assembly Improviement: Optimization Model for Packaging MRE	1	2011	2	2012	
Retortable Food Tubes	1	2011	2	2012	
Temperature Sensitivity Frozen Food	1	2011	1	2012	
Extended Shelf Life Shell Eggs	1	2011	1	2012	
Time Temperature Indicator Data Analysis	1	2011	4	2011	

Exhibit R-2A, RDT&E Project Just	xhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency										
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				PE 070801	IOMENCLAT 1S: Industria ing Technolo	l Preparedne	ess	PROJECT 2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)	4.091	3.778	4.488	-	4.488	4.578	4.656	4.733	4.813	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

R Accomplishments/Planned Programs (\$ in Millions)

The Department of Defense, through the Defense Logistics Agency, purchased \$2.1 billion of clothing and textile items in FY 2010. The lead-time is up to 15 months and the current inventory acquisition value is over \$1.4 billion. The current focus of DLA military clothing research is Customer Driven Uniform Manufacturing (CDUM). CDUM explores the application of advanced technologies and process reengineering to the end-to-end management of clothing and individual equipment (CIE). CDUM is focusing on three thrust areas:

- 1. Supply Chain Process Reengineering and Advanced Technology for Military Clothing
- 2. Central Issue Facility (CIF) Process Reengineering and Shared Visibility
- 3. Manufacturing Methods for Product Performance and Quality Improvement

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Customer Driven Uniform Manufacturing Accomplishments/Plans	4.091	3.778	4.488
FY 2011 Accomplishments: RFID Item Level Technology for Component Manufacturers, Fabric Manufacturers and Individual Equipment			
FY 2012 Plans: RFID Item Level Technology Phase 2 and Transition; Product Life Cycle Management Technical Data Package.			
FY 2013 Plans: CDUM II will continue the TDP project to address gaps in product specifications by developing a flexible environment that integrates multiple input and output formats to improve management, configuration control and communication between the Government and Defense Industrial Base manufacturers. Technical initiatives include developing a semantic data driven product data environment. Data mining will be adapted to populate the data models. The primary benefit will be a significant reduction in TDP errors and improved data access by the multiple tiers of industrial base. In addition, the technology facilitates communication among the Service Design Agencies, the Industrial Base and DLA Troop Support-Clothing and Textiles.			
Accomplishments/Planned Programs Subtotals	4.091	3.778	4.488

UNCLASSIFIED
Page 10 of 35

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logist	DATE: February 2012							
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT						
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)		r Driven Uniform Manufacturing reviously called Apparel Research					
		Network)						

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

# E. Performance Metrics

The CDUM program focus is on clothing and individual equipment (CIE). The cost benefit analysis for the RFID initiative has demonstrated improvements in inventory accuracy through reductions in adjustments.

Cost benefit analyses are performed on CDUM initiatives on an ongoing basis.

FY 2012

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

**Support (\$ in Millions)** 

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

FY 2013

Base

**PROJECT** 

FY 2013

Total

FY 2013

oco

2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)

**DATE:** February 2012

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Production Data Integration Technologies:Long Beach, California	8.400	0.751	Jan 2011	0.550	Jan 2013	-		0.550	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	AdvanTech:Annapolis, Maryland	6.567	1.737	Jan 2011	1.845	Jan 2013	-		1.845	Continuing	Continuing	Continuing
c. Manufacturing Process Support Costs	C/CPFF	Human Solutions NA, Incorporated:Dearborn, Michigan	0.750	-	Jan 2012	0.550	Jan 2013	-		0.550	Continuing	Continuing	Continuing
d. Manufacturing Process Support Costs	C/BPA	Logistics Management Institute:McLean, Virginia	3.920	1.290	Jan 2011	1.543	Aug 2012	-		1.543	Continuing	Continuing	Continuing
e. Manufacturing Process Support Costs	C/CPFF	Atlantic Diving Supply:Virginia Beach, VA	0.129	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	19.766	3.778		4.488		-		4.488			
			Total Prior Years Cost	FY 2	2012		2013 ise		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	19.766	3.778		4.488		-		4.488			

Remarks

PROPRIATION/BUDGET ACTIVITY  00: Research, Development, Test & Evaluation, L 7: Operational Systems Development	Defen	se-I	Nide	9		F	<b>R-1</b> PE ( Man	070	801	1S:	Ina	lusti	rial I	Pre <sub>l</sub>	par		ess Tech	)		2: (C		tom И) (Н	er D		n Ur sly ca					
	F				FY 2012				FY 2013				FY 2014			FY 2015			FY 2016 FY 201					7						
	1	2	3	4	1	2	2	3	4	1	2	3	4		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Supply Chain Process Reengineering and AIT for Military Clothing																														
Shared Army and DSCP Asset Visibility and CIF Process Reengineering																														
Manufacturing Methods for Product Performance and Quality Improvement																														
RFID Item Level Technology Phase 2 and Transition																														
Product Life Cycle Management Technical Data Package																														
Transition to CDUM II Prototype Implementations																														
CDUM II New Initiatives																														

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY R-1

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

#### R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

#### **PROJECT**

2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)

**DATE:** February 2012

## Schedule Details

	Sta	art	Er	nd
Events	Quarter	Year	Quarter	Year
Supply Chain Process Reengineering and AIT for Military Clothing	1	2011	4	2014
Shared Army and DSCP Asset Visibility and CIF Process Reengineering	1	2011	4	2014
Manufacturing Methods for Product Performance and Quality Improvement	1	2011	4	2014
RFID Item Level Technology Phase 2 and Transition	4	2012	4	2014
Product Life Cycle Management Technical Data Package	2	2012	4	2014
Transition to CDUM II Prototype Implementations	4	2012	4	2015
CDUM II New Initiatives	4	2013	4	2015

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Defer	nse Logistic	s Agency					DATE: Febr	uary 2012	
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Tes BA 7: Operational Systems Develo	st & Evaluation	n, Defense-V	Vide	PE 070801	PROJECT  08011S: Industrial Preparedness facturing Technology (IP ManTech)  PROJECT  3: Procurement Readiness Optim Advanced System Technology (P						
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO		FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)	2.522	2.316	2.728	-	2.728	2.784	2.830	2.877	2.926	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

Weapon system spare parts which use castings are responsible for a disproportionate share of backorders. Cast parts are 2% of National Stock Numbered parts but represent 4% of all backorders, and when only the oldest backorders are considered, up to 10% of them are castings. This program develops innovative technology and processes to improve the procurement, manufacture, and design of weapon system spare parts which use castings. The Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT) program takes a systems view and considers not only the Defense Logistics Agency (DLA) perspective but also the Military Service Engineering Support Activities (ESA) which DLA works with to solve technical issues, as well as the industrial supply base. The program has three components: Rapid Acquisition, Quality, and Cost Effectiveness.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Procurement Readiness Optimization-Advanced Casting Technology Accomplishments/Plans	2.522	2.316	2.728
FY 2011 Accomplishments:  Awarded new base Task Order contract. Completed digital radiography standards for investment steel castings. Developed high strength cast steels that can be substituted for titanium casting with no weight penalty with substantial cost savings. Developed affordable software for smaller diecasters to optimize selection and design of molds. Developed and statistically validated the mechanical properties of the aluminum alloy E357 for inclusion into the Metallic Materials Properties and Data Standardization (MMPDS) Handbook.			
FY 2012 Plans: Awaiting award of new casting task order contracts for new projects. Award is anticipated 2nd quarter FY11.			
FY 2013 Plans:  Continue development new projects under the three major R&D initiatives for castings: 1) improved castings inspection methods such as Digital Radiography for magnesium & copper based castings; 2) improved casting materials & processes such as rapid tooling & prototyping using on demand melting and lightweight high strength cast alloys process; additive manufacturing of airfoil investment casting cores by ceramic stereolithography; and 3) process modeling for lube-free die casting, steel casting performance and refinement of cast part performance in the presence of discontinuities.			
Accomplishments/Planned Programs Subtotals	2.522	2.316	2.728

UNCLASSIFIED
Page 15 of 35

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0708011S: Industrial Preparedness	3: Procurement Readiness Optimization-
BA 7: Operational Systems Development	Manufacturing Technology (IP ManTech)	Advanced System Technology (PRO-ACT)

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Awarded two base task order contracts competitively through a Broad Agency Announcement (BAA). Will now award task order contracts for projects as they are identified. Award of the first set of task orders is expected 2nd quarter FY12.

### E. Performance Metrics

TL:		_		_ 1  ! 1		!	
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11113 1	Ji Odiaili Ilas	a busiliess c	ase illai lusille	3 1110 1111/0311110		Comornio and	readiness benefits.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)

**PROJECT** 

3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)

DATE: February 2012

Support (\$ in Millions)	)			FY 2	2012		2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Advanced Technologies International:North Charleston, South Carolina	10.713	2.016	Mar 2012	2.428	Feb 2013	-		2.428	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	Honeywell International Inc.:Phoenix, Arizona	0.007	0.300	Mar 2012	0.300	Feb 2013	-		0.300	Continuing	Continuing	Continuing
		Subtotal	10.720	2.316		2.728		-		2.728			
			Total Prior Years Cost	FY 2	2012		2013 se		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	10.720	2.316		2.728		_		2.728			

Remarks

PROPRIATION/BUDGET ACTIVITY  10: Research, Development, Test & Evaluation, L  7: Operational Systems Development	on, Defense-Wide					ı	·							ocur	CT rement Readiness Optimization ed System Technology (PRO-A															
		FY 2	2011			F۱	Y 20	012			FY:	201	13 FY 2014				FY 2015				FY 2016				FY 2017					
	1	2	3	4	1	2	2	3	4	1	2	3	4		1	2	3	4	1	2	3	4	. 1	2	3	4	1	l 2	3	4
Digital Radiography Standard for Thin Section Steel Castings													·	·	·							·	·	·	·					
Tools for Streamlining Casting Supply Chains.																														
Additive Manufacturing of Airfoil Investment Casting Cores by Ceramic Sterolithography																														
Defense Casting for Supply Chain Integration and Statistical Properties for MMPDS Standard.																														
Modeling of Steel Casting Performance - Dimensions and Distortion.																														
Lightweight High Strength Cast Alloys Process Development.																														
Lube-free Die Casting.																														

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

PROJECT

3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)

DATE: February 2012

## Schedule Details

	St	art	Eı	nd
Events	Quarter	Year	Quarter	Year
Digital Radiography Standard for Thin Section Steel Castings	3	2011	2	2013
Tools for Streamlining Casting Supply Chains.	2	2012	2	2017
Additive Manufacturing of Airfoil Investment Casting Cores by Ceramic Sterolithography	2	2012	2	2017
Defense Casting for Supply Chain Integration and Statistical Properties for MMPDS Standard.	2	2012	2	2017
Modeling of Steel Casting Performance - Dimensions and Distortion.	2	2012	2	2017
Lightweight High Strength Cast Alloys Process Development.	2	2012	2	2017
Lube-free Die Casting.	2	2012	2	2017

Exhibit R-2A, RDT&E Project Just	Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency											
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop	& Evaluation	n, Defense-V	Vide	PE 070801	IOMENCLAT 1S: Industria ing Technolo	l Preparedne		PROJECT 4: Procuren Forging Adv FAST)				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)	1.188	1.102	1.308	-	1.308	1.335	1.358	1.380	1.403	Continuing	Continuing	
Quantity of RDT&E Articles												

#### A. Mission Description and Budget Item Justification

Weapon system spare parts that use forgings are responsible for a disproportionate share of DLA backorders. Forged parts are ~2% of National Stock Numbered parts but represent ~4% of all backorders, and when only the oldest backorders are considered, up to 10% of them are forgings. This program develops methods and technology to improve the supply of forged parts. This program takes a holistic view of the problem and attacks root causes inside DLA, at DLA's engineering support activity partners in the Services, and at DLA forging suppliers. The program has three thrusts: Business Enterprise Integration to improve supply support approaches; FORGE-IT to develop and improve technical problems; and R&D which develops new technology for forging suppliers, including new methods for making forge dies (typically the longest lead time item) and for simulation of metal flow inside the forge die (to eliminate trial and error development of the die).

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Procurement Readiness Optimization-Forging Advanced System Technology Accomplishments/Plans	1.188	1.102	1.308
FY 2011 Accomplishments:  Develop and deploy a web based tool that links forging customers to forging suppliers; lean six sigma process improvements at forges; re-evaluate and develop multi-material, multi-method evaluation tool. Address vexing forging supply chains to improve forging design and acquisition processes. Exploit the strength and toughness of "the Atlas of Metal Products" in old and new weapon systems. Begin planning for acquisition to solicit for next forging program.			
FY 2012 Plans: Finalize a web based tool that links forging customers to forging suppliers; begin implementation of lean six sigma process improvements at forges; develop multi-material, multi-method evaluation tool. Address vexing forging supply chains to improve forging design and acquisition processes. Initiate procurement action for next program.			
FY 2013 Plans: Finalize projects under current initiative, such as software for lean six sigma process improvements at forges; deploy multimaterial, multi-method evaluation tool. Also, finalize and award new contract for next tasks and projects.			
Accomplishments/Planned Programs Subtotals	1.188	1.102	1.308

UNCLASSIFIED
Page 20 of 35

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi:	stics Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)	PROJECT 4: Procurement Readiness Optimization- Forging Advanced System Technology (PRO- FAST)
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy A Broad Agency Announcement (BAA) is planned.		
E. Performance Metrics This program has a business case which justifies the investment in	terms of economic and readiness benefits.	

PE 0708011S: Industrial Preparedness Manufacturing Technology (... Defense Logistics Agency

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Logistics Agency

**Project Cost Totals** 

5.729

1.102

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

1.308

PROJECT

1.308

4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)

**DATE:** February 2012

Support (\$ in Millions)				FY :	2012		2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Advanced Technologies International:North Charleston, South Carolina	5.729	1.102	Jan 2012	1.308	Feb 2013	-		1.308	Continuing	Continuing	Continuing
		Subtotal	5.729	1.102		1.308		-		1.308			
			Total Prior Years Cost	FY:	2012		2013 ise		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract

Remarks

012 timization- chnology (PP FY 2017 2 3 4
FY 2017
2 3 4

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics	s Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide	R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness	PROJECT 4: Procurement Readiness Optimization-
BA 7: Operational Systems Development	Manufacturing Technology (IP ManTech)	Forging Advanced System Technology (PRO-FAST)

# Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
DoD Procurement Tools and Technical Support	1	2011	2	2013
Simulation of Heat Treat Distortion	3	2013	4	2017
Simulation and Workforce Development	1	2011	4	2013
Rapid Low Cost Data Generation for Simulation	3	2013	4	2017
Next Generation Low Cost Aluminum Alloys	3	2013	4	2017
National Forging Tooling Database (NFTD)	1	2011	2	2013
Metal and Process Optimization (MPO)	1	2011	4	2013
SmartChart™ Intelligent Process Tools for Forges	1	2011	2	2013

Exhibit R-2A, RDT&E Project Just	tification: PE	3 2013 Deter	nse Logistics	s Agency		DATE: February 2012							
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop	t & Evaluation	n, Defense-V	Vide	PE 070801	IOMENCLAT 1S: Industria ing Technolo	l Preparedne		PROJECT 5: Material	Acquisition Electronics (MAE)				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
5: Material Acquisition Electronics (MAE)	10.507	11.846	14.465	-	14.465	11.987	12.184	12.371	12.575	Continuing	Continuing		
Quantity of RDT&E Articles													

## A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

Develop a capability to emulate most obsolete digital integrated circuits (ICs) in the Federal catalog using a single, flexible manufacturing line. DoD has estimated \$2.9 billion is spent every five years redesigning circuit card assemblies. Many of these circuit card redesigns are performed to mitigate IC obsolescence. Commercial ICs have short Product Life Cycles (often only 18 months). IC Manufacturers subsequently move on to later generations of ICs, leaving little to no sources for their previous IC products. DoD maintains weapons systems much longer than IC lifecycles, resulting in an obsolescence problem. In order to avoid costs and potential readiness issues associated with buying/carrying excess inventories acquired before commercial availability ceases, or redesigning the next higher assembly to mitigate the obsolete IC, DLA (as the manager of 88% of the IC Federal Stock Class) must have the capability to manufacture needed IC devices.

Title: Material Acquisition Electronics Accomplishments/Plans	10.507	11.846	14.465
FY 2011 Accomplishments:  MAE will continue to develop additional capability and expand it to succeeding generations of obsolete ICs through successive technology nodes. These technologies will be demonstrated through performance based specification and Weapons System IC insertions. In addition, there has been increased DoD concern over trusted sourcing issues, as most IC design and production has migrated to overseas suppliers.			
FY 2012 Plans:  MAE will formulate specific device family targets and initiate a Linear Emulation thrust. It will initiate 250 nanometer Emulation fabrication process (High Performance (speed) and Density) development providing additional FSC 5962 coverage. It will continue 350 nanometer Emulation fabrication process development; bringing new capabilities to the Customers and Agency. It will integrate the Integrated Circuit Characterization tool advancements into Emulation flow, enabling supply for non-procurables. It will transition fully-developed and verified 800 nanometer emulation production capabilities to DLA Land and Maritime for full-scale production of previously non-procurable ICs.			
FY 2013 Plans:  MAE will transition additional Advanced CMOS Digital Microcircuit Emulation capability into full-scale production increasing DLA's ability to re-establish sourcing of non-procurable microcircuit NSNs. MAE will also transition higher density Read-Only- and Random-Access Memory Emulation Capability into full-scale production further increasing DLA's ability to re-establish sourcing of non-procurable microcircuit NSNs. The newly transitioned emulation capabilities will address several discontinued device families			

UNCLASSIFIED
Page 25 of 35

FY 2011

FY 2012

FY 2013

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics	s Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0708011S: Industrial Preparedness	5: Material	Acquisition Electronics (MAE)
BA 7: Operational Systems Development	Manufacturing Technology (IP ManTech)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
and will increase the potential emulation production envelope by several hundred NSNs. MAE will also initiate specific process,			
design and test verification developments in its new Linear Emulation thrust. It will initiate planning for the specific emulation			
technology implementations to support specific device family groups. It will continue 250 nanometer Emulation fabrication process			
development providing additional FSC 5962 coverage in its Digital Emulation thrust. It will complete assessment of a Trusted			
Design capability, responding to Agency, Customer, and DoD concerns. It will continue 350 nanometer Emulation fabrication			
process development, bringing new capabilities to the Customers and Agency.			
Accomplishments/Planned Programs Subtotals	10.507	11.846	14.465

## C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

# E. Performance Metrics

Transition of one technology implementation (base array) to low-rate initial production or full-scale production.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

Mida

R-1 ITEM NOMENCLATURE

PROJECT

**DATE:** February 2012

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

5: Material Acquisition Electronics (MAE)

Support (\$ in Millions)				FY 2	FY 2012		FY 2013 Base		FY 2013 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	SRI International:Princeton, New Jersey	50.366	11.846	Oct 2012	14.465	Oct 2012	-		14.465	Continuing	Continuing	Continuing
		Subtotal	50.366	11.846		14.465		-		14.465			
Year		Total Prior Years Cost	FY 2	2012	FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract	
		Project Cost Totals	50.366	11.846		14.465		-		14.465			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

PROJECT

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

DATE: February 2012

PROJECT

5: Material Acquisition Electronics (MAE)

		FY	2011		FY 2012				FY 2013				FY 2	2014		FY 2015			FY 2016			FY 2017						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Perform Gap Analysis (GA)																												
Implement Process Improvements																												-
Plan required Process Improvements																												
Perform Process Review																												
Transition New Microcircuit Designs to LRIP																												
Develop Low Rate Initial Production (LRIP) Capability																												
Develop Prototypes for Test and Insertion																												
Update Design Library																												-
Perform Base Array Designs Required to Fill GA																												
Monitor and Adjust Process Improvements																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

**PROJECT** 

5: Material Acquisition Electronics (MAE)

**DATE:** February 2012

## Schedule Details

	Si	E	nd	
Events	Quarter	Year	Quarter	Year
Perform Gap Analysis (GA)	1	2011	4	2016
Implement Process Improvements	1	2011	4	2016
Plan required Process Improvements	1	2011	4	2016
Perform Process Review	1	2011	4	2016
Transition New Microcircuit Designs to LRIP	1	2011	4	2016
Develop Low Rate Initial Production (LRIP) Capability	1	2011	4	2016
Develop Prototypes for Test and Insertion	1	2011	4	2016
Update Design Library	1	2011	4	2016
Perform Base Array Designs Required to Fill GA	1	2011	4	2016
Monitor and Adjust Process Improvements	1	2011	4	2016

Exhibit R-2A, RDT&E Project Just		DATE: February 2012									
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Tes BA 7: Operational Systems Develo	PE 070801	NOMENCLA 1S: Industria ring Technolo	l Preparedn		PROJECT 6: Battery Network (BATTNET)						
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
6: Battery Network (BATTNET)	0.947	1.725	2.008	-	2.008	2.008	2.001	2.033	2.068	Continuing	Continuing
Quantity of RDT&E Articles											

## A. Mission Description and Budget Item Justification

BATTNET is focused on improving the supply and reducing the cost of batteries used in fielded weapon systems, such as communication radios and armored vehicles. Batteries exhibit dynamic challenges for military logistics. BATTNET is a community of practice of battery supply chain members, engineering support activities, researchers, and users. BATTNET conducts R&D to address sustainment gaps and bridge technical solutions into higher MRLs for specific groups of batteries. For FY11, DLA received 143K orders for 3.6M batteries at \$238M Net Value compared to FY10 (\$237M) and FY09 (\$254M).

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: BATTNET Accomplishments/Plans	0.947	1.725	2.008
FY 2011 Accomplishments:  BATTNET R&D awarded three Short Term Projects (STP): "Coating Cost Reduction for Rechargeable Lithium-Ion Batteries", "Lithium-Ion Battery Modularity for Military Applications", and "Manufacturing Technology for Hybrid Li-CFx Primary Communications & Electronics Battery". Short term projects assure the prompt and sustained availability, quality, and affordability of military batteries. BATTNET R&D developed requirements for a military acceptable version of a rechargeable CR123 (ANSI C18.3M – 5018LC).			
FY 2012 Plans: BATTNET R&D will continue to be performed through identification and awards of new Short Term Projects (STP) with an expected duration of 18-24 months and an average funding of \$100K-\$500K per year. STP proposals are required to include a business case with specific metrics and transition plan for success. BATTNET R&D will also be collaborating on Advanced Battery Research proposals with DLA's Small Business Innovation Research (SBIR) program. A new BAA will be issued to refresh the partnerships in BATTNET R&D.			
FY 2013 Plans: BATTNET R&D has identified several potential Short Term Projects: Advancements in lithium power sources for the TOW Improved Target Acquisition System (ITAS) and Long Range Scout and Surveillance System (LRAS3) - a FY11 IBIF submission; Develop a rechargeable CR123 battery; Manufacturing advancements to critical vehicle batteries; and BCA for Defense battery monitoring and logistics system.			
Accomplishments/Planned Programs Subtotals	0.947	1.725	2.008

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0708011S: Industrial Preparedness	6: Battery N	letwork (BATTNET)
BA 7: Operational Systems Development	Manufacturing Technology (IP ManTech)		

## C. Other Program Funding Summary (\$ in Millions)

N/A

#### **D. Acquisition Strategy**

The BATTNET R&D partners were established by contract September 2009 through a competitive Broad Area Announcement (BAA) allowing for maximum competition. Partner Contracts were based upon proposals that demonstrated knowledge, experience, and expertise in the following areas of interest: Automation, Battery Maintenance, Competition & Contracting Requirements, Diminishing Manufacturing & Supply, Lithium Battery Safety, Reducing Acquisition Costs, Shelf Life, Supply Chain Logistics, Surge/Sustainment, and Technology Transition/Insertion. The BATTNET, which includes a Government Steering Group (GSG) of power source technical experts from the military services R&D groups, is informed of general R&D requirements for supply chain improvement. The partners develop among themselves related R&D projects, which are then formally evaluated by the GSG. Selected projects are then chartered within DLA and planned for contract STP awards when funds are available.

#### E. Performance Metrics

Each Short Term Project (STP) will have performance metrics appropriate to its scope. Also all STPs will include a business case to demonstrate return on investment
or a readiness case to calculate warfighter impact versus costs.

PE 0708011S: Industrial Preparedness Manufacturing Technology (... Defense Logistics Agency

UNCLASSIFIED
Page 31 of 35

R-1 Line #245

Volume 5 - 417

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

**DATE:** February 2012 **PROJECT** 

6: Battery Network (BATTNET)

upport (\$ in Millions)				FY 2	2012	FY 2 Ba	2013 se	FY 2		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
<ul><li>a. Manufacturing Process</li><li>Support Costs</li></ul>	C/CPFF	Quallion LLC:Sylmar, CA	0.331	0.364	Dec 2011	0.225	Dec 2012	-		0.225	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	Yardney Technical Products:Pawcatuck, CT	0.050	0.025	Dec 2011	0.025	Dec 2012	-		0.025	Continuing	Continuing	Continuing
c. Manufacturing Process Support Costs	C/CPFF	EaglePicher Technologies:Joplin, MO	0.050	0.305	Dec 2011	0.125	Dec 2012	-		0.125	Continuing	Continuing	Continuing
d. Manufacturing Process Support Costs	C/CPFF	Eskra Technical Products:Saukville, WI	0.465	0.300	Dec 2011	0.300	Dec 2012	-		0.300	Continuing	Continuing	Continuing
e. Manufacturing Process Support Costs	C/CPFF	Lockheed Martin Corporation:Grand Prairie, TX	0.050	0.025	Dec 2011	0.300	Dec 2012	-		0.300	Continuing	Continuing	Continuing
f. Manufacturing Process Support Costs	C/CPFF	Redblack Communications:Hollywo	ood, 0.300	0.195	Dec 2011	0.125	Dec 2012	-		0.125	Continuing	Continuing	Continuing
g. Manufacturing Process Support Costs	C/CPFF	Saft America:Cockeysville, MD	0.050	0.025	Dec 2011	0.500	Dec 2012	-		0.500	Continuing	Continuing	Continuing
h. Manufacturing Process Support Costs	C/CPFF	Spectrum Brands:Madison, WI	0.025	0.025	Dec 2011	0.025	Dec 2012	-		0.025	Continuing	Continuing	Continuing
i. Manufacturing Process Support Costs	C/CPFF	Innovative Battery Consulting:Southport, NC	0.075	0.125	Dec 2011	0.075	Dec 2012	-		0.075	Continuing	Continuing	Continuing
j. Manufacturing Process Support Costs	C/CPFF	Alion Science & Technology:Rome, NY	0.513	0.228	Dec 2011	0.308	Dec 2012	-		0.308	Continuing	Continuing	Continuing
k. Manufacturing Process Support Costs	C/FP	Logistics Management Institute (LMI):McLean, VA	0.050	0.108	Dec 2011	-		-		-	Continuing	Continuing	
		Subtotal	1.959	1.725		2.008		-		2.008			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 De				DATE	: Februar	y 2012			
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NO	MENCLATURE	PROJECT	OJECT					
0400: Research, Development, Test & Evaluation, Defense	PE 0708011S:	Industrial Preparedr	ness	6: Battery Network (BATTNET)			ET)		
BA 7: Operational Systems Development		Manufacturing	Technology (IP Man	Tech)					
Т	Total Prior								Target

	Total Prior Years Cost	FY	2012	FY 2		2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1.959	1.725		2.008	-		2.008			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Logistics Agency

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

**R-1 ITEM NOMENCLATURE**PE 0708011S: *Industrial Preparedness* 

Manufacturing Technology (IP ManTech)

**PROJECT** 

6: Battery Network (BATTNET)

		FY	<b>201</b> 1			FY 2012		FY 2013			FY 2014		FY 2015		FY 2016				F	Y 20	17							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	. 1	2	2 3		4	1	2	3 4
Battery Network Program																												
Coating Cost Reduction for Rechargeable Lithium-Ion Batteries (Eskra Technical Products)																												
Lithium-Ion Battery Modularity for Military Applications (Quallion)																												
Manufacturing Technology for Hybrid Li-CFx Primary C&E battery (RedBlack/Ultralife)																												
Zero-volt Battery Technology for Military Applications (Quallion)																												
Production Developments for Li-CFx Batteries (EaglePicher)																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

PROJECT

6: Battery Network (BATTNET)

**DATE:** February 2012

## Schedule Details

	St	art	End		
Events	Quarter	Year	Quarter	Year	
Battery Network Program	1	2011	4	2017	
Coating Cost Reduction for Rechargeable Lithium-Ion Batteries (Eskra Technical Products)	2	2011	1	2012	
Lithium-Ion Battery Modularity for Military Applications (Quallion)	3	2011	2	2012	
Manufacturing Technology for Hybrid Li-CFx Primary C&E battery (RedBlack/Ultralife)	4	2011	3	2013	
Zero-volt Battery Technology for Military Applications (Quallion)	2	2012	4	2013	
Production Developments for Li-CFx Batteries (EaglePicher)	2	2012	4	2013	



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0708012S: Logistics Support Activities (LSA)

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	2.792	2.458	4.711	-	4.711	4.757	4.809	4.860	4.912	Continuing	Continuing
1: Logistics Support Activities (LSA)	2.792	2.458	2.911	-	2.911	2.957	3.009	3.060	3.112	Continuing	Continuing
2: Pacific Disaster Center	-	-	1.800	-	1.800	1.800	1.800	1.800	1.800	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Logistics Support Activities (LSA) is under the staff cognizance and oversight of Office of the Secretary of Defense and was transferred to the defense Logistics Agency (DLA) in 1994. In accordance with DoD Directive 5111.1, Defense Continuity & Crisis Management (DCCM) was established to consolidate continuity-related policy and oversight activities within DoD in order to ensure the Secretary of Defense can perform his mission essential functions under all circumstances. DCCM provides the secretary of Defense policy, plans, crisis management, and oversight of the Department of Defense continuity related program activities. The DCCM's primary mission is to support the continued execution of the Department's mission essential functions across the full spectrum of threats. The threats range from major natural disasters to weapons of mass destruction in major metropolitan areas, as well as large-scale terrorist attacks.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.813	2.466	2.879	-	2.879
Current President's Budget	2.792	2.458	4.711	-	4.711
Total Adjustments	-0.021	-0.008	1.832	-	1.832
Congressional General Reductions	-	-0.008			
Congressional Directed Reductions	-	-			
Congressional Rescissions	-	-			
Congressional Adds	-	-			
Congressional Directed Transfers	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Departmental Fiscal Guidance	-0.017	-	1.832	-	1.832
Efficiency Initiatives SSC Reduction (OSD Withhold)	-0.004	-	-	-	-

## **Change Summary Explanation**

FY2012 FFRDC(f) Reduction: -\$0.008 million

FY2013 Departmental Fiscal Guidance: \$1.832 million

PE 0708012S: Logistics Support Activities (LSA)
Defense Logistics Agency

UNCLASSIFIED
Page 1 of 4

R-1 Line #246

Volume 5 - 423

**DATE:** February 2012

EXIIIDIL K-ZA, KD I &E PIOJECT JUST	XHIBIT N-2A, NOT ALL PROJECT SUSTINICATION. PD 2013 Deletise Logistics Agency									uary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development					OMENCLAT 2S: Logistics	<b>TURE</b> s Support Ad	PROJECT 1: Logistics	DJECT Digistics Support Activities (LSA)				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
1: Logistics Support Activities (LSA)	2.792	2.458	2.911	-	2.911	2.957	3.009	3.060	3.112	Continuing	Continuing	

## A. Mission Description and Budget Item Justification

Exhibit R-24 RDT&F Project Justification: PR 2013 Defense Logistics Agency

This program is reported in accordance with the Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Logistics Support Activities	2.792		2.911	-	2.911
Description: This is a classified program.					
FY 2011 Accomplishments: This is a classified program.					
FY 2012 Plans: This is a classified program.					
FY 2013 Base Plans: This is a classified program.					
FY 2013 OCO Plans: This is a classified program.					
Accomplishments/Planned Programs Subtotals	2.792	2.458	2.911	-	2.911

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Quantity of RDT&E Articles

N/A

## **E. Performance Metrics**

Perform classified logistics in accordance with direction provided by the Office of the Secretary of Defense (OSD) Special Access Programs Coordination Office (SAPCO). Program oversight provided by OSD SAPCO.

PE 0708012S: Logistics Support Activities (LSA) **Defense Logistics Agency** 

**UNCLASSIFIED** Page 2 of 4

Volume 5 - 424 R-1 Line #246

DATE: February 2012

Exhibit R-2A, RDT&E Project Jus		DATE: February 2012									
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Tes BA 7: Operational Systems Develo		IOMENCLA 2S: Logistic		ctivities	PROJECT 2: Pacific Disaster Center						
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2: Pacific Disaster Center	-	-	1.800	_	1.800	1.800	1.800	1.800	1.800	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

The Pacific Disaster Center (PDC) has been in operation since February 1996. The PDC is a public/private partnership managed by the University of Hawaii (UH) under a cooperative agreement with the Department of Defense. It is functionally within the organization of the USD(P), ASD(HD&ASA), and DASD(DCCM). The PDC is a world-recognized authority and leader in science and information technology applications relating to humanitarian assistance and disaster relief (HA/DR).

The PDC Program Office's (USD(P), ASD(HD&ASA), and DASD(DCCM)) primary responsibility is for management and stewardship of governmental funds provided in Defense Department appropriations for DoD missions associated with DoD CrM, HA/DR, Theater Security Cooperation, and DSCA. In doing this, the Program Office develops and provides policy, oversight and guidance, and jointly develops strategic guidelines, programmatic content and priorities with the UH and PDC. The PDC Program Office also serves as a support element of the Hawaii-based organization especially in the area of gaining Federal agency support and resources, as well as business opportunities.

		FY 2013	FY 2013	FY 2013
FY 2011	FY 2012	Base	oco	Total
-	-	1.800	-	1.800
	-		FY 2011 FY 2012 Base 1.800	FY 2011 FY 2012 Base OCO - 1.800 -

PE 0708012S: Logistics Support Activities (LSA)
Defense Logistics Agency

Page 3 of 4

R-1 Line #246

Volume 5 - 425

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency  DATE: February 2012									
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT							
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0708012S: Logistics Support Activities	2: Pacific D	Disaster Center						
BA 7: Operational Systems Development	(LSA)								

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
The March 14, 2011 Secretary of Defense memorandum, subject: Track Four Efficiency Initiatives Decisions, directed the Under Secretary of Defense (Policy) (USD(P)) to transfer the Pacific Disaster Center (PDC) function, manpower, and budget resources to the Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics) (OUSD(AT&L)) and the Defense Logistics Agency (DLA).					
FY 2013 OCO Plans: N / A.					
Accomplishments/Planned Programs Subtotals	-	-	1.800	-	1.800

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

TBD.

# E. Performance Metrics

TBD.

PE 0708012S: Logistics Support Activities (LSA)
Defense Logistics Agency

# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



# **Defense Security Cooperation Agency**

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide

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Defense Security Cooperation Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 43
Program Element Table of Contents (by Budget Activity then Line Item Number)	.Volume 5 - 43
Program Element Table of Contents (Alphabetically by Program Element Title)	.Volume 5 - 44
Exhibit R-2's	Volume 5 - 44



#### Defense-Wide FY 2013 President's Budget

### Exhibit R-1 FY 2013 President's Budget

Total Obligational Authority (Dollars in Thousands)

03 Jan 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Totals	FY 2013 Base	FY 2013 OCO	FY 2013 Totals
Og'erational Systems Development	2,379	. 2,453		2,453	3,526		3,526
Total Research, Development, Test & Evaluation	2,379	2,453		2,453	3,526		3,526
Summary Recap of FYDP Programs							
Research and Development	2,379	2,453		2,453	3,526		3,526
Total Research, Development, Test & Evaluation	2,379	2,453		2,453	3,526		3,526

 $\wp$ -1C: FY 2013 President's Budget (Published Version), as of January 3, 2012 at 10:02:39

## Defense-Wide

#### FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget

## Total Obligational Authority

(Dollars in Thousands)

FY 2011 FY 2012 FY 2012 PY 2012 FY 2013 FY 2013 FY 2013 Appropriation Actuals Base OCO Totals Base 000 Totals \_\_\_\_\_ 2,379 2,453 3,526 Defense Security Cooperation Agency 2,453 3,526 Total Research, Development, Test & Evaluation 2,379 2,453 2,453 3,526 3,526

R-1C: FY 2013 President's Budget (Published Version), as of January 3, 2012 at 10:02:39

03 Jan 2012

## Defense-Wide

#### FY 2013 President's Budget

#### Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Totals	FY 2013 Base	FY 2013 OCO	FY 2013 Totals
186	0605127 <b>T</b>	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	2,090	2,165		2,165	3,238		3,238
187	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	289	288		288	288		288
	Opera	utional Systems Development		2,379	2,453		2,453	3,526		3,526
	<b>.</b>	5. 1 <b>5</b>					A			* FOC
Tota	I Research,	Development, Test & Eval, DW		2,379	2,453		2,453	3,526		3,526

R-1C: FY 2013 President's Budget (Published Version), as of January 3, 2012 at 10:02:39

03 Jan 2012

# Defense Security Cooperation Agency FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Totals	FY 2013 Base	FY 2013 OCO	FY 2013 Totals
186	0605127T	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	2,090	2,165		2,165	3,238		3,238
187	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	289	288		288	288		286
0	perational	Systems Development		2,379	2,453		2,453	3,526		3,526
Tota	l Defense S	Security Cooperation Agency		2,379	2,453		2,453	3,526		3,526

R-1C: FY 2013 President's Budget (Published Version), as of January 3, 2012 at 10:02:39

# Defense-Wide

#### FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget

# Total Obligational Authority

(Dollars in Thousands)

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Totals	FY 2013 Base	FY 2013 OCO	FY 2013 Totals
Operational Systems Development	2,379	2,453		2,453	3,526		3,526
Total Research, Development, Test & Evaluation	2,379	2,453		2,453	3,526		3,526
Summary Recap of FYDP Programs							
Research and Development	2,379	2,453		2,453	3,526		3,526
Total Research, Development, Test & Evaluation	2,379	2,453		2,453	3,526		3,526

R-1C: FY 2013 President's Budget (Published Version), as of January 3, 2012 at 10:02:39

Page D-1

03 Jan 2012

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Jan 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Totals	FY 2013 Base	FY 2013 OCO	FY 2013 Totals
Defense Security Cooperation Agency	2,379	2,453		2,453	3,526		3,526
Total Research, Development, Test & Evaluation	2,379	2,453		2,453	3,526		3,526

R-1C: FY 2013 President's Budget (Published Version), as of January 3, 2012 at 10:02:39

Page D-2

#### Defense-Wide FY 2013 President's Budget

#### Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program	v.									
Line	Element			FY 2011	FY 2012	FY 2012	FY 2012	FY 2013	FY 2013	FY 2013	
No	Number	Item	Act	Actuals	Base	oco	Totals	Base	oco	Totals	
								•			
186	0605127T	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	2,090	2,165		2,165	3,238		3,238	
187	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	289	288		288	288		288	
	Opera	tional Systems Development		2,379	2,453		2,453	3,526		3,526	
Tota!	l Research,	Development, Test & Eval, DW		2,379	2,453		2,453	3,526		3,526	

R-1C: FY 2013 President's Budget (Published Version), as of January 3, 2012 at 10:02:39

Page D-3

03 Jan 2012

# Defense Security Cooperation Agency FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

03 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Totals	FY 2013 Base	FY 2013 OCO	FY 2013 Totals
186	0605127T	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	2,090	2,165		2,165	3,238		3,238
187	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	289	288		288	288		288
o	perational	Systems Development		2,379	2,453		2,453	3,526		3,526
Total Defense Security Cooperation Agency				2,379	2,453		2,453	3,526	the field was push loss your way again and	3,526

R-1C: FY 2013 President's Budget (Published Version), as of January 3, 2012 at 10:02:39

Page D-4

Defense Security Cooperation Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (by Budget Activity then Line Item Number)**

**Budget Activity 07: Operational Systems Development** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activ	vity Program Element Number	Program Element Title F	Page
186	07	0605127T	Regional International Outreach (RIO) - Partnership for Peace Information Management System (PIMS)Volume 5 -	443
187	07	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS) Volume 5 -	- 451



Defense Security Cooperation Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Overseas Humanitarian Assistance Shared Information System (OHASIS)	0605147T	187	07Volume 5 - 451
Regional International Outreach (RIO) - Partnership for Peace Information Management System (PIMS)	0605127T	186	07Volume 5 - 443



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Security Cooperation Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605127T: Regional International Outreach (RIO) - Partnership for Peace Information

**DATE:** February 2012

BA 7: Operational Systems Development Management System (PIMS)

, ,					,	,					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	2.090	2.165	3.238	-	3.238	3.270	2.292	2.361	2.407	Continuing	Continuing
000000: Regional International Outreach - Partnership for Peace Information Management Systems	2.090	2.165	3.238	-	3.238	3.270	2.292	2.361	2.407	Continuing	Continuing

### A. Mission Description and Budget Item Justification

Regional International Outreach (RIO) - Partnership for Peace (PfP) Information Management System (PIMS) is an Office of the Secretary of Defense (OSD) initiative to deploy a common information technology platform to improve international partner outreach and collaboration efforts in a federated environment. A federated environment – characterized by the capacity of DoD institutions to directly share participants and content across websites - fosters networks of partner influencers and enables better use of DoD resources through collaboration among the Regional Centers for Security Studies, PfP and international partners, other DoD educational institutions and communities as required. The program uses a spiral methodology (making available capabilities as developed), to speed the delivery of open source collaboration technologies the user community. The Defense Security Cooperation Agency (DSCA) oversees execution of the research and development of the RIO-PIMS effort and its operations, and ensures that the program addresses DoD security cooperation requirements in the context of defense, interagency, and international information sharing and collaboration needs.

The RIO-PIMS effort focuses on improving collaboration, supporting outreach efforts, and enabling communication among the Regional Centers for Security Studies, the Combatant Commanders, the DSCA, OUSD (Policy), North Atlantic Treaty Organization's (NATO) Military Cooperation Division (MCD), the PfP Consortium of Defense Academies, PfP Partner countries, and other designated DoD institutions and communities. It provides DoD and international partner security practitioners a platform to share information, communicate and collaborate, and improve administrative activities. It also provides the ability to form collaborative communities of interest around security issues. RIO- PIMS facilitates information sharing and knowledge management concepts in accordance with U.S. policy. PIMS, as a part of the NATO Enlargement Facilitation Act of 1996, implements the Congressional endorsement for the modernization of Defense capabilities in eligible PfP countries relative to their telecommunications infrastructure. RIO-PIMS provides allies and partner countries the ability to collaborate in critical cooperative activities that underpin the spirit of the PfP program. The program supports PfP coalition initiatives through development of distributive collaboration tools to support aspects of U.S. and NATO-approved PfP cooperative activities. This support is important to achieve the interoperability/integration outlined in the Guidance for the Employment of the Force. RIO-PIMS supports internet-based education and collaboration, exercise simulations, and training center requirements.

RCPAMS provides an integrated student and activities management framework that was designed to complement the capabilities of the Security Assistance Network (SAN). This interface between the SAN, RCPAMS, and RIO-PIMS provides faculty and students an effective information service to ensure student, activity and alumni management. Data is shared between the systems ensuring improved data integrity.

PE 0605127T: Regional International Outreach (RIO) - Partnershi...
Defense Security Cooperation Agency

UNCLASSIFIED
Page 1 of 8

R-1 Line #186

Volume 5 - 443

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense	e Security C	Cooperation Agenc	y	<b>DATE</b> : F	ebruary 2012						
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	PE 0	R-1 ITEM NOMENCLATURE PE 0605127T: Regional International Outreach (RIO) - Partnership for Peace Informatio Management System (PIMS)									
B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total						
Previous President's Budget	2.139	2.165	2.194	-	2.194						
Current President's Budget	2.090	2.165	3.238	-	3.238						
Total Adjustments	-0.049	-	1.044	-	1.044						
<ul> <li>Congressional General Reductions</li> </ul>	_	-									
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-									
<ul> <li>Congressional Rescissions</li> </ul>	-0.049	-									
Congressional Adds	-	-									
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-									
Reprogrammings	_	-									

### **Change Summary Explanation**

SBIR/STTR TransferRealignment Increase

• Non Pay Economic Adjustment

FY 2013: RIO-PIMS requires \$3.238 to implement the gaming and exercise support module that was researched and defined in FY12; extend the email/system notification functionality to allow users to respond directly to system generated notifications without having to login to the system; to research the computer human interface (CHI) ensuring it meets RIO-PIMS mission objectives – modify where necessary, validate existing requirements with the user communities and gather new ones; to deploy a native video teleconference (VTC) capability to replace the existing Adobe connect system; to update the GlobalNET implementation to the newest platform release; and to complete the 2013 recertification of security accreditation process that reflects the new and updated software capabilities as well newly integrated educational organizations.

UNCLASSIFIED
Page 2 of 8

1.000

0.044

1.000

0.044

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Defer	nse Security	Cooperation	n Agency				DATE: Febr	ruary 2012	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop						Regional International Outreach - ip for Peace Information Management					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
000000: Regional International Outreach - Partnership for Peace Information Management Systems	2.090	2.165	3.238	-	3.238	3.270	2.292	2.361	2.407	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

Regional International Outreach (RIO) - Partnership for Peace (PfP) Information Management System (PIMS) is an Office of the Secretary of Defense (OSD) initiative to deploy a common information technology platform to improve international partner outreach and collaboration efforts in a federated environment. A federated environment – characterized by the capacity of DoD institutions to directly share participants and content across websites - fosters networks of partner influencers and enables better use of DoD resources through collaboration among the Regional Centers for Security Studies, PfP and international partners, other DoD educational institutions and communities as required. The program uses a spiral methodology (making available capabilities as developed), to speed the delivery of open source collaboration technologies the user community. The Defense Security Cooperation Agency (DSCA) oversees execution of the research and development of the RIO-PIMS effort and its operations, and ensures that the program addresses DoD security cooperation requirements in the context of defense, interagency, and international information sharing and collaboration needs.

The RIO-PIMS effort focuses on improving collaboration, supporting outreach efforts, and enabling communication among the Regional Centers for Security Studies, the Combatant Commanders, the DSCA, OUSD (Policy), North Atlantic Treaty Organization's (NATO) Military Cooperation Division (MCD), the PfP Consortium of Defense Academies, PfP Partner countries, and other designated DoD institutions and communities. It provides DoD and international partner security practitioners a platform to share information, communicate and collaborate, and improve administrative activities. It also provides the ability to form collaborative communities of interest around security issues. RIO- PIMS facilitates information sharing and knowledge management concepts in accordance with U.S. policy. PIMS, as a part of the NATO Enlargement Facilitation Act of 1996, implements the Congressional endorsement for the modernization of Defense capabilities in eligible PfP countries relative to their telecommunications infrastructure. RIO-PIMS provides allies and partner countries the ability to collaborate in critical cooperative activities that underpin the spirit of the PfP program. The program supports PfP coalition initiatives through development of distributive collaboration tools to support aspects of U.S. and NATO-approved PfP cooperative activities. This support is important to achieve the interoperability/integration outlined in the Guidance for the Employment of the Force. RIO-PIMS supports internet-based education and collaboration, exercise simulations, and training center requirements.

RCPAMS provides an integrated student and activities management framework that was designed to complement the capabilities of the Security Assistance Network (SAN). This interface between the SAN, RCPAMS, and RIO-PIMS provides faculty and students an effective information service to ensure student, activity and alumni management. Data is shared between the systems ensuring improved data integrity.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Regional International Outreach - Partnership for Peace Information Management System	2.090	2.165	3.238

PE 0605127T: Regional International Outreach (RIO) - Partnershi...
Defense Security Cooperation Agency

UNCLASSIFIED
Page 3 of 8

R-1 Line #186

Volume 5 - 445

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Secu	urity Cooperation Agency		DATE: Fe	bruary 2012						
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	100: Research, Development, Test & Evaluation, Defense-Wide PE 0605127T: Regional International Outreach 0000									
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013					
FY 2011 Accomplishments:  In FY2011, RIO-PIMS achieved full operating capability (FOC) through that went through all phases of software delivery. RIO-PIMS re-valid global audience research. It distilled technical requirements from the created a new information architecture (IA). The technical architecture validated requirements and a new technical architecture was developed and implemented through a new computer human interface (CHI). A and workflow, was developed and executed by an independent authoromnunity. Moved all of the operational software and data from a Ne NOC in Ashburn, VA to save cost and increase speed for end users, addition to development activities and achieving DoD milestones.  Completed the Capabilities Production Document (CPD); and Informal Integration and Development System (JCIDS) process. Completed the Assurance Category (MAC) Level 3, Common Criteria EAL-2, and Fe Ensured supported institutions had system providing faculty and studiactivity and alumni management. Validated, tested, and implemented called RCPAMS. This included migrating legacy data from five regions.	lated all the system functional requirements through se functional requirements, developed use cases, are was examined and determined to be inadequate for led and deployed. A new user experience was plant in operational test plan, based on all of the requirementarity. Deployed system to seven members of the RIC etwork Operations Center (NOC) in Stuttgart, German Closed multiple security holes found in production settion Support Plan (ISP) required for Joint Capabilities are security accreditation package in order to maintain aderal Information Process Standards (FIPS) Security ents an effective information service to ensure stude an integrated student and activities management from all centers and ensuring RCPAMS met or exceeded	nd or the ned ents 0-PIMS ny to a ystem in es i Mission y Level 2. nt, amework all								
functionality. In addition, planned and executed an interface between RCPAMS and RIO-PIMS. Planned for student nomination form on the		etween								
FY 2012 Plans: Deploy the new platform to Counter terrorism fellowship program (CF Global Center for Security Cooperation (GCSC), Defense Institute for Language Institute English Learning Centers (DLI-ELC), Military Coo Graduate Studies (SIGS), and the NATO School.	International Legal Studies (DIILS), PIMS Partners,	Defense								
Begin development of direct data exchange links with relevant inform information sharing between GlobalNET and other learning managen										
Refine, test and deploy the chat capability. In addition, provide a frar capabilities for Adobe connect to minimize the recurring costs of the		the								

PE 0605127T: Regional International Outreach (RIO) - Partnershi...
Defense Security Cooperation Agency

UNCLASSIFIED Page 4 of 8

R-1 Line #186

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Sect	urity Cooperation Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0605127T: Regional International Outreach (RIO) - Partnership for Peace Information Management System (PIMS)		Regional Inte	rnational Out Information I	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Work with DSCA and OSD-P leaders to identify institutions which new institution specific requirements, allowing existing members to avail to the work with the integrators of the RCPAMS system to ensure that information the include the implementation of 1) an automatic provision more provision accounts for eligible participants, 2) participant nomination participation. Work with the exiting platform managers to update the release - allowing greater functionality and better security across all recomplete 2012 recertification of security accreditation process that a newly integrated educational organizations. Conduct developmental altest validated software release into production.  FY 2013 Plans: Fully implement the gaming and exercise support module as researce the capability to the indentified user communities, defining the process gaming and exercise support. In addition, introduce the capability to their baseline capabilities.  Work to extend the email functionality support to the system users sufficiently be a sufficient of the system will post a knowledge management. It begins to turn email into a client for limited validate the existing requirements are still applicable to the aggregation of the system of the system will post a knowledge management.	hemselves of the newly developed feature sets.  rmation is exchanged between RCPAMS and Globall dule allowing information from RCPAMS to populate a form, and 3) automatic group enrollment based on confide GlobalNET implementation to the newest platform standard software of the platform.  Also reflects the new and updated software capabilities and operational testing of latest software release. Residued and defined in FY 2012. This will include deploy as how to create, modify, test, and deploy scenarios to the unintended communities for review and inclusion such that plain language support for common tasks is generated notifications by allowing user initiate all of the content correctly and in a structured formatical ded functionality.	NET. and ourse table es as well elease  ying for n into  provided d tasks for			
effectiveness of the CHI and ensure that it meets all mission objective research to validate the new changes and implement the CHI to the	es and goals and modify where necessary. Perform				
	ed a similar capability. Work to extend the platform f				

PE 0605127T: Regional International Outreach (RIO) - Partnershi...
Defense Security Cooperation Agency

UNCLASSIFIED Page 5 of 8

R-1 Line #186

Volume 5 - 447

R-1 ITEM NOMENCLATURE

BA 7: Operational Systems Development	(RIO) - Partnership for Peace Information Management System (PIMS)	Partnership for Peace Systems		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
Deploy a native video teleconference (VTC) capability to replace the a loosely coupled Adobe connect system outside of the GlobalNET s a native VTC capability inside of the platform allowing much tighter in chatting and reduce the operations and maintenance (O&M) expense Work with the existing platform managers to update the GlobalNET in allowing greater functionality and better security across all members	tack and hosting environment. The capability would integrations with messaging, file sharing, white boarding of leasing this service.  In the property of the newest platform stable release the property of the newest platform stable release.	create ng, and		
Complete 2013 recertification of security accreditation process that a well newly integrated educational organizations. Conduct the resear simulation module.	·			

### C. Other Program Funding Summary (\$ in Millions)

APPROPRIATION/BUDGET ACTIVITY

0400: Research Development Test & Evaluation Defense-Wide

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Security Cooperation Agency

N/A

## D. Acquisition Strategy

RIO-PIMS employs a spiral acquisition strategy to ensure a well-defined model for each institution/ community that can be exported globally. The program uses a regional approach to ensure sustainable, leave-behind technology and information sharing procedures. By partnering with other U.S. Government agencies, existing assets are leveraged to preserve U.S. investments, avoid duplication of effort between agencies, and offer economically prudent solutions to improve information sharing and achieve U.S. security cooperation goals. RIO-PIMS has hired an independent Operational Test team to ensure that the program bears independent validation of the development team's effort. RIO-PIMS has regional based personnel to assist in the adoption of the GlobalNET platform with partners who are not familiar with social collaboration and networking media.

### **E. Performance Metrics**

RIO-PIMS project performance is measured in several methods: the successful meeting of stated performance objectives in the statement of work, and meeting target dates in the project management plan; via a combination of statistics including the number of trouble tickets generated on the development site, operational user feedback on development site usability, and design; and the system's performance during developmental and operational testing. The use of a 3rd party to execute the operational test ensures that the system meets the performance metrics prior to moving to production.

UNCLASSIFIED
Page 6 of 8

**DATE:** February 2012

2.090

2.165

3.238

**PROJECT** 

PF 0605127T: Regional International Outreach | 000000: Regional International Outreach -

**Accomplishments/Planned Programs Subtotals** 

ibit R-4, RDT&E Schedule Profile: PB 2013 D PROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE									PROJEC	т				
00: Research, Development, Test & Evaluation, Defense-Wide 7: Operational Systems Development												Regio			l Outread tion Man	
		FY 2012		FY 2013	3	FY 2	2014	FY 2015 FY 2016 FY 2017								
	1 2	3 4	1	2 3	4 1	2 3	4 1	1 2	3 4	1	2 3 4	1	2 3	4 1	2 3	4
Execute Operational Test Plan	<u> </u>															
Deploy System	l														i	
Award Support Services Contract for Support, SP, and Limited Equipment Support																
Refine Interface for Community Use																
Certification and Accreditation																
Process JCIDS Documents																
Review Operational Requirements																
Develop RCPAMS Interface																
dentify New Institutions for GlobalNET																
Jpgrade Core and Maintenance Releases																
Deploy to Other Institutions																
Review Technical Architecture																

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Security Cooperation Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0605127T: Regional International Outreach (RIO) - Partnership for Peace Information

Management System (PIMS)

**PROJECT** 

000000: Regional International Outreach -Partnership for Peace Information Management

**DATE:** February 2012

Systems

## Schedule Details

	Sta	art	Er	ıd
Events	Quarter	Year	Quarter	Year
Execute Operational Test Plan	4	2011	4	2011
Deploy System	4	2011	1	2017
Award Support Services Contract for Support, ISP, and Limited Equipment Support	1	2011	4	2015
Refine Interface for Community Use	2	2012	2	2016
Certification and Accreditation	4	2011	2	2016
Process JCIDS Documents	4	2011	2	2014
Review Operational Requirements	3	2013	2	2017
Develop RCPAMS Interface	2	2012	2	2012
Identify New Institutions for GlobalNET	3	2012	2	2016
Upgrade Core and Maintenance Releases	4	2011	2	2015
Deploy to Other Institutions	1	2012	2	2015
Review Technical Architecture	3	2012	3	2016

**Exhibit R-2**, **RDT&E Budget Item Justification:** PB 2013 Defense Security Cooperation Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605147T: Overseas Humanitarian Assistance Shared Information System (OHASIS)

**DATE:** February 2012

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.289	0.288	0.288	-	0.288	0.287	0.286	0.294	0.294	Continuing	Continuing
000204: Overseas Humanitarian Assistance Shared Information System	0.289	0.288	0.288	-	0.288	0.287	0.286	0.294	0.294	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Overseas Humanitarian Assistance Shared Information System (OHASIS) enables Humanitarian Assistance (HA) offices, including embassy staff, country team members, Combatant Command leads, and DSCA to manage and visualize HA projects on a web-based map display, automate report generation, and perform a variety of analysis.

The U.S. Army Corps of Engineers, Army Geospatial Center (AGC) initially developed this system for U.S. Central Command (USCENTCOM). This system is critical to the full lifecycle management of Humanitarian Assistance projects. As a result, OHASIS has been provided to all of the Geographic Combatant Commands (GCC) for their use in monitoring HA projects and to Country Team members throughout the world for nominating projects. The OHASIS system is currently used to manage the full life cycle of over 1,000 Overseas Humanitarian Disaster and Civic Aid (OHDACA) projects, 500 Denton and Funded Shipments, and three warehouses maintaining humanitarian excess property per fiscal year. Research, Development Test and Evaluation funding is being requested to upgrade and modernize the current OHASIS system.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	0.290	0.288	0.288	-	0.288
Current President's Budget	0.289	0.288	0.288	-	0.288
Total Adjustments	-0.001	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-0.001	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			

## **Change Summary Explanation**

FY 2013. The Overseas Humanitarian Assistance Shared Information System requires \$.3M to continue to provide web-based lifecycle management of Humanitarian Assistance projects to the Combatant Commands.

PE 0605147T: Overseas Humanitarian Assistance Shared Informatio... Defense Security Cooperation Agency

UNCLASSIFIED

Page 1 of 5 R-1 Line #187

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Security Cooperation Agency				DATE: Febr	ruary 2012						
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Tes BA 7: Operational Systems Develop	t & Evaluation	n, Defense-V	Vide				verseas Humanitarian Assistance formation System				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
000204: Overseas Humanitarian Assistance Shared Information System	0.289	0.288	0.288	-	0.288	0.287	0.286	0.294	0.294	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

Overseas Humanitarian Assistance Shared Information System (OHASIS) enables Humanitarian Assistance (HA) offices, including embassy staff, country team members, Combatant Command leads, and DSCA to visualize HA projects on a web-based map display, automate report generation, and perform a variety of analysis. The U.S. Army Corps of Engineers, Topographic Engineer Center (TEC) initially developed this system for U.S. Central Command (USCENTCOM). This system is critical to the full lifecycle management of Humanitarian Assistance projects. As a result, OHASIS has been provided to all of the Geographic Combatant Commands (GCC) for their use in monitoring HA projects and to Country Team members throughout the world for nominating projects. The OHASIS system is currently used to manage the full life cycle of over 1,000 Overseas Humanitarian Disaster and Civic Aid (OHDACA) projects, 500 Denton and Funded Shipments, and three warehouses maintaining humanitarian excess property per fiscal year. Research, Development Test and Evaluation funding is being requested to upgrade and modernize the current OHASIS system.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Overseas Humanitarian Assistance Shared Information System	0.289	0.288	0.288
FY 2011 Accomplishments: Launched OHASIS version 2 web site to improve usability and implement new logical framework for project submission. Helps ensure superior humanitarian assistance projects that 1) better meet DoD objectives and 2) have outcomes that can be measured and analyzed. Conducted on-going user training and consultation at HA conferences and via telecon as appropriate.			
FY 2012 Plans: Improvements to the functionality of the product, to include capturing data related to Disaster Relief operations with associated reporting capability, comprehensive AARs with integrated functions to assist in assuring their timely & accurate completion, improvements to the HA Transportation & Denton program management system within OHASIS, automation of the mandatory Congressional Reporting requirements associated with the OHDACA funding, integration of the Humanitarian Mine Action (HMA) and Humanitarian Civic Assistance (HCA) projects into the OHASIS system, improvements to the COCOMs' OHASIS budget planning and approval process, & basic reporting functionality, in addition to the continued evolution of the product in response to user feedback.			
FY 2013 Plans:			

PE 0605147T: Overseas Humanitarian Assistance Shared Informatio... Defense Security Cooperation Agency

UNCLASSIFIED
Page 2 of 5

R-1 Line #187

Volume 5 - 452

Exhibit K-2A, KD1&E Project Justification: PB 2013 Defense Security Cooperation Agency			DAIE. F	Buluary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0605147T: Overseas Humanitarian Assistance Shared Information System (OHASIS)	000204:	PROJECT 000204: Overseas Humanitarian Assistance Shared Information System		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Building upon the improvements above the FY 13 funding will be used to improved reporting capabilities and efficiencies, continued focus on facilitating ease of AAR completion/submission - most importantly to include investigating & developing					

**Accomplishments/Planned Programs Subtotals** 

### C. Other Program Funding Summary (\$ in Millions)

measures of monitoring and evaluation are expected.

Exhibit D 2A DDT9 E Project Justification: DR 2013 Defense Security Cooperation Agency

the viability of a mobile reporting platform allowing data entry on-site. Continued improvements toward integrating appropriate

N/A

### D. Acquisition Strategy

The program employs an incremental technology development and implementation strategy to ensure a desired capability is delivered in a relevant timeframe. This strategy also will continue to leverage industry standard technologies for web development, database technology, database modeling, geographic information systems, reporting, and documentation. As additional users require the system, it will continue to be developed with scalability and maintainability as key considerations. Additionally, this capability will help DoD better collaborate and support external agencies and their programs by leveraging the web services that have been designed in the initial baseline.

### E. Performance Metrics

OHASIS project performance is measured in several methods: the successful meeting of stated performance objectives in the statement of work and meeting target dates in the project management plan, and successful management of the full life cycle of the over 1,000 Overseas Humanitarian Disaster and Civic Aid (OHDACA) projects.

PE 0605147T: Overseas Humanitarian Assistance Shared Informatio... Defense Security Cooperation Agency

UNCLASSIFIED
Page 3 of 5

R-1 Line #187

Volume 5 - 453

DATE: February 2012

0.289

0.288

0.288

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Security Cooperation Agency **DATE:** February 2012 **R-1 ITEM NOMENCLATURE PROJECT** APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0605147T: Overseas Humanitarian 000204: Overseas Humanitarian Assistance BA 7: Operational Systems Development Assistance Shared Information System Shared Information System (OHASIS) FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 2 3 4 1 2 3 4 2 2 2 3 4 3 2 3 3 2 3 4 Disaster Reporting Module Congressional Reporting **DSCA Additional Reporting** After Action Reporting Measuring Effectiveness of Projects Module Program Module **HCA Project Type HMA Project Type** Handheld Data Access Handheld Data Collection Database Replication Information Assurance Certification and Accreditation **Award Ongoing Support Services Contract** Establish SIPR Presence SIPR Data Replication SIPR Project Prioritization SIPR Project Analysis

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Security Cooperation Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0605147T: Overseas Humanitarian Assistance Shared Information System

(OHASIS)

PROJECT

000204: Overseas Humanitarian Assistance

**DATE:** February 2012

Shared Information System

### Schedule Details

	St	Start		ıd
Events	Quarter	Year	Quarter	Year
Disaster Reporting Module	4	2011	1	2012
Congressional Reporting	1	2012	1	2016
DSCA Additional Reporting	1	2012	1	2016
After Action Reporting	4	2011	1	2013
Measuring Effectiveness of Projects Module	4	2012	4	2016
Program Module	1	2012	3	2013
HCA Project Type	4	2011	1	2012
HMA Project Type	4	2011	1	2012
Handheld Data Access	4	2013	2	2014
Handheld Data Collection	4	2015	2	2016
Database Replication Information Assurance	4	2013	4	2014
Certification and Accreditation	1	2011	2	2016
Award Ongoing Support Services Contract	2	2013	2	2013
Establish SIPR Presence	4	2014	1	2016
SIPR Data Replication	4	2015	4	2015
SIPR Project Prioritization	4	2016	4	2017
SIPR Project Analysis	4	2016	4	2016

Volume 5 - 455



# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



**Defense Security Service** 

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



Defense Security Service • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 46
Program Element Table of Contents (by Budget Activity then Line Item Number)	.Volume 5 - 47
Program Element Table of Contents (Alphabetically by Program Element Title)	.Volume 5 - 47
Exhibit R-2's	Volume 5 - 47



# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Research, Development, Test & Eval, DW	995	6,206		6,206
Total Research, Development, Test & Evaluation	995	6,206		6,206

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2013 Base	OCO	Total
Research, Development, Test & Eval, DW	8,866		8,866
Total Research, Development, Test & Evaluation	8,866		8,866

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Operational Systems Development	995	6,206		6,206
Total Research, Development, Test & Evaluation	995	6,206		6,206
Summary Recap of FYDP Programs				
Research and Development	995	6,206		6,206
Total Research, Development, Test & Evaluation	995	6,206		6,206

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2013 FY 2013 Base OCO	FY 2013 Total
Operational Systems Development	8,866	8,866
Total Research, Development, Test & Evaluation	8,866	8,866
Summary Recap of FYDP Programs		
Research and Development	8,866	8,866
Total Research, Development, Test & Evaluation	8,866	8,866

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Operational Systems Development	995	6,206		6,206
Total Research, Development, Test & Evaluation	995	6,206		6,206
Summary Recap of FYDP Programs				
Research and Development	995	6,206		6,206
Total Research, Development, Test & Evaluation	995	6,206		6,206

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Operational Systems Development	8,866		8,866
Total Research, Development, Test & Evaluation	8,866		8,866
Summary Recap of FYDP Programs			
Research and Development	8,866		8,866
Total Research, Development, Test & Evaluation	8,866		8,866

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Defense Security Service	995	6,206		6,206
Total Research, Development, Test & Evaluation	995	6,206		6,206

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Defense Security Service	8,866		8,866
Total Research, Development, Test & Evaluation	8,866		8,866

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

02 Feb 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Program								S
Element				FY 2011	FY 2012	FY 2012	FY 2012	e
Number	Item		Act	Actuals	Base	oco	Total	C
								7
0604130V	Enterprise Security System (ESS)		07	995	6,206		6,206	U
Opera	ational Systems Development			995	6,206		6,206	
2 0000000000000000000000000000000000000							6 006	
l Research,	, Development, Test & Eval, DW			995	6,206		6,206	
	Element Number  0604130V Opera	Element Number Item	Element Number Item 0604130V Enterprise Security System (ESS) Operational Systems Development	Element Number Item Act 0604130V Enterprise Security System (ESS) Operational Systems Development	Element Number Item Act Actuals  0604130V Enterprise Security System (ESS) Operational Systems Development  FY 2011 Act Actuals  77 995	Number Item Act Actuals Base  0604130V Enterprise Security System (ESS) 07 995 6,206  Operational Systems Development 995 6,206	Element Number Item Official Systems Development  FY 2011 FY 2012 FY 2012  Act Actuals Base OCO  OCO  OCO  OCO  OCO  OCO  OCO  OCO	Figure   F

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

02 Feb 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program						S
Line	Element			FY 2013	FY 2013	FY 2013	e
No	Number	Item	Act	Base	oco	Total	C
			15.55				
185	0604130V	Enterprise Security System (ESS)	07	8,866		8,866	U
	Opera	tional Systems Development		8,866		8,866	
Tota	l Research,	Development, Test & Eval, DW		8,866		8,866	

Defense Security Service • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (by Budget Activity then Line Item Number)**

**Budget Activity 07: Operational Systems Development** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
184	07	0604130V	Enterprise Security SystemVolum	ne 5 - 475



Defense Security Service • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Enterprise Security System	0604130V	184	07Volume 5 - 475



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Security Service

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0604130V: Enterprise Security System

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012 Fy 2012		FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.995	6.206	8.866	-	8.866	6.523	6.197	6.386	6.386	Continuing	Continuing
000: Enterprise Security System	0.995	6.206	8.866	-	8.866	6.523	6.197	6.386	6.386	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Defense Security Service (DSS) manages the Enterprise Security System (ESS) to provide an effective, real-time, security support capability for the Military Departments, DoD Agencies, the National Industrial Security Program (NISP), and other Federal Agencies. In compliance with the Expanded Electronic Government, President's Management Agenda, and the DoD Enterprise Architecture Framework, ESS is the unified offering of security mission systems which facilitate and automate improved national investigative and adjudicative standards, streamline security processes, and increase DoD community collaboration.

DSS Information Technology (IT) systems provide service critical to the major DSS mission areas: Industrial Security Oversight, and Security Education. DSS performs this critical function through operation of its production systems named the Enterprise Security System (ESS): the Industrial Security Facilities Database (ISFD); the DSS Gateway; and the Security Training Education and Professionalization Portal (STEPP) (formerly ENROL).

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	5.522	8.706	7.007	-	7.007
Current President's Budget	0.995	6.206	8.866	-	8.866
Total Adjustments	-4.527	-2.500	1.859	-	1.859
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-2.500			
<ul> <li>Congressional Rescissions</li> </ul>	-4.522	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Economic Adjustment	-0.005	-	0.109	-	0.109
One-time Increase	-	-	1.750	-	1.750

PE 0604130V: Enterprise Security System

Defense Security Service

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Just	xhibit R-2A, RDT&E Project Justification: PB 2013 Defense Security Service														
APPROPRIATION/BUDGET ACTIV		Defense		R-1 ITEM N			PROJECT	suine Consulity Cyatama							
0400: Research, Development, Test BA 7: Operational Systems Develop	viae	PE 0604130	JV: Enterpris	se Security S	000: Enterp	00: Enterprise Security System									
COST (\$ in Millions)	FY 2011 FY 2012 Base			FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost				
000: Enterprise Security System	0.995	6.206	8.866	-	8.866	6.523	6.197	6.386	6.386	Continuing	Continuing				
Quantity of RDT&E Articles															

#### A. Mission Description and Budget Item Justification

The Defense Security Service (DSS) manages the Enterprise Security System (ESS) to provide an effective, real-time, security support capability for the Military Departments, DoD Agencies, the National Industrial Security Program (NISP), and other Federal Agencies. In compliance with the Expanded Electronic Government, President's Management Agenda, and the DoD Enterprise Architecture Framework, ESS is the unified offering of security mission systems which facilitate and automate improved national investigative and adjudicative standards, streamline security processes, and increase DoD community collaboration.

DSS Information Technology (IT) systems provide service critical to the major DSS mission areas: Industrial Security Oversight, and Security Education. DSS performs this critical function through operation of its production systems named the Enterprise Security System (ESS): the Industrial Security Facilities Database (ISFD); the DSS Gateway; and the Security Training Education and Professionalization Portal (STEPP) (formerly ENROL).

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Systems Enhancement	0.995	6.206	8.866
<b>Description:</b> RDT&E for ESS primarily includes pre-planned product improvements (P3I) to the ESS applications, researching and improving assured information sharing, better posturing systems and networks against vulnerabilities, ensuring self-defense of systems and networks, and safeguarding data at all stages. These enhancements are necessary for DSS OCIO to increase the efficiency, capabilities, and security of the ESS Applications.			
FY 2011 Accomplishments:  1. Industrial Security Facility Database (ISFD): Accomplished the implementation of the ISFD "Metrics" Release system enhancement, which provides additional metric reporting and processing capability to ISFD for the tracking and reporting of information pertaining to facilities under DSS auspices.			
2. ODAA Business Management System (OBMS): Accomplished the Initial Operational Capability (IOC) for the DSS Office of the Designated Approving Authority (ODAA) Business Management System (OBMS). OBMS supports the DSS national security mission by providing security oversight and protection of classified information and technologies in the hands of the Defense Industrial Base (DIB) under the National Industrial Security Program (NISPOM).			
FY 2012 Plans: 1. ODAA Business Management System (OBMS): Continue the development of the system to achieve Full Operational Capability (FOC) in FY13.			

PE 0604130V: Enterprise Security System Defense Security Service

R-1 Line #184

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Secu	urity Service		DATE: Fe	bruary 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0604130V: Enterprise Security System	PROJEC 000: Ente	ECT Enterprise Security System					
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013			
<ol> <li>Open Source Corporate Management Information System (OSCM system to effectively manage the agency's Manpower, Human Resounce Industrial Security Facility Database (ISFD), which is nearing end Additionally, FOS will provide seamless integration of other DSS system Mobile Workforce Applications. FOS will provide DSS with a compreportfolio. FOS will improve information sharing and collaboration, provide hands of field representatives. The system will provide agency-wind providing security oversight and the protection of national security. accordance with the Business Transformation Agency (BTA) Business High-level program plan is to complete the functional and technical recore system.</li> <li>DD 254: Research automation capabilities of the DoD Form 254 information on the classification requirements of contractors and context performance of government contracts.</li> <li>FY 2013 Plans:         <ol> <li>ODAA Business Management System (OBMS): Deliver the Full Opto the DIB customers under the NISPOM. Completely modernizes the by automating the submission and management of System Security Indocumentation. This automation will allow DSS to more effectively of improving mitigation and response to new and emerging threats to out 2. Open Source Corporate Management Information System (OSCM) Services including Continuity of Operations Plannining (COOP) function the OSCMIS suite of applications.</li> </ol> </li> </ol>	S) will be the next generation enterprise capability, of life and becoming too expensive to enhance and tems and applications, such as eFCL, OBMS, DD-2 hensive enhanced capability to manage its entire reporting timely and accurate data for decision-making vide metrics to measure and improve agency perform The system will be developed in an iterative fashings Capability Lifecycle (BCL).  Requirements, and develop the first functional prototy accounts a capability Classification Specification, which tractor facilities that handle classified information in the manual DSS security oversight and protection microprocess (SSP) and Certification and Accreditation (Capability Classified information in the hands of industrial Base (DIB).  IS): continue implementation of Security and Supports.	replacing d maintain. 254, and nission g in rmance on in when the ch provide the olution ssion &A) ry,	FY 2011	FY 2012	FY 2013			
3. Field Operations System (FOS): Deliver an Initial Operational Capa Continue planning and systems engineering development to develop DSS systems and applications.								

PE 0604130V: *Enterprise Security System* Defense Security Service

UNCLASSIFIED

Page 3 of 6 R-1 Line #184

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Securi	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0604130V: Enterprise Security System	000: Enterp	orise Security System
BA 7: Operational Systems Development			

D. A complication and a /Discount of Discount of the Millians	<b>5</b> )/ 0044	<b>5</b> )/ 0040	<b>5</b> )/ 00/10
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
4. DD 254: Deliver the Initial Operational Capability (IOC) toward full automation of the oversight and management of providing classified information access and guidance required for the performance on classified contracts. The DoD Form 254 – Contract Security Classification Specification; required by DoD 5220.22-4, Industrial Security Regulation and the National Industrial Security Program Operating Manual (NISPOM). The DD Form 254, and underlying business processes, is critical to ensure access to our Nation's classified information is properly safeguarded.			
5. Mobile Workforce Applications (MWA): Research technical capabilities to implement mobile technologies to improve the efficacy of the DSS mission. The global DSS industrial security and oversight mission requires field representatives to audit remote contract facilities and information systems that process classified information. By incorporating mobile technologies into daily operations, the workforce has access to relevant and timely information, critical in ensuring security oversight decision-making.			
Accomplishments/Planned Programs Subtotals	0.995	6.206	8.866

## C. Other Program Funding Summary (\$ in Millions)

N/A

### D. Acquisition Strategy

DSS will award a new Enterprise Security System (ESS) Development Blanket Purchase Agreement (BPA) in Fiscal Year 2012 which will allow development of new applications, enhancement of other applications, and perform system integration with COTS and GOTS solutions and technology. These efforts will be issued as Task Orders under this BPA.

#### E. Performance Metrics

N/A

PE 0604130V: *Enterprise Security System* Defense Security Service

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Security Service

APPROPRIATION/BUDGET ACTIVITY

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R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 0604130V: Enterprise Security System

000: Enterprise Security System

**DATE:** February 2012

Product Development	Product Development (\$ in Millions)					FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Enterprise Security System	C/BPA	SAIC, Northrop Grumman, EDS:Herndon, VA and Columbia, MD	78.565	6.206		8.866		-		8.866	Continuing	Continuing	Continuing
	Subtotal 78.565					8.866		-		8.866			

#### Remarks

Specific Task Orders to be issued on DSS Development BPA are TBD.

	Total Prior Years Cost	FY 2	2012	FY 2 Ba	FY 2	2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	78.565	6.206		8.866	-		8.866			

Remarks

PE 0604130V: Enterprise Security System

Defense Security Service

UNCLASSIFIED
Page 5 of 6

R-1 Line #184

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Security Service

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

DATE: February 2012

R-1 ITEM NOMENCLATURE
PE 0604130V: Enterprise Security System
000: Enterprise Security System

Exhibit R-4,	Exhibit R-4, RDT&E Pr													9				111111		D	Date: February 2012						12	
APPROPRIATION/BUDGET ACTIV	ITY	Z			P	RO	GRA	ME	LE	ME	NT		F	RO	JE(	T	NAM	ſΕ										
RDT&E, DW / 07					0604130v					Enterprise Security System 0604130V									7									
						(Formerly Defense					se I	Information System																
													f	or	Se	ecu:	rit	y)										
Fiscal Year		FY	20:	11		FY	201	12	3	FY	20	13		FY	20	14		FY 2015 FY 2016 FY 2							20	)17		
Art de Colonia de Colonia.	1	2	3	4	1	2	3	4	1	2	3	4	1	. 2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Technology Development of ESS Applications																												
Production and Deployment of Enhancements							\ \ \	\ \ \	\	\[ \]	/// //	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				,,,,,		,,,,				,,,,					,,,,	<i></i>
O&M																												
Remarks:																												

# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



## **Defense Technical Information Center**

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



Defense Technical Information Center • President's Budget Submission FY 2013 • RDT&E Program

## **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 48
Program Element Table of Contents (by Budget Activity then Line Item Number)	.Volume 5 - 48
Program Element Table of Contents (Alphabetically by Program Element Title)	.Volume 5 - 48
Exhibit R-2's	Volume 5 - 49



#### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No 	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Totals	FY 2013 Base	FY 2013 OCO	FY 2013 Totals
158	0605801KA	Defense Technical Information Center (DTIC)	06	57,790	56,269		56,269	55,454		55,454
	RDT&E	Management Support		57,790	56,269		56,269	55,454		55,454
Tota	l Research,	Development, Test & Eval, DW		57,790	56,269		56,269	55,454		55,454

30 Dec 2011



Defense Technical Information Center • President's Budget Submission FY 2013 • RDT&E Program

## **Program Element Table of Contents (by Budget Activity then Line Item Number)**

Budget Activity 06: RDT&E Management Support

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activi	ty Program Element Number	Program Element Title	Page
158	06	0605801KA	Defense Technical Information Center\	Volume 5 - 491



Defense Technical Information Center • President's Budget Submission FY 2013 • RDT&E Program

## **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Defense Technical Information Center	0605801KA	158	06Volume 5 - 491



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Technical Information Center

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605801KA: Defense Technical Information Center

BA 6: RDT&E Management Support

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	57.790	56.269	55.454	-	55.454	54.232	53.793	52.623	53.520	Continuing	Continuing
001: Defense Technical Information Center	48.499	49.216	48.401	-	48.401	47.179	46.740	45.570	46.467	Continuing	Continuing
002: Information Analysis Centers	9.291	7.053	7.053	-	7.053	7.053	7.053	7.053	7.053	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Defense Technical Information Center (DTIC) is the hub of DoD Scientific and Technical Information interchanges, empowering innovators with greater efficiency, effectiveness, and agility by accelerating the delivery of warfighting technology. Located at Fort Belvoir, Virginia, DTIC leverages DoD's substantial investment in scientific and technical research and development by facilitating the transfer of scientific, technical and program information throughout the national defense community. The DTIC program generates a significant return on investment within the Department, as DTIC products and services represent a force multiplier within the S&T community. Employing efficient information organization, discovery, and delivery processes, DTIC reduces research costs and supports effective acquisition decision-making throughout the Department, and ultimately improves the technological superiority of the American warfighter. DTIC develops and maintains centralized information systems that collect, process, retrieve, and disseminate scientific and technical (S&T) information. By combining advanced knowledge management techniques with new information technologies, DTIC serves as the Department's agile information provider, delivering innovative discovery, collaboration and analysis products and services that support DoD program managers, acquisition professionals, warfighters, scientists, and engineers, as well as other government agencies, US allies, and DoD's academic and private sector partners. With a modest funding level, DTIC serves as an efficiency enabler, providing products and services in support of federal-wide collaboration, facilitating the elimination of redundant research efforts and reducing the traditional reliance on conferences and travel as a means of connecting with professional colleagues.

The DTIC mission is tied specifically to warfighting technologies, investments, and expenditures. With efficiencies being demanded of DoD, DTIC saves the Department money by bringing technology to bear to improve communication across DoD, between the DoD Labs and the COCOMs, and between Industry and DoD. DTIC increases the return on investment of DoD's research dollars, encouraging reuse of existing data. DTIC supports researchers and developers who create the technologies that support the warfighter's mission and saves lives.

Recent innovative products and services include:

- "DoDTechSpace Limited and Classified Collaboration Tools" These collaboration tools are similar to LinkedIn and FaceBook. The limited-access site will facilitate collaboration between Defense Laboratories, the Services, COCOM S&T Advisors/Staffs and the DoD Research and Engineering (R&E) Community. The classified site will enhance the COCOM Capability Gap Analysis process, which is specifically focused on Science and Technology Integrated Priority Lists (STIPLs). This will also enable the DoD R&E community to openly discuss capability gaps and reach out to the broad community for Proposed Solutions/Mitigation Strategies. Both the limited-access and classified DoDTechSpace will be enhanced through the ability to locate experts, post questions for discussion and explore the DTIC collections for relevant emerging candidate programs.
- "DoDTechipedia Limited and Classified Wikis" The limited-access wiki supports collaborative research and knowledge sharing within the DoD and throughout the Federal research and acquisitions communities. Launched October 1, 2008, DoDTechipedia annually serves over 600,000 page views to registered users. The classified wiki also supports capability gap discussions in a more restricted environment. The DoDTechipedia Limited Wiki has been featured on the White

PE 0605801KA: Defense Technical Information Center Defense Technical Information Center

Page 1 of 13

R-1 Line #158

Volume 5 - 491

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Technical Information Center **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE** PE 0605801KA: Defense Technical Information Center 0400: Research, Development, Test & Evaluation, Defense-Wide

BA 6: RDT&E Management Support

House Innovations Gallery and was selected for the 2009 Government Computer News Outstanding Information Technology Award. DTIC is moving this DoD R&E information entry point into a highly collaborative tool focused on communities of interest.

- "DTIC Online Access Controlled and Classified Interfaces" These Access Controlled and Classified versions of the DTIC Online customer interfaces serve as the gateway to provide users one-stop access to research and engineering information, budget analysis tools, science and technology strategic planning documents, and advanced searching capabilities.
- "Aristotle" Implemented in production at DTIC, and developed by Air Force Research Laboratory (AFRL), Aristotle is a limited access relationship discovery tool; it provides users with the ability to discover where current research is being conducted, review completed project outcomes, and identify subject matter experts. Aristotle is an additional tool in the DoDTechipedia Suite of Services. Aristotle has been featured on the White House Innovations Gallery.

Approximately 30,000 eligible individuals, representing hundreds of organizations (military, federal, industry, and academia), are registered to access DTIC's information. DTIC's public and access controlled Websites average 32 million page requests per month. DTIC develops and hosts over 70 Websites, collaboration tools and other applications for DoD Component organizations including the Joint Chiefs of Staff, Assistant Secretary of Defense for Research and Engineering (ASD(R&E)), Defense Logistics Agency (DLA), several Combatant Commands (COCOMs), and the Federal Voting Assistance Program. The Information Analysis Center (IAC) Program Office at DTIC provides core funding, management and oversight for 10 IACs. The IACs are chartered by DoD to collect, analyze, and disseminate worldwide scientific and technical information in specialized fields such as information assurance, chemical/biological defense, and weapons systems technology. IACs support the acquisition community, prevent unnecessary duplication of research and promote standardization of research methods and processes. The IAC funding level represents the Department's approved customer cost sharing methodology in accordance with the Economy Act and DoD regulations.

This Program Element (PE) supports DTIC mission operations, to include four core integrated functions: Research Support & Library Repository, Web Services & Hosting, Collaboration, and Information Analysis Centers (IACs). Mission funding provides for salaries and benefits of government civilian personnel assigned to DTIC; training, professional development, and travel for DTIC personnel; facility-related requirements; support agreements for Defense Finance and Accounting Service (DFAS) financial activities and Human Resource (HR) services, Defense Information Services Agency (DISA) communications support; annual maintenance and licensing requirements; supplies, equipment, Hardware/Software; and support contracts for Information Technology services, Defense Agencies Initiative (DAI) system integration, and Chief Financial Officer (CFO) Act compliance efforts. In addition, this PE provides funding in support of the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs, in accordance with Public Law No: 111-251 (Small Business Reauthorization Act) and Small Business Technology Transfer Program Reauthorization Act. Within the PE, an annual set-aside contribution totaling approximately \$400 Thousand is provided to the Department's Commercialization Pilot Program, as directed by the Department's Office of Small Business Programs (OSBP).

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Technical Information Center

**DATE:** February 2012

#### APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605801KA: Defense Technical Information Center

BA 6: RDT&E Management Support

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	61.054	56.269	56.015	-	56.015
Current President's Budget	57.790	56.269	55.454	-	55.454
Total Adjustments	-3.264	-	-0.561	-	-0.561
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-2.500	-	-	-	<del>-</del>
DoD Initiatives	-	-	-3.115	-	-3.115
Program Changes	-	-	2.500	-	2.500
<ul> <li>Other Program Changes</li> </ul>	-0.764	-	-0.019	-	-0.019
Economic Adjustments	-	-	0.073	-	0.073

#### **Change Summary Explanation**

Specific changes to the FY 2013 program (net reduction of \$0.561 Million) are outlined below:

DoD Initiatives: - \$3.115 Million decrease of FY 2013 budget authority in compliance with the Department's efforts to reduce programs. The reduction reflects a reshaping of planned contract support activities in areas such as Information Technology (IT) services, maintenance, etc.; streamlining of Support Agreement facility and contracting services; expanded utilization of new collaborative technologies, tools and distance training/learning; and new processes supporting the dissemination of Scientific and Technical information.

Program Changes: \$2.500 Million in support of the Department's Discovery, Analysis, and Collaboration Support Tools. This change to the program supports integration efforts and the development and implementation of additional features for the DoDTechipedia Suite of Services on both NIPRNET and SIPRNET. Specifically, this effort includes: enhancing a single user profile across DTIC products and features; enabling access by non-DoD Federal workforce to DTIC collections via the Personal Identification Verification (PIV) card; building out of WebServices interfaces to support federation across the DTIC collaboration tools and collections, and allowing DTIC users to access other DoD and non-DoD resources and tools. This effort will expand DTIC's user community by reducing the level of subject matter domain expertise needed to rapidly identify and act on relevant data and expand the material accessible, thus opening DTIC collections more broadly among technology customers, to include Warfighters, Combatant Commands, Acquisition, and Logistics communities, and technology providers within the Science and Technology (S&T) and Research, Development, Test and Evaluation (RDT&E) communities.

Other Program Changes: -\$0.019 Million of reductions to travel, printing and reproduction accounts within the program.

UNCLASSIFIED
Page 3 of 13

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense T	echnical Information Center	DATE: February 2012							
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605801KA: Defense Technical Informatio	on Center							
Economic Adjustments: \$0.073 Million in funding change refleand non-pay accounts.	ects revised economic assumptions based on antic	cipated inflation rates associated with both pay							

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Technical Information Center  DATE: February 2012											
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605801KA: Defense Technical Information Center  PROJECT 001: Defense				se Technical Information Center			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
001: Defense Technical Information Center	48.499	49.216	48.401	-	48.401	47.179	46.740	45.570	46.467	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

As the leader of the DoD's scientific and technical information (STINFO) program, DTIC has the responsibility to develop, coordinate and enable a strong STINFO program for the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) and the DoD Scientific & Technical (S&T) enterprise. In its role as the DoD STINFO Manager, DTIC sets and enables policy for scientific and technical information exchanges for the research and engineering community. DTIC's aim is to maximize the availability and use of technical information and products resulting from Defense-funded technical activities while ensuring restrictions in national security, export control, and intellectual property rights are safeguarded.

It is DoD policy to establish and maintain a coordinated and comprehensive program to document the results and outcome of DoD-sponsored and performed research and engineering (R&E) and studies, and to provide access to those efforts in an effective manner, in order to make efficient use of the investment that taxpayers have previously made in R&E. In the 21st Century, supporting the S&T and RDT&E communities requires that DTIC integrate, more than ever, our collections with databases, information links, utilizing the latest information technology, whether in-house or outside of our Department, regardless of the source. DTIC, as the central repository for the DoD-funded current and completed research, brings efficiencies to the Department as users can gather information from many sources with one search. DTIC's customers, from the individual researcher to the acquisition professional, can quickly fuse information into the most complete picture needed in a matter of minutes to hours; not days to months. DTIC accomplishes its mission to provide critical scientific, technical and related program information by performing the activities described in the three core integrated functions below:

- 1. RESEARCH SUPPORT AND LIBRARY REPOSITORY. This activity represents a world-class library with exceptional librarians capable of providing targeted research quickly. DTIC offers the STI community an authoritative source of information, including protecting the material according to its dissemination limitations. DTIC is the information repository from which new technologies arise. DTIC's repository allows DoD to reuse the research in which it already invested its money, leveraging prior research to maximize R&D dollars. DTIC's data also provides identification of how DoD R&D dollars were invested and the resulting outcomes. Working with classification/declassification experts across the DoD, the U.S. Government and affiliates, DTIC obtains the latest document classification and dissemination information. DTIC leads the DoD in the implementation of a new marking/protection scheme for unclassified sensitive information, now called Controlled Unclassified Information (CUI), and is exploring how these changes will affect all of our automated validation and registration systems.
- 2. COLLABORATION. DTIC is at the center of the Research & Engineering hub, connecting users, data and subject matter experts in meaningful ways. As the DoD S&T information hub, DTIC provides the technology and tools to promote collaboration, integration and innovation--in real time--among the entire DoD enterprise and its partners. Through DTIC's collaborative tools, the Department entrusts DTIC to forge critical linkages, or paths, between and amongst the various Service Laboratories, COCOMs, Federally Funded Research and Development Centers (FFRDCs), Industry/Academia, connecting diverse communities of interest to the critical research data maintained in the Department's designated Science & Technology repository. The value of scientific research lies not only in the knowledge it adds, but also in the ideas it leads to when shared. Access to information enables creative and new technologies, methods and approaches to researchers in government and business,

PE 0605801KA: Defense Technical Information Center Defense Technical Information Center

UNCLASSIFIED
Page 5 of 13

R-1 Line #158

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Technic	DATE: February 2012		
	R-1 ITEM NOMENCLATURE PE 0605801KA: Defense Technical Information	PROJECT 001: Defens	se Technical Information Center
BA 6: RDT&E Management Support	Center		

alike. DTIC's collaborative yet secure technologies assist researchers by connecting them with others and permitting them to tap into networks similar to those seen in social media. By sharing knowledge more quickly, easily and securely, the DoD community can accelerate innovation in technologies which will benefit the warfighter. Recognizing that information technology and information usage demands continually evolve, DTIC works within DoD and industry to leverage existing tools and pilot new capabilities and approaches to improve information discovery, analysis, and collaboration--connecting teams and people across the enterprise. To avoid duplication of efforts and increase information sharing, DTIC partners with DoD and other federal government organizations to provide federated access to information resources and tools. As relevant research and engineering and S&T information is stored at organizations across the Department, DTIC will expand its collections, virtually, by helping users leverage remote collections. DTIC will work to federate access to users through identity management agreements, or by exploiting remote collections through search crawlers, abstracts, links, and other references. Traditionally, the R&E community has worked in small geographically clustered teams and then shared information broadly through publishing reports on completed work. Internet technologies have changed the paradigm. Web 2.0 collaboration and professional networking technologies bring scientific investigation and research and development to an inflection point. Small geographically collocated teams, with limited resources and unique perspectives, will combine with other teams around the globe, bringing a diversity of perspectives and experiences to bear on problems to develop new solutions quickly and with increased innovation. Collaboration tools have the additional opportunity for the solution provider to fully engage the warfighter and decision makers; allowing those working on the solution to connect with those presenting the challenge/problem. In partnership with ASD(R&E) Communities of Interest, such as Modeling & Simulation; Rapid Prototyping; High Performance Computing; Basic Research & laboratory programs; and Science, Technology, Engineering, and Mathematics (STEM); to name a few; DTIC continues to enhance our collaborative suite of services, complementing our core repositories with advanced search to empower users in the Defense community to quickly recognize where resources are being applied, expertise exists, the state of the art happens, and most importantly, the art of the possible, as decision makers at all levels work to field solutions to near-, mid- and long-term warfighter needs.

3. WEB SERVICES AND SITE HOSTING. Within this activity, DTIC develops customized information solutions and hosts applications that support DoD Components. The jointly developed information collection, collaboration and analysis projects facilitate components' goals to improve DoD acquisition decision-making, increase collaborative research and development efforts, facilitate business processes, and provide improved support for the warfighter. DTIC hosts over 70 public, limited and classified web-based information systems for DoD Components. Customers include such organizations as: Joint Chief of Staff (JCS), Assistant Secretary of Defense for Research & Engineering (ASD(R&E)), Office of the Under Secretary of Defense (Comptroller) (OUSD(C)), and the Combatant Commands. Notable web-hosting development efforts include the Federal Voter Assistance Program (FVAP), providing voter access to U.S. citizens across the world; the OSD-Comptroller's R-2 application, a Department-wide effort to standardize appropriated budget information for submission to Congress; and Science Mathematics and Research for Transformation (SMART) Scholarship for Service Program, providing scholarships to colleges and universities in an effort to recruit, develop and retain the next generation of personnel in the science, mathematics and research fields for the Department of Defense.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Technical Information Center	48.499	49.216	48.401
FY 2011 Accomplishments: - In coordination with ASD(R&E), DTIC designed a new Independent Research and Development (IR&D) data entry portal and database, DefenseInnovationMarketplace.mil, as part of the Department's Better Buying Power Initiative. The IR&D site will give the DoD greater visibility of Industry's IR&D investments and work performed.			

PE 0605801KA: Defense Technical Information Center Defense Technical Information Center

UNCLASSIFIED
Page 6 of 13

R-1 Line #158

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Tech	nnical Information Center		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605801KA: Defense Technical Information Center	PROJECT 001: Defer		al Informatior	n Center
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
In coordination with ASD(R&E), DTIC designed a new Unified Rese portal. The goal of the URED is to provide a unified data collection, r and combine past R&E and Research Summary databases and repo funded R&E projects performed by in-house DoD, contractors or grar the work. This information is essential to the management the DoD r of data calls by allowing the field to submit data on continuous basis a Laboratories.  Obtained, created metadata for, and placed online the outputs of Do available to the widest audience compatible with its dissemination limenhance new research, and avoid duplication of research.  Implemented web-based interface for the Electronic Document Manmetadata and store completed the output of DoD funded R&E informedata better and permits implementation of analysis and semantic seathe streamlining of document processing steps.  Developed a reporting and analysis visualization tool to allow for the budget trends, demographic and sustainment trends within the Deparalmented digitization on demand of legacy research documents DTIC users; placing them online allows older research to be used for Converted over 200,000 documents via Optical Character Recognit Personally Identifiable Information (PII) was removed from the documented Added over 30,000 new Scientific and Technical Information reports government information collections for dissemination and preservation Made Security Classification Guide Index available online, enabling specific topics.  - Updated DoD Scientific and Technical Information (STI) Program (Services. Provided advice and guidance to DoD activities on policy ir Served as an active member of interagency and public/private S&T and technologies, including areas such as intellectual property rights, management.  Increased outreach to Combatant Commands, providing research ocustomized training and reference support for military exercises.  Deployed DoDTechSpace, a Facebook™ like capability on the SIPf and services to enhance COCOM collaboration, communication and	reporting and analysis process for ongoing R&E activities. This effort will provide DoD with a view of currentees, and the facilities in the DoD Laboratories that presearch budget. The database will reduce the number as the research progresses, saving overhead to the DoD funded R&E information. Ensured each item was nitations. Available and findable data on R&E is essentiated as a search and findable data on R&E is essentiated. An added benefit to the new workflow system to creation. Good metadata creation allows searchers to turch tools. An added benefit to the new workflow system are requested to the provided and interest and the provided and implementation. The provided and contents are requested and interpretation and implementation. The provided and classified resources and offer access controlled and classified resources and offer RNET to serve as the gateway to all DTIC online provided and classified resources and offer RNET to serve as the gateway to all DTIC online provided and classified resources and offer RNET to serve as the gateway to all DTIC online provided and classified resources and offer RNET to serve as the gateway to all DTIC online provided and classified resources.	rities ritly perform er DoD sential to reate arget tem is c) efforts, ted by dition, cquire for and es t ering ducts			

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 7 of 13

R-1 Line #158

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Tech	nical Information Center		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	PROJECT 001: Defer				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Provided training and content for DoDTechSpace and Aristotle to proscience and Technology (S&T) community.  - Continued to facilitate OSD Comptroller capabilities to automate the Language (XML) capabilities.  - Continued to improve search features to allow all DTIC customers to the taxpayer.  - Continued to improve user registration tools, enhancing ease of accengines, as well as the initiation of full-text search capabilities of Tech-Investigated key technologies for connecting with mobile end-users.  - Participated in DoD Controlled Unclassified Information (CUI) working overnment-wide CUI markings.  - Continued implementation and integration of Defense Agencies Initials of tware updates, and business process changes throughout both the	budget submission process utilizing Extensible Mark be better search the DTIC collection repository at lower ess. Continued efforts to implement appliance search inical Reports.  In groups and prepared for the implementation of the ative (DAI) system upgrades, functional enhancement	kup er cost to ch e new			
FY 2012 Plans:  - Implement additional features and content to the IR&D site, Defense industry on IR&D investments. Place data online for DoD Program Ma-Initiate first annual data call for the Unified R&E Database (URED), a use by OSD, Program Managers, scientists and engineers.  - Design a new database combining the DTIC Technical Reports data Systems (TEMS) database.  - Develop and launch DoDTechSpace gateway to all DTIC online proregistered users to update central profile.  - Continue to improve user registration tools, enhancing ease of acceemployees and their contractors.  - Update DoD Scientific and Technical Information (STI) Program (ST services. Provide advice and guidance to DoD activities on policy interplace.  - Increase outreach to Combatant Commands, providing research of a customized training and reference support for military exercises.  - Continue to implement business intelligence tools for budget analysing techniques.  - Expand outreach to new customer segments within ASD(R&E), DoE broader RDT&E community.  - Coordinate access to DoD S&T information and collaborative tools for Prepare for the implementation of the new government-wide Control	anagers and Program Executive Offices to use. a continuous reporting tool. Create an online databate abase with the IAC-generated Total Electronic Migrated ducts and services to provide access to and capabilities for not only DoD staff, but also federal governments (IP) Instructions in collaboration with DoD agencies a cerpretation and implementation. access controlled and classified resources and offering for OSD Comptroller. Deaboratories, acquisition functions, industry, and the for users with approved mobile devices.	ise for ion ty for nt and			

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 8 of 13

R-1 Line #158

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Tecl	hnical Information Center		DATE: Fel	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605801KA: Defense Technical Information Center	PROJECT 001: Defen		al Information	Center
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
- Continue implementation and integration of Defense Agencies Initia software updates, and business process changes throughout both the		ts,			
FY 2013 Plans:  - Continue critical enhancements on DoDTechSpace gateway to prove online products and services to include Technical Reports database, Development (IR&D), etc.  This developmental effort will leverage and optimize available technical resources from multiple sources, connecting and linking disparate data for DTIC users.  When complete, these efforts will result in the synthesis and visual offering user communities real-time decision support content within a of relevant technical reports, budgetary and program information, La Technology Integrated Priority Lists (STIPLs), all tied together with a - Implement additional features and content to the IR&D site, Defens as small business information, to Defense Innovation Marketplace sifederated search. Create search interface for both industry metrics a planning where DoD should target expenditures. Initiate first annual for DoD Program Managers and Program Executive Offices to use.  - Expand the Unified R&E Database (URED) as a continuous data can OSD, Program Managers, scientists and engineers.  - Continue to expand the capabilities of the reporting and analysis visual implement a reporting and analysis visualization tool for the class - Update DoD Scientific and Technical Information (STI) Program (S' services. Provide advice and guidance to DoD activities on policy in - Continue outreach to Combatant Commands, providing research of customized training and reference support for military exercises.  - Continue to implement business Intelligence tools for budget analys. Begin a pilot program to implement the new government-wide Contimpact the creation, handling, and storage of all unclassified sensitive.	DoDTechipedia, URED, Independent Research and inclogy as a means to combine and merge information atabases to create innovative and useful information publication of key technical information for DTIC stakehold a single representation: a complete, interconnected publicatory and industry subject matter experts, Science gile open search and collaboration capabilities. We Innovation Marketplace. Add new sources of data, the, so DoD can examine the state of industry R&D in and for program offices to learn about industry R&D for data call to industry on IR&D investments. Place data call collection tool. Enhance the online database for usualization tool for the unclassified/limited user community. TIP) Instructions in collaboration with DoD agencies a terpretation and implementation. If access controlled and classified resources and offer sis for OSD Comptroller.	on products Iders, picture e &, such one or ta online se by nunity and ring			
	C Information.				

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 9 of 13

R-1 Line #158

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Technic	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605801KA: Defense Technical Information	001: Defens	se Technical Information Center
BA 6: RDT&E Management Support	Center		

#### C. Other Program Funding Summary (\$ in Millions)

N/A

#### D. Acquisition Strategy

N/A

#### **E. Performance Metrics**

Research Support and Library Repository

- 1) Total Scientific and Technical Information (STI) Collected (Technical Reports (TRs), Unified R&E Database (URED), Independent Research and Development (IR&D), and TEMS (Total Electronic Migration System)
- 2) Total STI Disseminated (TRs, Digitization Requests, IR&D Usage, National Defense Industrial Association (NDIA), TEMS downloads, and IAC Web Inquiries)
- 3) Total Records in four databases (TR, URED, IR&D, and TEMS)

#### Collaboration

- 1) New Registered Users
- 2) Total Active Users

### Web Services and Site Hosting

- 1) Web Page Requests and Total Requests for each sponsored site
- 2) Total Web Page Requests by customer hosted sites

PE 0605801KA: Defense Technical Information Center Defense Technical Information Center

UNCLASSIFIED
Page 10 of 13

R-1 Line #158

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Technical Information Center  DATE: February 2012											
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605801KA: Defense Technical Information Center				PROJECT 002: Information Analysis Centers			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
002: Information Analysis Centers	9.291	7.053	7.053	-	7.053	7.053	7.053	7.053	7.053	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

DoD Information Analysis Centers (IACs) serve as a vital resource in providing timely, relevant information directly to users when and where it is needed. IACs serve as a bridge between the Warfighter and the Acquisition/Research community, providing essential technical analysis and data support to a diverse customer base, to include the Combatant Commands, the Office of the Secretary of Defense, Defense Agencies, and the Military Services. IACs actively partner and collaborate with Defense Research & Engineering focus groups and communities of interest in areas of specialized fields or specific technologies. IACs, established under DoD Instruction 3200.14, create and maintain comprehensive knowledge analysis centers that include historical, technical, scientific, and other data and information collected worldwide. They are staffed with scientists, engineers and information specialists to provide research and analysis to customers with diverse, complex and challenging requirements. IAC operations directly support the warfighter, and play an ongoing and critical role in solving key COCOM operational issues such as cyber security, IED defeat and helicopter survivability. The IAC Program Management Office at DTIC performs contract acquisition, management, and operational support for IAC contract operations and the technical information that is generated as a result of research and studies conducted. In a time of shrinking budgets and increasing responsibility, IACs are a valuable resource for accessing Scientific and Technical Information culled from efforts to solve new and historic challenges.

Direct IAC customer support activities, such as Technical Area Task (TAT) order processing, Basic Center Operations (BCO) support, Defense Finance and Accounting Service (DFAS) activities, contracting/acquisition related activities, etc., are funded in part through partnerships with the Defense Research & Engineering community and the annual collection of customer reimbursements for shared direct costs, in accordance with

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Information Analysis Centers	9.291	7.053	7.053	
FY 2011 Accomplishments:  - Contributed to OASD(R&E)'s four imperatives, while enhancing IAC partnership with OASD(R&E) on areas of common interest through participation in focus groups, communities of interest, and other Reliance 21 initiatives.  - Provided information and analytical support to Cyber Security and Advanced Materials Communities of Interest (COI); engaged Advanced Materials COI members in governance process for Advanced Materials IAC  - Provided administrative oversight and operational management of DTIC-sponsored IACs.  - Refined business processes, improving efficiency within the Program and maximizing value-per-dollar for our customers by providing innovative approaches, streamlined processes and alignment with new policies  - Provided basic core contract operations for DoD IACs to collect, analyze, synthesize and disseminate worldwide Scientific and Technical Information (STI) in support of DoD's critical technologies and the warfighter.				

PE 0605801KA: Defense Technical Information Center Defense Technical Information Center

UNCLASSIFIED
Page 11 of 13

R-1 Line #158

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Technology	nical Information Center		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	PROJECT 002: Inforr	JECT Information Analysis Centers			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
- Responded to over 7,100 technical inquiries and provided in-depth S results via IAC websites; captured over 41,000 STI products from new information among members of the operational and technical commur For example, authored a first-of-its-kind DoD energy handbook for first-active targets for energy efficiency and use of alternative - Established presence on social media, including 22-week Armed with participation on a panel addressing the use of social media to support - Exceeded metrics goals in all 15 key performance areas Codified and begin executing acquisition strategy for Basic Center O as well as new scope areas of emerging importance to the Department - Established and began executing acquisition strategy for Homeland Quantity Multiple Award Contracts (IDIQ MAC) for Technical Area Tasting - Managed and supported TATs ordered by the DoD and non-DoD custoring areas and supported TATs ordered by the DoD and non-DoD custoring areas and supported TATs ordered by the DoD and non-DoD custoring strategy and ensured alignment with Department goals/direct - Provided mechanism for operational users to leverage existing inform example, IACs provided recommendations to optimize maintenance for implemented, will enable a cost avoidance of over \$7 billion over the literature.	w/on-going analysis tasks; and supported the exchanities. acility managers to assess and evaluate options for we sources h Science blog initiative, leading to a radio interview mission objectives across DoD  operations contracts for the entire scope of the IAC Font. Defense and Defense Systems Indefinite Delivery Insks (TATs). stomers, including all 10 Combatant Commands; protion. mation to solve new and historic challenges (for or Mine Resistant Ambush Protected vehicles that, in	r and Program, Indefinite ovided			
<ul> <li>FY 2012 Plans:</li> <li>Provide administrative oversight and basic core contract operations to worldwide Scientific and Technical Information (STI) in support of DoE.</li> <li>Provide in-depth analysis services and create STI products, in respond technical community.</li> <li>Respond to technical inquiries and provide in-depth S&amp;T analysis; craproducts from new/on-going analysis tasks; and support the exchange technical communities.</li> <li>Continue executing acquisition strategy for Basic Center Operations new scope areas of emerging importance to the Department.</li> <li>Award Cyber Security IAC contract.</li> <li>Gain PEO approval of acquisition strategy for Homeland Defense TAR Release Request For Proposals for Homeland Defense IDIQ for TAT Manage and support TATs ordered by the DoD and non-DoD custom program strategy and ensure alignment with Department goals/direction</li> </ul>	O's critical technologies and the warfighter. Inse to anticipated and real-time needs of the operative and provide STI results via IAC websites; capter of information among members of the operational contracts for the entire scope of the IAC Program, and IDIQ.  TS. Insers, including all 10 Combatant Commands; provides	tional ure STI and as well as			
FY 2013 Plans:					
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PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 12 of 13

R-1 Line #158

pit R-2A, RDT&E Project Justification: PB 2013 Defense Tec	<b>DATE:</b> February 2012	
ROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
Research, Development, Test & Evaluation, Defense-Wide	PE 0605801KA: Defense Technical Information	002: Information Analysis Centers
RDT&E Management Support	Center	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
- Provide administrative oversight and basic core contract operations for DoD IACs to collect, analyze, synthesize and disseminate			
worldwide Scientific and Technical Information (STI) in support of DoD's critical technologies and the warfighter.			
- Respond to technical inquiries and provide in-depth S&T analysis; create and provide STI results via IAC websites; capture STI			
products from new/on-going analysis tasks; and support the exchange of information among members of the operational and			
technical communities.			
- Continue executing acquisition strategy for Basic Center Operations contracts for the IAC Program.			
- Award contracts for Homeland Defense and Defense Systems IACs.			
- Complete transition to new IAC Program contract structure utilizing Indefinite Delivery Indefinite Quantity Multiple Award			
contracts.			
- Manage and support TATs ordered by the DoD and non-DoD customers, including all 10 Combatant Commands; provide			
program strategy and ensure alignment with Department goals/direction.			
Accomplishments/Planned Programs Subtotals	9.291	7.053	7.053

## C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

N/A

## **E. Performance Metrics**

Information Analysis Centers: Number of IAC technical inquiries.

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 13 of 13

R-1 Line #158



# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



## **Defense Threat Reduction Agency**

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



Defense Threat Reduction Agency • President's Budget Submission FY 2013 • RDT&E Program

## **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 509
Program Element Table of Contents (by Budget Activity then Line Item Number)	Volume 5 - 513
Program Element Table of Contents (Alphabetically by Program Element Title)	Volume 5 - 515
Summary Document	Volume 5 - 517
Acronyms	Volume 5 - 519
Exhibit R-2's	Volume 5 - 527



#### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

25 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	S e c
1	0601000BR	DTRA Basic Research Initiative	01	46,107	47,737		47,737	U
	Basic	Research		46,107	47,737		47,737	
23	0602718BR	Weapons of Mass Destruction Defeat Technologies	02	197,984	196,083		196,083	U
	Appli	ed Research		197,984	196,083		196,083	
28	0603160BR	Counterproliferation Initiatives - Proliferation Prevention and Defeat	03	301,571	283,073		283,073	U
	Advan	ced Technology Development (ATD)		301,571	283,073		283,073	
121	0605000BR	Weapons of Mass Destruction Defeat Capabilities	05	7,826	5,888		5,888	U
	Syste	m Development and Demonstration (SDD)		7,826	5,888		5,888	
153	0605502BR	Small Business Innovation Research	06	7,888				U
	RDT&E	Management Support		7,888				8
Tota	l Research,	Development, Test & Eval, DW		561,376	532,781		532,781	9

#### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

al Obligational Authority 25 Jan 2012 (Dollars in Thousands)

Appropriation: 0400D Research, Development, Test & Eval, DW

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	Program						S
	Element			FY 2013	FY 2013	FY 2013	e
No	Number	Item	Act	Base	oco	Total	C
							Ψ.
1	0601000BR	DTRA Basic Research Initiative	0.1	45 071		45 081	
1	OGOTOODK	DIRA BASIC RESEATCH INICIACIVE	01	45,071		45,071	U
	Pagia	Research		45 055			
	Basic	Research		45,071		45,071	
23	0602718BR	Weapons of Mass Destruction Defeat Technologies	02	172,352		172,352	U
		STANDER TO THE TOTAL CONTROL OF THE STANDER OF THE					
	Applie	ed Research		172,352		172,352	
28	0603160BR	Counterproliferation Initiatives - Proliferation Prevention and	03	275,022		275,022	U
		Defeat					
	Advenn	ced Technology Development (ATD)					
	Advant	ded reciniology beveropment (ATD)		275,022		275,022	
121	0605000BR	Weapons of Mass Destruction Defeat Capabilities	05	5,749		5,749	U
		Charles - A productive Control of the Control of the Control of the Control of Control o					
	System	m Development and Demonstration (SDD)		5,749		5,749	
153	0605502BR	Small Business Innovation Research	06				U
	RDT&E	Management Support					
Total	Desearch	Development, Test & Eval, DW		400 104		400 104	
iocal	r Research,	Development, lest & Eval, DW		498,194		498,194	

R-1C: FY 2013 President's Budget (Published Version), as of January 25, 2012 at 08:46:38

#### Defense Threat Reduction Agency FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Drogram

Program Line Element No Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	s e c
1 0601000BR		01	46,107	47,737		47,737	U
Basic Resear 23 0602718BR	Weapons of Mass Destruction Defeat Technologies	02	46,107 197,984	47,737 196,083		47,737 196,083	
Applied Rese	earch		197,984	196,083		196,083	
28 0603160BR	Counterproliferation Initiatives - Proliferation Prevention and Defeat	03	301,571	283,073		283,073	U
Advanced Tec	chnology Development (ATD)		301,571	283,073		283,073	
121 0605000BR	Weapons of Mass Destruction Defeat Capabilities	05	7,826	5,888		5,888	U
System Devel	lopment and Demonstration (SDD)		7,826	5,888	,	5,888	
153 0605502BR	Small Business Innovation Research	06	7,888				υ
RDT&E Manage	ement Support		7,888				
Total Defense	Threat Reduction Agency		561,376	532,781		532,781	

R-1C: FY 2013 President's Budget (Published Version), as of January 25, 2012 at 08:46:38

#### Defense Threat Reduction Agency FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Drogram

Program						S
Line Element			FY 2013	FY 2013	FY 2013	e
No Number	Item	Act	Base	oco	Total	C
						_
1 0601000BR	DTRA Basic Research Initiative	01	45,071		45,071	U
Basic Resear	cch		45,071		45,071	
23 0602718BR	Weapons of Mass Destruction Defeat Technologies	02	172,352		172,352	U
Applied Rese	earch		172,352		172,352	
28 0603160BR	Counterproliferation Initiatives - Proliferation Prevention and Defeat	03	275,022		275,022	U
7.1	1 1 2 2 2					
Advanced Tec	Chnology Development (ATD)		275,022		275,022	
121 0605000BR	Weapons of Mass Destruction Defeat Capabilities	05	5,749		5,749	U
System Deve	lopment and Demonstration (SDD)		5,749		5,749	
153 0605502BR	Small Business Innovation Research	06				U
RDT&E Manage	ement Support					
Total Defense	Threat Reduction Agency		498,194		498,194	

R-1C: FY 2013 President's Budget (Published Version), as of January 25, 2012 at 08:46:38

Defense Threat Reduction Agency • President's Budget Submission FY 2013 • RDT&E Program

## **Program Element Table of Contents (by Budget Activity then Line Item Number)**

Budget Activity 01: Basic Research

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
1	01	0601000BR	DTRA Basic Research Initiative	Volume 5 - 527

**Budget Activity 02: Applied Research** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
23	02	0602718BR	WMD Defeat TechnologiesVolum	e 5 - 533

Budget Activity 03: Advanced Technology Development (ATD)

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	y Program Element Number	Program Element Title	Page
28	03	0603160BR	Counterproliferation Initiatives - Proliferation, Prevention and Defeat	Volume 5 - 575

## **UNCLASSIFIED**

Defense Threat Reduction Agency • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 05: Development & Demonstration (SDD)

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
121	05	0605000BR	WMD Defeat CapabilitiesVolume	5 - 611

Budget Activity 06: RDT&E Management Support

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

•••••								
Line Item	Budget Activit	y Program Element Number	Program Element Title Pag	j <b>e</b>				
153	06	0605502BR	`Small Business Innovation Research	9				

Defense Threat Reduction Agency • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Counterproliferation Initiatives - Proliferation, Prevention and Defeat	0603160BR	28	03Volume 5 - 575
DTRA Basic Research Initiative	0601000BR	1	01Volume 5 - 527
WMD Defeat Capabilities	0605000BR	121	05Volume 5 - 611
WMD Defeat Technologies	0602718BR	23	02Volume 5 - 533
`Small Business Innovation Research	0605502BR	153	06Volume 5 - 619



#### Exhibit R-1, RDT&E Programs Defense Threat Reduction Agency

Appropriation: RDT&E, Defense-Wide Date: February 2012

#### **OVERVIEW**

DTRA's mission is to safeguard the United States (US) from global WMD threats by integrating, synchronizing and providing expertise, technologies, and capabilities across all operating environments. DTRA's FY 13-17 PBS and its mission are aligned with overarching guidance in the NSS, the QDR, the Nuclear Posture Review (NPR), and the National Strategy for Countering Biological Threats (NSCBT), and the National Strategy to Combat Weapons of Mass Destruction. Furthermore, the Agency supports DoD's strategic CWMD priorities as well as requirements articulated in the Guidance for the Employment of the Force, the FY 12-16 Defense Planning and Programming Guidance (DPPG), the Strategic Global Assessment, the Joint Strategic Capabilities Plan, and Combatant Commanders' Global Campaign Plans, Contingency Plans, and Theater Campaign Plans.

The Agency's PBS also applies recommendations from key studies and assessments to inform program and resource decisions. These studies and assessments include the 2010 Combat Support Agency Review Team Assessment, the 2009 National Academy of Sciences report on Global Security Engagement, and the Biennial Review of Defense Agencies.

DTRA's budget request responds to warfighter needs and supports its chartered responsibilities and national commitments. These focus on: support to the Combatant Commands (COCOMs); arms control treaty obligations; international cooperative efforts to interdict WMD; Cooperative Threat Reduction (CTR) programs both inside and outside of the former Soviet Union (FSU); nuclear deterrence support; research and development (R&D) across the Chemical, Biological, Radiological, Nuclear, and High-yeild Explosives (CBRNE) spectrum; and support to other US Government (USG) agencies. DTRA invests in focused science and technology R&D efforts to meet the above responsibilities, commitments, and next-generation CWMD needs.

DTRA's RDT&E critical focus areas are programmed to: modernize WMD defense capabilities to provide broad-spectrum, flexible solutions and multi-use technologies to counter post cold-war threats; develop technological solutions to provide timely information to the warfighter, increase the probability of surviving attack, and speed the recovery from any such attack; collaborate across the DoD and intelligence community to fully synchronize CWMD technical and analytic capabilities and functions; apply a comprehensive systems approach to integrate cross-functional CBRN enabling technologies in modeling and simulation, persistent intelligence, surveillance and reconnaissance, and data to decision support tools; and, build international capacity to prevent, reduce, and respond to WMD threats globally through international S&T engagement.

The FY 2013 DTRA Budget Request reflects reductions in travel, contractor services, printing and reproduction consistent with Department efficiencies.



# **Acronyms**

ACES Arms Control Enterprise System

Al Active Interrogation

APOM Amended POM

AOR Area of Responsibility

APIX Airborne Persistent Imagery eXploitation

ARIEL Autonomous Reconnaissance Infrared Electro-optical Loitering

ASIC Application Specific Integrated Circuit

ASCO Advanced Systems Concepts Office

ATAC Advanced Targeting Assessment Capability

ATD Advanced Technology Development

AUV Autonomous Underwater Vehicle

BAA Broad Agency Announcement

BDA Battle Damage Assessment

BDI Battle Damage Information

BLADE BDI Link Advanced Demonstrator

BLU Bomb, Live Unit

CAPE Capability Assessment and Program Evaluation

CBRNE Chemical, Biological, Radiological, Nuclear, and High-yield Explosives

CFD Computational Fluid Dynamics

CHAMP Counter Electronics High Power Microwave Advanced Missile Project

CIO Chief Information Officer

CNDSP DTRA Computer Network Defense Service Provider

COCOM Combatant Command

CoE-NI Consequence of Execution – Nuclear Integration

COI Community of Interest

CONOPS Concept of Operations

CONPLAN Concept of Operation Plan

CONUS Continental United States

COOP Continuity of Operations

CP Counter-proliferation

CSM Computational Structure Mechanics

CT/CP Counterterrorism / Counterproliferation

CTR Cooperative Threat Reduction

C-WAC Counter-WMD Analysis Center

CWMD Combating Weapons of Mass Destruction

CWMD-T Combating Weapons of Mass Destruction –Terrorism

CZT Cadmium zinc telluride

DARPA Defense Advanced Research Projects Agency

DEL DTRA Experimentation Lab

DHS Department of Homeland Security

DIAMONDS Defense Integration and Management of Nuclear Data Services

DIOCC/DIA Defense Intelligence Operations Coordination Center/Defense Intelligence

Agency

DITEC DTRA Integration Technical Experimentation Center

DNDO Domestic Nuclear Detection Office

DoD Department of Defense

DOE Department of Energy

DPG Dugway Proving Ground

DPOE Dynamic Picture of the Operating Environment

DRDC Defence Research and Development Canada

DSP Digital Signal Processing

DSWA Defense Special Weapons Agency

DT&E Development, Testing and Evaluation

DTRA Defense Threat Reduction Agency

DTSA Defense Technology Security Administration

EHF Extremely High Frequency

EMP Electromagnetic Pulse

EOD Explosive Ordnance Disposal

EPA Environmental Protection Agency

EXCALIBUR Explicit Calculations of Interacting Blocks Under Rapid Loading

FFRDC Federally Funded Research and Development Center

FINDER Flight Inserted Detector Expendable for Reconnaissance

FOC Full Operational Capability

GDF Global Development of Forces

GEF Guidance for Employment of the Force

GIG Global Information Grid

GNDS Global Nuclear Defense System

GUI Graphical User Interface

HAMMER Heated And Mobile Munitions Employing Rockets

HANE High Altitude Nuclear Environments

HEMP High Altitude Electro Magnetic Pulse

He3-RT Helium 3 Replacement Technology

HDBT Hard and Deeply Buried Targets

HPAC Hazard Prediction and Assessment Capability

HPC High Performance Computing

HPM High Power Microwave

HSC High Strength Concrete

HTD Hard Target Defeat

IBRD Interagency Biological Restoration Demonstration

IED Improvised Explosive Device

IMEA Integrated Munitions Effects Assessment

IND Improvised Nuclear Device

INDRAC Interagency CWMD Database of Responsibilities, Authorities, and

Capabilities

IOC Initial Operational Capability

IPODS Integrated Precision Ordnance Delivery System

ISIS Integrated Standoff Inspection System

ISR Intelligence, Surveillance, Reconnaissance

ISS Integrated Sensor System

IT Information Technology

ITD Integrated Technology Demonstration

IWMDT Integrated Weapons of Mass Destruction Toolset

JAIEG Joint Atomic Information Exchange Group

JCDE Joint Concept Development & Experimentation

JCTD Joint Concept Technology Demonstration

JDAM Joint Direct Attack Munition

JECE Joint Elimination Coordination Element

JEM Joint Effects Model

JMEWS Joint Multi-Effects Warhead System

JIPOE Joint Intelligence Preparation of the Operational Environment

JSAF Joint Semi-Automated Forces

JSIVA Joint Staff Integrated Vulnerability Assessments

KAFB Kirtland Air Force Base

LIBS Laser Induced Breakdown Spectroscopy

LMSI Lower Manhattan Security Initiative

LTS Large Test Structure

MACS Modular Autonomous Countering WMD System

MAV Micro Air Vehicle

MCNP Monte Carlo N-Particle

MDA Missile Defense Agency

M&S Modeling and Simulation

MFK-R Mobile Field Kit – Radiological

MIMS Metastable Innershell Molecular State

MMUAS Multi-Mission Unmanned Aerial Systems

MOP Massive Ordnance Penetrator

NATO North Atlantic Treaty Organization

NCPC National Counterproliferation Center

NIF National Ignition Facility

NLGC Nunn Lugar Global Cooperation

NMS National Military Strategy

NMSP National Military Strategic Plan

NNSA National Nuclear Security Administration

NNSS Nevada National Security Site

NPR Nuclear Posture Review

NRTRS Near Real Time Reachback Support

NSS National Security Strategy

NST New START Treaty

NTNF National Technical Nuclear Forensics

NTPR Nuclear Test Personnel Review

NuCS Nuclear Capability Services

NWE Nuclear Weapon Effects

NWEC Nuclear Weapon Effects Center

NWED Nuclear Weapons Effects Database

NWEN Nuclear Weapons Effects Network

NWRM Nuclear Weapons Related Materiel

OCO Overseas Contingency Operations

OCONUS Outside the Continental United States

O&M Operations and Maintenance

OPCW Organization for the Prohibition of Chemical Weapons

OSCAR Occluding Six-Crystal Array

OSD CAPE Office of the Secretary of Defense Capability Assessment and Program

Evaluation

OSD-NM Office of the Secretary of Defense, Nuclear Matters Office (in the office of

the Assistant Secretary of Defense for Nuclear, Chemical, and Biological

Defense Programs)

OSIA On-site Inspection Agency

P-ISR Persistent Intelligence, Surveillance, and Reconnaissance

PITAS Photonuclear Inspection and Threat Analysis System

PNAF Prime Nuclear Airlift Forces

QRC Quick Reaction Capability

R2TD Rapid Reaction Tunnel Detection

RDD Radiological Dispersion Device

R&D Research and Development

RadHard Radiation Hardened

RFIS Robust Fuzewell Instrumentation System

RHBD Radiation Hardened by Design

RHM Radiation Hardened Microelectronics

RHOC Radiation Hardened Oversight Council

SBIR Small Business Innovative Research

SCC WMD USSTRATCOM Center for Combating Weapons of Mass Destruction

SCSP USSOCOM Combating Weapons of Mass Destruction – Terrorism

Support Program

SHAMRC Second-order Hydrodynamic Automatic Mesh Refinement Code

SHAPE Supreme Headquarters Allied Powers, Europe

SNM Special Nuclear Material

SOF Special Operation Forces

SOX Standoff Operational Exercise

SREMP Source Region Electromagnetic Pulse

START Strategic Arms Reduction Treaty

STC Secure the Cities

STIRS Smart Threads Integrated Radiological Sensors

TACBRD TransAtlantic Collaboration Biological Resiliency Demo

TACSAT Technical Satellite

TDFD Timed Delay Firing Device

TEAMS Technical Evaluation Assessment and Monitor Site

TNF Technical Nuclear Forensics

TOA Total Obligation Authority

TRAC Threat Reduction Advisory Committee

TRL Technology Readiness Level

TSG Technical Support Group

TTL Tag, Track, Locate

TWAC Targeting and Weaponeering Analysis Cell

UAS Unmanned Aerial Systems

UAV Unmanned Aerial Vehicle

UCP Unified Command Plan

UGF Underground Facility

UGT Underground Test

UHF Ultra-High Frequency

UHPC Ultra-High Performance Concrete

URM Universal Rock Model

USANCA U.S. Army Nuclear and Combating WMD Agency

USEUCOM U.S. European Command

USNORTHCOM U.S. Northern Command

USP University Strategic Partnership

USPACOM U.S. Pacific Command

USSOCOM U.S. Special Operations Command

USSTRATCOM U.S. Strategic Command

UTAS Underground Targeting and Analysis System

VAPO Vulnerability Assessment Protection Option

VOIP Voice Over Internet Protocol

WACS WMD Aerial Collection System

WCF West Coast Facility

WEP Weapon Effects Phenomenology

WESC Weapon Effects Steering Committee

WMD Weapons of Mass Destruction

WSMR White Sands Missile Range

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Threat Reduction Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0601000BR: DTRA Basic Research Initiative

BA 1: Basic Research

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	46.107	47.737	45.071	-	45.071	45.493	45.925	46.757	47.602	Continuing	Continuing
RU: Fundamental Research for Combating WMD	46.107	47.737	45.071	-	45.071	45.493	45.925	46.757	47.602	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Defense Threat Reduction Agency (DTRA) safeguards America and its allies from Weapons of Mass Destruction (chemical, biological, radiological, nuclear, and high explosives) by providing capabilities to reduce, eliminate, counter the threat, and mitigate its effects. The Basic Research Initiative program provides for the discovery and development of fundamental knowledge and understanding by research performers drawn primarily from academia and world-class research institutions in government and industry. This leverages Department of Defense's \$2 billion annual investment in basic research by ensuring a motivation within the scientific community to conduct research benefiting Weapons of Mass Destruction-related defense missions and by improving Agency knowledge of other research efforts of potential benefit to DTRA nonproliferation, counterproliferation and consequence management efforts.

These efforts are closely coordinated with the Chem-Bio Technology portfolio which executes a basic research program under the joint Chem-Bio Defense Program. Agency research interests are coordinated with those of Defense Advanced Research Projects Agency and Service basic research programs through the Defense Basic Research Advisory Group. DTRA reviews research interests annually to focus on technology areas not clearly addressed by other basic research efforts.

The decrease from FY 2012 to FY 2013 is predominately due to a reduction in the number of grants awarded and the elimination of dedicated support to transition discoveries to DTRA applied research.

PE 0601000BR: DTRA Basic Research Initiative Defense Threat Reduction Agency

UNCLASSIFIED
Page 1 of 5

R-1 Line #1

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Threat Reduction Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0601000BR: DTRA Basic Research Initiative

BA 1: Basic Research

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	47.412	47.737	48.071	-	48.071
Current President's Budget	46.107	47.737	45.071	-	45.071
Total Adjustments	-1.305	-	-3.000	-	-3.000
Congressional General Reductions	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-1.014	-			
FFRDC Reduction	-0.050	-	-	-	-
Economic Assumption Reduction	-0.241	-	-	-	-
Programmatic - Fiscal Guidance Adjustment	-	-	-3.000	-	-3.000

### **Change Summary Explanation**

The decrease from the previous President's Budget submission in FY 2011 is due to the Federally Funded Research and Development Center (FFRDC) and the Economic Assumption reductions, and the SBIR transfer. The FY 2013 decrease from the previous President's Budget is predominately due to a reduction in the number of grants awarded and the elimination of dedicated support to transition discoveries to DTRA applied research.

PE 0601000BR: *DTRA Basic Research Initiative* Defense Threat Reduction Agency

UNCLASSIFIED Page 2 of 5

R-1 Line #1

Exhibit R-2A, RDT&E Project Just	nse Threat F	Reduction Agency				DATE: February 2012					
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 1: Basic Research							PROJECT RU: Fundamental Research for Combating WMD				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
RU: Fundamental Research for Combating WMD	46.107	47.737	45.071	-	45.071	45.493	45.925	46.757	47.602	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This project provides for the discovery and development of fundamental knowledge and understanding by research performers drawn primarily from academia and world-class research institutions in government and industry. This leverages the Department of Defense's (DoD) \$1 billion annual investment in basic research by ensuring a motivation within the scientific community to conduct research benefiting Weapons of Mass Destruction-related defense missions and by improving Agency knowledge of other research efforts of potential benefit to Defense Threat Reduction Agency (DTRA) nonproliferation, counterproliferation and consequence management efforts.

These efforts are closely coordinated with the Chem-Bio Technology Portfolio which executes a basic research program under the joint Chem-Bio Defense Program. Agency research interests are coordinated with those of Defense Advanced Research Projects Agency and Service basic research programs through the Defense Basic Research Advisory Group. DTRA reviews research interests annually to focus on technology areas not clearly addressed by other basic research efforts.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Project RU: Fundamental Research for Combating WMD	46.107	47.737	45.071	
FY 2011 Accomplishments:  - Expanded the basic research portfolio to a total of 242 active basic research awards to 107 universities and laboratories across 37 states and 2 countries to include Canada and the UK. The Agency's 6.1 basic research portfolio supports the Combating Weapons of Mass Destruction (CWMD) grand challenge for the DoD, and is capitalized at 8.5% of the DTRA Science & Technology (S&T) investment.  - Supported 381 Principal Investigators, 535 students and 120 post-doctoral researchers which published 340 peer reviewed articles, 572 presentations and submitted 25 patent applications.  - Conducted a technical review assessing each grant's scientific advancements and progress in meeting technical objectives. The review included 240 technical presentations and was attended by 639 people fostering collaboration and building relationships within the scientific community.  - Conducted an external panel review of the basic research program that was open to DoD research stakeholders, which assessed the focus and scope of the program with respect to the CWMD challenges, and assessed the coordination of CWMD basic research across DoD mission space and across the broader basic research community to avoid unintended duplication and ensure successful partnerships.				
FY 2012 Plans:				

PE 0601000BR: DTRA Basic Research Initiative Defense Threat Reduction Agency

Page 3 of 5

R-1 Line #1

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

	Initiative				WMD	arrieritai Nes	earch for Cor	nbating
B. Accomplishments/Planned Programs (\$ in Millions)						FY 2011	FY 2012	FY 2013
<ul> <li>Program expected to be managing over 200 active basic research research portfolio is expected to continue the CWMD grand challengthe DTRA research and development investment.</li> <li>Plan to conduct a technical review of each grant to assess the scietechnical objectives and to foster collaboration and build relationship.</li> <li>Plan to conduct an external panel review of the basic research proassess the focus and scope of the program with respect to the CWM basic research across DoD mission space and across the broader be ensure successful partnerships.</li> </ul>	ge for the DoD, ar entific advanceme ps within the scier ogram, which will b MD challenges, ar	nd be capitalizents and progratific commun the open to Do nd to assess t	zed at appro ess in meeti ity. D research s he coordinat	ximately 8-10 ng the award stakeholders tion of CWMI	0% of d's s, to D			
FY 2013 Plans:  - Program expected to be managing over 160 active basic research research portfolio is expected to continue the CWMD grand challenge the DTRA S&T investment.  - Support the development of the future Science, Technology, Engire talent in WMD research at universities and laboratories.  - Conduct an annual technical review of each grant to assess the set technical objectives and to foster collaboration and build relationship.  - Conduct an annual external panel review of the basic research processes the focus and scope of the program with respect to the CWM basic research across DoD mission space and across the broader been sure successful partnerships.	ge for the DoD an neering and Mathe cientific advancem ps within the scier ogram, which will bull challenges, an	d to be capital ematics workf nents and progntific communoe open to Dond to assess the	orce by supporce by supporces in meesty.  The properties of the coordinate of the co	roximately 8- corting world eting the awa stakeholders tion of CWMI	-10% of I-class ard's s, to			
	Acco	mplishments	s/Planned P	rograms Su	btotals	46.107	47.737	45.07
C. Other Program Funding Summary (\$ in Millions) FY 2	2013 FY 2013	FY 2013				1	Cost To	<u>.</u>
Line Item FY 2011 FY 2012 E	Base OCO	Total	FY 2014	FY 2015	FY 2016	EV 204	7 Complete	Total Cos

## D. Acquisition Strategy

Technologies

Procurement methods include in-scope award through Defense Threat Reduction Agency University Strategic Partnership, collaborative funding through other organizations, and competitive award through Broad Agency Announcement.

PE 0601000BR: *DTRA Basic Research Initiative* Defense Threat Reduction Agency

UNCLASSIFIED
Page 4 of 5

R-1 Line #1

Volume 5 - 530

**DATE:** February 2012

xhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	eat Reduction Agency	<b>DATE:</b> February 2012
PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
400: Research, Development, Test & Evaluation, Defense-Wide A 1: Basic Research	PE 0601000BR: DTRA Basic Research Initiative	RU: Fundamental Research for Combating WMD
Performance Metrics	,	
Project performance is measured via a combination of statistics incengineering supporting Department of Defense educational goals, uUS News & World Report "Best Colleges" list.		

PE 0601000BR: *DTRA Basic Research Initiative* Defense Threat Reduction Agency



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Threat Reduction Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0602718BR: WMD Defeat Technologies

BA 2: Applied Research

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	197.984	196.083	172.352	-	172.352	170.483	174.084	177.832	180.828	•	Continuing
RA: Systems Engineering and Innovation	44.923	41.456	33.396	-	33.396	31.924	32.454	32.780	33.152	Continuing	Continuing
RE: Counter-Terrorism Technologies	15.946	-	-	-	-	-	-	-	-	Continuing	Continuing
RF: Detection Technology	43.697	49.677	44.998	-	44.998	47.223	47.722	48.417	49.330	Continuing	Continuing
RG: Advanced Energetics & Counter WMD Weapons	18.432	17.771	14.645	-	14.645	14.750	13.595	13.521	14.004	Continuing	Continuing
RI: Nuclear Survivability	18.525	17.503	18.810	-	18.810	18.965	20.142	21.428	21.490	Continuing	Continuing
RL: Nuclear & Radiological Effects	15.891	25.343	25.752	-	25.752	23.904	25.202	25.539	25.964	Continuing	Continuing
RM: WMD Battle Management	18.255	13.761	18.969	-	18.969	19.066	19.988	20.593	20.729	Continuing	Continuing
RR: Test Infrastructure	13.509	21.941	13.782	-	13.782	14.135	14.414	15.005	15.610	Continuing	Continuing
RT: Target Assessment Technologies	0.845	-	-	-	-	-	-	-	-	Continuing	Continuing
RU: Fundamental Research for Combating WMD	7.961	8.631	2.000	-	2.000	0.516	0.567	0.549	0.549	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The mission of the Defense Threat Reduction Agency (DTRA) is to safeguard America and its allies from Weapons of Mass Destruction (WMD) by reducing the present threat and preparing for the future threat. This mission directly reflects several national and Department of Defense level guidance/vision documents to include the National Security Strategy, Unified Command Plan, National Strategy to Combat WMD, Counterproliferation Interdiction, National Strategy for Combating Terrorism, National Military Strategy, Global Development of Forces, Global Employment of Forces, National Military Strategy for Combating WMD, National Military Strategic Plan for the War on Terrorism, Joint Strategic Capabilities Plan (including the Nuclear Annex), and Nuclear Posture Review. To achieve this mission, DTRA has identified principal objectives along with strategies and tasks to ensure the objectives are met. Three of these objectives are to deter the use of WMD, reduce the present threat, and to prepare for the future threat. A focused and strong threat reduction technology base is critical to achieving these objectives and is closely tied with the operational support programs that make up its combat support mission. DTRA has taken the steps to develop this technology base and provide a foundation for transformational activities within the WMD arena.

Project RA provides systems engineering and analysis support across all other Projects, innovative counterproliferation research, and technical advisory reachback support on WMD effects and consequences.

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

Page 1 of 41

R-1 Line #23

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Threat Reduction Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0602718BR: WMD Defeat Technologies

BA 2: Applied Research

APPROPRIATION/BUDGET ACTIVITY

Project RE provides research and development support to the U.S. Special Operations Command (USSOCOM) Combating Weapons of Mass Destruction – Terrorism Support Program (SCSP) to forecast plausible terrorist WMD threats for planning and conducting operations to combat WMD terrorism. Follow-on funding for this project can be found in the Proliferation Prevention and Defeat; 0603160BR, budget exhibit.

Project RF develops technologies, systems and procedures to detect, identify, track, tag, locate, monitor and interdict strategic and improvised nuclear and radiological weapons, components, or materials in support of Department of Defense (DoD) requirements for combating terrorism, counterproliferation and nonproliferation, homeland defense, and international initiatives and agreements.

Project RG develops advanced technologies and weapon concepts and validates their applicability as counter WMD weapon systems.

Project RI provides the capability for DoD nuclear forces and their associated control and support systems and facilities in wartime to avoid, repel, or withstand attack or other hostile action, to the extent that essential functions can continue or be resumed after the onset of hostile action.

Project RL develops nuclear and radiological assessment modeling tools to support military operational planning, weapon effects predictions, and strategic system design decisions.

Project RM provides (1) full-scale testing of counter WMD weapon effects, sensor performance, and weapon delivery optimization, (2) weapon effects modeling, and (3) the Defense Threat Reduction Agency Experimentation Lab.

Project RR provides a unique national test bed capability for simulated WMD facility characterization, weapon-target interaction, and WMD facility defeat testing to respond to operational needs by developing and maintaining test beds used by the DoD, the Services, the Combatant Commanders and other federal agencies to evaluate the implications of WMD, conventional, and other special weapon use against U.S. military or civilian systems and targets.

Project RT provides the Combatant Commands and the Intelligence Community with technologies and processes to find and characterize Weapons of Mass Destruction (WMD) targets located in underground facilities and then, in near-real-time, assess the results of attacks against those targets. Follow-on funding for this project can be found in the Proliferation Prevention and Defeat; 0603160BR, budget exhibit.

Project RU provides (1) strategic studies to support DoD, (2) Decision support tools and analysis to support combating WMD research and development investments, and (3) early applied research for technology development.

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 2 of 41

R-1 Line #23

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Threat Reduction Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0602718BR: WMD Defeat Technologies

BA 2: Applied Research

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	212.742	196.954	191.786	-	191.786
Current President's Budget	197.984	196.083	172.352	-	172.352
Total Adjustments	-14.758	-0.871	-19.434	-	-19.434
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-10.435	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-1.685	-			
FFRDC Reduction	-0.227	-0.871	-	-	-
<ul> <li>Economic Assumption Reduction</li> </ul>	-1.081	-	-	-	-
Realignment	-1.330	-	0.688	-	0.688
<ul> <li>Programmatic - Fiscal Guidance Reduction</li> </ul>	-	-	-23.198	-	-23.198
• Inflation	-	-	3.076	-	3.076

## **Change Summary Explanation**

The decrease from the previous President's Budget submission in FY 2011 is the net effect of the Congressional Rescission, the Federally Funded Research and Development Center (FFRDC) reduction, the Economic Assumption reduction, and a transfer of funding to WMD Defeat Capabilities; 0605000BR for increased investment in the Joint Collaborative Analysis Module of the Integrated Weapons of Mass Destruction Toolset (IWMDT). The decrease from the previous President's Budget submission in FY 2013 is predominately due to decreased efforts in Advanced Energetics, University Strategic Partnerships, CWMD-T, Innovation, System Engineering, Test and Technology Support, DTRA Wargaming, Environmental Restoration Support and WMD National Test Bed.

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 3 of 41

Exhibit R-2A, RDT&E Project Jus	stification: PE	3 2013 Defe	nse Threat F	eduction Agency				DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research					IOMENCLAT 8BR: <i>WMD L</i>		nologies	PROJECT RA: Systems Engineering and Innovation			ration
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
RA: Systems Engineering and Innovation	44.923	41.456	33.396	-	33.396	31.924	32.454	32.780	33.152	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Systems Engineering and Innovation project provides (1) systems engineering and analysis support across all other Projects, (2) innovative counterproliferation research and development, and (3) technical advisory reachback support on Weapons of Mass Destruction (WMD) effects and consequences. The systems engineering effort provides research and development with requirements, technology, architecture analyses and proof-of-principle capability necessary for making decisions on strategic planning, research and development investments, new initiatives, cooperation, ventures with new customers, and accomplishment of high-level, short notice special projects. It also conducts the development, validation and fielding of the Arms Control Enterprise System (ACES) as a part of the U.S. commitment under arms control treaties. The innovative counterproliferation effort conducts research and development to investigate, identify, develop and transition short term, high payoff technologies from Defense Threat Reduction Agency (DTRA), other government agencies, industry, academia and international Science and Technology partners into the respective DTRA and other research and development programs and to end user organizations. The technical reachback effort provides 24 hours, 7 days per week information and analyses on potential impacts of a WMD event to Warfighters and First Responders in consult with DTRA's Combating WMD Research and Development subject matter experts. This project also provides support to international Counter-WMD science and technology cooperation through the DTRA London Office.

The decrease from FY 2012 to FY 2013 is predominantly due to reduced investment in systems engineering collaboration with external partners and customers and the slowing development and fielding of innovative technologies to the warfighter.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: RA: Systems Engineering and Innovation	44.923	41.456	33.396	
<b>Description:</b> Project RA provides the research and development both for systems engineering and analysis support across all other projects and innovative counterproliferation research and technical reachback support.				
FY 2011 Accomplishments:  - Finalized operational capability for systems engineering decision support tools. Provided direct support to DTRA programs and projects for analyzing and determining key performance and key technical parameters to support investment strategies.  - Continued requirements and gap analyses to enable research and development efforts to meet combating WMD capability gaps. Supported program and project managers by translating Agency goals and Concept of Operations into actionable products.  - Completed 21st century nuclear threat assessment resulting in increasing our knowledge of current threats and providing a solid basis for future analysis.  - Completed the Distributed Decision Support and Analysis architecture and Manufacturing Readiness Level Assessment studies vis-a-vis the DTRA Mission and active projects resulting in the development of refined analytical and systems engineering tools.				

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 4 of 41

R-1 Line #23

Volume 5 - 536

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	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Three	at Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies	PROJEC RA: Syst		ring and Inno	ovation
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<ul> <li>Completed Nuclear Enterprise architecture analysis resulting in the Tool.</li> <li>Initiated three new systems-engineering based special projects focus System, a new research and development portfolio management tool technologies.</li> <li>Solicited new innovative research projects resulting in ongoing develon-user capabilities, while leveraging resources from other DoD and Completed reconstructing the current networks to produce the DTR an environment to test and assess new technologies and configuration. Developed and integrated secure core infrastructure enhancements. Engineered and deployed full virtual infrastructure modeling and and Successfully closed the Advanced Systems and Concepts Office (Assection Completed proof-of-concept and development efforts in areas of entechnologies supporting WMD Analysis.</li> <li>Demonstrated feasibility of virtualization of WMD Analysis support scapability gaps in support of Operation Tomodachi.</li> <li>Conducted code-based vulnerability assessments on DTRA-development efforts in future revisions.</li> </ul>	using on the New START Treaty Arms Control Enter demonstrating radiological and nuclear stand-off delopment efforts for needed new technologies and in USG agencies.  A Integration Technical Experimentation Center (District that remediate vulnerability issues. Statement of the capability.  SCO).  Inanced remote access, collaboration, and virtualizations, some of which were rapidly provisioned to	rprise eletection encreased TEC) as eletion encreased meet			20.10
FY 2012 Plans:  - Develop next generation WMD Analysis Reachback Tool capabilities.  - Solicit at least 5 new innovative research projects focused on Chem Destruction (CWMD) / Improvised Explosive Device and Special Nucl.  - Continue requirements and gap analyses to enable research and de Support program and project managers by translating Agency goals at a Complete initial concept demonstrations for Standoff Detection in the Continental United States (OCONUS) environments to Combat WMD.  - Facilitate Joint Concept Development & Experimentation (JCDE) for Investigate and explore developmental technologies, such as Virtua.  - Analyze, explore, and identify gaps, and barriers associated with CV.  - Support STRATCOM requirements for an integrated strategic stocky.  - Support Office of the Secretary of Defense Capability Assessment at detection analysis and modeling.  - Perform analysis studies to predict new WMD threats.	nical-Biological detection, Countering Weapons of Near Materials detection. Evelopment efforts to meet combating WMD capable and Concept of Operations into actionable products a Continental United States (CONUS) and Outside proliferation. The CWMD Community of Interest. I Worlds. WMD Warfighter Challenges Dile force structure planning tool.	lity gaps. s. the			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 5 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Three	eat Reduction Agency	DAT	E: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0602718BR: WMD Defeat Technologies	RA: Systems Eng	gineering and Inno	ovation
BA 2: Applied Research				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 20	11 FY 2012	FY 2013
- Stimulate, identify, and execute high-impact projects to address lor	ng term resolution of WMD issues.			
- Provide long-range analytical support to the warfighter.				
- Develop and innovate a Nuclear Weapon-Related Materiel (NWRN				
Data Services with the ability to evolve to keep up with emerging ma				
of Defense (DoD) tracking systems into a single worldwide accounta report, and track NWRM during peacetime, crisis, and wartime.	ibility system that provides the ability to account, ma	iiritairi,		
<ul> <li>Design and implementation of Mission Domain IT architecture. Inc</li> </ul>	cludes migration and integration of current P&D IT o	anahilities		
leveraged by DTRA operational and combat support customers into		apabilities		
<ul> <li>Contract support to design, implement and manage the DTRA Interest</li> </ul>				
<ul> <li>Provide capability to model, simulate and analyze existing DTRAs</li> </ul>	-	apabilities		
and perform regression testing for system changes and upgrades (ir				
- Building partner capacity through applied research to improve the s				
FY 2013 Plans:				
- Continue requirements and gap analyses to enable research and d	levelopment efforts to meet combating WMD capabi	lity gaps.		
Support program and project managers by translating Agency goals				
- Support STRATCOM requirements for an integrated strategic stock	xpile force structure planning tool.			
- Integrate first person virtual environments into the suite of CWMD I				
- Facilitate Joint Concept Development & Experimentation (JCDE) for				
- Integrate Joint Semi-Automated Forces (JSAF) mission planning, c	onstructive analysis, and virtual training toolkit into t	:he		
Integrated Weapons of Mass Destruction (WMD) Toolset (IWMDT).				
- Continue to support OSD-CAPE and OSD-Nuclear Matters office (I		TCC) and		
- Deploy advanced Countering WMD (CWMD) operational virtual/liverelated DOE activities.	e training capabilities for Technical Support Group (	isg) and		
- Integrate Defense Intelligence Operations Coordination Center/Def	ianse Intelligence Agency (DIOCC/DIA) collection n	anning		
tools into NIMBLE ELDER mission capabilities.	ense intelligence Agency (Diocordia) collection pr	ariffing		
- Deploy 1st generation real time radiation modeling capabilities into	DTRA Reachback support			
- Continue to solicit new innovative research projects for developing		capabilities		
(leveraging other DoD and USG resources where possible) focused	•	•		
Explosives (CBRNE) detection, CWMD, Improvised Explosive Device		•		
detection.	·			
- Continue development of capability to model secondary and tertiary	y effects supporting optimal course of action and tac	tical		
decisions for WMD operations, including power and communication				

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 6 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0602718BR: WMD Defeat Technologies RA: Systems Engineering and Innovation BA 2: Applied Research B. Accomplishments/Planned Programs (\$ in Millions) FY 2011 FY 2012 FY 2013 - Organize/conduct senior Combatant Command (COCOM), Interagency, and International workshops, symposiums, and table top exercises to address key national/international strategies for reducing/combating the WMD threat. - Refine and enhance WMD lessons learned process with international staff and across the other COCOMs, incorporating lessons learned from partner activities. - Develop and update DTRA Support Plan as directed in the Defense Planning and Programming Guidance (DPPG) to further the Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the Guidance for Employment of the Force (GEF). - Utilize institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development collaboration within the Pacific Region in accordance with the GEF. - Continue to conduct strategic analyses and assessments on emerging WMD threats using various strategic research methodologies. Expand the use of Second Track Dialogues to meet future CWMD challenges.

- Manage the Threat Reduction Advisory Committee (TRAC).

- Build a professional network of up-and-coming professionals (post-BS/BA and pre-PhD) through effective management of the Bio Initiative for the Next Generation.
- Complete modernization of infrastructure and extend enhanced enterprise services.
- Complete documentation and architecture development for migrated mission systems.
- Begin code-based vulnerability scanning and documentation. Expand capability to perform code analysis earlier in the develop life-cycle as well as interfacing passive code exploitation reporting to the DTRA Computer Network Defense Service Provider (CNDSP).

**Accomplishments/Planned Programs Subtotals** 

44.923 41.456

C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• 28/0603160BR: <i>Proliferation</i>	4.815	13.641	7.455		7.455	8.448	9.215	9.771	9.946	Continuing	Continuing

Prevention and Defeat

# D. Acquisition Strategy

Not Applicable

### **E. Performance Metrics**

Number of customer requests for data analysis compared to historical level. Number of changes to investments based on systems engineering analyses.

PE 0602718BR: WMD Defeat Technologies
Defense Threat Reduction Agency

UNCLASSIFIED

Page 7 of 41 R-1 Line #23

Volume 5 - 539

33.396

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threa	at Reduction Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0602718BR: WMD Defeat Technologies	RA: System	ns Engineering and Innovation
BA 2: Applied Research			
Number of exercise and operations supported.  Number of Defense Acquisition Workforce Improvement Act certified New capabilities delivered and transitioned to operational capabilities Manage the strategic weapons stockpile and Nuclear Weapon-Relat Mission Enclave moves from development to Initial Operational Capa Mission Enclave moves from IOC to Full Operational Capability (FOC Segment architectures for the mission enclave and supported missic Integrate segment architectures into the DTRA Enterprise Architecture Development of network modeling and system-in-the-loop testing capability.	s. red Materiel; maintain 100% accountability. ability (IOC). C) by FY13. on systems. ure.	perimentation	n Center (DITEC).

PE 0602718BR: *WMD Defeat Technologies* Defense Threat Reduction Agency

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Defe	nse Threat F	Reduction Ag	jency				DATE: Feb	ruary 2012			
									PROJECT RE: Counter-Terrorism Technologies				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
RE: Counter-Terrorism Technologies	15.946	-	-	-	-	-	-	-	-	Continuing	Continuing		

### A. Mission Description and Budget Item Justification

The USSOCOM Combating Weapons of Mass Destruction – Terrorism Support Program (SCSP) supports processes to forecast plausible terrorist WMD threats for planning and conducting operations to combat WMD terrorism. The SCSP specifically addresses Commander USSOCOM responsibilities under the Chairman, Joint Chiefs of Staff (CJCS) Unified Command Plan (UCP) for integrating and synchronizing Defense-wide operations and activities to prevent terrorists from developing, acquiring, proliferating, or using WMD.

Follow-on funding for this project can be found in the Proliferation Prevention and Defeat; 0603160BR, budget exhibit.

Prevention and Defeat; 0603160BR, budget exhibit.	B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Combating Weapons of Mass Destruction – Terrorism Support Program (SCSP) to forecast plausible terrorist WMD threats for planning and conducting operations to combat WMD terrorism. Follow-on funding for this project can be found in the Proliferation Prevention and Defeat; 0603160BR, budget exhibit.  FY 2011 Accomplishments:  - SCSP established an initial capability to provide a dynamic picture of the global WMD-T operating environment.  - SCSP established an initial advanced IT infrastructure (Phase I) to accommodate data analysis processing and network conductivity.  - SCSP provided WMD data to COCOMs to support real-time contingency planning.	Title: RE: Counter-Terrorism Technologies	15.946	-	-
	Combating Weapons of Mass Destruction – Terrorism Support Program (SCSP) to forecast plausible terrorist WMD threats for planning and conducting operations to combat WMD terrorism. Follow-on funding for this project can be found in the Proliferation Prevention and Defeat; 0603160BR, budget exhibit.  FY 2011 Accomplishments:  - SCSP established an initial capability to provide a dynamic picture of the global WMD-T operating environment.  - SCSP established an initial advanced IT infrastructure (Phase I) to accommodate data analysis processing and network			
Accomplishments/Planned Programs Subtotals 15.946 -	- SCSP provided WMD data to COCOMs to support real-time contingency planning.			
	Accomplishments/Planned Programs Subtotals	15.946	-	-

## C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Not Applicable

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 9 of 41

R-1 Line #23

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xhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	eat Reduction Agency	DATE: February 2012			
PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			
400: Research, Development, Test & Evaluation, Defense-Wide A 2: Applied Research	PE 0602718BR: WMD Defeat Technologies	RE: Counter-Terrorism Technologies			
Performance Metrics	·				
success and reduces the number of current gaps in SOF capabilitie	es to counter weapons of mass destruction when co	ATURE Defeat Technologies RE: Counter-Terrorism Technologies  Try Utility Assessments conducted that increase the potential mission			
		DMENCLATURE BR: WMD Defeat Technologies  RE: Counter-Terrorism Technologies  seful Military Utility Assessments conducted that increase the potential mission			
	R-1 ITEM NOMENCLATURE PROJECT				

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency						DIGET ACTIVITY elopment, Test & Evaluation, Defense-Wide sch  R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies PROJECT RF: Detection Technology Cost To					
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research											
COST (\$ in Millions)	FY 2011	FY 2012				FY 2014	FY 2015	FY 2016	FY 2017		Total Cost
RF: Detection Technology	43.697	49.677	44.998	-	44.998	47.223	47.722	48.417	49.330	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Detection Technology project develops technologies, systems and procedures to detect, identify, track, locate, monitor and interdict strategic and improvised nuclear and radiological weapons, components, or materials in support of Department of Defense requirements for combating terrorism, counterproliferation and nonproliferation, homeland defense, and international initiatives and agreements. This project researches, develops, demonstrates, and transitions advanced technologies to improve: operational capability to detect and identify nuclear and radiological weapons, and support to the attribution process through development, demonstration, and transition of improved post-detonation National Technical Nuclear Forensics operational capabilities. Efforts under this project also support international peacekeeping and nonproliferation objectives, on-site and aerial inspections and monitoring, on-site sampling and sample transport, and on-site and off-site analysis to meet forensic, verification, monitoring and confidence-building requirements.

The Detection Technology project under Weapons of Mass Destruction Proliferation Prevention and Defeat emphasizes the advanced technology development and engineering portion of the overall effort.

The decrease from FY 2012 to FY 2013 is predominately due to the redirection of the nuclear detection portfolio toward a more holistic nuclear THREAT detection portfolio that integrates both passive and active radiation detection into a comprehensive Intelligence, Surveillance, and Reconnaissance (ISR) solution. This resulted in a decreased investment in advanced detector technology to fund increased investment in nuclear weapons effects in Project RI - Nuclear Survivability and system vulnerability and assessment capabilities in Project RL - Nuclear and Radiological Effects.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RF: Detection Technology	43.697	49.677	44.998
<b>Description:</b> Project RF develops technologies, systems and procedures to detect, identify, track, tag, locate, monitor and interdict strategic and improvised nuclear and radiological weapons, components, or materials in support of Department of Defense (DoD) requirements for combating terrorism, counterproliferation and nonproliferation, homeland defense, and international initiatives and agreements.			
FY 2011 Accomplishments:  - Continued development of a fieldable standoff active interrogation system for standoff detection and warning of hidden and shielded nuclear material. This standoff active interrogation system will also provide a new reference standard for evaluating progress and capabilities in standoff detection and warning of hidden and shielded nuclear material.  - Performed field demonstrations of new detector technologies for handheld detectors, distributed sensors, and vehicle mountable detector systems, to improve the ability of fielded forces to detect, locate, and identify nuclear materials in the battle space.			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 11 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0602718BR: WMD Defeat Technologies RF: Detection Technology BA 2: Applied Research B. Accomplishments/Planned Programs (\$ in Millions) FY 2011 FY 2012 FY 2013 - Continued to improve performance of new detector materials, imaging and spectroscopy systems, and signals analysis methods through rigorous field testing. - Continued to develop fieldable and improved technical capabilities for post-detonation prompt diagnostics, ground and airborne debris sample collection, sample analysis, modeling to support nuclear device reconstruction, and forensics data to lower uncertainties/increase confidence in technical nuclear forensics (TNF) conclusions. Combined all research and development projects to improve prompt diagnostics capabilities under projects DISCREET OCULUS and MINIKIN ECHO to demonstrate and field a prototype of an integrated ground sensor capability to augment and enhance current yield estimation and other prompt diagnostic capabilities. Includes continued development of methods to rapidly determine nuclear weapon yields and reaction history post-event. Began development, validation and transition of seismic/air blast/infrasound/craterology model to improve yield accuracy. - Continued execution, technical management and development of yield estimation and airborne/ground debris sample collection capabilities in support of the FY2010-initiated National Technical Nuclear Forensics (NTNF) Joint Capability Technology Demonstration (JCTD) - Investigated the use of muon and proton beams for standoff stimulation of fission in nuclear materials. Conducted experiments to validate the feasibility of the approach. Investigated alternative methods to detect fissions in nuclear materials from operationally relevant distances. - Started development of methods to rapidly determine nuclear weapon yields post-event, by investigating alternative prompt nuclear weapons effects on the environment. - Developed improved correlation tools, signature databases, and modeling of device/production design space to increase confidence, decrease uncertainties and timelines, to better support production of consensus technical nuclear forensics (TNF) results. Continued to mature alternative neutron detection materials and systems as an alternative to the use of helium-3. Investigated potential of a compact superconducting source in active interrogation systems. - Investigated the concept of a pulsed millimeter wave system which detects radioactive sources in both passive detection and active interrogation scenarios. - Improved a probabilistic code to enhance its modeling capabilities for specific problems. - Began efforts to improve accelerator design for improved capabilities with reduced weight and size. FY 2012 Plans: Continue to mature passive interrogation systems for determining the location of nuclear material. - Complete design of man-portable field instrument capable of passively locating and identifying nuclear materials. Continue to mature passive interrogation systems for determining the location of nuclear material. · Complete design of man-portable field instrument capable of passively locating and identifying nuclear materials. - Continue to develop and demonstrate neutron detection technology as an alternative to helium-3 neutron detectors.

PE 0602718BR: WMD Defeat Technologies **Defense Threat Reduction Agency** 

UNCLASSIFIED Page 12 of 41

R-1 Line #23

	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency			<b>DATE</b> : February 2012			
PROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT						
0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	search, Development, Test & Evaluation, Defense-Wide plied Research PE 0602718BR: WMD Defeat Technologies RF: De					
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013	
- Begin development of a rugged, mobile stand-off radiation detection	n system to provide detection and identification of n	uclear				
materials in a field environment.						
- Research and develop new detector materials intended to improve	• •	aterials.				
Improve the manufacturing readiness level by maturing technologies,						
- Transition compact, high performing replacement electronics for det						
- Develop an advanced algorithm to increase speed and reliability of	isotope identification in fielded hand-held and porta	ble				
detectors.						
- Begin to incorporate radiation transport into existing operational mo-	<u> </u>					
- Begin development of compact superconducting cyclotrons as a sou						
- Continue to develop and field (prototype) upgraded technical capab		ple				
analysis, and integration of design modeling and forensic data to sup						
- Complete execution, transition and fielding of the National Technica						
Demonstration (JCTD) capabilities and begin Limited Operational Us						
- Complete development of a fieldable standoff active interrogation sy	ystem for standoff detection and warning of hidden	and				
shielded nuclear material.						
- Continue to perform field demonstrations of new detector technolog						
mountable detector systems, to improve the ability of fielded forces to	o detect, locate, and identify nuclear materials in the	e battle				
space.						
- Continue to improve performance of new detector materials, imagin	g and spectroscopy systems, and signals analysis	methods				
through rigorous field testing.						
- Expand the functionality of the Mobile Field Kit – Radiological (MFK	-R) to add radiological situational awareness to the	current				
suite of chemical sensors in the kit.						
- Investigate alternative methods to detect fissions in nuclear materia	Is from standoff ranges, including the use of high-pe	ower				
lasers to generate beams of mono-energetic x-rays.						
- Investigate the use of muon and proton beams for standoff stimulati	on of fission in nuclear materials. Conduct experim	ents to				
validate the feasibility of the approach.						
- Progressively advance the laboratory physics demonstrations of tar	get stimulation, signature detection, and validated r	nodeling				
capability.						
- Develop a system to produce, capture, steer, cool and re-accelerate		wer				
components than are being used in comparable muon generating sys						
- Develop the ability and Concept of Operations (CONOPS) to detect	radiation induced air fluorescence from special nuc	clear				
material (SNM) by passive and active means.						
- Investigate concept of a pulsed millimeter wave system which detect	cts radioactive sources in both passive and active					
interrogation scenarios.						

PE 0602718BR: *WMD Defeat Technologies* Defense Threat Reduction Agency

UNCLASSIFIED
Page 13 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0602718BR: WMD Defeat Technologies RF: Detection Technology BA 2: Applied Research B. Accomplishments/Planned Programs (\$ in Millions) FY 2011 FY 2012 FY 2013 - Improve the Monte Carlo N-Particle (MCNP) code to enhance its modeling capability for specific problems. - Continue development of a large standoff, directionally oriented, monoenergetic gamma (e.g. laser Wakefield/inverse Compton scattering accelerator) source for integration with an active interrogation system. - Continue efforts to improve accelerator designs for higher acceleration gradients and reduced weight and size. FY 2013 Plans: - Continue development of a compact superconducting source in active interrogation systems. - Continue to identify all-source nuclear threat signatures, characteristics, and corresponding detection modalities; identify the proper tipping, gueuing, and data fusion techniques and algorithms to enable the rapid and effective accumulation of all-source intelligence on nuclear threat scenarios. - Investigate alternative methods to detect fissions in nuclear materials from standoff ranges. - Investigate the use of proton beams for standoff stimulation of fission in nuclear materials. Conduct experiments to validate the feasibility of the approach. - Progressively advance the laboratory physics demonstrations of target stimulation, signature detection, and validated modeling capability. - Investigate concept of a radio wave-type system to detect radioactive sources in multiple scenarios. Improve a probabilistic code to enhance its modeling capability for specific problems. - Continue efforts to improve accelerator designs for improved capabilities with reduced weight and size. - Continue to incorporate radiation transport into existing operational modeling tools. - Test and evaluate developmental large-area detection systems. - Research and develop new detector materials intended to improve the capability to detect, locate, and identify threat materials. Improve the manufacturing readiness level by maturing technologies, designs, and production processes. - Continue to develop and demonstrate neutron detection technology as an alternative to helium-3 neutron detectors. - Continue to develop, accelerate development where appropriate, demonstrate, and field (prototype) upgraded technical capabilities for prompt diagnostics (under DISCREET OCULUS and MINIKIN ECHO) and debris sample collection, sample analysis, modeling to support nuclear device reconstruction, and forensics data to lower uncertainties/increase confidence in technical nuclear forensics (TNF) conclusions. Includes development of new debris collection and field analysis concepts and supporting technologies that take advantage of higher activity level samples and the ability to collect/analyze short-lived isotopes to significantly shorten the timeline from weeks to days. - Begin development of methods to rapidly determine post-event nuclear weapon yields and reaction history by investigating alternative prompt nuclear weapons effects, effects on the environment, and developing/fielding prototype capabilities. **Accomplishments/Planned Programs Subtotals** 43.697 49.677 44.998

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

Page 14 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0602718BR: WMD Defeat Technologies

RF: Detection Technology

**DATE:** February 2012

BA 2: Applied Research

C. Other Program Funding Summary (\$ in Millions)

APPROPRIATION/BUDGET ACTIVITY

			FY 2013	FY 2013	FY 2013					Cost To
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<b>Total</b>	FY 2014	FY 2015	FY 2016	FY 2017	Complete Total Cost
• 28/0603160BR: Proliferation	77.472	77.784	76.298		76.298	77.863	78.528	80.321	81.651	Continuing Continuing

Prevention and Defeat

### **D. Acquisition Strategy**

Not Applicable

#### **E. Performance Metrics**

Successful completion of the individual digital dosimeter project.

Increased standoff detection distance using a mobile active interrogation system to stimulate characteristic neutron and gamma ray signals from nuclear material.

Successful acceptance and operational development of transitional detection technologies.

Successful demonstrations of a forensics capability to support attribution involving both Radiological Dispersal and Improvised Nuclear Devices.

Delivery of technical equipment prototypes to reduce their current gaps in technology, to locate, characterize and provide advanced diagnostics to defeat Weapons of Mass Destruction devices in support of a classified Chairman Joint Chiefs of Staff plan.

Improved forensics evaluation tool capabilities.

Support development of National Technical Nuclear Forensics (NTNF) capabilities through development of technologies/prototypes addressing gaps and shortfalls in Department of Defense (DoD) NTNF capabilities, and through participation in the interagency process. Note: Specific metrics associated with NTNF are classified.

Use an active interrogation system to interrogate and differentiate Special Nuclear Materials and an inert material at extended ranges.

Delivery of a series of documents that discuss the technical aspects of radiation detection applied to realistic concepts of operations (CONOPS) for detecting radiological and nuclear threats, along with their supporting documents.

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

Page 15 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency										DATE: February 2012		
					IOMENCLAT 8BR: <i>WMD L</i>	_	ologies	PROJECT RG: Advanced Energetics & Counter WMD Weapons				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
RG: Advanced Energetics & Counter WMD Weapons	18.432	17.771	14.645	-	14.645	14.750	13.595	13.521	14.004	Continuing	Continuing	

### A. Mission Description and Budget Item Justification

The Counter Weapon of Mass Destruction Hard Target Defeat (CWMD HTD) Weapons Development project develops, matures, and demonstrates innovative kinetic and non-kinetic weapon capability for the physical or functional defeat of WMD agents, processes, and support networks with a minimum of collateral effects from incidental release of agent. This is directly linked to the 2010 Quadrennial Defense Review (QDR) priority objectives to prevent and deter conflict and prepare to defeat adversaries and succeed in a wide range of contingencies, and the key missions of deter and defeat aggression in anti-access environments; and prevent proliferation and counter weapons of mass destruction. It does so through the systematic identification and maturation of advanced technologies capable of defeating WMD agents or agent based processes, then integrating the technologies into the weapons and delivery systems most relevant to the COCOMs' WMD Defeat CONOPS for their Area of Responsibility (AOR). The primary focus of current efforts is defeating an adversary's WMD capability protected in the confines of hardened and protected bunker and tunnel facilities. Included in this program is the development of offensive defeat capabilities, WMD agent/agent-based process simulants, test infrastructure, and sampling capability required for effective development, testing, and evaluation of the next generation capability as well as the advanced modeling and simulation necessary for ensuring optimum weapon solutions are achieved based on this technology. The program addresses requirements delineated in the QDR and Strategic Planning Guidance as codified in Joint Capability Integrated Development (JCID) documents, Service requirements documents, and COCOMs and Agency Priority Lists for lethal and non-lethal C-WMD capability. The efforts contained in the program further develop, mature, and demonstrate technology and weapon system concepts that greatly enhance the warfighters' capability to defeat the spectrum of weapons of mass destruction in

The program's investment approach is based on a strategic top-down analysis of threat vulnerabilities and aligned with stated organizational core competencies and lines of operations aimed at the defeat of (1) the chemical, biological, radiological, and nuclear (CBRN) threat materials, (2) the ability to deliver the same, and (3) the support networks, both physical and non-physical, enabling both. The program places a high priority on understanding, characterizing, and validating potential weapon effects within some mathematical confidence as it relates to the unintended release of hazardous threat materials. Our end-state is to provide COCOMs with accurate and timely WMD defeat expertise, tailored technologies, and customized solutions that provide offensive weapons and capabilities to combat WMD in any target while mitigating collateral contamination effects. Without these capabilities our nation cannot effectively hold at risk our adversaries' WMD capabilities thus giving them strategic advantage.

The decrease from FY 2012 to FY 2013 represents an efficiency reduction to contract support services as part of the DoD reform agenda to reduce reliance on service support contractors.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RG: Advanced Energetics & Counter WMD Weapons	18.432	17.771	14.645

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

Page 16 of 41

R-1 Line #23

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	eat Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies	PROJEC RG: Adva Weapons	: Advanced Energetics & Counter WMD		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<b>Description:</b> Project RG develops advanced technologies and weap weapon systems.	on concepts and validates their applicability as cou	nter WMD			
FY 2011 Accomplishments:  Continued development and small-scale testing of new energetic means according to the conducted scaled penetrator tests versus High Strength Concrete (characterize breakthrough penetrator technologies.  Continued investigation of CWMD payloads capable of neutralizing Designed fuze well redundant data recorder for field and flight testing weapons.  Initiated advanced testing of WMD Defeat sub-munitions (Kinetic Fire Made Kinetic Fireball design improvements to address target equipments.  Designed low-cost layer and void sensing target detection device for Continued investigating thermite energetic materials to identify multidemonstrations that will inform how to best use thermite for WMD agenoesigned miniature shock survivable fuze based on current manufactory continued development of a WMD process computer model useful it to specific CWMD targets.  Performed flight test of operational Battle Damage Information (BDI) demonstrating capability to transmit BDI data into an Air Operations Continued testing of prototype Joint Direct Attack Munition (JDI) demonstrating capability to transmit BDI data into an Air Operations Continued testing of target site and integration with BLADE hards.  Performed flight testing of prototype Joint Direct Attack Munition (JDI) demonstrating capability to transmit BDI data into an Air Operations Continued to coverage of target site and integration with BLADE hards.  Explored integration of kinetic and non-kinetic capabilities into single Performed laboratory and field testing of hardware demonstrating capables and penetic data reception portion of infrastructure for long haul conters.  Refined, validated, and transitioned an algorithm for improving the complex of the payloads.  Conducted flight tests to support multi-hit weapon tactics and penetic MMD payloads.	and components. (HSC) and steel-encased concrete targets to further large amounts of WMD agent. Ing of both legacy and developmental hard target development developmental hard target development dev	feat full-scale and applied g post- g a harsh command			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 17 of 41

R-1 Line #23

	UNCLASSIFIED						
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	at Reduction Agency		DATE: Fe	bruary 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies	PROJECT RG: Advar Weapons	dvanced Energetics & Counter WMD				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013		
<ul> <li>Conducted kinetic and functional simulant neutralization experiment</li> <li>Conducted additional detonations in a scaled complex tunnel facility</li> <li>Initiated concept studies for BLU-119/B conversion using a safer, lo</li> <li>Conducted thermal evaluation of the Joint Multi-Effects Warhead Sy against WMD.</li> <li>Began development and testing of model improvements to Second-(SHAMRC) (those identified in the 2010 evaluation).</li> <li>Completed fabrication and installation of cluster molecule production</li> <li>Began production of candidate cluster molecule energetic materials</li> <li>Began characterization and evaluation of cluster molecule energetic</li> <li>Developed highly metalized explosive formulation optimized using Second conducted model code comparison evaluation exercise to identify not explosive formulations optimized for conducted model code comparison evaluation exercise to identify not explosive development of explosive additive fuels optimized for despend development of explosive formulations using additive fuels for despending additive fuels optimized for despending development of explosive formulations using additive fuels for despending additive fuels optimized for despending additive fuels</li></ul>	v in support of weapon and model development efformer lifecycle cost payload fill. vstem (JMEWS) warhead and evaluated its potential corder Hydrodynamic Automatic Mesh Refinement of the equipment.  c material candidates. GHAMRC model guidance for maximized blast performaximum energy content. Incodel code capabilities and needs. Inced internal blast packet charges, metal-augmente effeat of chemical and biological agent threats.	al for use Code ormance.					
FY 2012 Plans:  - Select the most promising and enhanced survivable energetic mate  - Continue maturing advanced non-energetic WMD Defeat payload of conduct subscale experiments to develop and verify prediction capater continue advanced testing of WMD Defeat sub-munitions.  - Develop and test fuze well redundant data recorder for field and flig defeat weapons.  - Begin testing and demonstrations of CWMD weapons payloads for continue a low-cost layer and void sensing target detection device for development.  - Continue to explore new energetic CWMD payloads by performing a penetrator energetic material fill.  - Develop miniature shock survivable fuze and integrate low cost layer.  - Continue development of process modeling capability for non-kinetic.  - Conduct flight testing of operational BLADE system, demonstrating infrastructure.	omponents. ability for countermeasure effects on projectile pendin the testing of both legacy and developmental hard to use against bulk chemical agent. For hard target defeat fuze and transition hardware to sub-scale characterizations of the next generation set and void sensing target detection device hardware c-based CWMD and apply it to specific CWMD target.	etration.  arget  o a fuze survivable re. gets.					

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 18 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre				bruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies	PROJEC RG: Adva Weapons	Advanced Energetics & Counter WMD			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013	
<ul> <li>Continue to explore combining integration of kinetic and non-kinetic Demonstrate entire infrastructure for long haul communication of BB BDI flight tests.</li> <li>Begin testing and demonstrations of non-energetic CWMD payloads</li> <li>Conduct full-scale test against target with penetration countermeast</li> <li>Begin integration of WMD Defeat sub-munitions into a weapon ward</li> <li>Determine and catalog the accuracy and precision of bio-aerosol sate of Conduct the investigations necessary to develop a capability that careleased in an explosive plume while achieving acceptable accuracy</li> <li>Complete testing with insensitive munitions and other High Energy of WMD agent.</li> <li>Begin reduced scale target testing of CWMD payloads and capability Initiate testing for BLU-119/B conversion to safer, lower Life Cycle of the Cycl</li></ul>	DI data from battlefield back to command centers less.  Jures.  Jures.	at is quantities t payload t hard and				

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 19 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat	Reduction Agency		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0602718BR: WMD Defeat Technologies	RG: Advanced Energetics & Counter WMD		
BA 2: Applied Research		Weapons		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
- Initiate potential WMD target access denial or denial-of-use technologies Evaluate small new inventory weapons effectiveness against WMD threats.			
Accomplishments/Planned Programs Subtotals	18.432	17.771	14.645

### C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• 28/0603160BR: Proliferation	18.273	15.186	20.682		20.682	21.540	21.780	22.487	23.212	Continuing	Continuing
Prevention and Defeat											

### D. Acquisition Strategy

Not Applicable

### E. Performance Metrics

Mature weapon system component technologies required for development of at least one new capability to counter WMD in tunnels during the FYDP, to Technology Readiness Level 2/3.

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 20 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Defei	nse Threat F	Reduction Ag	jency			<b>DATE:</b> February 2012			
APPROPRIATION/BUDGET ACTIV		R-1 ITEM N	IOMENCLAT	ΓURE		PROJECT					
0400: Research, Development, Tes	PE 060271	8BR: <i>WMD [</i>	Defeat Techn	ologies	RI: Nuclear Survivability						
BA 2: Applied Research											
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
RI: Nuclear Survivability	18.525	17.503	18.810	-	18.810	18.965	20.142	21.428	21.490	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Nuclear Survivability project provides enabling technologies for Department of Defense (DoD) nuclear forces and their associated control and support systems and facilities in wartime to avoid, repel, or withstand attack or other hostile action, to the extent that essential functions can continue or be resumed after the onset of hostile action. Emphasis is on ionizing radiation effects. The Nuclear Survivability project provides Radiation Hardened (RadHard) Microelectronics and Nuclear Weapons Effects (NWE) experimentation research. Funding in this project also supports the expanding role of the Nuclear Test Personnel Review (NTPR) program into Science & Technology development for human survivability.

The NWE simulators are available to validate nuclear survivability requirements for DoD missile and space systems, conduct research in radiation effects, and validate computational models. The Nuclear Survivability Experimental Capabilities program is working with the National Nuclear Security Administration and the United Kingdom Atomic Weapons Establishment to jointly develop new, enabling technologies for improved NWE experimentation capabilities for x-rays, gamma rays and neutrons.

The Nuclear Technology Analysis Support provides support for the Joint Atomic Information Exchange Group (JAIEG) and the international Weapon Effects Steering Committee (WESC) that was called the NWE Users' Group. The WESC establishes standards for U.S. and U.K nuclear weapons effects simulation codes and models as defined and prioritized by the nuclear community, and serves as a forum for sharing information on nuclear technologies, gaps and plans.

The increase from FY 2012 to FY 2013 is predominately due to increased investment in nuclear weapons effects efforts as part of a redirection of the nuclear detection portfolio toward a more holistic nuclear THREAT detection portfolio that integrates both passive and active radiation detection into a comprehensive Intelligence, Surveillance, and Reconnaissance (ISR) solution.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RI: Nuclear Survivability	18.525	17.503	18.810
<b>Description:</b> Project RI provides the capability for DoD nuclear forces and their associated control and support systems and facilities in wartime to avoid, repel, or withstand attack or other hostile action, to the extent that essential functions can continue or be resumed after the onset of hostile action.			
FY 2011 Accomplishments:			
- Demonstrated a new circuit upset mechanism involving power transients.			
- Demonstrated Radiation-Hardened Designs for Data Conversion and timing stability.			
- Demonstrated radiation hardening by use of charge cancellation technique.			
- Conducted risk mitigation experiments for a high-temporal fidelity gamma experimentation capability.			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 21 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

APPROPRIATION/BUDGET ACTIVITY
0400: Research, Development, Test & Evaluation, Defense-Wide
BA 2: Applied Research

B. Accomplishments/Planned Programs (\$ in Millions)

DATE: February 2012

PROJECT
PE 0602718BR: WMD Defeat Technologies

FY 2011 FY 2012 FY 2013

B. Accomplishments/rightness (\$ in millions)	1 1 2011	1 1 2012	1 1 2013
<ul> <li>Demonstrated advanced laser-driven x-ray sources on National Ignition Facility (NIF) for potential NWE experimentation capabilities.</li> <li>Demonstrated warm x-ray sources on Saturn to support certification of survivable DoD systems.</li> <li>Conducted a demonstration of lower energy x-ray test capability for the certification of solar arrays and optic systems for survivable satellites and missile defense interceptors.</li> </ul>			
<ul> <li>FY 2012 Plans:</li> <li>Develop 45nm RadHard-By-Design mitigation techniques.</li> <li>Investigate 32nm technology Total Ionizing Dose mitigation methods.</li> <li>Demonstrate compatibility of 90nm RadHard by design library cells and macro with 90nm RadHard by process enhancements.</li> <li>Initiate fabrication of a high temporal fidelity prompt gamma simulator for satellite electronics certification.</li> <li>Conduct laser-driven x-ray source demonstrations to support space telescope subsystem survivability.</li> <li>Investigate potential neutron sources for survivability certification on the Z-machine at Sandia National Laboratories.</li> <li>Integrate fast-running urban radiation transport algorithms into operational code.</li> </ul>			
<ul> <li>FY 2013 Plans:</li> <li>Demonstrate initial 45nm RadHard prototype circuits to develop RadHard by design methods.</li> <li>Continue development of Technology Computer-Aided Design modeling for 45nm circuit devices.</li> <li>Characterization and mitigation of radiation effects in graphene devices.</li> <li>Implementation of human radiation induced performance decrement model into operational code.</li> <li>Perform a full-scale space interceptor telescope survivability test on NIF in collaboration with the Missile Defense Agency (MDA).</li> <li>Initiate an investigation of advanced concepts to generate &gt;10X the existing warm x-ray test capability to support strategic system life extension programs in collaboration with the National Nuclear Security Administration (NNSA).</li> </ul>			
Accomplishments/Planned Programs Subtotals	18.525	17.503	18.810

### C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	<u>FY 2013</u>					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	<b>FY 2017</b>	<b>Complete</b>	<b>Total Cost</b>
• 28/0603160BR: Proliferation	15.702	6.985	6.129		6.129	6.654	6.571	6.712	7.104	Continuing	Continuing

Prevention and Defeat

## D. Acquisition Strategy

Not Applicable

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 22 of 41

R-1 Line #23

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threa	at Reduction Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies	PROJECT RI: Nuclear Survivability
E. Performance Metrics  Reduce facility overhead costs by disposition of excess government	t-owned simulator hardware at the West Coast Fac	cility (WCF).
Development of cold and warm x-ray capabilities on the Saturn mac	chine at Sandia National Laboratory that meet or ex	sceed the equivalent capabilities at the WCF.
Weapon Effects Steering Committee: Coordinate and integrate nucle defense communities and provide accreditation authority for all nucle		ms across the United States and United Kingdom

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

Exhibit R-2A, RDT&E Project Justi	ification: PE	3 2013 Defer	nse Threat F	Reduction Agency					DATE: February 2012			
APPROPRIATION/BUDGET ACTIVIO 0400: Research, Development, Test BA 2: Applied Research	Vide		IOMENCLAT 8BR: <i>WMD L</i>	<b>TURE</b> Defeat Techn		PROJECT RL: Nuclear & Radiological Effects						
COST (\$ in Millions) FY 2011 FY 2012 Base				FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
RL: Nuclear & Radiological Effects	-	25.752	23.904	25.202	25.539	25.964	Continuing	Continuing				

### A. Mission Description and Budget Item Justification

The Nuclear and Radiological Effects project develops nuclear and radiological assessment modeling tools to support military operational planning, weapon effects predictions, and strategic system design decisions; consolidate validated Defense Threat Reduction Agency modeling tools into net-centric environment for integrated functionality; predict system response to nuclear and radiological weapons producing electromagnetic, thermal, blast, shock and radiation environments - key systems include Nuclear Command and Control System, Global Information Grid, missiles, structures, humans and environment; provide detailed adversary nuclear infrastructure characterization to enhance counterforce operations and hazard effects; conduct analyses in support of nuclear and radiological Science and Technology and address the priority needs of the Combatant Commands and the Department of Defense, develop and provide electromagnetic pulse assessment capabilities to support national and military operational planning, weapon effects predictions, and national strategic systems designs; and develop foreign nuclear weapon outputs.

The increase from FY 2012 to FY 2013 is predominately due to increased investment in system vulnerability and assessment efforts as part of a redirection of the nuclear detection portfolio toward a more holistic nuclear THREAT detection portfolio that integrates both passive and active radiation detection into a comprehensive Intelligence, Surveillance, and Reconnaissance (ISR) solution.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RL: Nuclear & Radiological Effects	15.891	25.343	25.752
<b>Description:</b> Project RL develops nuclear and radiological assessment modeling tools to support military operational planning, weapon effects predictions, and strategic system design decisions.			
FY 2011 Accomplishments:			
- Began Electro Magnetic Pulse (EMP) E1 physics-based code for better modeling/predictions of EMP effects.			
- Continued Effects Manual-1 (EM-1) development (3 chapters published); continued publication of Joint Radiation Effects			
documentation.			
- Continued to validate code for system response to High Altitude Nuclear Effects (HANE); validate and integrate Modeling and			
Simulation (M&S) capability to understand HANE; validate and integrate M&S capability.			
- Demonstrated prototype sensor visualization capability.			
- Completed an Electromagnetic Pulse (EMP) Survivability Test on a Maritime Ship (USS Makin Island).			
- Completed an EMP Survivability Test on a B2 Bomber and an E4 NAOC in accordance with military test standards.			
- Conducted Survivability Verification Tests on military satellite communication facilities.			
- Conducted an EMP Power Grid experiment at Idaho National Laboratory, to test survivability of power infrastructures against			
EMP from high-altitude nuclear bursts.			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 24 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Three	eat Reduction Agency		DATE: Fel	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJEC	Т '		
0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	PE 0602718BR: WMD Defeat Technologies	RL: Nucle	ear & Radiolo	gical Effects	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
- Performed a High Altitude EMP (HEMP) assessment on the Emergagainst EMP from high-altitude nuclear bursts.	gency Ultra-High Frequency (UHF) network, to test su	ırvivability			
FY 2012 Plans:  - Standup of the Nuclear Weapons Effects Network (NWEN) plans a Model and code development, performing analyses at all computa Emphasize re-initiation of quality NWE science via balanced mode Focus initially on first-principles model development and Uncertair - Complete non-ideal Source Region Electromagnetic Pulse (SREMI - Complete new version of United States Strategic Command's (USS determine the probability of damage from nuclear weapon Update trapped radiation belt model Continue EM-1 development (3 chapters); continue publication of J database of foreign nuclear weapon outputs for DoD and the Service - Update Nuclear Weapons Effects Database (NWEDS) used by the	Intional levels of fidelity and run times.  Seling and simulation and experimentation.  The Quantification.  P) Study.  STRATCOM) official strategic targeting code used to the selicities and the selicities are selected as the selected as the selicities are selected as the selected	grade			
FY 2013 Plans:  - Prototype first principles urban effects model for nuclear detonation.  - Deliver improved HANE model for better modeling/predictions of nuclear fallout for better modetonations.  - Begin component level EMP response model for better modeling/p.  - Continue EM-1 development (4 chapters); continue publication of Judatabase of foreign nuclear weapon outputs for DoD and the Service.  - Deliver hazard source terms to the Chemical – Biological Defense predict hazards associated with weapons of mass destruction.	uclear effects from space detonations. Ideling/predictions of fallout from ground or low-altitude redictions of effects on electronic systems. Idint Radiation Effects documentation, continue to up es. Program's Joint Effects Model Block II, enhancing ou MP protection for command and control facilities.	grade ir ability to			
- Conduct Maritime EMP Standard Ship Test to provide improved ted	chniques for testing Navy vessels against EMP threa	13.			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 25 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

R-1 ITEM NOMENCLATURE **PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide PE 0602718BR: WMD Defeat Technologies RL: Nuclear & Radiological Effects

BA 2: Applied Research

C. Other Program Funding Summary (\$ in Millions)

APPROPRIATION/BUDGET ACTIVITY

or ourself rogramme	, , ,	<del>0110</del>									
			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
<ul> <li>28/0603160BR: Proliferation,</li> </ul>	2.661	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Prevention, and Defeat											
<ul> <li>117/0605000BR: WMD Defeat</li> </ul>	7.826	5.888	5.749		5.749	5.995	6.077	8.359	8.541	Continuing	Continuing
Capabilities											

### D. Acquisition Strategy

Not Applicable

### **E. Performance Metrics**

Complete transition of all hazard source terms to the Chemical and Biological (Chem-Bio) Defense Program's Joint Effects Model (JEM) Block II enhancing our ability to predict hazards associated with weapons of mass destruction.

Provide Department of Defense the ability to predict the survival and mission impact of military critical systems exposed to nuclear weapon environments within acceptability criteria defined during the model accreditation process.

Complete new version of United States Strategic Command (USSTRATCOM) official strategic targeting code used to determine the probability of damage from nuclear weapons.

PE 0602718BR: WMD Defeat Technologies **Defense Threat Reduction Agency** 

UNCLASSIFIED Page 26 of 41

Volume 5 - 558 R-1 Line #23

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Defei	nse Threat F	Reduction Ag	jency		DATE: February 2012		
APPROPRIATION/BUDGET ACTIV		R-1 ITEM N	IOMENCLAT	TURE	<b>PROJECT</b>				
0400: Research, Development, Tes	Vide	PE 060271	8BR: <i>WMD [</i>	Defeat Techn	Battle Management				
BA 2: Applied Research									
COST (\$ in Millions)	FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ III MIIIIOTIS)	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
RM: WMD Battle Management	18.969	_	18.969	19.066	19.988	20.593	20.729	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Weapons of Mass Destruction (WMD) Battle Management project provides applied research to support full and sub-scale testing required to investigate countering WMD weapon effects, and sensor performance, weapon effects modeling algorithm development, and the set-up of the Defense Threat Reduction Agency (DTRA) Experimentation Lab (DEL).

This project provides combatant commanders the prediction capability and the attack options to engage Hard & Deeply Buried Targets (HDBTs) as the proliferation and hardness of this class of targets increases. The project conducts weapon effects phenomenology (WEP) tests, analyzes data, conducts high performance computer simulations, and creates/modifies software to more accurately model cratering effects, fragmentation (both primary & secondary), internal air blast, equipment/container damage, structural response, and penetration. These efforts will lead to advanced modeling capability in the countering WMD tools, Integrated Munitions Effects Assessment (IMEA) weaponeering and Vulnerability Assessment and Protection Option (VAPO) force/structure protection. The Advanced Energetics & Counter WMD Weapons Program develops new novel energetic materials and weapon design technology for rapid, directed and enhanced energy release, providing new capability to defeat difficult WMD/HDB targets. The Advanced Energetics Program also develops new high energy systems well above chemical energy levels to defeat WMD targets beyond the reach of traditional high explosive blast/frag warhead technology.

The DTRA Experimentation Lab Capability is an Agency-wide capability that assures the timely acquisition, synchronization, correlation and delivery of Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) consequence management and mitigation data necessary in combating WMD. The DTRA Experimentation Lab will be the "key enabler" allowing the Agency to transform successfully into an interoperable DoD Science and Technology environment. Through the use of the DTRA Experimentation Lab, DTRA will be able to shape and improve military situational awareness independent of time or location, effectively shorten decision cycles in a CBRNE event, and extend DTRA's knowledge base externally through collaborative technologies.

The increase from FY 2012 to FY 2013 is predominately due to the reallocation of funds from infrastructure development in Project RR - Test Infrastructure to weapons effects and planning tools in Project RM – Battle Management to properly align mission responsibilities.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RM: WMD Battle Management	18.255	13.761	18.969
<b>Description:</b> Project RM provides (1) full-scale testing of counter WMD weapon effects, sensor performance, and weapon delivery optimization, (2) weapon effects modeling, and (3) the Defense Threat Reduction Agency Experimentation Lab.			
FY 2011 Accomplishments: - Conducted Ultra High Performance Concrete (UHPC) penetration tests and material analysis. Continued modeling and finalized evaluation of current models.			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 27 of 41

R-1 Line #23

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threa	at Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies	PROJECT RM: WMD	Battle Man	agement	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<ul> <li>Delivered 15 additional validated equipment fragility models to supprimulation for counter-WMD planning tools.</li> <li>Updated the WMD Agent Release database to support DoD need for counter-WMD planning tools.</li> <li>Completed Phase 1 progressive collapse testing and model developments were conducted in a full-scale 4-story concrete test structure.</li> <li>Completed five internal detonation tests for validation of Internal Detoare explosives in conventional construction.</li> <li>Improved Second-order Hydrodynamic Automatic Mesh Refinement as well as very small sized particles.</li> <li>Demonstrated new production process for aluminum nanoparticles of Quantified Explosively Generated Plasma effects used for enhanced Designed high performance reactive cases for explosive payloads, reperformance.</li> <li>Prepared conceptual enhanced blast design for high performance of Continued to provide leading technological integration capabilities to DTRA Experimentation Lab (DEL).</li> <li>Continued to support demonstrations and experimentation events for Community of Interest (COI) to include participation in Noble Resolve Resolve, and efforts to prevent loose nukes experimentation campaig - Continued facilitation of the internal Continuity of Operations Table 1 FY 2012 Plans:</li> <li>Integrate first principle modeling codes into Graphical User Interface - Facilitate Joint Concept Development &amp; Experimentation (JCDE) for Investigate and explore developmental technologies, such as Virtual - Analyze, explore, and identify gaps and barriers associated with CW - Complete facilitation of the internal Continuity of Operations Table 1 - Plan, design, execute, and analyze warfighting experimentation in scombatant Commands, Defense agencies, and the interagency as a Perform annual cycle of requirements collection, challenge proposal Performance Computing.</li> </ul>	or accurate weapons effects modeling and simulation of the concrete frame structures. Two column reconation (quasi-static and dynamic pressure) mode at Code (SHAMRC) to model flow of densely packed with improved stability and safety. It target damage, made from pressed powders, to enhance weapon missile payload. It is the combating WMD mission through utilization of the Countering Weapons of Mass Destruction (Co., Coalition Warrior Interoperability Demonstration, ins.)  Top Experiment through the DEL.  It (GUI)-based hazard prediction models.  It worlds.  If Worlds.  If Worlds.  If Worlds.  If Worlds, and in coordination with the Service oppopriate.	emoval Is with I particles  f the -WMD) Urban			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 28 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0602718BR: WMD Defeat Technologies RM: WMD Battle Management BA 2: Applied Research B. Accomplishments/Planned Programs (\$ in Millions) FY 2011 FY 2012 FY 2013 - Support two DTRA DoD high performance computing challenge projects, "Improve parallel scalability of important Computational Fluid Dynamics (CFD)" and "Computational Structural Mechanics (CSM) codes to reduce time to solution." - Provide interface between important CFD & CSM codes to analysis software to facilitate Validation, Sensitivity Studies, and Uncertainty Quantification. - Develop capability to model equipment fragility for any generic equipment. - Conduct testing and modeling improvements to the WMD Agent Release Model to support DoD need for accurate weapons effects modeling and simulation for counter-WMD planning tools. - Complete blast door model verification and validation. Conduct Phase 2 progressive collapse testing and begin modeling effort for steel frame structures. - Finalize Internal Detonation testing and (quasi-static and dynamic pressure) model. Begin test program for blast propagation through failing bunker walls from blast and fragmentation. - Incorporate SHAMRC workshop recommendations into improved SHAMRC; compare the simulated results with test results. - Evaluate technology transfer to cruise missile payload using DTRA-developed reactive case technology. - Integrate enhanced blast explosives and reactive cases into designs for weapon payloads. - Study performance of payloads based on enhanced blast explosives and reactive cases for agent defeat. - Begin efforts to develop novel energy storage capabilities based on antimatter storage, super halogen chemistry, warm dense matter at high pressure, hydrogen isotope reactions, and high nitrogen explosives. FY 2013 Plans: Facilitate Joint Concept Development & Experimentation (JCDE) for the CWMD Community of Interest. - Integrate virtual environments into DTRA wargaming activities. - Analyze, explore, and identify gaps, and barriers associated with CWMD Warfighter Challenges through the use of wargaming and tabletop exercises. - Perform annual cycle of requirements collection, challenge proposals, resource allocation, and technical support through High Performance Computing. - Submit two DTRA Challenge Proposals for improved quality of service in time limit, allowed job size, and job throughput on DoD high performance computers. - Improve computational methods for prediction of progressive collapse. - Complete blast through failing walls test series and provide new model for blast through failing walls from inventory weapons. - Start delivery of validated high fidelity models for air blast in complex tunnels. - Start delivery of validated models for blast and fragmentation through failing blast doors. - Improve computational methods for prediction of progressive collapse. Provide modeling support for the transfer of novel energetic concepts to selected weapon systems. - Complete formulation testing, perform in-depth fragmentation test and analysis with reactive liners in sub-scale warheads.

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 29 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0602718BR: WMD Defeat Technologies

RM: WMD Battle Management

FY 2011

**DATE:** February 2012

FY 2012

FY 2013

BA 2: Applied Research

APPROPRIATION/BUDGET ACTIVITY

## B. Accomplishments/Planned Programs (\$ in Millions)

- Continue testing of agent defeat mechanisms using hybrid enhanced blast explosives and reactive cases.
- Begin work to develop warhead energy release tailored to target environment and to develop directed blast energy release to enhance target damage.
- Continue development of warm dense matter at high pressure; demonstrate novel use of this material state for x-ray generation.
- Complete synthesis and lab tests of one new explosive compound.

<b>Accomplishments/Planned Programs Subtotals</b>	18.255	13.761	18.969

### C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• 28/0603160BR: <i>Proliferation</i> ,	29.143	22.303	22.503		22.503	22.527	22.937	23.700	24.328	Continuing	Continuing
Prevention and Defeat											

<u>D. Acquisition Strategy</u>
Not Applicable

#### E. Performance Metrics

Confidence in engineering models based on software validation and testing.

Number of targets successfully planned.

Time required completing assessments.

The DTRA Experimentation Lab (DEL) is occupied by planning or execution efforts 75% of the year.

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

Page 30 of 41

R-1 Line #23

Exhibit R-2A, RD1&E Project Jus	stification: Pl	3 2013 Defei	nse Threat F	Reduction Ag	gency		DATE: February 2012				
APPROPRIATION/BUDGET ACT	VITY			R-1 ITEM N	IOMENCLA <sup>*</sup>	TURE		PROJECT			
0400: Research, Development, Te	Vide	PE 060271	8BR: <i>WMD I</i>	Defeat Techr	ologies	RR: Test Infrastructure					
BA 2: Applied Research											
COST (¢ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost		
RR: Test Infrastructure	13.782	_	13.782	14.135	14.414	15.005	15.610	Continuina	Continuina		

### A. Mission Description and Budget Item Justification

The Test Infrastructure project provides a unique national test bed capability for simulated Weapons of Mass Destruction (WMD) facility characterization, weapon-target interaction, and WMD facility defeat testing to respond to operational needs by developing and maintaining test beds used by the Department of Defense (DoD), the Services, the Combatant Commanders, and other federal agencies to evaluate the implications of WMD, conventional, and other special weapon use against U.S. military or civilian systems and targets. It leverages fifty years of testing expertise to investigate weapons effects and target response across the spectrum of hostile environments that could be created by proliferate nations or terrorist organizations with access to advanced conventional weapons or WMD (nuclear, biological and chemical). The project maintains testing infrastructure to support the testing requirements of warfighters, other government agencies, and friendly foreign countries on a cost reimbursable basis. It creates testing strategies and a WMD Test Bed infrastructure focusing on the structural response of buildings and Hard & Deeply Buried Targets that house nuclear, biological, and chemical facilities. It provides support for full and sub-scale tests that focus on weapon-target interaction with fixed soft and hardened facilities to include aboveground facilities, cut-and-cover facilities, and deep underground tunnels. This capability does not exist anywhere else within the DoD and supports the counterproliferation pillar of the National Strategy to Combat WMD.

The decrease from FY 2012 to FY 2013 is predominately due to the reallocation of funds from infrastructure development in Project RR - Test Infrastructure to weapons effects and Planning tools in Project RM - Battle Management, and reduced investment in test infrastructure environment restoration support and the WMD National Test Bed (TB).

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RR: Test Infrastructure	13.509	21.941	13.782
<b>Description:</b> Project RR provides a unique national test bed capability for simulated WMD facility characterization, weapon-target interaction, and WMD facility defeat testing to respond to operational needs by developing and maintaining test beds used by the DoD, the Services, the Combatant Commanders and other federal agencies to evaluate the implications of WMD, conventional, and other special weapon use against U.S. military or civilian systems and targets.			
FY 2011 Accomplishments:  - Augmented funding of test articles, design and drawings, construction and tunnel operation for Massive Ordinance Penetrator (MOP) Quick Reaction Capability (QRC) testing at White Sands Missile Range (WSMR).  - Completed construction of add-on structures to Component Test Structure-3 to develop weapons effects and mitigation test data models for fire and blast in cooperation with the Singapore government. Test executed first quarter of FY 2011. Follow-on test construction scheduled to begin second quarter FY 2012, estimated test execution third quarter FY 2012.  - Conducted upgrade and integration of instrumented mobile wireless "Mesh" infrastructure capabilities and improvements in support of the Department of Homeland Security/Domestic Nuclear Detection Office (DHS/DNDO) tests conducted at DTRA and			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 31 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	eat Reduction Agency		DATE: Fe	ebruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies	PROJECT RR: Test	T Infrastructur	е	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
DHS/DNDO defined CONUS-wide sites for the DHS/DNDO Secure thand other functional tests.  - Conducted Interagency Biological Restoration Demonstration (IBRE and resources necessary to recover and restore wide urban areas, mbiological incident.  - Conducted testing on Chemical, Biological, Radiological, Nuclear arremote geological sensing, and battle management systems designe activities.  - Conducted WMD Aerial Collection System (WACS) testing that is disall-in-one. Chemical, Biological, Radiological, and Nuclear (CBRN) is Assessment) of suspected WMD facilities and mobile time-sensitive to a Conducted nuclear detection and forensics testing to prevent weapouterritories, and Allied Nations.  - Conducted Weapons of Mass Destruction sensor testing at the Tech detect nuclear grade material from entering the U.S., U.S. territories, and Continued environmental remediation and compliance activities at the Ground (DPG), WSMR, and Kirtland Air Force Base (KAFB) in accordant Environmental guidelines.  - Developed Cost Analysis Tool for Test Sites database to develop R as well as different test bed.  - Conducted tunnel work detection testing at NNSS for the Customs along northern and southern borders of CONUS.  - Continued infrastructure and instrumentation upgrades to ensure telepartnered with the National Laboratories and conducted Source Physest Ban Treaty Initiatives, new START Warhead Verification.  - Completed installation of test instrumentation support systems at U-Obtained a Highly Enriched Uranium Sphere for use at the TEAMS, Finalized effort to transfer DECADE module II nuclear simulator fror Huntsville, AL.  - Placed the Hard Target Defeat "Capitol Peak Tunnel Complex," WS-Completed the deactivation of Detachment Two Test Support Division Documented, prioritized, and supported test infrastructure requiremental complex, and supported test infrastructure requiremental complex.	D) testing in conjunction with DoD & DHS to reduce nilitary installations, and critical infrastructure following the Explosive (CBRNE) sensors, WMD countermeased for surveillance and tracking targets used for WM esigned to meet U.S. Forces Korea's requirement of sensor system for post-strike assessment (Battle Datargets.  Ons grade material/dirty bombs from entering the U.S. hnical Evaluation Assessment and Monitor Site (TE and Allied Nations through rail, ship, and air ports. he Nevada National Security Site (NNSS), Dugway dance with Environmental Protection Agency (EPA) tough Order of Magnitude estimates for different type and Border Patrol to be able to detect tunnel work of the State of State	the time ng a sures, D of an amage S., U.S. AMS) to Proving , Safety, les of tests or tunnels ing needs.			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 32 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	at Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies	PROJECT RR: Test	r Infrastructure	9	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<ul> <li>Conducted and evaluated field-level facility biological remediation of (Bio Response Operational Test and Evaluation), jointly managed by coordinating/execution lead.</li> </ul>					
FY 2012 Plans:  - Develop and implement prototype Voice Over Internet Protocol (VO data, voice communications, video, etc., to support test program exect - Modify existing test infrastructure or develop test infrastructure to susupporting DTRA test programs.  - Make improvements to existing test infrastructure and test articles, or Technology Program starting in first quarter FY 2012.  - Conduct testing in support of Treaty Verification Technologies Program comprehensive Test Ban Treaty Initiatives, New START Warhead Volume Chemical Weapons.  - Continue support of Weapons of Mass Destruction sensor testing at (TEAMS) to detect and prevent nuclear grade material from entering ship, and air ports.  - Continue Interagency Biological Restoration Demonstration (IBRD) and resources necessary to recover and restore wide urban areas, m biological incident.  - Continue testing Chemical, Biological, Radiological, Nuclear, and Exsensing, and battle management systems designed for surveillance at Continue WMD Aerial Collection System testing that is designed to Chemical, Biological, Radiological, and Nuclear sensor system for posuspected WMD facilities and mobile time-sensitive targets.  - Continue nuclear detection and forensics testing to prevent weapon Territories, and Allied Nations.  - Continue Weapons of Mass Destruction sensor testing at the Techn prevent nuclear grade material from entering the U.S., U.S. Territorie prevent nuclear grade material from entering the U.S., U.S. Territorie Continue environmental remediation and compliance activities at the Grounds (DPG), White Sands Missile Range (WSMR), and Kirtland A Environmental guidelines throughout FY 2012.  - Continue development of a Cost Analysis Tool for Test Sites databat different types of tests as well as different test beds during FY 2012.	cution starting first quarter FY 2012. upport revitalized Weapons Effects Phenomenology or construct new test articles to support DTRA Determan and Source Physics Experiments to support perification, and detection and verification of Biologic to the Technical Evaluation Assessment and Monitor the U.S., U.S. Territories, and Allied Nations through testing in conjunction with DoD and DHS to reduce nilitary installations, and critical infrastructure, follow explosive sensors, WMD countermeasures, remote and tracking targets used for WMD activities. The meet U.S. Forces Korea's requirement of an "all-instructure assessment (Battle Damage Assessment) as grade material/dirty bombs from entering the U.S. Inical Evaluation Assessment and Monitor Site to destand Allied National Security Site (NNSS), Dugway Fair Force Base (KAFB) in accordance with EPA, Sair Force Base	r Program ection cal and r Site gh rail, the time ring a geological cone" of, U.S. tect and s. Proving fety, and			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 33 of 41

R-1 Line #23

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threa	at Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	PROJECT RR: Test I	- ˈ nfrastructur	е		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<ul> <li>Continue tunnel work detection testing at Nevada National Security tunnel work or tunnels along northern and southern borders of CONU</li> <li>Continue infrastructure and instrumentation upgrades to ensure test</li> <li>Document, prioritize, and support test infrastructure requirements.</li> </ul>	S.				
FY 2013 Plans:  Complete Integrated Technology Demonstration (ITD) at NNSS to d transition into several related projects/planned events through FY 2015. Begin Directorate ITD testing at WSMR prioritizing requirements to sand construction of future CWMD test beds.  Support development and demonstration of Transatlantic Collaborate to shape interagency approach to counter a wide area biological ever infrastructure.  Begin research of Biological Reaerolization in conjunction with DoD/technologies for residual biological pathogens reentering air after sett.  Conduct intergovernmental test program between DTRA and Defend Agent Defeat testing.  Begin testing in support of "Speed of Sound" nuclear forensic program. Adintain current version of VOIP system that can transfer classified support test program execution.  Maintain existing test infrastructure in current configuration to supposupporting DTRA test programs; make improvements through funding. Improve existing test infrastructure and test articles or construct new Program through funding provided by external program managers.  Conduct testing in support of Treaty Verification Technologies Program Comprehensive Test Ban Treaty Initiatives, New START Warhead Veriform entering the U.S., U.S. territories, and Allied Nations through rail program managers.  Continue support of Weapons of Mass Destruction sensor testing at from entering the U.S., U.S. territories, and Allied Nations through rail program managers.  Continue IBRD testing in conjunction with DoD and DHS to reduce the wide urban areas, military installations, and critical infrastructure, folione pependent on external program manager funding, continue testing of sensing, and battle management systems designed for surveillance as	support reduced architectural and engineering designation Biological Resiliency Demo (TACBRD), a DoD of impacting U.S. and partner nations' key civilian/not/DHS/EPA to help develop precise measurement ding.  The Research and Development Canada (DRDC), Earn estimated to continue through FY 2015 and unclassified data, voice communications, vide not revitalized Weapons Effects Phenomenology Program and Source Physics Experiments to support earn and Source Physics Experiments to support erification, and detection and verification of Biological the TEAMS to detect and prevent nuclear grade mands, ship, and air ports with funding provided by external program and source Physics Experiments to support erification, and detection and verification of Biological the TEAMS to detect and prevent nuclear grade mands, ship, and air ports with funding provided by external program and resources necessary to recover and resources a biological incident.  CBRNE sensors, WMD countermeasures, remote governances.	gn efforts capability nilitary  Biological o, etc. to ogram gy cal and naterial nal estore			

PE 0602718BR: *WMD Defeat Technologies* Defense Threat Reduction Agency

UNCLASSIFIED
Page 34 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 2: Applied Research

PE 0602718BR: WMD Defeat Technologies RR: Test Infrastructure

B/(2.7)ppiled Nedection			
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
- Complete WACS testing that is designed to meet U.S. Forces Korea's requirement of an "all-in-one" CBRN sensor system for			
post-strike assessment (Battle Damage Assessment) of suspected WMD facilities and mobile time-sensitive targets.			
- Continue nuclear detection and forensics testing to prevent weapons grade material/dirty bombs from entering the U.S., U.S.			
territories, and Allied Nations through funding provided by external program managers.			
- Continue environmental remediation and compliance activities at the NNSS, DPG, WSMR, and KAFB in accordance with EPA,			
Safety, and Environmental guidelines. Defer major demolition and restoration efforts of major test articles while ensuring they are			
safely closed and sealed at minimal acceptable standards.			
- Maintain the current version of a Cost Analysis Tool for Test Sites database to develop Rough Order of Magnitude estimates for			
different types of tests as well as different test beds.			
- Continue tunnel work detection testing at NNSS for the Customs and Border Patrol to be able to detect tunnel work or tunnels			
along northern and southern borders of CONUS.			
- Maintain current inventory of infrastructure and instrumentation, extending life-cycle of these items as long as possible to ensure			
test beds meet customers' advanced technology testing needs.			
- Document, prioritize, and support test infrastructure requirements; pass on test support and execution costs to external program			
managers.			
- Close the Large Blast Thermal Simulator eliminating ability to execute test requirements on these nuclear effects.			
- Evaluate and determine courses of action for current usefulness of remaining existing nuclear simulators within management			
control of Test Support Division.			
Accomplishments/Planned Programs Subtotals	13.509	21.941	13.782

### C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• 28/0603160BR: Proliferation,	1.790	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Prevention, and Defeat											

### D. Acquisition Strategy

Not Applicable

#### **E. Performance Metrics**

Number of tests executed safely, i.e., no loss of life or limb, no unintentional significant damage of property. FY11 – No safety issues/incidents during scheduled test events.

Number of tests that are evaluated through the milestone review process.

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

**UNCLASSIFIED** 

Page 35 of 41 R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	at Reduction Agency	<b>DATE:</b> February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	PE 0602718BR: WMD Defeat Technologies	RR: Test Infrastructure
100% of all tests completing scheduled milestones.		
Number of tests that undergo environmental assessment consistent All test executed undergo environmental review consistent with exis FY 11 - 123 Tests		

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

Exhibit R-2A, RDT&E Project Just	nse Threat F	Reduction Agency					DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research							PROJECT RT: Target Assessment Technologies				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
RT: Target Assessment Technologies	0.845	-	-	-	-	-	-	-	-	Continuing	Continuing

### A. Mission Description and Budget Item Justification

For some hard and deeply buried targets, physical destruction is neither possible, nor practical, with current conventional weapons and employment techniques. It may be possible, however, to achieve target defeat objectives by denying or disrupting the mission or function of the target facility. Functional defeat, however, requires more information, more detailed analysis of the target. The functional defeat process includes finding and identifying a facility, characterizing its function and physical layout, determining its vulnerabilities to available weapons, planning and executing an attack, assessing damage, and if necessary, suppressing reconstitution efforts and re-attacking the facility. Target Assessment Technologies provides the Combatant Commands and the Intelligence Community with technologies and processes to find and characterize Weapons of Mass Destruction (WMD) targets located in underground facilities and then, in near-real-time, assess the results of attacks against those targets. Overall objectives are to develop new methodologies, processes and technologies for detecting, locating, identifying, physically and functionally characterizing, modeling, and assessing new and existing hard and deeply buried targets to support either physical or functional defeat. Extending this activity and applying these processes to Weapons of Mass Destruction (WMD) target characterization and threat analysis presents the next technical challenge. The Target Assessment Technologies project now consists of three subordinate and related activities: (1) Targeting and Intelligence Community Technology Development; (2) Find, Characterize, Assess Technology Development; and (3) Counter-WMD Analysis Cell (C-WAC) Technology Support. Follow-on funding for this project can be found in the Proliferation Prevention and Defeat; 0603160BR, budget exhibit.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RT - Target Assessment Technologies	0.845	-	-
<b>Description:</b> Project RT provides the Combatant Commands and the Intelligence Community with technologies and processes to find and characterize Weapons of Mass Destruction (WMD) targets located in underground facilities and then, in near-real-time, assess the results of attacks against those targets. Follow-on funding for this project can be found in the Proliferation Prevention and Defeat; 0603160BR, budget exhibit.			
<ul> <li>FY 2011 Accomplishments:</li> <li>Initiated development of additional universal rock models (URM) for specific types of rock for use in characterizing the geological properties associated with underground targets.</li> <li>Developed new Standard Operating Procedures (SOPs) for "Quicklooks" and characterizations of foreign WMD developments for use in support of crisis operations.</li> </ul>			
Accomplishments/Planned Programs Subtotals	0.845	-	-

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 37 of 41

R-1 Line #23

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

**R-1 ITEM NOMENCLATURE PROJECT** 

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide PE 0602718BR: WMD Defeat Technologies RT: Target Assessment Technologies

BA 2: Applied Research

C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013				Cost To
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017 Complete Total Cost
• 28/0603160BR: <i>Proliferation</i> ,	35.047	33.493	31.298		31.298	31.883	32.743	33.413	34.139 Continuing Continuing

# Prevention, and Defeat

D. Acquisition Strategy N/A

#### **E. Performance Metrics**

Complete development of three additional Universal Rock Models (URMs) for use in Underground Targeting and Analysis System (UTAS) target characterizations.

Improve Counter-WMD Analysis Cell capabilities and processes for the analysis and assessment of foreign development of WMD.

PE 0602718BR: WMD Defeat Technologies **Defense Threat Reduction Agency** 

**UNCLASSIFIED** Page 38 of 41

R-1 Line #23

Volume 5 - 570

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Defer	nse Threat F	Reduction Agency				DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research				R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies				PROJECT RU: Fundamental Research for Combating WMD			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
RU: Fundamental Research for Combating WMD	7.961	8.631	2.000	-	2.000	0.516	0.567	0.549	0.549	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Fundamental Research for Combating WMD project (1) conducts early applied science research with an emphasis on maturing emerging science into Counter WMD technologies; (2) Supports a partnership of six universities with connections to over 20 additional universities, and (3) conducts strategic studies in support of DoD Combating WMD issues. The advancement of technology and science into applied technology development effort focus upon increasing the stability and utility of mid-to-long term, moderate risk but high payoff science, and emerging technologies for transition to other Defense Threat Reduction Agency (DTRA) applied technology programs. This effort serves as the bridge between the bench scientist and the applied technologist. The university partnership provides innovative research, scientific experts, post-doctoral fellowships, and scholarships to US students directly supporting cutting edge science, international cooperation programs and the next generation workforce. The strategic studies address challenges in reducing the threat from WMD based on an assessment of the future national security environment. They also develop and maintain an evolving analytical vision of necessary and sufficient capabilities to protect the U.S. and allied forces and citizens from nuclear, biological, and chemical attack and identify gaps in these capabilities and initiate programs to fill them.

The decrease from FY 2012 to FY 2013 is predominately due to the elimination of University Strategic Partnerships activities, reduced efforts in Combating Weapons of Mass Destruction – Terrorism (CWMD-T), and the transfer of advanced systems concepts funding from project RU – Fundamental research for combating WMD to project RA – Systems Engineering and Innovation to perform strategic research and dialogues.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RU: Fundamental Research for Combating WMD	7.961	8.631	2.000
<b>Description:</b> Project RU provides (1) strategic studies to support DoD, (2) Decision support tools and analysis to support combating WMD research and development investments, and (3) early applied research for technology development.			
<ul> <li>FY 2011 Accomplishments:</li> <li>Identified 38 of 112 basic science projects as candidate Science and Technology research and development projects to appropriate long-term sponsors for concept/design validation, prototype fabrication, testing, and fielding.</li> <li>Conducted eleven active research projects—Two major accomplishments.</li> <li>Developed and transitioned initial nuclear materials detection capabilities, one for land use and one for underwater unmanned vehicles—potential pre-detonation nuclear weapon detection systems.</li> <li>Developed new carbon-based transistor—potential as basis for next generation radiation-hardened electronics and for space sensors.</li> <li>Continued to exercise the test bed to assess promising technologies to quantify and mitigate large area nuclear effects on systems, networks and equipment.</li> </ul>			

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 39 of 41

R-1 Line #23

			UNCLAS	21LIED							
Exhibit R-2A, RDT&E Project Justification: F	B 2013 Defen	se Threat Re	eduction Age	ency				DATE: Fe	oruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluati BA 2: Applied Research	on, Defense-W		R-1 ITEM NO PE 06027181			I	PROJECT RU: Fundamental Research for Combating WMD				
B. Accomplishments/Planned Programs (\$ i	n Millions)							FY 2011	FY 2012	FY 2013	
<ul> <li>Continued "bridging" projects for early applie</li> <li>Continued to provide technical expertise and solicitation.</li> <li>Continued the mentoring, sponsorship, and engineering expertise.</li> <li>Sponsored 17 U.S. student theses this past supporting US government.</li> <li>Provided 6 Post-doctoral fellows to DTRA—</li> </ul>	advice to general ducation of the vear—historical	erate the never e "Next Generally about 60%	v basic resear eration" of mi % transition t	arch topics in ssion-critical	I scientific, to	echnical and	d				
<ul> <li>Initiate expanded Fundamental Research Brocore DTRA capability, as current University Str</li> <li>Identify and transition all suitable investigator term sponsors for concept/design validation, pr</li> <li>Identify and conduct strategic studies address</li> <li>Continue "bridging" projects for early applied</li> <li>Continue to provide technical expertise and a solicitation.</li> <li>Continue the mentoring, sponsorship, and edengineering expertise.</li> </ul>	ategic Partners y Science and ototype fabrica sing challenge development of dvice to general	ship (USP) can be ship (USP) at the ship of the ship of combating the ship of	ontract come research an , and fielding the threat fr WMD techn basic resear	es to its mon d developm rom WMD. ologies. rch topics in	etary close a ent projects support of th	after 10 yea to appropria ne semi-ann	rs. ate long-				
<ul><li>FY 2013 Plans:</li><li>Initiate close out of the current University Str</li><li>Close out the remainder of the eleven active</li></ul>			ontract after	10 years of	activities.						
			Accon	nplishment	s/Planned P	rograms S	ubtotals	7.961	8.631	2.000	
C. Other Program Funding Summary (\$ in M  Line Item FY 201  • 1/0601000BR: DTRA Basic 46.10	FY 2012	FY 2013 Base 45.071	FY 2013 OCO	FY 2013 Total 45.071	<b>FY 2014</b> 45.493	<b>FY 2015</b> 45.925	<b>FY 20</b> 1 46.75			<ul><li><u>Total Cost</u></li><li>Continuing</li></ul>	
Research Initiative  D. Acquisition Strategy  Not Applicable											

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

UNCLASSIFIED
Page 40 of 41

R-1 Line #23

	UNCLASSIFIED		
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	eat Reduction Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research	R-1 ITEM NOMENCLATURE PE 0602718BR: WMD Defeat Technologies	PROJECT RU: Funda WMD	mental Research for Combating
E. Performance Metrics  Project performance is measured via a combination of statistics inclending engineering supporting DoD's educational goals, number of research Report "Best Colleges" list.			
Publication of an annual basic research technical and external prog	grammatic review report.		
Each study/project will commence within 3 months of customer requ	uest and results delivered within 3 months of comp	letion.	

PE 0602718BR: WMD Defeat Technologies Defense Threat Reduction Agency

**UNCLASSIFIED** Page 41 of 41

R-1 Line #23



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Threat Reduction Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 3: Advanced Technology Development (ATD)

PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat

**DATE:** February 2012

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	301.571	283.073	275.022	-	275.022	280.713	283.738	290.132	296.378	Continuing	Continuing
RA: Systems Engineering and Innovation	4.815	13.641	7.455	-	7.455	8.448	9.215	9.771	9.946	Continuing	Continuing
RE: Counter-Terrorism Technologies	116.668	113.681	110.657	-	110.657	111.798	111.964	113.728	115.998	Continuing	Continuing
RF: Detection Technology	77.472	77.784	76.298	-	76.298	77.863	78.528	80.321	81.651	Continuing	Continuino
RG: Advanced Energetics & Counter WMD Weapons	18.273	15.186	20.682	-	20.682	21.540	21.780	22.487	23.212	Continuing	Continuino
RI: Nuclear Survivability	15.702	6.985	6.129	-	6.129	6.654	6.571	6.712	7.104	Continuing	Continuin
RL: Nuclear & Radiological Effects	2.661	-	-	-	-	-	-	-	-	Continuing	Continuino
RM: WMD Battle Management	29.143	22.303	22.503	-	22.503	22.527	22.937	23.700	24.328	Continuing	Continuino
RR: Test Infrastructure	1.790	-	-	-	-	-	-	-	-	Continuing	Continuing
RT: Target Assessment Technologies	35.047	33.493	31.298	-	31.298	31.883	32.743	33.413	34.139	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Proliferation, Prevention and Defeat program reduces Weapons of Mass Destruction (WMD) proliferation and enhances WMD defeat capabilities through advanced technology development. To accomplish this objective, seven project areas were developed: RA - Systems Engineering and Innovation, RE - Counter-Terrorism Technologies, RF - Detection Technology, RG - Counter WMD Weapons & Capabilities, RI - Nuclear Survivability,

RM - WMD Battle Management, and RT - Target Assessment Technologies. This supports technology requirements in line with the Joint Functional Concepts (Chairman, Joint Chiefs of Staff Instruction 3170.01). The missions and plans of these projects are described below and in the R-2a Budget Exhibits.

Project RA provides the research and development both for systems engineering and analysis support across all other projects and innovative counterproliferation research and technical reachback support.

Project RE provides research and development support to Joint U.S. Military Forces, specifically U.S. Special Operations Command (USSOCOM), in the areas of Explosive Ordnance Disposal Device Defeat; counter-WMD technologies for warfighters; the USSOCOM Combating Weapons of Mass Destruction – Terrorism Support Program (SCSP); and oversight of counterproliferation (CP) research and development resources sent directly to USSOCOM for warfighter-unique CP technologies.

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

Page 1 of 36

R-1 Line #28

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Three	eat Reduction Agency	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat

BA 3: Advanced Technology Development (ATD)

Project RF develops technologies, systems and procedures for post-detonation nuclear forensics, and to detect, identify, track, tag, locate, monitor and interdict strategic and improvised nuclear and radiological weapons, components, or materials in support of Department of Defense (DoD) requirements for combating terrorism, counterproliferation and nonproliferation, homeland defense, and international initiatives and agreements.

Project RG develops advanced technologies and weapon concepts and validates their applicability as counter WMD weapon systems.

Project RI provides the capability for DoD nuclear forces and their associated control and support systems and facilities in wartime to avoid, repel, or withstand attack or other hostile action, to the extent that essential functions can continue or be resumed after the onset of hostile action.

Project RL develops nuclear and radiological assessment modeling tools to support military operational planning, weapon effects predictions, and strategic system design decisions. Related funding for this project can be found in the WMD Defeat Technologies: 0602718BR, budget exhibit.

Project RM provides (1) full-scale testing of counter WMD weapon effects, sensor performance, and weapon delivery optimization, (2) weapon effects modeling, and (3) the Defense Threat Reduction Agency Experimentation Lab.

Project RR provides a unique national test bed capability for simulated Weapons of Mass Destruction (WMD) facility characterization, weapon-target interaction, and WMD facility defeat testing to respond to operational needs by developing and maintaining test beds used by the Department of Defense (DoD), the Services, the Combatant Commanders, and other federal agencies to evaluate the implications of WMD, conventional, and other special weapon use against U.S. military or civilian systems and targets. Related funding for this project can be found in the WMD Defeat Technologies: 0602718BR, budget exhibit.

Project RT provides the Combatant Commands and the Intelligence Community with technologies and processes to find and characterize hard and deeply buried targets and then assess the results of attacks against those targets.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Threat Reduction Agency

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat

BA 3: Advanced Technology Development (ATD)

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	295.163	283.073	278.100	-	278.100
Current President's Budget	301.571	283.073	275.022	-	275.022
Total Adjustments	6.408	-	-3.078	-	-3.078
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-11.950	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	25.200	-			
SBIR/STTR Transfer	-5.026	-			
FFRDC Reduction	-0.315	-	-	-	-
Economic Assumption	-1.501	-	-	-	-
Realignment	-	-	0.238	-	0.238
<ul> <li>Programmatic - Fiscal Guidance Reduction</li> </ul>	-	-	-6.391	-	-6.391
• Inflation	-	_	3.075	-	3.075

### **Change Summary Explanation**

The increase from the previous President's Budget submission in FY 2011 is the net effect of the Congressional Rescission, the \$25.2M FY 11-21R Prior Approval reprogramming action in support of higher priority Department needs, the Federally Funded Research and Development Center (FFRDC)/Economic Assumption reductions, and the Small Business Innovative Research (SBIR) realignment. The decrease in FY 2013 from the previous President's Budget is predominately due to decreased investment for Counter WMD-Terrorism (CWMD-T) testing and defeat programs and the Counter-WMD Analysis Cell; and the realignment of Radiation Hardened (RadHard) Microelectronics and Information Operations Condition (INFOCON) 3 efforts from Program Element (PE) 0603160BR to PE 0602718BR to better reflect the nature of these programs.

UNCLASSIFIED
Page 3 of 36

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency  DATE: February 2012											
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)								PROJECT RA: Systems Engineering and Innovation			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
RA: Systems Engineering and Innovation	4.815	13.641	7.455	-	7.455	8.448	9.215	9.771	9.946	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Systems Engineering and Innovation project provides (1) systems engineering and analysis support across all other Projects, (2) innovative counterproliferation research, and (3) technical advisory reachback support on Weapons of Mass Destruction (WMD) effects and consequences. The systems engineering effort provides research and development with requirements, technology, architecture analyses and proof-of-principle capability necessary for making decisions on strategic planning, research and development investments, new initiatives, cooperation, ventures with new customers, and accomplishment of high-level, short notice special projects. This includes analysis of National, Department of Defense (DoD) and other Federal agencies' strategic guidance and plans in the combating WMD, Combating Terrorism and Homeland Defense arenas through analytical political-military and technical studies, workshops and conferences. It also provides the Defense Threat Reduction Agency (DTRA) on-site support to North Atlantic Treaty Organization (NATO) and Supreme Headquarters Allied Powers, Europe (SHAPE) with a current primary focus on support to U.S. European Command (USEUCOM), NATO, and SHAPE in combating WMD and maintaining the NATO nuclear deterrent. A significant element of this project includes support to Command Elements and the warfighting Combatant Commands (COCOMs) on strategies for reducing/countering the WMD threat in the COCOMs Areas of Responsibility. This project also provides for the solution to the Secretary of Defense mandate for DTRA to account, maintain, report, and track the National Nuclear Weapons Stockpile & Nuclear Weapon-Related Materiel during peacetime, crisis, and wartime. In support of national requirements necessary to maintain a viable nuclear deterrent, the Defense Integration and Management of Nuclear Data Services provide a platform to ensure continued sustainability and viability of the nuclear weapon stockpile.

The FY 2012 to FY 2013 decrease is predominately due to the net effect of a one time increased investment for the Arms Control Enterprise System (ACES) in FY 2012 and a realignment of funding from Program Element (PE) 0603160BR to PE 0602718BR for information technology test and engineering program for Information Operations Condition (INFOCON) 3.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: RA: Systems Engineering and Innovation	4.815	13.641	7.455	
<b>Description:</b> Project RA provides the research and development both for systems engineering and analysis support across all other projects and innovative counterproliferation research and technical reachback support.				
FY 2011 Accomplishments:				
- Continued to conduct strategic analyses and assessments on emerging WMD threats.				
- Continued to organize/conduct senior COCOM, Interagency, and International workshops, symposiums, and table top exercises				
to address key national/international strategies for reducing/combating the WMD threat.				
- Continued to refine and enhance WMD lessons learned process with international staff and across the other COCOMs,				
incorporating lessons learned from partner activities.				

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 4 of 36

R-1 Line #28

A3. 3: Advanced Technology Development (ATD)  A5. 3: Advanced Technology Development (ATD)  A5. 3: Advanced Technology Development (ATD)  Continued to develop and update the Defense Threat Reduction Agency (DTRA) Campaign Support Plan as directed in the Guidance for Employment of the Force (GEF) to further Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the GEF.  Utilized institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development collaboration within the Agency (DTRA) Campaign Support Plan as directed in the Guidance of Employment of the Force (GEF) to further Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the GEF.  PV 2012 Plans:  Develop and innovate a Nuclear Weapon-Related Materiel (NWRM) module in Defense Integration and Management of Nuclear Data Services with the ability to evolve to keep up with emerging mainstream technologies to consolidate various DoD tracking systems into a single worldwide accountability system that provides the ability to account, maintain, report, and track NWRM sturing peacetime, crisis, and wartime.  Continue to organize/conduct senior COCOM, Interagency, and International workshops, symposiums, and table top exercises to address key national/international strategies for reducing/combating the WMD threat.  Continue to refine and enhance WMD lessons learned process with international staff and across the other COCOMs, necoprating lessons learned from partner activities.  Continue to utilize institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development and integration of process with international research and development collaboration within the Pacific Region in accordance with the GEF.  Continue to utilize institutionalized l		UNULASSII ILD				
A3. 3: Advanced Technology Development (ATD)  A5. 3: Advanced Technology Development (ATD)  A5. 3: Advanced Technology Development (ATD)  Continued to develop and update the Defense Threat Reduction Agency (DTRA) Campaign Support Plan as directed in the Guidance for Employment of the Force (GEF) to further Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the GEF.  Utilized institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development collaboration within the Agency (DTRA) Campaign Support Plan as directed in the Guidance of Employment of the Force (GEF) to further Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the GEF.  PV 2012 Plans:  Develop and innovate a Nuclear Weapon-Related Materiel (NWRM) module in Defense Integration and Management of Nuclear Data Services with the ability to evolve to keep up with emerging mainstream technologies to consolidate various DoD tracking systems into a single worldwide accountability system that provides the ability to account, maintain, report, and track NWRM sturing peacetime, crisis, and wartime.  Continue to organize/conduct senior COCOM, Interagency, and International workshops, symposiums, and table top exercises to address key national/international strategies for reducing/combating the WMD threat.  Continue to refine and enhance WMD lessons learned process with international staff and across the other COCOMs, necoprating lessons learned from partner activities.  Continue to utilize institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development and integration of process with international research and development collaboration within the Pacific Region in accordance with the GEF.  Continue to utilize institutionalized l	Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threa	at Reduction Agency		DATE: Fe	bruary 2012	
Continued to develop and update the Defense Threat Reduction Agency (DTRA) Campaign Support Plan as directed in the Guidance for Employment of the Force (GEF) to further Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the GEF.  Utilized institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development collaboration within the Pacific Region in accordance with the GEF.  FY 2012 Plans:  Develop and innovate a Nuclear Weapon-Related Materiel (NWRM) module in Defense Integration and Management of Nuclear Data Services with the ability to evolve to keep up with emerging mainstream technologies to consolidate various DoD tracking systems into a single worldwide accountability system that provides the ability to account, maintain, report, and track NWRM during peacefilme, crisis, and wartime.  Continue to organize/conduct senior COCOM, Interagency, and International workshops, symposiums, and table top exercises to address key national/international strategies for reducing/combating the WMD threat.  Continue to refine and enhance WMD lessons learned process with international staff and across the other COCOMs, incorporating lessons learned from partner activities.  Continue to develop and update DTRA Support Plan as directed in the GEF to further Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the GEF.  Continue to utilize institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development collaboration within the Pacific Region in accordance with the GEF.  Continue to conduct strategic analyses and assessments on emerging WMD threats.  Increase the capacity of Technical Reachback through the development and integration of ageospatial services for decision support — support projec	APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)					
Guidance for Employment of the Force (GEF) to further Combating WMD mission across all theaters while balancing DTRA assests and managing risks as prioritized within the GEF.  - Utilized institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development collaboration within the Pacific Region in accordance with the GEF.  - Develop and innovate a Nuclear Weapon-Related Materiel (NWRM) module in Defense Integration and Management of Nuclear Data Services with the ability to evolve to keep up with emerging mainstream technologies to consolidate various DoD tracking systems into a single worldwide accountability system that provides the ability to account, maintain, report, and track NWRM during peacetime, crisis, and wartime.  - Continue to organize/conduct senior COCOM, Interagency, and International workshops, symposiums, and table top exercises to address key national/international strategies for reducing/combating the WMD threat.  - Continue to organize/conduct senior COCOM, Interagency, and International workshops, symposiums, and table top exercises to address key national/international strategies for reducing/combating the WMD threat.  - Continue to develop and update DTRA Support Plan as directed in the GEF to further Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the GEF.  - Continue to utilize institutionalized linkage with NATO/SHAPE and USEUCOM in International research and development collaboration to further develop similar international research and development and integration within the Pacific Region in accordance with the GEF.  - Continue to conduct strategic analyses and assessments on emerging WMD threats.  - Increase the capacity of Technical Reachback through the development and integration of high performance computing and ageopatial services for decision support – support projected workload of over 1,800 requests for inf	B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Develop and innovate a Nuclear Weapon-Related Materiel (NWRM) module in Defense Integration and Management of Nuclear Data Services with the ability to evolve to keep up with emerging mainstream technologies to consolidate various DoD tracking systems into a single worldwide accountability system that provides the ability to account, maintain, report, and track NWRM during peacetime, crisis, and wartime.  Continue to organize/conduct senior COCOM, Interagency, and International workshops, symposiums, and table top exercises to address key national/international strategies for reducing/combating the WMD threat.  Continue to refine and enhance WMD lessons learned process with international staff and across the other COCOMs, ncorporating lessons learned from partner activities.  Continue to develop and update DTRA Support Plan as directed in the GEF to further Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the GEF.  Continue to utilize institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development collaboration within the Pacific Region in accordance with the GEF.  Continue to conduct strategic analyses and assessments on emerging WMD threats.  Increase the capacity of Technical Reachback through the development and integration of high performance computing and geospatial services for decision support – support projected workload of over 1,800 requests for information.  Building partner capacity through advanced technology demonstrations to increase the technical capacity of international partners.  Develop, test, and deploy Arms Control Enterprise System (ACES) New START Treaty (NST) Increment #2 mid FY12 providing production facility, weapon transfer, annual nuclear weapons platform Conversion or Elimination plans and flight route notification capability. Increment #3 end FY12 providing prototypes, new equipment, demonstrations and teleme	Guidance for Employment of the Force (GEF) to further Combating W assets and managing risks as prioritized within the GEF.  - Utilized institutionalized linkage with NATO/SHAPE and USEUCOM to further develop similar international research and development colleger.	/MD mission across all theaters while balancing DTF in international research and development collaborations.	RA			
Data Services with the ability to evolve to keep up with emerging mainstream technologies to consolidate various DoD tracking systems into a single worldwide accountability system that provides the ability to account, maintain, report, and track NWRM during peacetime, crisis, and wartime.  - Continue to organize/conduct senior COCOM, Interagency, and International workshops, symposiums, and table top exercises to address key national/international strategies for reducing/combating the WMD threat Continue to refine and enhance WMD lessons learned process with international staff and across the other COCOMs, incorporating lessons learned from partner activities Continue to develop and update DTRA Support Plan as directed in the GEF to further Combating WMD mission across all theaters while balancing DTRA assets and managing risks as prioritized within the GEF Continue to utilize institutionalized linkage with NATO/SHAPE and USEUCOM in international research and development collaboration to further develop similar international research and development collaboration within the Pacific Region in accordance with the GEF Continue to conduct strategic analyses and assessments on emerging WMD threats Increase the capacity of Technical Reachback through the development and integration of high performance computing and geospatial services for decision support – support projected workload of over 1,800 requests for information Building partner capacity through advanced technology demonstrations to increase the technical capacity of international partners Develop, test, and deploy Arms Control Enterprise System (ACES) New START Treaty (NST) Increment #2 mid FY12 providing production facility, weapon transfer, annual nuclear weapons platform Conversion or Elimination plans and flight route notification capability Develop, test, and deploy ACES NST Increment #3 will be at full operational capability (FOC) of ACES NST software upgrade Begin development and integration of agent based modeling capabil	FY 2012 Plans:					
- Building partner capacity through advanced technology demonstrations to increase the technical capacity of international partners Develop, test, and deploy Arms Control Enterprise System (ACES) New START Treaty (NST) Increment #2 mid FY12 providing production facility, weapon transfer, annual nuclear weapons platform Conversion or Elimination plans and flight route notification capability - Develop, test, and deploy ACES NST Increment #3 end FY12 providing prototypes, new equipment, demonstrations and telemetry notification capability. Increment #3 will be at full operational capability (FOC) of ACES NST software upgrade Begin development and integration of agent based modeling capabilities, including network dynamics and propagation of infectious disease, with computation time in minutes instead of hours supporting Near Real Time Reachback.	Data Services with the ability to evolve to keep up with emerging main systems into a single worldwide accountability system that provides the during peacetime, crisis, and wartime.  - Continue to organize/conduct senior COCOM, Interagency, and Interto address key national/international strategies for reducing/combating.  - Continue to refine and enhance WMD lessons learned process with incorporating lessons learned from partner activities.  - Continue to develop and update DTRA Support Plan as directed in the theaters while balancing DTRA assets and managing risks as prioritize.  - Continue to utilize institutionalized linkage with NATO/SHAPE and Utilize continue to further develop similar international research and devaccordance with the GEF.  - Continue to conduct strategic analyses and assessments on emerginal linerease the capacity of Technical Reachback through the development.	nstream technologies to consolidate various DoD traine ability to account, maintain, report, and track NWI remaissed workshops, symposiums, and table top exig the WMD threat. International staff and across the other COCOMs,  the GEF to further Combating WMD mission across the within the GEF.  ISEUCOM in international research and development collaboration within the Pacific Region in the mag WMD threats.  The property of the performance computing the property and integration of high performance computing the property of the property of the property of the property of the performance computing the performance computing the property of the property of the performance computing the perfor	acking RM ercises all			
- Develop, test, and deploy ACES NST Increment #3 end FY12 providing prototypes, new equipment, demonstrations and telemetry notification capability. Increment #3 will be at full operational capability (FOC) of ACES NST software upgrade Begin development and integration of agent based modeling capabilities, including network dynamics and propagation of infectious disease, with computation time in minutes instead of hours supporting Near Real Time Reachback.	partners Develop, test, and deploy Arms Control Enterprise System (ACES) production facility, weapon transfer, annual nuclear weapons platform	New START Treaty (NST) Increment #2 mid FY12 p	roviding			
FY 2013 Plans:	<ul> <li>Develop, test, and deploy ACES NST Increment #3 end FY12 provional telemetry notification capability. Increment #3 will be at full operational and ended and ended in the second second ended in the second ended e</li></ul>	al capability (FOC) of ACES NST software upgrade. lities, including network dynamics and propagation of				
	FY 2013 Plans:					

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 5 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat F	DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603160BR: Counterproliferation Initiatives	RA: Systems Engineering and Innovation		
BA 3: Advanced Technology Development (ATD)	- Proliferation, Prevention and Defeat			

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
- Complete initial development and integration phase of agent based modeling capabilities with computation time in minutes			
instead of hours.			
- Conduct Near Real Time Reachback demonstration with nuclear and biological scenarios; demonstrate capability to model			
selected secondary and tertiary effects and impact of certain courses of action.			
Accomplishments/Planned Programs Subtotals	4.815	13.641	7.455

### C. Other Program Funding Summary (\$ in Millions)

		-	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• 23/0602718BR: WMD Defeat	44.923	41.456	33.396		33.396	31.924	32.454	32.780	33.152	Continuing	Continuing
Technologies											

#### D. Acquisition Strategy

Not Applicable

#### **E. Performance Metrics**

Development of a DoD annex to the National Response plan for a pandemic flu and subsequent national-level exercises to test plan.

Development of Defense Threat Reduction Agency (DTRA) Security Cooperation Plans for all regional Combatant Commands (COCOMs).

Development of a DTRA gap analysis of Combating Weapons of Mass Destruction (CWMD) mission vice Homeland Defense and Combating Terrorism mission areas to provide way ahead for DTRA operational and research and development planning.

Robust lessons learned process that incorporates new, workable operational and technical solutions into DoD and with allies.

Incorporation of at least three new technologies by FY 2013 as a result of International research and development collaboration.

Number of strategic analyses and assessments conducted on emerging WMD threats.

Number of senior Combatant Commands (COCOMs), Interagency and/or International Workshops/Conferences organized/conducted to address national/international strategies for reducing the WMD threat.

Manage the strategic weapons stockpile and Nuclear Weapon-Related Materiel; maintain 100% accountability.

UNCLASSIFIED
Page 6 of 36

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threa	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603160BR: Counterproliferation Initiatives	RA: Systems Engineering and Innovation
BA 3: Advanced Technology Development (ATD)	- Proliferation, Prevention and Defeat	
Support the Office of Secretary of Defense, Joint Staff, Combatant C	Commands, Services, Nuclear Weapon Custodial Ur	nits, and Department of Energy.

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency								DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)					R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat				PROJECT RE: Counter-Terrorism Technologies			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
RE: Counter-Terrorism Technologies	116.668	113.681	110.657	-	110.657	111.798	111.964	113.728	115.998	Continuing	Continuing	

#### A. Mission Description and Budget Item Justification

The Counter-Terrorism Technologies project is an over-arching project that develops and transitions a full spectrum of new technologies to counter emergent Weapons of Mass Destruction (WMD) thus enabling warfighters to improve their ability to detect, disable, interdict, neutralize, and destroy chemical, biological, nuclear production, storage, and weaponization facilities. This project supports Joint U.S. Military Forces, and in particular, the U.S. Special Operations Command (USSOCOM). This research and development support to USSOCOM is one of the highest priority mission areas in the National Security Strategy, the National Strategy to Combat WMD, the National Strategy for Countering Biological Threats, the Quadrennial Defense Review, and the Guidance on the Employment of the Force, and therefore a top priority for the Defense Threat Reduction Agency (DTRA). The following efforts are included in this project:

Provide oversight for Counterproliferation (CP) research and development resources sent directly to USSOCOM that are used to develop warfighter-unique technologies in support of USSOCOM's Counterterrorism and Counterproliferation (CT/CP) mission. New CT/CP technologies are developed under USSOCOM management that provides warfighters with the operational capability to counter WMD threats.

The Explosive Ordnance Disposal (EOD) Device Defeat effort develops innovative technologies, energetic materials, and software programs to identify, defeat, contain, and mitigate WMD capable Improvised Explosive Devices (IEDs). DTRA has been delegated the responsibilities and the authority to act as Task Lead on behalf of the Department of Defense (DoD) to provide leadership, integration, development, and testing as the primary U.S. Government coordinator for the National Implementation Plan WMD-Terrorism Task 5.4.4. The EOD Device Defeat effort adds targeted rapid development of tools, techniques, and procedures for the access and advanced diagnostics and defeat of WMD systems and IEDs. The focus of the activity is prototype development and transition of promising technologies to the warfighters for procurement.

The USSOCOM Combating Weapons of Mass Destruction – Terrorism Support Program (SCSP) addresses Commander USSOCOM responsibilities under the Chairman, Joint Chiefs of Staff (CJCS) Unified Command Plan (UCP) for integrating and synchronizing Defense-wide operations and activities to prevent terrorists from developing, acquiring, proliferating, or using WMD.

The Counter WMD-Terrorism (CWMD-T) technologies program builds upon collaborative efforts with the warfighter. One portion of this program involves a proof of concept and subsequent advancements in research, development, testing, and evaluation (RDT&E) and provides multi-mission capabilities that may be applied throughout the entire spectrum of warfare while significantly eliminating collateral damage. The CWMD-T technologies program is developing technologies to enable the warfighter to locate, identify, characterize, and access WMDs, their production and storage facilities, and associated enablers along multiple nodes concurrently or simultaneously within the terrorist pathway to disrupt, delay, degrade, destroy, or deny Chemical, Biological, Radiological and Nuclear (CBRN) WMDs while minimizing risk to U.S. forces in support of CT/CP offensive operations.

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

Page 8 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threa	at Reduction Agency		DATE: Fel		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat	PROJEC RE: Cour	T nter-Terrorism	Technologie	s
The decrease from FY 2012 to FY 2013 is predominately due to dec	creased investment for CWMD-T testing and defeat p	orograms.			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Title: RE: Counter-Terrorism Technologies			116.668	113.681	110.657
Description: Project RE provides research and development support Operations Command (USSOCOM), in the areas of Explosive Ordnar warfighters; the USSOCOM Combating Weapons of Mass Destruction counterproliferation (CP) research and development resources sent of FY 2011 Accomplishments:  - Continued development and transitioned new counterproliferation (CWMD, enabling warfighters to improve their ability to detect, disable, in nuclear production, storage, and weaponization facilities. Some of the mechanical, and alternative energies to improve the efficiencies and expoperations against Chemical, Biological, Radiological, Nuclear, and E-Successfully conducted approximately 150 joint tests with military ut (UHPC) to improve tactics, techniques, and procedures.  - Proceeded in multi-year classified development effort to deliver tools production and storage facilities, and associated enablers anywhere very content of the procedure of the production and storage facilities, and associated enablers anywhere very content of the procedure	nce Disposal Device Defeat; counter-WMD technology and a technology of the Terrorism Support Program (SCSP); and oversign of the USSOCOM for warfighter-unique CP technologies for Joint U.S. Military Forces to counterdict, neutralize, and destroy chemical, biological ese efforts used innovative technologies utilizing energificativeness of joint U.S. military ground forces' offer explosive (CBRNE) WMD production facilities. Existing explosive (CBRNE) WMD production facilities. Sociality assessments against Ultra High Performance Counter to combat against WMDs, within the terrorist pathway.	gies for ght of cologies.  Inter and ergetic, ensive concrete their			
<ul> <li>- Achieved successful progress per plan for successive multi-year efformed program.</li> <li>- Designed and built eight new Test Objects for characterization and to the successive multi-year efformed program.</li> <li>- SCSP established an initial capability to provide a dynamic picture of the successive multi-year efformed program.</li> <li>- SCSP established an initial advanced IT infrastructure (Phase I).</li> </ul>	esting to counter emergent threats.	ice			
<ul> <li>SCSP provided WMD data to COCOMs to support real-time conting</li> <li>Developed technologies and tools to characterize and identify the el systems.</li> </ul>		fusing			
- Developed barrier defeat tools that enhance defeat solutions to defe using a range of defeating techniques, equipment, and material.					
- Developed production defeat tools that enable ground forces to dest WMD.	troy "critical nodes" used in the production and suppo	ort of			
- Provided structural defeat tools for the destruction of structures' key	entry points to collapse the structure or render it unit	usable.			

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED Page 9 of 36

R-1 Line #28 Volume 5 - 583

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat	t Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat	PROJECT RE: Coun		n Technologie	es
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
- Proceeded with a 48-month classified development effort to deliver to production and storage facilities, and associated enablers anywhere wide-year effort will begin, so at the end of 4 years solutions will be deliver. Continued work on Knowledge Management Objectives begun in FY and initiate a study of the effects of Radio Frequency (RF) signals on entitiated multi-year program to design and produce ultra-high fidelity to	ithin the terrorist pathway. Each year of this progra red each year thereafter. 10; continue to test the effects of RF signals on test explosives.	m a new			
FY 2012 Plans:					
<ul> <li>Continue development and then transition new technologies for Joint specifically SOF, to improve their ability to detect, disable, interdict, new production, storage, and weaponization facilities. These efforts use in alternative energies to improve the efficiencies and effectiveness of Joing against CBRNE WMD production facilities.</li> <li>Develop and transition innovative counter-WMD tools designed to loc production and storage facilities with minimal to no collateral damage of a Continue funding three 48-month technology solutions that began in a proliferation of WMD.</li> <li>SCSP will reach Full Operational Capability (FOC) and continue to such Develop systemic operational plans for integrating diplomatic, military counter proliferation of WMD and acquisition by known terrorist organizes. Begin development of next generation imaging capabilities to allow Endown the Continue work on Knowledge Management Objectives begun in FY10 and initiate a study of the effects of Radio Frequency (RF) signals on expressions.</li> </ul>	utralize, and destroy chemical, biological, and nucle novative technologies utilizing energetic, mechanical int U.S. Military Ground Force's offensive operation attack, identify, characterize, assess and attack WMD or loss of life.  FY10 and manage their progress in countering the apport COCOM planning efforts related to CWMD-Ty, economic, financial, intelligence and law enforcer zations.  OD forces advanced diagnostic capabilities.  O; continue to test the effects of RF signals on test of	ear al and as			
FY 2013 Plans:  - Continue other planned development and transition of new CP technological enabling warfighters to improve their ability to detect, disable, interdict, production, storage, and weaponization facilities.  - Continue work on successive multi-year efforts to develop high fidelity.  - Build EOD Device Defeat test objects for characterization and testing.  - Continue work on Knowledge Management Objectives begun in FY10 and initiate a study of the effects of Radio Frequency (RF) signals on e.  - Sustain the CWMD-T global dynamic picture of the operating environs.  - Continue to support COCOM planning efforts related to CWMD-T.	neutralize, and destroy chemical, biological, and not y test articles for EOD Device Defeat program.  D; continue to test the effects of RF signals on test explosives.	uclear			

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 10 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603160BR: Counterproliferation Initiatives	RE: Counte	er-Terrorism Technologies
BA 3: Advanced Technology Development (ATD)	- Proliferation, Prevention and Defeat		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
- Establish a collaborative virtual workspace (linked to dynamic SCSP data sets/feeds) that enables CWMD-T planning by geographically separated COCOMs.			
Accomplishments/Planned Programs Subtotals	116.668	113.681	110.657

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• 23/0602718BR: WMD Defeat	15.946	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Technologies											

# D. Acquisition Strategy

Not Applicable

### **E. Performance Metrics**

Number of technologies developed and delivered, and/or proof of concept, or successful Military Utility Assessments conducted that increase the potential mission success and reduces the number of current gaps in SOF capabilities to counter weapons of mass destruction when conducting Overseas Contingency Operations.

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 11 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Defe	nse Threat F	Reduction Ag	jency				DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM N	IOMENCLAT	ΓURE		PROJECT			
0400: Research, Development, Test			Vide		0BR: Counte	•		RF: Detection	on Technolo	gy	
BA 3: Advanced Technology Develo	pment (ATD)	· · · · · · · · · · · · · · · · · · ·									
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
RF: Detection Technology	77.472	77.784	76.298	-	76.298	77.863	78.528	80.321	81.651	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Detection Technology project develops technologies, systems and procedures to detect, identify, track, locate, monitor and interdict strategic and improvised nuclear and radiological weapons, components, or materials in support of Department of Defense requirements for combating terrorism, counterproliferation and nonproliferation, homeland defense, and international initiatives and agreements. This project researches, develops, demonstrates, and transitions advanced technologies to improve: operational capability to detect and identify nuclear and radiological weapons; and to support the attribution process through development, demonstration, and transition of improved post-detonation National Technical Nuclear Forensics (NTNF) capabilities. Efforts under this project also support international peacekeeping and nonproliferation objectives, on-site and aerial inspections and monitoring, on-site sampling and sample transport, and on- and off-site analysis to meet forensic, verification, monitoring and confidence-building requirements.

In FY11, the treaty and verification technology program was launched as a component of the detection technology project. This program develops technology to support nuclear arms reductions treaties and agreements, nuclear test monitoring, and on-site inspection.

The Detection Technology project under Weapons of Mass Destruction Proliferation Prevention and Defeat emphasizes the advanced technology development and engineering portion of the overall effort.

The decrease from FY 2012 to FY 2013 represents an efficiency reduction to contract support services as part of the DOD reform agenda to reduce reliance on service support contractors.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RF: Detection Technology	77.472	77.784	76.298
<b>Description:</b> Project RF develops technologies, systems and procedures for post-detonation nuclear forensics, and to det identify, track, tag, locate, monitor and interdict strategic and improvised nuclear and radiological weapons, components, or materials in support of Department of Defense (DoD) requirements for combating terrorism, counterproliferation and nonproliferation, homeland defense, and international initiatives and agreements.	ect,		
<ul> <li>FY 2011 Accomplishments:</li> <li>Continued development of a fieldable standoff active interrogation system for standoff detection and warning of hidden ar shielded nuclear material.</li> <li>Performed field demonstrations of new detector technologies for handheld detectors to improve the ability of fielded force detect, locate, and identify nuclear materials in the battle space.</li> </ul>			

UNCLASSIFIED
Page 12 of 36

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	eat Reduction Agency		DATE: Fe	ebruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat	PROJECT RF: Detec		<del>-</del>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<ul> <li>Improved performance of new detector materials, imaging and specing or igorous field testing.</li> <li>Continued expanding the functionality of the Mobile Field Kit – Radi awareness and mission review to current and future suites of sensors.</li> <li>Continued transitioning multiple near term technologies to generate – Continued to develop fieldable and improved technical capabilities from the sample analysis, modeling to support nuclear device reconstruction, in technical nuclear forensics (TNF) conclusions.</li> <li>Combined all research and development prompt diagnostics project demonstrate and field prototypes of an integrated ground sensor cap other prompt diagnostic capabilities. Includes continued development reaction history post-event. Continued development, validation and timprove yield accuracy.</li> <li>Continued execution, technical management and development of yicapabilities in support of the FY2010-initiated National Technical Nuclear Demonstration (JCTD).</li> <li>Began development of fieldable (integrated and deployable) enhance capabilities and prototype novel technologies to shorten the analysis.</li> <li>Continued to develop improved correlation tools, signature databas increase confidence, decrease uncertainties and timelines, to better stielded improved debris diagnostic codes; accelerate design signature analysis capability.</li> <li>Continued robotic post-detonation ground debris sample collection autonomous/semi-autonomous collection capabilities as well as initial Maritime Domain debris sample collection capabilities and senior de infrastructure.</li> <li>Investigated alternative methods to detect fissions in nuclear material started development of methods to rapidly determine nuclear weap nuclear weapons effects on the environment.</li> <li>Continued development of contour mapping technology prototype for continued development of contour mapping technology prototype for the continued development of contour mapping technology prototype for the protocont and transition of a se</li></ul>	ological (MFK-R) by increasing radiological situations.  In prototypes and design packages to assist operation for post-detonation prompt and debris sample collect and forensics data to lower uncertainties/increase collect and forensics data to lower uncertainties/increase collect and process of the sunder DISCREET OCULUS and MINIKIN ECHO to ability to augment and enhance current yield estimate the of methods to rapidly determine nuclear weapon yield assimation of seismic/air blast/infrasound/craterology receleration and airborne/ground debris collection clear Forensics (NTNF) Joint Capability Technology coed/rapid separation, dissolution and analysis laboration and overall TNF process timeline.  The estimation of device/production design space support production of consensus technical forensics are database development and base lining of weaponimprovements. Began development of enhanced atted a study to determine the benefits and feasibility of the very standard of the process of	al users. ion, onfidence o cion and elds and model to  tory to results. n design  of			

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 13 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre		1		bruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603160BR: Counterproliferation Initiatives	RF: Detect	ion Techno	logy	
BA 3: Advanced Technology Development (ATD)	- Proliferation, Prevention and Defeat				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
- Continued Concept of Operations development & Standard Operation		de the			
Continental United States (OCONUS) demonstrations for detection, a					
- Continued cooperation and acceptance of DTRA developed detection					
- Continued transitioning multiple near term technologies to generate	prototypes and design packages to provide ground	forces			
improved capability.					
- Continued development and testing of remote information awareness for increased area of detection capability.	ss capability for radiation sensor systems and data in	itegration			
<ul> <li>Investigated capability gaps and opportunities for insertion of technology</li> </ul>	plogy for treaty monitoring and verification				
- Developed and conducted laboratory and field experiments to under					
underground nuclear tests in various types of geology.	retains the esternic entests of sevice se coupling is:				
- Began to develop a manufacturing capability for boron and lithium b	ased replacements to helium based neutron detecto	rs to			
address He-3 shortage	•				
- Completed successful maritime demonstration of neutron sensitive	panel detector.				
- Completed laboratory testing of cadmium zinc telluride (CZT) -base	d Compton imaging spectrometer, allowing progress	toward a			
fieldable prototype.					
- Demonstrated the ability to scale up the production of novel and hig		s for			
national security applications ensuring ability to deliver future capability					
- Transitioned a state of the art technology to complete procurement	for the Army Dosimeters, to replace aging technolog	y with			
<ul><li>improved capability.</li><li>Completed Spiral One of the Arms Control Enterprise System which</li></ul>	a anabled officient and timely compliance with the no	tification			
requirements of the New START Treaty.	renabled efficient and timely compliance with the no	lilication			
- Began the Arms Control Enterprise System Analysis of Alternatives	which will provide a flexible and affordable software				
approach to data bases and notifications for future treaties.	Which will provide a hoxisio and anordasio contrare				
- In partnership with NNSA, conducted the first Source Physics Exper	riment to examine signatures from evasive and low y	rield			
nuclear testing which provided an improved capability to detect under					
- Conducted a workshop with Department of State (DOS) on Technol	ogy Development for Strategic Arms Reductions whi	ich			
provided a technology roadmap to support future treaties.					
- Continued to evaluate ship search prototypes in support of CWMD r					
- Completed directional man-portable radiation sensor prototype for C	CWMD Urban Search Operations.				
FY 2012 Plans:					
- Continue design and fabrication of a prototype passive interrogation material.	system for determining the location and signature o	f nuclear			

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 14 of 36

R-1 Line #28

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	at Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat	PROJECT RF: Detec	tion Techno	logy	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<ul> <li>Continue development of a rugged, mobile stand-off radiation detection dentification of nuclear materials in a field environment.</li> <li>Complete development and testing of a small, light-weight, low-cost single design for the Navy, Army, and Air Force. Continue development and neutron sensitivity.</li> <li>Continue to develop and demonstrate alternative neutron detection.</li> <li>Continue developing and improving high performing microelectronic.</li> <li>Continue to develop, test, verify, assist with validation, and use add intended to provide nuclear detection simulation capability into the JS the Concept of Operations (CONOPS) and physics of nuclear detectic.</li> <li>Continue to develop, accelerate development where appropriate, decapabilities for prompt diagnostics (under DISCREET OCULUS and I analysis, and integration of design modeling and forensic data to sup.</li> <li>Continue development of fieldable (integrated and deployable) enhacapabilities and prototype novel technologies to shorten the analysis.</li> <li>Continue development of methods to rapidly determine post-event ruclear weapons effects, effects on the environment, and developing.</li> <li>Complete execution of the National Technical Nuclear Forensics (N begin Limited Operational Use / Employment and Follow-on Sustainn.</li> <li>Continue robotic air/ground sample collection improvements; compl autonomous ground and airborne debris collection capabilities in con.</li> <li>Continue development of a fieldable standoff active interrogation sy shielded nuclear material.</li> <li>Continue to perform field demonstrations of new detector technolog mountable detector systems, to improve the ability of fielded forces to space.</li> <li>Continue to improve performance of new detector materials, imagin through rigorous laboratory and field testing.</li> <li>Continue expanding the functionality of the Mobile Field Kit – Radiol awareness and mission review to current and future suites of sensors.</li> <li>Investigate capability gaps and opport</li></ul>	and low-power real-time secondary dosimeter to prent on a real-time primary dosimeter providing beta, of technologies for replacement of helium-3 neutron desis to determine the location of a radiological source. Itions to the Joint Semi-Automated Forces (JSAF) to GAF environment, an integrated, accurate, environment on can be studied in tandem.  Immonstrate, and field (prototype) upgraded technical MINIKIN ECHO) and debris sample collection, sample port development of technical conclusions.  Indicate weapon yields by investigating alternative profielding prototype capabilities.  TNF) Joint Capability Technology Demonstration (JCM) and activities.  Interest development and prototype fielding of enhanced junction with completion of the NTNF JCTD.  Instem for standoff detection and warning of hidden are its for handheld detectors, distributed sensors, and to detect, locate, and identify nuclear materials in the grand spectroscopy systems, and signals analysis may logical (MFK-R) by increasing radiological situational is.  In detection technology for treaty monitoring and veriforototypes and design packages to assist operational to standoff experiments with the Photonuclear Inspection in the Ph	ovide a gamma, stectors. ol ent where le oratory ompt CTD) and semi- nd vehicle battle nethods fication. I users.			

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 15 of 36

R-1 Line #28

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thr	eat Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat	PROJECT RF: Detect		logy	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<ul> <li>Establish the Integrated Standoff Inspection System (ISIS) as an A Continue development of a large standoff, directionally oriented, m scattering accelerator) source for integration with an active interrogation by the New Strategic Arms Reduction Treaty (START).</li> <li>Demonstrate Spiral I of the Arms Control Enterprise System (ACES movements and inspection operations.</li> <li>Complete Spiral II of ACES that addresses production facilities and complete Phase I near source strong motion-small scale tests and yield and evasive testing.</li> <li>Complete the Analysis of Alternatives for the Arms Control Enterprise Initiate Phase I near source strong motion-small scale tests and higher tests.</li> <li>Begin exploring technologies for man portable detection and analy Demonstrate field portable gamma ray and neutron detection systems it ests.</li> <li>Start experimental assessment of advanced concepts for warhead Initiate upgrade analysis system for radioactive noble gases to detection complete operational characterization of the imaging and high spesiationary radiological detectors.</li> <li>Begin development of the next generation NIMBLE ELDER networn Begin operational characterization of the emerging radiological action.</li> <li>Continue development of NIMBLE ELDER maritime detection capation continue development of NIMBLE ELDER maritime detection capation continue development of the Proce protection improvement for NIMBLE Continue development acceptance of DTRA developed detection conduct NIMBLE ELDER evaluation exercises assessing radiolog Level (TRL) 3, 4, 5 and 6 levels of development against the approve Begin transitioning ground robotic sample collection capability to a continue testing and evaluation nuclear forensics sample collection conduct a "track 2" dialog between the US National Academy of Stransparency measures for arms control.</li> </ul>	counting and assessment for Future START. ect underground nuclear explosions for CTBT. ect underground nuclear explosions for CTBT. ect ral resolution systems for man portable, vehicle bor technologies. ive detection prototypes. When ELDER detection equipment. editable ELDER capability gaps. program of record. n procedures through demonstrations and exercises.	e follow- of low esting. nuclear			

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 16 of 36

R-1 Line #28 **Volume 5 - 590** 

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Three	eat Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat	PROJECT RF: Detect	tion Techno	logy	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
- Conduct an investigation of technology needs and international par Future Multilateral START treaty.	tnerships opportunities for technology development for	or a			
FY 2013 Plans:  - Continue design and fabrication of prototype passive detection syst material; test and characterize developmental prototype passive detection. Continue to develop and demonstrate alternative neutron detection. Continue to test, verify, assist with validation, and use additions to to provide nuclear detection simulation capability into the JSAF envir Concept of Operations (CONOPS) and physics of nuclear detection. Continue to perform field demonstrations of new detector technolog mountable detector systems, to improve the ability of fielded forces to space.  - Continue development of a large standoff, directionally oriented, moscattering accelerator) source for integration with an active interrogated accelerator. Source for integration with an active interrogated begin to exploit all-source nuclear threat signatures and characteristic reduce the occurrence of false alarms.  - Continue to develop, accelerate development where appropriate, decapabilities for post-detonation prompt diagnostics (under DISCREE collection, sample analysis, modeling to support nuclear device reconconfidence in technical nuclear forensics (TNF) conclusions. This indicence in technical nuclear forensics (TNF) conclusions. This indicence is significantly shorten the timeline from weeks to days. Continue development of methods to rapidly determine post-event alternative prompt nuclear weapons effects, effects on the environmental continue to improve performance of new detector materials, imaging through rigorous laboratory and field testing.  - Continue expanding the functionality of the Mobile Field Kit. – Radio awareness and mission review to current and future suites of sensor. Continue transitioning multiple near term technologies to generate performances of the Arms Control Enterprise System (ACES) telemetry.	ection systems  technologies for replacement of helium-3 neutron dethe Joint Semi-Automated Forces (JSAF) tool intender onment, an integrated, accurate, environment where can be studied in tandem.  gies for handheld detectors, distributed sensors, and to detect, locate, and identify nuclear materials in the concenergetic gamma (e.g. laser Wakefield/inverse Cotton system.  Stics to improve probability of nuclear threat detection emonstrate, and field (prototype) upgraded technical T OCULUS and MINIKIN ECHO) and debris sample instruction, and forensics data to lower uncertainties/iscludes development of new debris collection and field activity level samples and the ability to collect/analyzis.  Inuclear weapon yields and reaction history by investigent, and developing/fielding prototype capabilities. In an and spectroscopy systems, and signals analysis methodical (MFK-R) by increasing radiological situational section to a new O&M maintenance contract.	etectors. ed the vehicle battle ompton and and encrease analysis te short-gating methods I users.			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat F	Reduction Agency	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603160BR: Counterproliferation Initiatives	RF: Detecti	on Technology	
BA 3: Advanced Technology Development (ATD)	- Proliferation, Prevention and Defeat			

P. Accomplishments/Planned Programs (\$ in Millians)	EV 2044	EV 2042	EV 2042
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
- Conduct a warhead imaging demonstration at an NNSA nuclear weapons facility.			
- Conduct a field demonstration of production signatures for the fissile material cutoff treaty.			
- Demonstrate the ability to simulate Underground Test (UGT) Electromagnetic Pulse (EMP) signatures in a field experiment in			
partnership with NNSA.			
- Continue development of the next generation NIMBLE ELDER network technologies.			
- Continue operational characterization of the emerging radiological active detection prototypes.			
- Continue development of the Force protection improvement for NIMBLE ELDER detection equipment.			
- Continue development of NIMBLE ELDER maritime detection capabilities.			
- Conduct NIMBLE ELDER evaluation exercises assessing R/N detection technology at the TRL 3, 4, 5, & 6 levels of development			
against the approved NIMBLE ELDER capability gaps.			
- Accelerate the development of non-radiological detection S&T projects.			
Accomplishments/Planned Programs Subtotals	77.472	77.784	76.298

## C. Other Program Funding Summary (\$ in Millions)

		•	FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	<b>FY 2017</b>	<b>Complete</b>	<b>Total Cost</b>
• 23/0602718BR: WMD Defeat	43.697	49.677	44.998		44.998	47.223	47.722	48.417	49.330	Continuing	Continuing
Technologies											

## **D. Acquisition Strategy**

Continue to implement the approved CWMD SEARCH Modernization Strategy for the transition of S&T projects to DOD programs of record at the Milestone A decision for rapid capability fielding.

### **E. Performance Metrics**

Conduct/support end-to-end National Technical Nuclear Forensics capabilities exercise and supporting demonstration(s).

Successfully develop data integration capability with future interagency comprehensive, all domain weapons of mass destruction detection architecture.

Continue to develop upgraded technologies for sample collection, sample analysis, and data analysis; develop plan for faster diagnostics based on technology demonstrations; formulate program direction for advanced forensic sampling concepts.

Successful operational development and acceptance of transitional detection technologies.

Successful testing of the prototype components of a large area gamma detection system.

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

**UNCLASSIFIED** 

Page 18 of 36 R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency  DATE: February 2012									
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives	PROJECT RF: Detection Technology							
BA 3: Advanced Technology Development (ATD)	- Proliferation, Prevention and Defeat	Ta : Bottodion roomloidgy							
Transition of next-generation detection systems.									

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Defer	nse Threat F	Reduction Agency					DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)					R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initial - Proliferation, Prevention and Defeat				PROJECT RG: Advanced Energetics & Counter WMD Weapons			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
RG: Advanced Energetics & Counter WMD Weapons	18.273	15.186	20.682	-	20.682	21.540	21.780	22.487	23.212	Continuing	Continuing	

#### A. Mission Description and Budget Item Justification

The Counter Weapon of Mass Destruction Hard Target Defeat (CWMD HTD) Weapons Development project develops, matures, and demonstrates innovative kinetic and non-kinetic weapon capability for the physical or functional defeat of WMD agents, processes, and support networks with a minimum of collateral effects from incidental release of agent. This is directly linked to the 2010 Quadrennial Defense Review (QDR) priority objectives to prevent and deter conflict and prepare to defeat adversaries and succeed in a wide range of contingencies, and the key missions of deter and defeat aggression in anti-access environments; and prevent proliferation and counter weapons of mass destruction. It does so through the systematic identification and maturation of advanced technologies capable of defeating WMD agents or agent based processes, then integrating those technologies into the weapons and delivery systems most relevant to the COCOMs' WMD Defeat CONOPS for their AOR. The primary focus of current efforts is defeating an adversary's WMD capability protected in the confines of hardened and protected bunker and tunnel facilities. Included in this program is the development of offensive defeat capabilities, WMD agent/agent-based process simulants, test infrastructure, and sampling capability required for effective development, testing, and evaluation of the next generation capability as well as the advanced modeling and simulation necessary for ensuring optimum weapon solutions are achieved based on this technology. The program addresses requirements delineated in the QDR and Strategic Planning Guidance as codified in Joint Capability Integrated Development (JCID) documents, Service requirements documents, and COCOMs and Agency Priority Lists for lethal and non-lethal C-WMD capability. The efforts contained in the program further develop, mature, and demonstrate technology and weapon system concepts that greatly enhance the warfighters' capability to defeat the spectrum of weapons of mass destruction (WMD) in hard and deeply

The program's investment approach is based on a strategic top-down analysis of threat vulnerabilities and aligned with stated organizational core competencies and lines of operations aimed at the defeat of (1) the chemical, biological, radiological, and nuclear (CBRN) threat materials, (2) the ability to deliver the same, and (3) the support networks, both physical and non-physical, enabling both. The program places a high priority on understanding, characterizing, and validating potential weapon effects within some mathematical confidence as it relates to the unintended release of hazardous threat materials. Our end-state is to provide COCOMs with accurate and timely WMD defeat expertise, tailored technologies, and customized solutions that provide offensive weapons and capabilities to combat WMD in any target while mitigating collateral contamination effects. Without these capabilities our nation cannot effectively hold at risk our adversaries' WMD capabilities thus giving them strategic advantage.

The increase from FY 2012 to FY 2013 is predominately due to increased investment in Counter WMD Hard Target Defeat Weapons Development to mature and demonstrate innovative kinetic and non-kinetic weapon capability for the physical or functional defeat of the WMD structures, functions, and/or the agents themselves with a minimum of collateral effects from incidental release of agent.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: RG: Advanced Energetics & Counter WMD Weapons	18.273	15.186	20.682	

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 20 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Thre	at Reduction Agency		DATE: Fe	bruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat	PROJECT RG: Advar Weapons		nergetics & Counter WM		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013	
<b>Description:</b> Project RG develops advanced technologies and weap weapon systems.	on concepts and validates their applicability as coun	ter WMD				
FY 2011 Accomplishments: - Completed Integrated Precision Ordnance Delivery System (IPODS Research Laboratory (AFRL) laser radar seeker technology risk redu - Evaluated IPODS proposals for tunnel defeat, selected contractors, Component Test Completed IPODS Phase IIA: Interim Design Review with both contractors.	ction testing for IPODS. and initiated Phase II: Preliminary Development and					
<ul> <li>Continued work on improving the ability of computer models that she characteristics are built into those models; added other capabilities in that destroy WMD by means other than detonation.</li> <li>Initiated research and development of a capability that will allow the while minimizing the spread of contamination.</li> <li>Finalized Modular Autonomous Countering WMD System (MACS) (maturation efforts for complex tunnel defeat.</li> <li>Advanced the development of a diagnostic tool that improves upon WMD.</li> <li>Demonstrated MACS critical component technologies in preparation demonstrations.</li> <li>Conducted small-scale tests and used the data to improve compute some other means.</li> <li>Continued development of weapons payloads that are capable of deagent.</li> </ul>	e U.S. to attack WMD in 'soft' targets like surface structure. Concept Development Studies and initiated technology the ability to measure the effects of new weapons the for component and system integration and testing/er models of weapons that destroy WMD by exploding estroying large amounts of WMD chemical and biological and biologi	gy at defeat g or by gical				
- Refined an advanced wireless sensor for use in Counter-WMD wea environments, which will allow improved weapons development and the Conducted full-scale test to investigate the effects that high-explosive make WMD agents in order to better understand and develop weaponer Completed work on investigating the damage effects that high-power research and development of high-powered microwave weapons that a Conducted Counter Electronics High Power Microwave Advanced No Demonstration (JCTD) ground effects testing against representative No	testing. ve counter-WMD weapons have on the equipment us ns to use against WMD production sites. ered microwaves have on electronics in order to guic t can be used against WMD process equipment. Missile Project (CHAMP) Joint Concept Technology	sed to				

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Three	eat Reduction Agency		DATE: Feb	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat	PROJECT RG: Advai Weapons		tics & Counte	er WMD
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
- Provided support to the Air Force Massive Ordnance Penetrator (M	IOP) Quick Reaction Capability (QRC) efforts.				
FY 2012 Plans:  - Develop IPODS preliminary Hardware Design and Software Archite - Continue work on improving the ability of computer models that she characteristics are built into those models.  - Conduct computerized fit checks on F-15E, B-52, and B-2 aircraft of tunnel testing.  - Examine alternate payload candidates for potential integration into - Further advance the development of a diagnostic tool that improved defeat WMD.  - Initiate development of MACS system and concept of operation are - Begin development of a capability that will allow the US to attack With the spread of contamination.  - Develop initial MACS prototype to demonstrate design concepts will - Integrate Kinetic Fireball sub-munitions into warhead.  - Conduct High Power Microwave disruption and forensics testing.  - Complete Counter Electronics High Power Microwave Advanced M Demonstration (JCTD) Operational Utility Assessment against a WM	ow weapons effects so that the WMD agent defeat carriage platforms and perform scale model IPODS was IPODS baseline design. Is upon the ability to measure the effects of new weap chitecture.  If we weapons is upon the ability to measure the effects of new weapons in the ability to measure the effects of new weapons in the content of the content is upon the ability to measure the effects of new weapons in the content is upon the ability to measure the effects of new weapons in the content is upon the content in the content in the content in the content is upon the content in the conten	ons that			
FY 2013 Plans:  - Continue improvements for defeat of WMD in soft targets.  - Continue maturing diagnostic capability to meet emerging needs ar  - Complete Heated And Mobile Munitions Employing Rockets (HAMI design, critical component testing, and payload subscale bio defeat t  - Conduct MACS Underground Communication proof-of-principle der  - Complete IPODS Phase II Preliminary Design.  - Initiate IPODS Phase III, Detailed Development & System Level Te  - Issue MACS Phase III First Generation System Concept Request for	MER) Advanced Technology Demonstration (ATD) watests monstration in a realistic environment.	eapon			
		Subtotals	18.273	15.186	20.6

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED Page 22 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat F	Reduction Agency	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603160BR: Counterproliferation Initiatives	RG: Advance	ced Energetics & Counter WMD
BA 3: Advanced Technology Development (ATD)	- Proliferation, Prevention and Defeat	Weapons	

# C. Other Program Funding Summary (\$ in Millions)

		-	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<b>Total</b>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• 23/0602718BR: WMD Defeat	18.432	17.771	14.645		14.645	14.750	13.595	13.521	14.004	Continuing	Continuing
Technologies											

## D. Acquisition Strategy

Not Applicable

## **E. Performance Metrics**

Evaluate weapon system component technologies required for development of at least one new capability to counter WMD in tunnels during the FYDP to TRL 4/5.

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 23 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justi	nse Threat F	Reduction Agency					<b>DATE:</b> February 2012				
APPROPRIATION/BUDGET ACTIV		R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test	PE 0603160	DBR: Counte	erproliferation	n Initiatives	RI: Nuclear Survivability						
BA 3: Advanced Technology Develop	oment (ATD)			- Proliferation, Prevention and Defeat							
COST (¢ in Milliana)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
RI: Nuclear Survivability	15.702	6.985	6.129	-	6.129	6.654	6.571	6.712	7.104	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Nuclear Survivability project develops and demonstrates Radiation Hardened Microelectronics (RHM) for nuclear hardening and survivability of Department of Defense's (DoD) systems and provides for the execution of force-on-force evaluations and nuclear weapons surety efforts to enhance the protection of nuclear resources.

The RHM program responds to DoD space and missile system requirements for RHM and photonics technology to support mission needs. This program develops and demonstrates radiation-hardened, high performance prototype microelectronics to support the availability of RHM and photonics for DoD missions from both private sector and government organizations.

Mighty Guardian Force-on-Force Tests aid in satisfying requirements for the Services by providing denial of access to nuclear resources in all environments; operational, storage and in transit. The results of the evaluations identify security vulnerabilities to weapons systems that are then addressed through targeted application of research and development projects requested by the resource owners. These projects are designed to demonstrate, test, and evaluate security enhancement systems prior to service procurement.

Nuclear Weapons Surety, as tasked by the DoD Nuclear Weapon System Safety Program, provides Combatant Commands (COCOMs), Services, and Joint Chiefs of Staff with technical analyses, studies, research, and experimental data necessary to identify and quantify risks of plutonium dispersal and Loss of Assured Safety due to accidents, fires or natural causes during peacetime operations of the nation's nuclear weapon systems. Additionally, this will provide studies necessary to quantify the probability of success against targeted terrorist attacks on DoD facilities, while leveraging these risk assessment advances. It also provides new and innovative technologies for the protection of nuclear resources in support of COCOMs and Services.

The decrease from FY 2012 to FY 2013 represents an efficiency reduction to contract support services as part of the DOD reform agenda to reduce reliance on service support contractors.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RI: Nuclear Survivability	15.702	6.985	6.129
<b>Description:</b> Project RI provides the capability for DoD nuclear forces and their associated control and support systems and facilities in wartime to avoid, repel, or withstand attack or other hostile action, to the extent that essential functions can continue or be resumed after the onset of hostile action.			
FY 2011 Accomplishments: - Initiated 90nm Application Specific Integrated Circuit (ASIC) design process to qualify for recognized usage.			

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 24 of 36

R-1 Line #28

Exhibit N-ZA, No Fac F Toject dustilled ion: 1 b 2010 belense Third	eat Reduction Agency		DATE: Feb	ruary 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)		ROJECT : Nuclear	CT ear Survivability				
B. Accomplishments/Planned Programs (\$ in Millions)		F	FY 2011	FY 2012	FY 2013		
<ul> <li>Developed initial Technology Computer-Aided Design modeling for</li> <li>Conducted Mighty Guardian XIV Force-On-Force test to evaluate in Whiteman AFB, MO.</li> <li>Initiated planning for Mighty Guardian XV Force-on-Force test to evaluate planning Bay, GA.</li> <li>Conducted research, development, test, and evaluation on physical nuclear stockpile as determined by the Services.</li> </ul>	uclear security policy as it applies to bomber generation raluate nuclear security policy for waterfront restricted are	eas at					
FY 2012 Plans:  - Develop 90nm Radiation Hardening By Design (RHBD) qualificatio  - Continue investigation of 45nm RHBD mitigation techniques on a te  - Demonstrate 45nm RHBD Test Circuit Vehicle.  - Demonstrate initial 90nm radiation hardened 64Mb Static Random  - Plan and conduct Mighty Guardian XV Force-on-Force test to evaluate Base Kings Bay, GA.  - Initiate planning for Mighty Guardian XVI Force-on-Force test to even (PNAF) and On-Base Convoys at a location still to be determined.  - Conduct research, development, test, and evaluation on physical soluction stockpile as determined by the Services.	echnology characterization vehicle.  Access Memory (SRAM).  Late nuclear security policy for waterfront restricted areas  aluate nuclear security policy for Prime Nuclear Airlift For	rces					
FY 2013 Plans:  - Transition 90nm ASIC Qualified Manufacturer List radiation harden  - Transition 90nm radiation hardened 64Mb Static Random Access N  - Develop 45nm RHBD Product Demonstration Vehicle (PDV)  - Conduct engineering studies in support of and continue planning M	Memory (SRAM) to user community ighty Guardian XVI Force-on-Force test to evaluate nucle Convoys at a location still to be determined.						
- Conduct research, development, test, and evaluation on physical s nuclear stockpile as determined by the Services.	ecurity technologies designed to enhance protection of tr						

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 3: Advanced Technology Development (ATD)

PROJECT
PE 0603160BR: Counterproliferation Initiatives
- Proliferation, Prevention and Defeat

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
Line Item	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• 23/0602718BR: WMD Defeat	18.525	17.503	18.810		18.810	18.965	20.142	21.428	21.490	Continuing	Continuing
Technologies											

## D. Acquisition Strategy

Not Applicable

#### **E. Performance Metrics**

Achieve Radiation Hardened and Radiation Hardened by Design (RHBD) 90nm Application Specific Integrated Circuit design flow capability.

Successful completion of Mighty Guardian exercises is measured by completing all necessary planning and logistics steps, troops arriving when required, training completed, execution of the exercise, redeployment of forces, and publishing a final report within 90 days of completion.

Successful completion of research, development, test, and evaluation for physical security technologies is determined by performers completing the project on-time and within budget, all stated tasks in the statement of work/objectives being met, proper reporting and coordination of decision areas, receipt of final reports closing out the project, and transitioning the project to the requesting Service.

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 26 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency  Date of the project Justification of the project									DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY  0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)  R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat					ical Effects						
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
RL: Nuclear & Radiological Effects	2.661	-	-	_	-	_	_	-	_	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Nuclear and Radiological Effects project develops nuclear and radiological assessment modeling tools to support military operational planning, weapon effects predictions, and strategic system design decisions; consolidate validated Defense Threat Reduction Agency modeling tools into net-centric environment for integrated functionality; predict system response to nuclear and radiological weapons producing electromagnetic, thermal, blast, shock and radiation environments - key systems include Nuclear Command and Control System, Global Information Grid, missiles, structures, humans and environment; provide detailed adversary nuclear infrastructure characterization to enhance counterforce operations and hazard effects; conduct analyses in support of nuclear and radiological Science and Technology and address the priority needs of the Combatant Commands and the Department of Defense, develop and provide electromagnetic pulse assessment capabilities to support national and military operational planning, weapon effects predictions, and national strategic systems designs; and develop foreign nuclear weapon outputs. Related funding for this project can be found in the WMD Defeat Technologies: 0602718BR, budget exhibit.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RL - Nuclear & Radiological Effects	2.661	-	-
<b>Description:</b> Project RL develops nuclear and radiological assessment modeling tools to support military operational planning, weapon effects predictions, and strategic system design decisions. Related funding for this project can be found in the WMD Defeat Technologies: 0602718BR, budget exhibit.			
FY 2011 Accomplishments:  - Updated Nuclear Weapon Effects Database System (NWEDS) development for the U.S. Army Nuclear and Combating WMD Agency (USANCA).  - Updated Probability of Damage Calculator (PDCalc) development for USSTRATCOM.  - Updated Nuclear Capabilities Services (NuCS) in DTRA's net-centric architecture.  - Published two volumes of Journal of Radiation Effects Research and Engineering.			
Accomplishments/Planned Programs Subtotals	2.661	-	-

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• 23/0602718BR: WMD Defeat	15.891	25.343	25.752		25.752	23.904	25.202	25.539	25.964	Continuing	Continuing
Technologies											

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 27 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603160BR: Counterproliferation Initiatives	RL: Nuclear & Radiological Effects
BA 3: Advanced Technology Development (ATD)	- Proliferation Prevention and Defeat	

## C. Other Program Funding Summary (\$ in Millions)

		-	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<b>Total</b>	FY 2014	FY 2015	<b>FY 2016</b>	FY 2017	Complete	<b>Total Cost</b>
• 118/0605000BR: WMD Defeat	7.826	5.888	5.749		5.749	5.995	6.077	8.359	8.541	Continuing	Continuing
Capabilities											

## D. Acquisition Strategy

Not Applicable

#### **E. Performance Metrics**

Complete transition of all hazard source terms to the Chemical and Biological (Chem-Bio) Defense Program's Joint Effects Model (JEM) Block II enhancing our ability to predict hazards associated with weapons of mass destruction.

Provide Department of Defense the ability to predict the survival and mission impact of military critical systems exposed to nuclear weapon environments within acceptability criteria defined during the model accreditation process.

Complete new version of United States Strategic Command (USSTRATCOM) official strategic targeting code used to determine the probability of damage from nuclear weapons.

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 28 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Just	nse Threat F	eduction Agency					DATE: February 2012					
					OMENCLAT	TURE		PROJECT				
0400: Research, Development, Test	& Evaluation	n, Defense-V	Vide	PE 0603160	DBR: Counte	erproliferation	n Initiatives	RM: WMD E	Battle Manag	gement		
BA 3: Advanced Technology Develop	oment (ATD)	- Proliferation, Prevention and Defeat										
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To		
COST (\$ III WIIIIOTIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost	
RM: WMD Battle Management	29.143	22.303	22.503	-	22.503	22.527	22.937	23.700	24.328	Continuing	Continuing	

### A. Mission Description and Budget Item Justification

The Weapons of Mass Destruction (WMD) Battle Management project develops, integrates, demonstrates and transitions emerging/innovative technologies to support the counter WMD Mission. This activity specifically focuses on two critical components in countering the WMD threat:

Develop end-to-end planning capabilities including weaponeering tools to aid the Combatant Commander's targeting and weapons officers in choosing the proper weapon, fuze, and employment parameters to optimize the defeat of WMD and related hard targets. Deliver modernized, validated and fast running attack planning tools and integrating software. Leverage attack planning tools to support force protection planners and vulnerability assessment teams.

Develop, integrate, demonstrate and transition emerging/innovative technologies to provide the warfighter with an enhanced near real-time combat and battle damage assessment capability. Capability is achieved through the development of Unmanned Aerial Systems (UAS) and weapon-based sensors, platforms, taggants, seekers and other innovative technologies to; remotely sense, identify, track and target WMD-related threats; perform battle damage assessment/indication of strikes against these threats; and locate, track, collect, detect, selectively identify, and characterize Chemical Weapon and Biological Weapon aerosol agents released during these WMD counterforce strikes.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RM: WMD Battle Management	29.143	22.303	22.503
<b>Description:</b> Project RM provides (1) full-scale testing of counter WMD weapon effects, sensor performance, and weapon delivery optimization, (2) weapon effects modeling, and (3) the Defense Threat Reduction Agency Experimentation Lab.			
FY 2011 Accomplishments:			
- Conducted development testing of the WMD Aerial Collection System (WACS) on the SHADOW unmanned aerial vehicle (UAV).			
- Performed annual cycle of requirements collection, challenge proposals, resource allocation, and tech support through High			
Performance Computing (HPC) effort.			
- Supported Massive Ordinance Penetrator (MOP) program with provision of high priority, high performance computing service for			
reduced time to solution for time-critical calculations (~6,000,000 total computer hours).			
- Secured two of the 14 DoD Challenge Proposals for improved quality of service in time limit, allowable job size, and job			
throughput on DoD high performance computers for DTRA research and development (R&D) efforts.			
- Provided 23 Targeting and Weaponeering Analysis Cell (TWAC) academic sessions, built 200+ targeting recommendation			
packages (TRPs) supporting Combatant Command (COCOM) requirements, and provided optimized dual delivery (ODD)			
weaponeering support.			

feration, ... UNCLASSIFIED
Page 29 of 36

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threa	at Reduction Agency		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives	PROJECT	Battle Man	agement	
BA 3: Advanced Technology Development (ATD)	- Proliferation, Prevention and Defeat				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<ul> <li>Delivered a specialized Integrated Munitions Effects Assessment (IN to support the fielding and operational planning of MOP.</li> <li>Delivered Vulnerability Assessment Protection Option (VAPO) version vulnerability analysis, nuclear contouring, and suicide bomber modeling. Enhanced Wide Area Aerial Surveillance technology to produce persistences from Chemical, Biological, Radiological, Nuclear and Explosive.</li> <li>Demonstrated the capability to integrate sensor data into the Airborn CBRN detection capability on a wide-area surveillance platform.</li> <li>Developed and integrated miniaturized chemical and radiological selection.</li> <li>Developed Counter-WMD Persistent Intelligence, Surveillance, and of data from multiple sources that provide activity-based intelligence.</li> <li>Continued development of a near real-time Battle Damage Assessment testing of the BDA system sensor canisters.</li> </ul>	on 5.0 with critical infrastructure protection modelinging. sistent coverage of WMD targets to predict and courses (CBRNE). The Persistent Imagery exploitation (APIX) Viewer to the process of the proce	and hter provide he fusion			
FY 2012 Plans:  Continue to support the Combatant Commands with the further refin technologies that will enhance the capability of rapid response in regal Conduct demonstration of the WMD Aerial Collection System (WACS and to confirm that WACS fulfills CBRN requirements for the Shadow - Initiate the design of WACS prototypes for the U.S. Army that will me - Develop and demonstrate novel tag technologies for C-WMD Tag, T - Conduct an operationally representative flight test of a near real-time strikes.  Deliver Integrated Munitions Effects Assessment 2012 with site-leve - Provide Targeting and Weaponeering Analysis Cell academic sessic Combatant Command (COCOM) requirements.  Begin the effort to integrate first principle nuclear fallout modeling co prediction models.  FY 2013 Plans:  Continue to support the Combatant Commands with the further refin technologies that will enhance the capability of rapid response in regal - Continue the effort to integrate first principle nuclear fallout modeling - Provide TWAC academic sessions and targeting recommendation prequirements.	ards to next generational reach back capabilities. S) to support technology assessment of system ope Unmanned Aircraft System (UAS). Seet the Army's end-state, fully integrated WACS caparack and Locate Program. See Battle Damage Assessment (BDA) system for constant attack capability. Sons and targeting recommendation packages supposed into Graphic User Interface (GUI) based hazard sement and development of operation center critical ands to next generational reach back capabilities. It codes into GUI-based hazard prediction models.	ability. ventional rting			

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 30 of 36

R-1 Line #28 **Volume 5 - 604** 

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat F		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603160BR: Counterproliferation Initiatives	RM: WMD	Battle Management
BA 3: Advanced Technology Development (ATD)	- Proliferation, Prevention and Defeat		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
- Deliver VAPO version 6.0 with improved prediction of chemical/biological threats; improved explosive effects, progressive			
collapse, and infrastructure modeling; incorporation of the U.K.'s Human Injury Prediction code; and new forward operating base			
modeling capability to support combatant commands.			
- Demonstrate miniaturized chemical and radiological sensors with radio frequency tags designed to enhance counter-WMD			
persistent surveillance, intelligence and reconnaissance.			
- Complete system assessment of the Phase 2 conventional strike BDA system, to include the Chemical, Acoustic, Nuclear and			
Seismic sensor capabilities, mesh networking with two or more hubs, and relay of BDA data via a long haul (satellite) interface and			
display on a warfighter interface.			
- Complete the Autonomous Reconnaissance Infrared Electro-optical Loitering (ARIEL) vehicle final design, in support of			
combating WMD long range sensor battle damage assessment.			
- Complete WACS (U.S. Navy variant) Preliminary Design.			
- Develop DTRA Spiral Sensors for CWMD Tag, Track and Locate (TTL) Program.			
Accomplishments/Planned Programs Subtotals	29.143	22.303	22.503

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• 23/0602718BR: WMD Defeat	18.255	13.761	18.969		18.969	19.066	19.988	20.593	20.729	Continuing	Continuing
Technologies											

## D. Acquisition Strategy

Not Applicable

### **E. Performance Metrics**

Standoff detection range of Weapons of Mass Destruction (WMD) reconnaissance system.

Number of new capabilities delivered to Combatant Commands (COCOMs).

Number of weaponeering solutions delivered to COCOMs.

Increase automation of the analytic process used by Defense Threat Reduction Agency Reachback, DTRA Operations Center and the U.S. Strategic Command Center for Combating WMD.

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED

Page 31 of 36 R-1 Line #28

Exhibit R-2A, RDT&E Project Just		DATE: February 2012									
APPROPRIATION/BUDGET ACTIV	R-1 ITEM N	IOMENCLA <sup>*</sup>	TURE		PROJECT	PROJECT					
0400: Research, Development, Test	PE 060316	0BR: Counte	erproliferation	n Initiatives	RR: Test In	RR: Test Infrastructure					
BA 3: Advanced Technology Develo	- Proliferation	on, Preventid	on and Defea	at							
COST (¢ in Milliana)	FY			FY 2013	FY 2013					Cost To	
COST (\$ in Millions) FY 2011 FY 2012 Base				ОСО	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
RR: Test Infrastructure	1.790	-	-	-	-	-	-	-	-	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

The Test Infrastructure project provides a unique national test bed capability for simulated Weapons of Mass Destruction (WMD) facility characterization, weapon-target interaction, and WMD facility defeat testing to respond to operational needs by developing and maintaining test beds used by the Department of Defense (DoD), the Services, the Combatant Commanders, and other federal agencies to evaluate the implications of WMD, conventional, and other special weapon use against U.S. military or civilian systems and targets. It leverages fifty years of testing expertise to investigate weapons effects and target response across the spectrum of hostile environments that could be created by proliferant nations or terrorist organizations with access to advanced conventional weapons or WMD (nuclear, biological and chemical). The project maintains testing infrastructure to support the testing requirements of warfighters, other government agencies, and friendly foreign countries on a cost reimbursable basis. It creates testing strategies and a WMD Test Bed infrastructure focusing on the structural response of buildings and Hard & Deeply Buried Targets that house nuclear, biological, and chemical facilities. It provides support for full and sub-scale tests that focus on weapon-target interaction with fixed soft and hardened facilities to include aboveground facilities, cut-and-cover facilities, and deep underground tunnels. This capability does not exist anywhere else within the DoD and supports the counterproliferation pillar of the National Strategy to Combat WMD. Related funding for this project can be found in the WMD Defeat Technologies; 0602718BR, budget exhibit.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: RR - Test Infrastructure	1.790	-	-	
<b>Description:</b> Project RR provides a unique national test bed capability for simulated Weapons of Mass Destruction (WMD) facility characterization, weapon-target interaction, and WMD facility defeat testing to respond to operational needs by developing and maintaining test beds used by the Department of Defense (DoD), the Services, the Combatant Commanders, and other federal agencies to evaluate the implications of WMD, conventional, and other special weapon use against U.S. military or civilian systems and targets. Related funding for this project can be found in the WMD Defeat Technologies: 0602718BR, budget exhibit.				
FY 2011 Accomplishments: - Identified and purchased data acquisition systems in support of the tunnel U12u effort at Nevada National Security Site, NV Performed test site remediation at various test beds and test articles on Chestnut Test Site, Kirtland AFB and White Sands Missile Range, NM Procured instrumentation systems for DISTINCT DOLPHIN 2; structural and column collapse testing.				
<ul> <li>Provided construction effort for DISTINCT FOX 2; steep slope attack testing.</li> <li>Invested in data acquisition systems and optics systems in support of DTRA RDT&amp;E test programs.</li> <li>Purchased Chemical/Biological sampler detector devices to support RDT&amp;E Chemical/Biological programs.</li> <li>Acquired instrumentation sequencer and timing and firing equipment to support DTRA RDT&amp;E test programs.</li> </ul>				

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**DATE:** February 2012 **PROJECT** 

FY 2011 | FY 2012 | FY 2013

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603160BR: Counterproliferation Initiatives | RR: Test Infrastructure

BA 3: Advanced Technology Development (ATD)

- Proliferation. Prevention and Defeat

			<b>Programs</b>	s (	<b>\$</b>	in	Millions)	)

- Procured instrumentation for weapons effects phenomenology testing.			
Accomplishments/Planned Programs Subtotals	1.790	-	-

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• 23/0602718BR: WMD Defeat	13.509	21.941	13.782		13.782	14.135	14.414	15.005	15.610	Continuing	Continuing
Technologies											

### **D. Acquisition Strategy**

N/A

#### **E. Performance Metrics**

Number of tests executed safely, i.e., no loss of life or limb, no unintentional significant damage of property. FY11 – No safety issues/incidents during scheduled test events.

Number of tests that are evaluated through the milestone review process.

100% of all tests completing scheduled milestones.

Number of tests that undergo environmental assessment consistent with existing Environmental Impact Statements.

All test executed undergo environmental review consistent with existing Environmental Impact Statements.

FY 10 - 125 Tests

FY 11 - 123 Tests

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... **Defense Threat Reduction Agency** 

UNCLASSIFIED Page 33 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency  DATE: February 2012												
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 3: Advanced Technology Develo	R-1 ITEM N PE 0603160 - Proliferation		rproliferation		PROJECT RT: Target	ECT rget Assessment Technologies  Cost To Complete Total C						
COST (\$ in Millions)	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017		Total Cost			
RT: Target Assessment Technologies	35.047	33.493	31.298	-	31.298	31.883	32.743	33.413	34.139	Continuing	Continuing	

#### A. Mission Description and Budget Item Justification

For some hard and deeply buried targets, physical destruction is neither possible, nor practical, with current conventional weapons and employment techniques. It may be possible, however, to achieve target defeat objectives by denying or disrupting the mission or function of the target facility. Functional defeat, however, requires more information, more detailed analysis of the target. The functional defeat process includes finding and identifying a facility, characterizing its function and physical layout, determining its vulnerabilities to available weapons, planning and executing an attack, assessing damage, and if necessary, suppressing reconstitution efforts and re-attacking the facility. Target Assessment Technologies provides the Combatant Commands and the Intelligence Community with technologies and processes to find and characterize Weapons of Mass Destruction (WMD) targets located in underground facilities and then, in near-real-time, assess the results of attacks against those targets. Overall objectives are to develop new methodologies, processes and technologies for detecting, locating, identifying, physically and functionally characterizing, modeling, and assessing new and existing hard and deeply buried targets to support physical or functional defeat. Extending this activity and applying these processes to WMD time-dependent target characterization and threat analysis presents the next technical challenge. The Target Assessment Technologies project consists of three subordinate and related activities: (1) Targeting and Intelligence Community Technology Development; (2) Find, Characterize, Assess Technology Development; and (3) Counter-WMD Analysis Cell (C-WAC) Technology Support.

The decrease from FY 2012 to FY 2013 is predominately due to decreased investment in Counter-WMD Analysis Cell collaboration with the National Counterproliferation Center (NCPC) and the Intelligence Community.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RT: Target Assessment Technologies	35.047	33.493	31.298
<b>Description:</b> Project RT provides the Combatant Commands and the Intelligence Community with technologies and processes to find and characterize hard and deeply buried targets and then assess the results of attacks against those targets.			
FY 2011 Accomplishments:			
- Added WMD systems and process characterization modeling and assessment capabilities to the Underground Targeting and			
Analysis System (UTAS) functionality for support of the COCOMs and Intelligence Community targeting and weaponeering requirements.			
- Fully integrated models for analysis and assessment of weapons effects on WMD related equipment and systems into UTAS for			
use by the Intelligence Community.			
- Continued target characterization training for the Underground Facility (UGF) and WMD target defeat communities.			
- Designed, developed and tested on-node data fusion to enhance Integrated Sensor System (ISS) surveillance capabilities for			
support of Combatant Commands (COCOMs) and Intelligence Community target characterization and assessment needs.			

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 34 of 36

R-1 Line #28

				UNCLAS	SIFIED						
Exhibit R-2A, RDT&E Project Just	ification: PB	2013 Defens	se Threat Re	eduction Age	ency				DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)  R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat										es	
B. Accomplishments/Planned Pro	grams (\$ in N	(lillions)							FY 2011	FY 2012	FY 2013
<ul> <li>Demonstrated Counter-WMD Anal development processes in response</li> <li>Completed development of the fifth properties associated with undergro</li> </ul>	ysis Cell (C-We to COCOMs of (of eleven pla	/AC) initial c and Intellige	ence Commu	inity counter	WMD requi	rements.		jical		·	
FY 2012 Plans:  - Demonstrate Integrated Sensor Sy USNORTHCOM Rapid Reaction Tu - Demonstrate Integrated Sensor Sy WMD Technologies Directorate's Integrated Sensor Sy WMD Technologies Directorate's Integrated Sensor Sy WMD Technologies Direc	nnel Detection vistem (ISS) se tegrated Techicapability to pocom. Since version that the target analysintegrates analysistems.	n (R2TD) Joi ensor mission nology Dem perform strat combines b sis. alysis of facil	int Concept on planning an onstration 1 egic level an uildings, bur ities and WM	Technology nd data fusion (ITD-1). Inalysis of adv Inkers and tur  ID functiona	Demonstration capabilities versary WMI nnels into a cal process manual process ma	on (JCTD). es as part of D programs common ope	the DTRA ( in support o	f the			
<ul> <li>Demonstrate the initial version of the Validate C-WAC Nuclear Fuel Cycen Demonstrate an intermediate analyof biological weapons (BW) by potential Deliver UTAS modeling capability and Continue target characterization terror</li> </ul>	le model for si ytical tool for th ntial adversarion for support of	upport of CC he character es. IC and COC	OCOM and IC rization of du COM target n	C counter-Wilal-use techroetwork syste	MD analysis nologies rela ems analysis	ted to the po		elopment			
				Accor	nplishment	s/Planned P	rograms S	ubtotals	35.047	33.493	31.298
C. Other Program Funding Summ.  Line Item  23/0602718BR: WMD Defeat Technologies	<b>ary (\$ in Millio</b> <b>FY 2011</b> 0.845	FY 2012 0.000	FY 2013 Base 0.000	FY 2013 OCO	FY 2013 Total 0.000	<b>FY 2014</b> 0.000	<b>FY 2015</b> 0.000	<b>FY 201</b>		Cost To Complete Continuing	Total Cost
D. Acquisition Strategy Not Applicable											

PE 0603160BR: Counterproliferation Initiatives - Proliferation, ... Defense Threat Reduction Agency

UNCLASSIFIED
Page 35 of 36

R-1 Line #28

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency  DATE: February 2012									
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603160BR: Counterproliferation Initiatives - Proliferation, Prevention and Defeat	PROJECT RT: Target	Assessment Technologies						

#### **E. Performance Metrics**

By the end of FY 2013, increase WMD target characterization capability through successful incorporation of WMD systems and process characterization modeling and assessment capabilities into the UTAS functionality.

By the end of FY 2013, demonstrate capability to remotely determine target geotechnical properties to within 35 percent for use in UTAS calculations.

By the end of FY 2013, improve UTAS analysis of weapons effects on WMD targets through integration of models for analysis and assessment of weapons effects on a broader range of WMD-related equipment.

By the end of FY 2013, demonstrate improved ISS on-node data fusion capability.

By the end of FY 2013, improve WMD development analysis capability through C-WAC modeling and analysis.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Threat Reduction Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605000BR: WMD Defeat Capabilities

BA 5: Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	7.826	5.888	5.749	-	5.749	5.995	6.077	8.359	8.541	Continuing	Continuing
RL: Nuclear & Radiological Effects	7.826	5.888	5.749	-	5.749	5.995	6.077	8.359	8.541	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Weapons of Mass Destruction (WMD) Toolset is the real-time globally accessible net-centric framework which migrates the Defense Threat Reduction Agency (DTRA) chemical, biological, radiological, nuclear, and high explosive (CBRNE) modeling and simulation codes to provide an integrated suite of Combating WMD decision support capabilities. The framework is the only operational CBRNE framework in the world which provides capabilities through web applications, net-centric web services, and stand-alone mobile deployments which are validated and accredited for operational use by International, National, State, and local authorities.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	7.307	5.888	5.749	-	5.749
Current President's Budget	7.826	5.888	5.749	-	5.749
Total Adjustments	0.519	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
Congressional Rescissions	-0.603	-			
Congressional Adds	-	-			
Congressional Directed Transfers	-	-			
Reprogrammings	1.330	-			
SBIR/STTR Transfer	-0.163	-			
FFRDC Reduction	-0.008	-	-	-	-
Economic Assumption Reduction	-0.037	-	-	<u>-</u>	-

## **Change Summary Explanation**

The increase from the previous President's Budget submission in FY 2011 the net effect of the Congressional Rescission, the Federally Funded Research and Development Center (FFRDC) reduction, the Economic Assumption reduction, and a transfer of funding from WMD Defeat Technologies; 0602718BR for increased investment in the Joint Collaborative Analysis Module of the Integrated Weapons of Mass Destruction Toolset (IWMDT).

PE 0605000BR: WMD Defeat Capabilities
Defense Threat Reduction Agency

UNCLASSIFIED
Page 1 of 7

R-1 Line #121

Volume 5 - 611

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Just	Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency											
	APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide					TURE	PROJECT	er & Dodiological Effects				
BA 5: Development & Demonstration (SDD)				PE 0605000	OBR: <i>WMD L</i>	<i>Јегеат</i> Сараг	oiiities	RL: Nuclear & Radiological Effects				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
RL: Nuclear & Radiological Effects	7.826	5.888	5.749	-	5.749	5.995	6.077	8.359	8.541	Continuing	Continuing	
Quantity of RDT&E Articles												

## A. Mission Description and Budget Item Justification

Accomplishments/Diamed Dyangers (¢ in Millians)

Net-Centric Architecture includes three functional areas: 1) Integrated Weapons of Mass Destruction Toolset (IWMDT), 2) IWMDT Codes, and 3) Software Assurance and Certification and Accreditation. The IWMDT functional area develops the architecture, defines and implements the standards to consolidate validated Defense Threat Reduction Agency (DTRA) tools, and through this architecture, enables rapid access for planning, emergency response, and assessment capabilities. These capabilities are used by a wide range of planners, managers, and operational and technical personnel facing the full spectrum of chemical, biological, radiological, nuclear, and high-yield explosives threats. The IWMDT Codes functional area develops analysis and simulation codes, and then integrates the codes into the IWMDT architecture. These efforts are unique to this effort across the Department of Defense (DoD) and directly supports analysis capabilities in the Office of the Secretary of Defense (OSD) Studies and Analysis Group, and Cost Assessment and Program Evaluation (OSD CAPE), US Pacific Command and United States Forces Korea offices, Republic of Korea Ministry of Defense, Ministry of Defense Taiwan, as well as providing unique simulation capabilities to US Joint Forces Command and the Air Force Distributed Mission Operation Center. This sub-project extends research and development to system development and demonstration.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: RL: Nuclear & Radiological Effects	7.826	5.888	5.749	
FY 2011 Accomplishments:  - Deployed IWMDT 3.2 as a common nuclear assessment capability to U.S. Strategic Command (USSTRATCOM), United Kingdom Ministry Of Defence (UK MOD) and Supreme Headquarters Allied Powers Europe (SHAPE), providing the first true collaborative Chemical, Biological, Radiological, Nuclear, and High-yield Explosives (CBRNE) environment between the US at UK in accordance with 1959 International Memorandum Of Understanding.  - Enhanced implementation of Net Centric Enterprise Services messaging and collaboration for use across exercise and operational deployments.  - Enhanced the two primary capabilities in IWMDT 3.3 by integrating Hazard Prediction Assessment Capability (HPAC) 5.0 S Maintenance build within the Consequence Assessment, and Integrated Munitions Effects Assessment (IMEA) 2010 within the Target Support area.  - Integrated IWMDT-SIM and Joint Collaborative Analysis Model (JCAM) into IWMDT 3.3 expanding the IWMDT capabilities at through external systems integration using the web-services capabilities. Each new capability extends the DTRA legacy CBR tools to new training and operational user communities.  - Upgraded COE/NUCS STRATCOM nuclear data sets across the IWMDT framework providing more accurate and scaleable assessments for the nuclear community.	P1 ne areas NE			

PE 0605000BR: WMD Defeat Capabilities
Defense Threat Reduction Agency

UNCLASSIFIED

Page 2 of 7 R-1 Line #121

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605000BR: WMD Defeat Capabilities

RL: Nuclear & Radiological Effects

FY 2011

**DATE:** February 2012

FY 2012

FY 2013

B. Accomplishments/Planned Programs (\$ in Millions)

APPROPRIATION/BUDGET ACTIVITY

BA 5: Development & Demonstration (SDD)

- Migrated NUCS nuclear capabilities into IWMDT 3.2 and 3.3 enabling FY 2012 deployment of the net-centric based nuclear planning and assessment tools.

#### FY 2012 Plans:

- Develop and provide an initial cyberspace capability through internal agency integration efforts.
- Integrate advanced capabilities within the Net-Centric Architecture with the Global Strike Mission.
- Complete and release IWMDT framework version 3.4.

#### FY 2013 Plans:

- Leverage the 4th Qtr FY11 and FY12 successes across USSTRATCOM, the UK and SHAPE, enabling IWMDT to become the primary CBRNE assessment capability within the DTRA Reachback and enabling it to become the single integrated assessment CBRNE capability across DTRA, STRATCOM, UK and U.S. Army Nuclear and Combating WMD Agency (USANCA).

Accomplishments/Planned Programs Subtotals

complishments/Planned Programs Subtotals	7.826	5.888	5.749

## C. Other Program Funding Summary (\$ in Millions)

	• •	<b></b>	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• 23/0602718BR: WMD Defeat	15.891	25.343	25.752		25.752	23.904	25.202	25.539	25.964	Continuing	Continuing
Technologies											
• 28/0603160BR: <i>Proliferation,</i>	2.661	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Prevention, and Defeat											

## D. Acquisition Strategy

The program for IWMDT is executed through a competed Cost Plus Fixed-Fee contract. This contract is a 3-year effort for software development, test, and integration. Follow-on contracts will be competed for award to continue any out-year activities.

#### **E. Performance Metrics**

Demonstrate and provide over 80% of the customer-required CBRNE modeling and simulation capabilities over networks, e.g. Department of Defense Global Information Grid.

Transform 100% of the validated mission-required legacy Defense Threat Reduction Agency CBRNE codes to a net-centric implementation in a process-controlled Verification, Validation, and Accreditation standards-based method.

PE 0605000BR: WMD Defeat Capabilities
Defense Threat Reduction Agency

Page 3 of 7

R-1 Line #121

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Threat Reduction Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)

PE 0605000BR: WMD Defeat Capabilities

RL: Nuclear & Radiological Effects

**DATE:** February 2012

Product Development (	\$ in Millio	ns)		FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Development - IWMDT	C/CPAF	SAIC:San Diego, CA	17.109	3.100	Jan 2012	-		-		-	14.510	34.719	37.949
System Development - NuCS	C/CPFF	Applied Research Associates:Raliegh, NC	4.930	-		-		-		-	0.000	4.930	6.300
System Development - COE	C/CPFF	Titan:Kingstowne, VA	5.535	-		-		_		_	0.000	5.535	7.100
System Development - Component Contracts	C/Various	Various:Various	5.073	-		-		-		-	0.000	5.073	6.800
	•	Subtotal	32.647	3.100		-		-		-	14.510	50.257	58.149

#### Remarks

The "Various" reported reflects multiple contracts, mainly CPFF.

Support (\$ in Millions)	,			FY 2012		FY 2 Ba		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Configuration Management	C/Various	SAIC, ARA, Titan:Various	0.146	0.060	Jan 2012	0.095	Mar 2013	-		0.095	1.353	1.654	2.074
Software Integration	C/Various	SAIC, ARA, Titan:Various	3.100	0.200	Jan 2012	2.510	Mar 2013	-		2.510	1.100	6.910	6.910
Technical Data	C/Various	SAIC, ARA, Titan:Various	0.050	0.573	Jan 2012	0.050	Mar 2013	-		0.050	0.938	1.611	2.300
Engineering Services	C/Various	SAIC, ARA, Titan:Various	1.464	0.503	Jan 2012	0.908	Mar 2013	-		0.908	0.786	3.661	3.727
Accreditation & Certification	C/Various	SAIC, ARA, Titan:Various	0.146	0.420	Jan 2012	0.509	Mar 2013	-		0.509	0.983	2.058	2.058
	-	Subtotal	4.906	1.756		4.072		-		4.072	5.160	15.894	17.069

PE 0605000BR: WMD Defeat Capabilities
Defense Threat Reduction Agency

UNCLASSIFIED
Page 4 of 7

R-1 Line #121

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Threat Reduction Agency

APPROPRIATION/BUDGET ACTIVITY

Mida

**R-1 ITEM NOMENCLATURE** 

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 5: Development & Demonstration (SDD)

PE 0605000BR: WMD Defeat Capabilities

RL: Nuclear & Radiological Effects

**DATE:** February 2012

Test and Evaluation (\$ i	n Millions	)		FY 2	2012	FY 2 012 Ba		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	C/Various	SAIC, ARA, Titan:Various	1.555	0.350	Jan 2012	0.505	Mar 2013	-		0.505	1.300	3.710	5.228
Operational Test & Evaluation	C/Various	SAIC, ARA, Titan:Various	1.555	0.070	Jan 2012	0.398	Mar 2013	-		0.398	0.925	2.948	4.456
		Subtotal	3.110	0.420		0.903		-		0.903	2.225	6.658	9.684

Management Services	lanagement Services (\$ in Millions)			FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	C/Various	SAIC, ARA, Titan:Various	2.296	0.132	Jan 2012	0.234	Mar 2013	-		0.234	2.100	4.762	5.278
Travel	C/Various	SAIC, ARA, Titan:Various	1.070	0.240	Jan 2012	0.270	Mar 2013	-		0.270	1.300	2.880	3.530
Overhead	C/Various	SAIC, ARA, Titan:Various	2.293	0.240	Jan 2012	0.270	Mar 2013	-		0.270	1.600	4.403	4.403
		Subtotal	5.659	0.612		0.774		-		0.774	5.000	12.045	13.211

	Total Prior Years Cost	FY 2	2012	FY 2 Ba	FY 2	2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	46.322	5.888		5.749	_		5.749	26.895	84.854	98.113

#### Remarks

All "PY Costs" costs and activities for Integrated Weapons of Mass Destruction Toolset (IWMDT), Nuclear Capability Server (NuCS), and Consequence of Execution (COE) were assigned under Project BD of PE 0602716BR. IWMDT was funded in 2004 by a competitive CPAF contract for \$12.425M over a 3-year period. At end of FY 2006, its follow-on contract was awarded with an initial \$.300M increment. IWMDT program efforts have continued into FY 2011 with \$28.962M now applied. Likewise, the NuCS program was funded under a competitive CPFF contract over a 3-year period with funding of \$5.913M applied through FY 2008; a follow-on contract has now been awarded with initial funding to date of \$2.356M to continue program efforts, this effort is not funded past FY11 under this line. COE was funded under a competitive CPFF contract with increments to date of \$6.566M total. NUCS and COE will no longer be funded under this line. In CY 2012 IWMDT will be openly competed under the new DTRA ID/IQ for approx \$24.000M for FY2014-16.

PE 0605000BR: WMD Defeat Capabilities
Defense Threat Reduction Agency

UNCLASSIFIED
Page 5 of 7

R-1 Line #121

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Threat Reduction Agency **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0605000BR: WMD Defeat Capabilities RL: Nuclear & Radiological Effects BA 5: Development & Demonstration (SDD) **FY 2011** FY 2012 FY 2013 FY 2014 FY 2015 **FY 2016** FY 2017 2 4 1 3 1 2 3 2 4 3 4 2 3 4 1 IWMDT - System Development, Test, and Integration - Phase 2 IWMDT - System Development, Test, and Integration - Phase 3/4 COE Integration - Phase 2

NuCS - Spiral 2 Development

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Threat Reduction Agency

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM N

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0605000BR: WMD Defeat Capabilities

**PROJECT** 

RL: Nuclear & Radiological Effects

**DATE:** February 2012

## Schedule Details

	St	art	End		
Events	Quarter	Year	Quarter	Year	
IWMDT - System Development, Test, and Integration - Phase 2	1	2011	2	2011	
IWMDT - System Development, Test, and Integration - Phase 3/4	3	2011	2	2014	
COE Integration - Phase 2	1	2011	4	2011	
NuCS - Spiral 2 Development	1	2011	4	2011	



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Threat Reduction Agency

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605502BR: `Small Business Innovation Research

BA 6: RDT&E Management Support

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	7.888	-	-	-	-	-	-	-	-	Continuing	Continuing
RA: Systems Engineering and Innovation	7.888	-	-	-	-	-	-	-	-	Continuing	Continuing

### Note

## A. Mission Description and Budget Item Justification

The SBIR program provides the means for stimulating technological innovation in the private sector, strengthens the role of small business in meeting Department of Defense (DoD) research and development needs; fosters and encourages participation of minority and disadvantaged businesses in technological innovation; and increases the commercial application of DoD supported research and development results. These efforts are responsive to Public Law 106-554.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	7.888	-	-	-	-
Total Adjustments	7.888	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	7.888	-			

# **Change Summary Explanation**

Funding for the FY 2011 SBIR Program has been consolidated in this program element for execution.

PE 0605502BR: `Small Business Innovation Research Defense Threat Reduction Agency

UNCLASSIFIED
Page 1 of 3

R-1 Line #153

Volume 5 - 619

**DATE:** February 2012

<sup>\*</sup> Funding is not allocated until the year of execution. Program Element 0605502BR "Small Business Innovative Research (SBIR)" is used in reporting year-end actual expenses only.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Threat Reduction Agency						<b>DATE:</b> Feb	ruary 2012				
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 6: RDT&E Management Suppor	t & Evaluation	n, Defense-l	Vide	R-1 ITEM N PE 0605502 Research	_	_	novation	PROJECT RA: Systems Engineering and Innovation			ration
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
RA: Systems Engineering and Innovation	7.888	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

### **Note**

## A. Mission Description and Budget Item Justification

This project provides the means for stimulating technological innovation in the private sector, strengthens the role of small business in meeting the Department of Defense (DoD) research and development needs; fosters and encourages participation of minority and disadvantaged businesses in technological innovation; and increases the commercial application of the DoD supported research and development results. These efforts are responsive to Public Law 106-554.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: RA: Systems Engineering and Innovation	7.888	-	-
<b>Description:</b> This project provides the means for stimulating technological innovation in the private sector, strengthens the role of small business in meeting the Department of Defense (DoD) research and development needs; fosters and encourages participation of minority and disadvantaged businesses in technological innovation; and increases the commercial application of the DoD supported research and development results. These efforts are responsive to Public Law 106-554. <b>FY 2011 Accomplishments:</b> **** PLEASE ENTER TEXT ****			
Accomplishments/Planned Programs Subtotals	7.888	_	_

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Not Applicable

# **E. Performance Metrics**

Number of Phase I awards supporting innovative technology development.

PE 0605502BR: `Small Business Innovation Research Defense Threat Reduction Agency

Page 2 of 3

R-1 Line #153

Volume 5 - 620

<sup>\*</sup> Funding is not allocated until the year of execution. Program Element 0605502BR "Small Business Innovative Research (SBIR)" is used in reporting year-end actual expenses only.

chibit R-2A, RDT&E Project Justification: PB 2013 Defense Three	<b>DATE:</b> February 2012		
PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
00: Research, Development, Test & Evaluation, Defense-Wide A 6: RDT&E Management Support	PE 0605502BR: `Small Business Innovation Research	RA: Systems Engineering and Innovation	
Number of Phase II and III awards leading to technology transition.			

PE 0605502BR: `Small Business Innovation Research Defense Threat Reduction Agency



# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



**The Joint Staff** 

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



The Joint Staff • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 627
Program Element Table of Contents (by Budget Activity then Line Item Number)	Volume 5 - 639
Program Element Table of Contents (Alphabetically by Program Element Title)	Volume 5 - 64
Exhibit R-2's	Volume 5 - 643



# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Research, Development, Test & Eval, DW	93,747	84,664		84,664
Total Research, Development, Test & Evaluation	93,747	84,664		84,664

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Appropriation	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Research, Development, Test & Eval, DW	108,648		108,648
Total Research, Development, Test & Evaluation	108,648		108,648

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Advanced Technology Development (ATD)				
Advanced Component Development & Prototypes				
RDT&E Management Support	84,162	79,532		79,532
Operational Systems Development	9,585	5,132		5,132
Total Research, Development, Test & Evaluation	93,747	84,664		84,664
Summary Recap of FYDP Programs				
General Purpose Forces	9,278	2,420		2,420
Intelligence and Communications	1,938			
Research and Development	79,701	79,514		79,514
Administration and Associated Activities	2,830	2,730		2,730
Total Research, Development, Test & Evaluation	93,747	84,664		84,664

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Advanced Technology Development (ATD)	21,230		21,230
Advanced Component Development & Prototypes	10,637		10,637
RDT&E Management Support	63,746		63,746
Operational Systems Development	13,035		13,035
Total Research, Development, Test & Evaluation	108,648		108,648
Summary Recap of FYDP Programs			
General Purpose Forces	3,922		3,922
Intelligence and Communications	8,238		8,238
Research and Development	92,388		92,388
Administration and Associated Activities	4,100		4,100
Total Research, Development, Test & Evaluation	108,648		108,648

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Advanced Technology Development (ATD)				
Advanced Component Development & Prototypes				
RDT&E Management Support	84,162	79,532		79,532
Operational Systems Development	9,585	5,132		5,132
Total Research, Development, Test & Evaluation	93,747	84,664		84,664
Summary Recap of FYDP Programs				
General Purpose Forces	9,278	2,420		2,420
Intelligence and Communications	1,938			
Research and Development	79,701	79,514		79,514
Administration and Associated Activities	2,830	2,730		2,730
Total Research, Development, Test & Evaluation	93,747	84,664		84,664

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Advanced Technology Development (ATD)	21,230		21,230
Advanced Component Development & Prototypes	10,637		10,637
RDT&E Management Support	63,746		63,746
Operational Systems Development	13,035		13,035
Total Research, Development, Test & Evaluation	108,648		108,648
Summary Recap of FYDP Programs			
General Purpose Forces	3,922		3,922
Intelligence and Communications	8,238		8,238
Research and Development	92,388		92,388
Administration and Associated Activities	4,100		4,100
Total Research, Development, Test & Evaluation	108,648		108,648

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
The Joint Staff	93,747	84,664		84,664
Total Research, Development, Test & Evaluation	93,747	84,664		84,664

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Appropriation	10.30 20000000000000000000000000000000000	2013 FY 2013 OCO Total
The Joint Staff	108,648	108,648
Total Research, Development, Test & Evaluation	108,648	108,648

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	s e c
62	0603828J	Joint Experimentation	03					U
	Advan	ced Technology Development (ATD)						!
104	0604787J	Joint Systems Integration	04					U
106	0604828J	Joint FIRES Integration and Interoperability Team	04					U
	Advan	ced Component Development & Prototypes						
144	0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	79,701	79,514		79,514	Ū
170	0204571J	Joint Staff Analytical Support	06	4,461	18		18	U
174	0303166J	Support to Information Operations (IO) Capabilities	06					U
	RDT&E	Management Support		84,162	79,532		79,532	
190	0607828J	Joint Integration and Interoperability	07					U
191	0208043J	Planning and Decision Aid System (PDAS)	07	4,817	2,402		2,402	U
210	0303149J	C4I for the Warrior	07	1,938				U
251	0902298J	Management HQ - OJCS	07	2,830	2,730		2,730	U
	Opera	tional Systems Development		9,585	5,132		5,132	
Tota:	l Research,	Development, Test & Eval, DW		93,747	84,664		84,664	

R-1C: FY 2013 President's Budget (Published Version), as of January 24, 2012 at 11:06:34

24 Jan 2012

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

cal Obligational Authority 24 Jan 2012 (Dollars in Thousands)

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	s e c
62	0603828J	Joint Experimentation	03	21,230		21,230	U
	Advan	ced Technology Development (ATD)		21,230		21,230	ari
104	0604787J	Joint Systems Integration	04	3,273		3,273	Ū
106	0604828J	Joint FIRES Integration and Interoperability Team	04	7,364		7,364	Ū
	Advan	ced Component Development & Prototypes		10,637		10,637	40
144	0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	55,508		55,508	Ū
170	0204571J	Joint Staff Analytical Support	06				U
174	0303166J	Support to Information Operations (IO) Capabilities	06	8,238		8,238	U
	RDT&E	Management Support		63,746		63,746	50
190	0607828J	Joint Integration and Interoperability	07	5,013		5,013	U
191	0208043J	Planning and Decision Aid System (PDAS)	07	3,922		3,922	Ū
210	0303149J	C4I for the Warrior	07				Ū
251	0902298J	Management HQ - OJCS	07	4,100		4,100	Ū
	Opera	tional Systems Development		13,035		13,035	
Tota	l Research,	Development, Test & Eval, DW		108,648		108,648	

# The Joint Staff FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Program Line Element No Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	s e c
62 0603828J	Joint Experimentation	03					U
Advanced Tec	chnology Development (ATD)						
104 0604787J	Joint Systems Integration	04					U
106 0604828J	Joint FIRES Integration and Interoperability Team	04					Ū
Advanced Cor	mponent Development & Prototypes						
144 0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	79,701	79,514		79,514	υ
170 0204571J	Joint Staff Analytical Support	06	4,461	18		18	U
174 0303166J	Support to Information Operations (IO) Capabilities	06					Ū
RDT&E Manage	ement Support		84,162	79,532		79,532	3
190 0607828J	Joint Integration and Interoperability	07					υ
191 0208043J	Planning and Decision Aid System (PDAS)	07	4,817	2,402		2,402	U
210 0303149J	C4I for the Warrior	07	1,938				U
251 0902298J	Management HQ - OJCS	07	2,830	2,730		2,730	Ū
Operational	Systems Development		9,585	5,132		5,132	
Total The Joint	t Staff		93,747	84,664		84,664	c

# The Joint Staff FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Program Line Element No Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	s e c
62 0603828J	Joint Experimentation	03	21,230		21,230	Ū
Advanced Te	chnology Development (ATD)		21,230		21,230	
104 0604787J	Joint Systems Integration	04	3,273		3,273	Ū
106 0604828J	Joint FIRES Integration and Interoperability Team	04	7,364		7,364	Ū
Advanced Co	mponent Development & Prototypes		10,637		10,637	
144 0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	55,508		55,508	U
170 0204571J	Joint Staff Analytical Support	06				Ū
174 0303166J	Support to Information Operations (IO) Capabilities	06	8,238		8,238	U
RDT&E Manag	ement Support		63,746		63,746	•
190 0607828J	Joint Integration and Interoperability	07	5,013		5,013	U
191 0208043J	Planning and Decision Aid System (PDAS)	07	3,922		3,922	Ū
210 0303149J	C4I for the Warrior	07				U
251 0902298J	Management HQ - OJCS	07	4,100		4,100	Ū
Operational	Systems Development		13,035		13,035	1000
Total The Join	t Staff					20.
			108,648		108,648	

The Joint Staff • President's Budget Submission FY 2013 • RDT&E Program

# Program Element Table of Contents (by Budget Activity then Line Item Number)

**Budget Activity 03: Advanced Technology Development (ATD)** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
62	03	0603828J	Joint Experimentation\	Volume 5 - 643

Budget Activity 04: Advanced Component Development & Prototypes (ACD&P) Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title Pa	ge
104	04	0604787J	Joint Systems IntegrationVolume 5 - 6	47
106	04	0604828J	Joint FIRES Integration and Interoperability TeamVolume 5 - 6	51

The Joint Staff • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 06: RDT&E Management Support

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title Page
144	06	0605126J	Joint Integrated Air & Missle Defense Organization (JIAMDO)Volume 5 - 655
170	06	0204571J	Joint Staff Analytical Support (JSAS)Volume 5 - 671
174	06	0303166J	Support to Information Operations Capability

Budget Activity 07: Operational Systems Development

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title	Page
190	07	0607828J	Joint Integration & InteroperabilityVolume	5 - 679
191	07	0208043J	Planning and Decision Aid System (PDAS)Volume	5 - 683
210	07	0303149J	Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW)Volume	5 - 685
251	07	0902298J	Management HeadquartersVolume	5 - 693

The Joint Staff • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Command, Control, Communications, Computers, and Intelligence for the Warrior	02024401	240	O7 Volume F C05
(C4IFTW)	0303149J	210	07Volume 5 - 685
Joint Experimentation	0603828J	62	03Volume 5 - 643
Joint FIRES Integration and Interoperability Team	0604828J	106	04Volume 5 - 651
Joint Integrated Air & Missle Defense Organization (JIAMDO)	0605126J	144	06Volume 5 - 655
Joint Integration & Interoperability	0607828J	190	07Volume 5 - 679
Joint Staff Analytical Support (JSAS)	0204571J	170	06Volume 5 - 671
Joint Systems Integration	0604787J	104	04Volume 5 - 647
Management Headquarters	0902298J	251	07Volume 5 - 693
Planning and Decision Aid System (PDAS)	0208043J	191	07Volume 5 - 683
Support to Information Operations Capability	0303166J	174	06Volume 5 - 675



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603828J: Joint Experimentation

BA 3: Advanced Technology Development (ATD)

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	-	21.230	-	21.230	21.667	23.719	24.169	22.839	Continuing	Continuing
P808: Joint Experimentation	-	-	21.230	-	21.230	21.667	23.719	24.169	22.839	Continuing	Continuing

### Note

In FY 2013 funds transfer to the Joint Staff. For FY 2012 and previous, refer to PE 0603828D8Z.

### A. Mission Description and Budget Item Justification

Joint Experimentation (JE) funds the Joint Concept Development and Experimentation (JCD&E) Enterprise. Led by the Joint Staff, the JCD&E Enterprise includes the combatant commands, the military services, the National Guard Bureau, the Joint Staff, the Office of the Secretary of Defense (OSD), and several Defense agencies. Intra-government agencies and coalition partners often participate in JCD&E processes and projects.

JE projects and activities develop and examine potential solutions for combatant command operational needs through targeted Doctrine, Organizational, Training, Materiel, Leadership and Education, Personnel, Facilities, and Policy (DOTMLPF-P) improvements. JE tackles joint capability issues demanding sophisticated analysis, innovative design and complex experimentation leading to solutions. JE addresses topics that would prove difficult for individual combatant commands and Services to capture in the context of their immediate operational and force generation responsibilities. Joint Concept Development & Experimentation (JCD&E) projects produce a range of outcomes including inputs to major policy documents such as the Quadrennial Defense Review and Defense Planning and Programming Guidance (DPPG) and input to the Joint Capabilities Integration and Development System (JCIDS).

To ensure the program focuses on needs of the warfighters, JCD&E projects originate from an annual call for nominations from combatant commands and Services, and from assessment of combatant command identified critical warfighting capability gaps articulated in combatant command Integrated Priority Lists and Joint Urgent Needs documents submitted to the Chairman of the Joint Chiefs of Staff (CJCS).

Project plans are developed in consultation with JE partners, and consolidated into an annual program of work. The Synchronization Board and the Joint Capabilities Board meet regularly to review and approve the progress of the efforts in the program of work. The JCD&E Program of Work allows the Department to synchronize JCD&E efforts over multiple years to avoid duplication of effort and to create synergy among the defense experimentation entities.

PE 0603828J: Joint Experimentation

The Joint Staff

UNCLASSIFIED
Page 1 of 3

R-1 Line #62

Volume 5 - 643

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603828J: Joint Experimentation

BA 3: Advanced Technology Development (ATD)

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	-	21.230	-	21.230
Total Adjustments	-	-	21.230	-	21.230
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Funds transfer to the Joint Staff</li> </ul>	-	-	21.230	-	21.230

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Joint Experimentation Efforts	-	-	21.230	-	21.230
<b>Description:</b> Description: Potential JCD&E areas include: Building Partnerships (BP), Battlespace Awareness (BA), Command and Control (C2), Force Application (FA), Logistics (Log), Protection (P), Net Centric (NC), Cyber, Combatant Command Service Experimentation Support (CCSES), Urban Operation (UO), Irregular Warfare (IW), and Future Joint Warfighting (FJW).					
FY 2013 Base Plans: The FY13 Program of Work will include projects supporting the President's "Sustaining U.S. Global Leadership Priorities for the 21st Century Defense". Specific projects will focus on capabilities critical to the success of the future joint force, including intelligence, surveillance, and reconnaissance; counterterrorism; countering weapons of mass destruction; operating in anti-access environments; and prevailing in all domains, including cyber.					
FY 2013 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	_	_	21.230	_	21.230

# D. Other Program Funding Summary (\$ in Millions)

N/A

PE 0603828J: *Joint Experimentation* The Joint Staff

UNCLASSIFIED Page 2 of 3

R-1 Line #62

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Sta	ff	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603828J: Joint Experimentation	
BA 3: Advanced Technology Development (ATD)		

### E. Acquisition Strategy

N/A

### **F. Performance Metrics**

Performance of Joint Experimentation efforts is measured by successful development and implementation of solutions to capability gaps identified by the CJCS, Combatant Commands, and Services and include:

- (1) objective assessment and validation of enhanced capabilities enabling the joint force commander to perform joint missions,
- (2) delivery of relevant, intellectually rigorous joint concepts to enhance or change Joint Doctrine,
- (3) confirmed transition of capability/products from experimentation to force implementation through the DOTMLPF-P Change Recommendations (DCR) process,
- (4) identification of innovative integrated solutions and joint interoperability standards for Service and Agency capability developers to pursue through demonstration, acquisition and/or employment,
- (5) resolution of specific joint capability shortfalls.

PE 0603828J: *Joint Experimentation*The Joint Staff

R-1 Line #62 Volume 5 - 645



R-1 ITEM NOMENCLATURE

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0604787J: Joint Systems Integration

BA 4: Advanced Component Development & Prototypes (ACD&P)

	<i>p</i>	101) 600 (1.0	/								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	-	3.273	-	3.273	3.275	3.297	3.293	3.248	Continuing	Continuing
P787: Joint Systems Integration Command	-	-	3.273	-	3.273	3.275	3.297	3.293	3.248	Continuing	Continuing
Quantity of RDT&E Articles											

### Note

In FY 2013 funds transfer to the Joint Staff. For FY 2012 and previous years, refer to PE 0604787D8Z.

### A. Mission Description and Budget Item Justification

The Joint Systems Integration program element provides mission funding for the Joint System Integration Center (JSIC) to conduct interoperability assessments, and develop solutions/recommendations to improve integration of Service, Defense Agency, and coalition systems. JSIC promotes Service/Defense Agency C2 capability integration, and conducts technical, operational, and DOTMLPF assessments of Command and Control (C2) and Command, Control, Computer, Communication, Intelligence, Surveillance and Reconnaissance (C4ISR) capabilities. JSIC serves as the technical analysis and operational assessment activity in support of the Joint Staff capability-driven requirements process, the Joint Capabilities Integration and Development System (JCIDS). JSIC also serves as a joint interoperability compliance activity for the milestone decision authorities/program managers in the Defense acquisition enterprise.

JSIC provides Combatant Commands with a laboratory and assessment environment for the warfighter and capability developer. This environment provides for assessment of current and near-term joint and coalition capabilities primarily at the operational and tactical levels. JSIC assesses system of systems interoperability, operational capability, procedural compliance and technical suitability of emerging and existing systems and programs to confirm readiness for deployment.

PE 0604787J: Joint Systems Integration The Joint Staff

Page 1 of 3

Volume 5 - 647 R-1 Line #104

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0604787J: Joint Systems Integration

BA 4: Advanced Component Development & Prototypes (ACD&P)

FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
-	-	-	-	<del>-</del>
-	-	3.273	-	3.273
-	-	3.273	-	3.273
-	-			
-	-			
-	-			
-	-			
-	-			
-	-			
-	-			
-	-	3.273	-	3.273
	FY 2011	FY 2011 FY 2012	3.273 3.273 3.273 	3.273 3.273

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Interoperability Assessments(IA) and Interoperability Technology Demonstration Center(ITDC)	-	-	3.273	-	3.273
<b>Description:</b> IA supports the interoperability assessment of systems in five categories: operational, system of systems, technical, software, and procedural.					
FY 2013 Base Plans: Interoperability assessments will be conducted to solve warfighter problems, including coalition challenges. Focus areas will include Joint Command and Control Capabilities, Intelligence support to C2/ISR, Integrated Air and Missile Defense, Joint Fires Capabilities, Cyberspace, Information Sharing Capabilities, and Data Strategy Implementation.					
FY 2013 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	_	-	3.273	-	3.273

# D. Other Program Funding Summary (\$ in Millions)

N/A

PE 0604787J: *Joint Systems Integration* The Joint Staff

UNCLASSIFIED Page 2 of 3

R-1 Line #104

Volume 5 - 648

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Sta	ff	<b>DATE</b> : February 2012				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE					
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0604787J: Joint Systems Integration					
BA 4: Advanced Component Development & Prototypes (ACD&P)						

## E. Acquisition Strategy

JSIC supports interoperability of systems selected for acquisition, integration and fielding. JSIC is intended to be a forcing function to discover and provide interoperable joint solutions as a means to foster rapid, near-term insertion of command and control technology by promoting the ability to meet the DoD direction for spiral development and evolutionary acquisition. Services and Defense Agencies are responsible for conducting acquisition activities in Programs of Record (POR).

### **F. Performance Metrics**

FY 2013 Strategic Goals Supported: Joint Command and Control

- Drive resolution of C4 interoperability problems with actionable recommendations stemming from technical and operational demonstrations and assessments of existing and emerging C4 capabilities.
- Integrate and assess technical solutions that provide gap-filling capabilities to satisfy near-term operational requirements.
- Provide a persistent C4 environment replicating an operational Joint Task Force Headquarters and/or subordinate elements to conduct interoperability, capability, and integration assessments.

PE 0604787J: *Joint Systems Integration*The Joint Staff

Volume 5 - 649



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0604828J: Joint FIRES Integration and Interoperability Team

BA 4: Advanced Component Development & Prototypes (ACD&P)

APPROPRIATION/BUDGET ACTIVITY

,	,	<i>31</i> (	,								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	-	7.364	-	7.364	7.506	7.661	7.799	7.944	Continuing	Continuing
P857: Joint Deployable Analysis Team	-	-	7.364	-	7.364	7.506	7.661	7.799	7.944	Continuing	Continuing
Quantity of RDT&E Articles											

### Note

In FY 2013 funds transfer to the Joint Staff. For FY 2012 and previous, refer to PE 0604828D8Z.

### A. Mission Description and Budget Item Justification

Employ scientific methods to research, investigate, test, assess, and evaluate current and emergent Joint command and control (C2) information systems and associated procedures. These activities measure capabilities and limitations, identify shortfalls and root cause, recommend and verify solutions, and validate joint capabilities. The resultant empirical outcomes influence Joint Capability development in areas such as Joint Tactics, Techniques and Procedures; integration of capabilities; and digital interoperability. JDAT provides decision-quality data and cogent solutions to customers and stakeholders responsible for improving Joint C2 information systems integration and interoperability to inform acquisition decisions and ensure that Services and Agencies field interdependent and interoperable systems.

The emphasis of JDAT assessment efforts is the evaluation of C2 Information Systems and procedures to provide Services and Agencies findings and recommendations based on quantifiable data in order to improve Joint C2 integration and interoperability. JDAT collects and analyzes data and provides observations, findings, conclusions, and recommendations to identify Joint doctrine, tactics, techniques, and procedures (TTP) and material solutions and products that promote capability improvement. Evaluations range from small, single-focus events to large, multi event/venue exercises.

PE 0604828J: Joint FIRES Integration and Interoperability Team The Joint Staff

UNCLASSIFIED
Page 1 of 4

R-1 Line #106 Volume 5 - 651

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0604828J: Joint FIRES Integration and Interoperability Team

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	-	7.364	-	7.364
Total Adjustments	-	-	7.364	-	7.364
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Transfer to the Joint Staff	-	-	7.364	-	7.364

**Change Summary Explanation** 

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
<b>Title:</b> Joint Deployable Analysis Team (JDAT) - Command and Control (C2) Information Systems and Procedures Capability Assessments	-	-	7.364
<b>Description:</b> JDAT conducts assessments in conjunction with Service and Combatant Command (COCOM) exercises, experiments, and test & evaluation events.			
The primary outputs and efficiencies include:  - Improvement in the Services' ability to employ Joint C2 information systems  - Recommendations for system integration and interoperability  - Ability to include Joint context during new system acquisition or development  - Development of related Universal Joint Tasks (UJT) and Additional Task Detail (ATD)  - Updates and revisions to doctrine, TTP, and other Joint publications  - Development and refinement of analytical tools (i.e. Data Collection Architecture for Analytical Feedback (DCAAF), Joint Windows-based Warfare Assessment Model (JWinWAM))  - Recommended solutions integrated within the Joint Staff Joint Capabilities Integration Development System (JCIDS) and OSD Joint C2 Capability Portfolio Manager (JC2 CPM) processes  - Identification of specific key performance parameters (KPPs) and key system attributes (KSAs) for new systems that meet Joint warfighter operational requirements to ensure Services and Agencies field interdependent and interoperable systems  - Increased effectiveness and confidence in combat identification and a reduction in fratricide			

UNCLASSIFIED
Page 2 of 4

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint	DATE: Fe	bruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0604828J: Joint FIRES Integration and Interoperability	<sup>,</sup> Team		
C. Accomplishments/Planned Programs (\$ in Millions) - Increased effectiveness and confidence in C2 information systems	and procedures.	FY 2011	FY 2012	FY 2013
FY 2013 Plans: - Provide analytical support to a Military Utility Assessment of coalitio Quest 13. Provide instrumentation, data collection, data capture, rea daily debriefings. Benefits will include improved ability to assess varietask execution, and an effective Military Utility Assessment of US C2 required to provide fact-based recommendations.  - Assist Commander, Operational Test and Evaluation Force (COMO Level 1 Joint Operational Test Approach (JOTA) analysis to validate data collection and analysis methodologies, design and implement dameet JOTA objectives. Determine any gaps or shortfalls in integratio Operational Test Agencies and Program Managers with fact-based file	I-time mission monitoring, and feedback to participants via bus participating coalition and US systems, improved joint information systems while greatly reducing the timeline  PTEVFOR) with Identification Friend or Foe (IFF) Mode 5 integration and interoperability of fielded systems. Develop at a collection architectures and conduct analysis requisite to n and interoperability of Mode 5 systems. Provide Service			
<ul> <li>Provide analytical support to assess technology integration and inte assessment event. Provide data collection, analysis and display usin in a Joint Common Operational Picture to battlespace managers.</li> </ul>				
- Team with U.S. Army Test and Evaluation Command to conduct a Daustere Challenge 2013. Provide data collection, analysis and displaimprovements in a Joint Common Operational Picture to COCOM Air	y using JDAT developed tools. Benefits will include			
- Provide C2 data collection and analytical support to the Joint Fires S Change Implementation Group. Conduct Digitally Aided Close Air Sureduction assessments to validate service compliance with requisite I recommendations for Tactics, Techniques, and Procedures in the are development of associated Universal Joint Tasks.	upport (DACAS) Coordinated Implementation risk Engineering Change Proposals. Benefits will include			
- Chair the Joint Close Air Support Executive Steering Committee (JC (DACAS) Engineering Change Implementation Group. Plan and exe proposals and coordinate implementation across the Department of E	cute testing and validation of DACAS engineering change			

PE 0604828J: *Joint FIRES Integration and Interoperability Team* The Joint Staff

UNCLASSIFIED
Page 3 of 4

R-1 Line #106

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff **DATE:** February 2012 R-1 ITEM NOMENCLATURE

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P) PE 0604828J: Joint FIRES Integration and Interoperability Team

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
- Update Joint Windows-based Warfare Assessment Model (JWinWAM), Data Collection Architecture for Analytical Feedback (DCAAF) and Multi-Interface Gateway (MIG) software development to support JDAT assessment activities and the efforts of other government agencies as directed.			
- Define Universal Joint Task (UJT) Additional Task Detail (ATD) for tactical task TA 3.3.2 Control Tactical Airspace and refine ATD for TA 3.2.2 Conduct Close Air Support (CAS) and TA 3.2.1 Conduct Joint Fires.			
- Provide subject matter expertise and tier 2 architecture products on development of the Joint Close Air Support (CAS) Joint Mission Thread (JMT) and Joint Fires JMT.			
Accomplishments/Planned Programs Subtotals	_	_	7.364

## D. Other Program Funding Summary (\$ in Millions)

N/A

### E. Acquisition Strategy

Not applicable for this item.

### F. Performance Metrics

JDAT delivers Joint solutions for tactical forces deployed to Combatant Commands (COCOMs). Deliverables may include: discrete improvements to training processes; doctrine; Tactics, Techniques, & Procedures (TTPs); and/or technical system performance specifications and standards; validated Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities (DOTMLPF) recommendations; timely delivery of quality feedback to exercise participants; or improvements to Joint context of a training venue. JDAT works with Joint Staff, Services and COCOMs to approve the annual agenda of work and validate results.

PE 0604828J: Joint FIRES Integration and Interoperability Team The Joint Staff

UNCLASSIFIED Page 4 of 4

Volume 5 - 654

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605126J: Joint Integrated Air & Missle Defense Organization (JIAMDO)

**DATE:** February 2012

BA 6: RDT&E Management Support

APPROPRIATION/BUDGET ACTIVITY

3 - 1 - 1 - 1 - 1 - 1											
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	71.424	79.514	55.508	-	55.508	47.607	48.321	46.023	45.945	Continuing	Continuing
P001: Core	24.751	9.030	22.508	-	22.508	21.767	22.481	19.967	20.627	Continuing	Continuing
P002: Homeland	14.347	25.000	6.000	-	6.000	-	-	-	-	Continuing	Continuing
P003: Black Dart	3.833	5.000	4.000	-	4.000	3.374	3.374	3.374	3.000	Continuing	Continuing
P004: Joint Distributed Engineering Plant	4.785	8.927	3.250	-	3.250	3.250	3.250	3.374	3.000	Continuing	Continuing
P005: Nimble Fire	11.692	13.340	10.500	-	10.500	10.690	10.690	10.750	10.750	Continuing	Continuing
P006: Cruise Missle Combat Identification (CID)	12.016	18.217	9.250	-	9.250	8.526	8.526	8.558	8.568	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Joint Integrated Air and Missile Defense Organization (JIAMDO) is the organization within the Department of Defense (DOD) chartered to plan, coordinate, and oversee Joint Air and Missile Defense (AMD) requirements, joint operational concepts, and operational architectures. As part of the CJCS staff, JIAMDO supports the Chairman in meeting his Title 10 responsibilities as they relate to air and missile defense issues. JIAMDO serves as the operational community's proponent for characteristics, requirements, and capabilities in air and missile defense, and is the joint air and missile defense resource proponent within the DOD's resource allocation structures. JIAMDO also leads AMD mission area and utility analyses, integrates air and missile defense within the Force Protection joint capability area, and conducts evaluations and demonstrations of joint air and missile defense architectures and concepts.

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UNCLASSIFIED
Page 1 of 15

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605126J: Joint Integrated Air & Missle Defense Organization (JIAMDO)

BA 6: RDT&E Management Support

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	94.577	79.859	55.541	-	55.541
Current President's Budget	71.424	79.514	55.508	-	55.508
Total Adjustments	-23.153	-0.345	-0.033	-	-0.033
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Directed reduction in travel.</li> </ul>	-	-0.345	-0.033	-	-0.033
<ul> <li>Congressional Rescission in FY12 Defense</li> </ul>	-18.608	-	-	-	-
Appropriation					
Unobligated FY11	-4.545	-	-	-	-

## **Change Summary Explanation**

JIAMDO-Homeland: Programs will be near development completion and conducting Military Utility Assessment, which requires live assets and integration development.

JIAMDO-Core: The Joint Staff plans to reduce dependence upon contracted advisory and assistance service efforts, and increase leverage upon organic (military and federal civilian) labor.

UNCLASSIFIED
Page 2 of 15

Exhibit R-2A, RDT&E Project Ju	stification: Pl	3 2013 The .	Joint Staff						DATE: Febi	ruary 2012	
APPROPRIATION/BUDGET ACT	IVITY			R-1 ITEM N	IOMENCLA <sup>T</sup>	TURE		PROJECT			
0400: Research, Development, Te	st & Evaluatio	n, Defense-V	Vide	PE 060512	6J: <i>Joint Inte</i>	egrated Air &	Missle	P001: Core			
BA 6: RDT&E Management Suppo	ort			Defense Or	ganization (	JIAMDO)					
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	ОСО	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
P001: Core	24.751	9.030	22.508	-	22.508	21.767	22.481	19.967	20.627	Continuing	Continuing
Quantity of RDT&F Articles											

### A. Mission Description and Budget Item Justification

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Core	24.751	9.030	22.508
<b>Description:</b> Provides overall staff support for JIAMDO operations in the area of ballistic missile defense, air and cruise missile defense and homeland defense. This includes performing analyses, demonstrations, and programmatic assessments of technology, operations, requirements, and weapons systems. In coordination with Services and COCOMs, JIAMDO Core also leads the definition, assessment, development, and approval of Joint AMD Operational Concepts, Operational Architectures, and capability requirements to guide the Department's joint/interagency/combined fully integrated and net-centric capable air defense (including defense against cruise missiles, unmanned aerial vehicles, and ballistic missiles). JIAMDO Core also:  • Develops and integrates joint exercises, simulations, war-games, force resource allocations, and interoperability initiatives  • Manages relevant Congressional interaction and COCOM interface through a cadre of liaisons collocated with major headquarters			

UNCLASSIFIED Page 3 of 15

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Sta	ff		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605126J: Joint Integrated Air & Missle Defense Organization (JIAMDO)	PROJECT P001: Core			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
<ul> <li>Directly supports and sponsors homeland air surveillance related decomposition.</li> <li>Runs the AMD Working Group focusing COCOM, Joint Staff, and Stand development of the integrated AMD architecture and roadmap.</li> <li>Develops US positions for, and serves as the US representative to,</li> <li>JIAMDO Core also enables strategic planning development, infrastructivities. Funding pays for: Contractor Systems Engineering and Te Defense (ACMD), Ballistic Missile Defense (BMD), Homeland Air Se JIAMDO white papers; leased office space, including all upkeep services personnel, including support for Combatant Commander liaison personnel, including support for Combatant Commander liaison personnel (SCI) terminals (due to the classified nature and the diverghysical security force and alarm monitoring and maintenance; daily Security Program Operating Manual (NISPOM), and other security reassociated Information Technology (IT) support, copier purchase and all telephones, telephone lines, classified telephones, and classified/</li> </ul>	the NATO Air Defense Committee  Icture, security, travel, administrative and other supchnical Assistance (SETA) support for Air & Cruise curity (HAS) strategic planning, senior level briefing vices; all travel costs for government and contractor connel travel; multiple levels of security including leady JWICS) communications line and Special Compartingse content of work in the JIAMDO portfolio); 24-horon-site security personnel to meet DOD, National Integulations; for all administrative and support function dimaintenance, as well as basic office supplies and	port Missile is, and support ase mented ur ndustrial ns; all			
FY 2011 Accomplishments:  Performed Ballistic Missile Defense directed studies and program su technical assistance, administration, security, communications, lease		eering and			
FY 2012 Plans: Perform Ballistic Missile Defense directed studies and program supp technical assistance, administration, security, communications, lease on contracted advisory and assistance services, and intends to lever planned mission.	ed space and supply). Program will reduced dependent	dence			
FY 2013 Plans:  Perform Ballistic Missile Defense directed studies and program supp technical assistance, administration, security, communications, lease on contracted advisory and assistance services, and intends to lever	ed space and supply). Program will reduced dependent	dence			
planned mission.	ago organio (minary ana roadra divinari) labor to at				

PE 0605126J: Joint Integrated Air & Missle Defense Organization...
The Joint Staff

UNCLASSIFIED
Page 4 of 15

R-1 Line #144

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff

APPROPRIATION/BUDGET ACTIVITY
0400: Research, Development, Test & Evaluation, Defense-Wide
BA 6: RDT&E Management Support

PE 0605126J: Joint Integrated Air & Missle
Defense Organization (JIAMDO)

DATE: February 2012

PROJECT
PD 001: Core

## C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Not required for Budget Activities 1, 2, 3 and 6.

#### **E. Performance Metrics**

- Conduct two Protection Functional Capability Boards per month
- Conduct two Air and Missile Defense Working Groups per month
- Conduct Change Control Boards per quarter
- Support U.S. Representative to NATO Air Defense Council (NADC) to include 2 overseas NADC meetings per year
- Develop and maintain electronic library of current Joint and Service AMD Publications
- Develop and maintain operational architecture compliant with DoD architectural framework (DODAF) standards
- Ensure 100% of all government employee travel is in accordance with the JFTR/JTR
- Maintain all unclassified/classified LANs on a daily basis in accordance with TJS Office of the Chief Information Officer guidance/policy
- Ensure all computers NIPRNET/SIPRNET are refreshed according to OCIO policy/guidance

Exhibit R-2A, RDT&E Project Jus	stification: PE	3 2013 The 、	Joint Staff						<b>DATE:</b> Feb	ruary 2012	
APPROPRIATION/BUDGET ACTI		. D. f	A /: -1 -	1	OMENCLA		A 4' 1 -	PROJECT	-11		
0400: Research, Development, Tes BA 6: RDT&E Management Suppo		n, Detense-V	Viae		6J: Joint Inte rganization (մ	•	Missie	P002: Hom	eland		
BA 6. RD I &E Management Suppo	11			Deletise Of	yarıızatıori (	JIAIVIDO)					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P002: Homeland	14.347	25.000	6.000	-	6.000	-	-	-	-	Continuing	Continuing
Quantity of RDT&F Articles											

### A. Mission Description and Budget Item Justification

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Homeland	14.347	25.000	6.000
Description: Develop Homeland Surveillance technologies to enable Joint Integrated Air and Missile Defense.			
FY 2011 Accomplishments:  Perform technology development efforts. Specific details of this project are classified.			
FY 2012 Plans: Perform technology development efforts. Specific details of this project are classified.			
FY 2013 Plans: Perform technology development efforts. Specific details of this project are classified.			
Accomplishments/Planned Programs Subtotals	14.347	25.000	6.000

UNCLASSIFIED
Page 6 of 15

PE 0605126J: Joint Integrated Air & Missle Defense Organization... The Joint Staff

R-1 Line #144

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staf	f	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide	R-1 ITEM NOMENCLATURE PE 0605126J: Joint Integrated Air & Missle	PROJECT P002: Homeland
BA 6: RDT&E Management Support	Defense Organization (JIAMDO)	P002. Homeland
	Deletise Organization (SIAMIDO)	
C. Other Program Funding Summary (\$ in Millions)		
N/A		
D. Acquisition Strategy		
Not required for Budget Activities 1, 2, 3 and 6.		
Trotroquirou for Budgot Flotivitios 1, 2, 5 and 5.		
E. Performance Metrics		
Details of this project are classified.		

PE 0605126J: *Joint Integrated Air & Missle Defense Organization...* The Joint Staff

UNCLASSIFIED
Page 7 of 15

Exhibit R-2A, RDT&E Project Just	stification: PE	3 2013 The 、	Joint Staff						<b>DATE:</b> Febi	ruary 2012	
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 6: RDT&E Management Suppo	st & Evaluation	n, Defense-V	Vide	PE 060512	NOMENCLA 6J: Joint Inte rganization (	grated Air &	Missle	PROJECT P003: Black	k Dart		
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P003: Black Dart	3.833	5.000	4.000	-	4.000	3.374	3.374	3.374	3.000	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

The Joint Integrated Air and Missile Defense Organization (JIAMDO), is the organization within the Department of Defense (DOD) chartered to plan, coordinate, and oversee Joint Air and Missile Defense (AMD) requirements, joint operational concepts, and operational architectures. As part of the CJCS staff, JIAMDO supports the Chairman in meeting his Title 10 responsibilities as they relate to air and missile defense issues. JIAMDO serves as the operational community's proponent for characteristics, requirements, and capabilities in air and missile defense, and is the joint air and missile defense resource proponent within the DOD's resource allocation structures. JIAMDO also leads AMD mission area and utility analyses, integrates air and missile defense within the Force Protection joint capability area, and conducts evaluations and demonstrations of joint air and missile defense architectures and concepts.

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: JIAMDO Black Dart	3.833	5.000	4.000	
<b>Description:</b> Provides funding to support administration and execution of Black Dart demonstrations. Black Dart is a joint agency demonstration which focuses on rapid development and implementation of UAV technology from readily-available commercial products.				
FY 2011 Accomplishments:  Detect, ID, and interdict UAV's demonstration event and supporting analysis (includes targets). Assess C-UAS across IAMD kill chain in littoral/ maritime environment, quantify detection and track performance, understand C-UAS aspects of IAMD architecture, establish operational / technical performance, enable Allied/Coalition participation, determine environmental impacts, increase fidelity of threat representations and emissions				
FY 2012 Plans:				

PE 0605126J: Joint Integrated Air & Missle Defense Organization... The Joint Staff

UNCLASSIFIED
Page 8 of 15

R-1 Line #144

	Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff			DATE: February 2012
-	APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
-	0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605126J: Joint Integrated Air & Missle	P003: Black	k Dart
	BA 6: RDT&E Management Support	Defense Organization (JIAMDO)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Assess C-UAS across IAMD kill chain in littoral/ maritime environment. Quantify identification performance. Understand C-UAS aspects of IAMD architecture. Establish operational / technical performance. Enable Allied/Coalition participation. Determine environmental impacts. Increase fidelity of threat representations' size & performance. Use US systems as surrogates.			
FY 2013 Plans: Increase fidelity of threat representations' size & performance. Use US systems as surrogates.			
Accomplishments/Planned Programs Subtotals	3.833	5.000	4.000

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Not required for Budget Activities 1, 2, 3 and 6.

## E. Performance Metrics

- Complete events within schedule and budget. Events provide useful data to improve C-UAS capability
- Document gaps, develop & substantiate hardware, software and employment concepts
- Field C-UAS capability

Exhibit R-2A, RDT&E Project Just						DATE: Febr	ruary 2012				
							PROJECT P004: Joint Distributed Engineering Plant				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P004: Joint Distributed Engineering Plant	4.785	8.927	3.250	-	3.250	3.250	3.250	3.374	3.000	Continuing	Continuing
Quantity of RDT&E Articles											

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Joint Distributed Engineering Plant (JDEP)	4.785	8.927	3.250
<b>Description:</b> Evaluates and improves interoperability by establishing and using a distributed, nationwide, hardware and software in-the-loop simulation capability that allows proposed combat capabilities and field combat weapon systems to operate in operationally representative, synthetic joint air and missile defense environments.			
FY 2011 Accomplishments: Fund approximately ten joint distributed test events. Execute coalition test event with UK. Provide users the means to create SoS environments by linking existing capabilities using hardware, software, and operator-in-the-loop. Link existing Service and			

UNCLASSIFIED
Page 10 of 15

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605126J: Joint Integrated Air & Missle	P004: Joint	Distributed Engineering Plant
BA 6: RDT&E Management Support	Defense Organization (JIAMDO)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Joint combat system engineering and test sites via distributed communications. Reduce costs and developmental cycle times by leveraging existing facilities and additional efforts determined by Service/COCOM priorities.			
FY 2012 Plans: Fund approximately ten joint distributed test events. Execute coalition test event with UK, provide users the means to create SoS environments by linking existing capabilities using hardware, software, and operator-in-the-loop. Link existing Service and Joint combat system engineering and test sites via distributed communications. Reduce costs and developmental cycle times by leveraging existing facilities.			
FY 2013 Plans: Reduce costs and developmental cycle times by leveraging existing facilities.			
Accomplishments/Planned Programs Subtotals	4.785	8.927	3.250

# C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

Not required for Budget Activities 1, 2, 3 and 6.

## **E. Performance Metrics**

- Each JDEP event develops measures of effectiveness (MOE) & measures of performance (MOP) based on a eighteen month test planning and event process
- Complete events within schedule and budget
- Events provide useful data to improve AMD interoperability, with implemented corrective changes

PE 0605126J: Joint Integrated Air & Missle Defense Organization...
The Joint Staff

UNCLASSIFIED
Page 11 of 15

R-1 Line #144

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff								DATE: Feb	ruary 2012		
								PROJECT P005: Nimble Fire			
BA 6: RDT&E Management Suppl	· · · · · · · · · · · · · · · · · · ·			Defense Organization (JIAMDO)							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P005: Nimble Fire	11.692	13.340	10.500	-	10.500	10.690	10.690	10.750	10.750	Continuing	Continuing
Quantity of RDT&E Articles											

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: JIAMDO Nimble Fire	11.692	13.340	10.500
<b>Description:</b> The Department's only joint air and missile defense operator-in-the-loop simulation. Comprised of current and future land, sea, and air weapon systems representing each of the Services AMD capabilities. Operational personnel execute full mission scenarios in a realistic joint environment. Distributed simulation in CONUS and overseas. Enhances air and missile defense capability through the integration of robust representations of current and emerging weapons platform models that support operator-in-the-loop exercises.			
FY 2011 Accomplishments:			

UNCLASSIFIED
Page 12 of 15

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0605126J: Joint Integrated Air & Missle	P005: Nimb	ole Fire
BA 6: RDT&E Management Support	Defense Organization (JIAMDO)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Purchase and upgrade Army PATRIOT/SLAMRAAM/MEADS and JLENS simulators. Enhanced Electronic Attack capabilities and composite tracking on JLENS. Add 4 F-35 Joint Strike Fighter cockpits for USMC forces. Support impacts of Electronic Attack in PACOM AOR from Asymmetric Missile Attack. Executing 3 operator in the loop events.			
FY 2012 Plans: Continue to purchase and upgrade Army PATRIOT/SLAMRAAM/MEADS and JLENS simulators. Enhance Electronic Attack capabilities and composite tracking on JLENS. Add 4 F-35 Joint Strike Fighter cockpits for USMC forces. Support impacts of Electronic Attack in PACOM AOR from Asymmetric Missile Attack. Execute 3 operator in the loop events.			
FY 2013 Plans: Continue to purchase and upgrade Army PATRIOT/SLAMRAAM/MEADS and JLENS simulators. Enhance Electronic Attack capabilities and composite tracking on JLENS. Add 4 F-35 Joint Strike Fighter cockpits for USMC forces. Support impacts of Electronic Attack in PACOM AOR from Asymmetric Missile Attack. Execute 3 operator in the loop events.			
Accomplishments/Planned Programs Subtotals	11.692	13.340	10.500

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Not required for Budget Activities 1, 2, 3 and 6.

## E. Performance Metrics

- Complete events within schedule and budget
- Specific details are classified

PE 0605126J: *Joint Integrated Air & Missle Defense Organization...*The Joint Staff

UNCLASSIFIED
Page 13 of 15

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff									<b>DATE</b> : Febi	uary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support			PE 0605126J: Joint Integrated Air & Missle				PROJECT P006: Cruise Missle Combat Identification (CID)				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P006: Cruise Missle Combat Identification (CID)	12.016	18.217	9.250	-	9.250	8.526	8.526	8.558	8.568	Continuing	Continuing
Quantity of RDT&F Articles											

### A. Mission Description and Budget Item Justification

The Joint Integrated Air and Missile Defense Organization (JIAMDO) is the organization within the Department of Defense (DOD) chartered to plan, coordinate, and oversee Joint Air and Missile Defense (AMD) requirements, joint operational concepts, and operational architectures. As part of the CJCS staff, JIAMDO supports the Chairman in meeting his Title 10 responsibilities as they relate to air and missile defense issues. JIAMDO serves as the operational community's proponent for characteristics, requirements, and capabilities in air and missile defense, and is the joint air and missile defense resource proponent within the DOD's resource allocation structures. JIAMDO also leads AMD mission area and utility analyses, integrates air and missile defense within the Force Protection joint capability area, and conducts evaluations and demonstrations of joint air and missile defense architectures and concepts.

JIAMDO has established a close partnership with Combatant Commands (COCOMs) and maintains liaison offices at all major COCOM locations to facilitate coordination of integration issues and requirements. In particular, JIAMDO maintains close coordination with US Strategic Command (USSTRATCOM) in support of ballistic missile defense of the US. It provides the Chairman, JCS and the Joint Requirements Oversight Council (JROC) the ability to meet statutory responsibilities to review the cost, schedule and performance criteria of Missile Defense Agency (MDA) missile defense programs, and assesses the validity of those criteria in relation to national and military requirements. At the request of USSTRATCOM, and at the direction of the CJCS, JIAMDO supports USSTRATCOM in the conduct of Military Utility Assessments and analysis of the Ballistic Missile Defense System (BMDS). JIAMDO supports the USSTRATCOM mission by ensuring operational and technical requirements are integrated into the theater missile warning architecture. JIAMDO represents the Joint Staff in work on the AMD Capabilities Based Assessment Joint Service Team and provides direct support to US Northern Command (USNORTHCOM) for homeland air surveillance issues.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Cruise Missile Combat Identification (CID)	12.016	18.217	9.250	
<b>Description:</b> Develops joint cruise missile CID technology, and positions it for fielding on front-line weapon systems. Monitors, assesses, and enhances joint AMD Combat ID programs.				
FY 2011 Accomplishments: Details of this program are classified.				
FY 2012 Plans: Details of this program are classified.				
FY 2013 Plans:				

PE 0605126J: Joint Integrated Air & Missle Defense Organization... The Joint Staff

UNCLASSIFIED
Page 14 of 15

R-1 Line #144

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
			se Missle Combat Identification
BA 6: RDT&E Management Support	Defense Organization (JIAMDO)	(CID)	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Details of this program are classified.			
Accomplishments/Planned Programs Subtotals	12.016	18.217	9.250

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Not required for Budget Activities 1, 2, 3 and 6.

# **E. Performance Metrics**

Details of this program are classified.



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0204571J: Joint Staff Analytical Support (JSAS)

BA 6: RDT&E Management Support

APPROPRIATION/BUDGET ACTIVITY

3 ,,											
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ III WIIIIOTIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
Total Program Element	23.081	0.018	-	-	-	-	-	-	-	0.000	23.099
P001: Concept Development Red Teaming	0.581	0.018	-	-	-	-	-	-	-	0.000	0.599
P002: Global Force Management Data Initative (GFM DI)	22.500	-	-	-	-	-	-	-	-	0.000	22.500

## A. Mission Description and Budget Item Justification

The Joint Staff Analytical Support (JSAS) family of programs provides defense analytical support capabilities for the CJCS and COCOMs. JSAS encompasses the developmental tools and infrastructure required to conduct analyses and formulate the results to best assist the Chairman in fulfilling his statutory responsibilities. Key deliverables provided by JSAS include wide-ranging force structure assessments, course of action development for the Joint Force environment, analyses and studies to aid in decision-making, and other analysis efforts to implement timely, low-cost initiatives.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	23.081	0.018	-	-	-
Current President's Budget	23.081	0.018	-	-	-
Total Adjustments	-	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Just	Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff										
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support					<b>IOMENCLA</b> 1J: <i>Joint Sta</i>	TURE ff Analytical	Support	PROJECT P001: Concept Development Red Teaming			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P001: Concept Development Red Teaming	0.581	0.018	-	-	-	-	-	-	-	0.000	0.599
Quantity of RDT&F Articles											

## A. Mission Description and Budget Item Justification

ocemplichmente/Planned Programs (\$ in Millions)

The Joint Staff Analytical Support (JSAS) family of programs provides defense analytical support capabilities for the CJCS and COCOMs. JSAS encompasses the developmental tools and infrastructure required to conduct analyses and formulate the results to best assist the Chairman in fulfilling his statutory responsibilities. Key deliverables provided by JSAS include wide-ranging force structure assessments, course of action development for the Joint Force environment, analyses and studies to aid in decision-making, and other analysis efforts to implement timely, low-cost initiatives.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Concept Development Red Teaming	0.581	0.018	-	
<b>Description:</b> Funds discovery experimentation activities supporting Joint Operations Concept (JOpsC) Development Process, implementation, and system integration. Provides expert assessment of future conceptual approaches, alternate means to achieve future solutions and capabilities through Red Teaming. Supports development and competition of ideas that provide the fundamental underpinnings for force development and design critical to assessing risk to DoD future capabilities.				
FY 2011 Accomplishments: Increase Red Team activities by three additional future concepts. Five concepts are identified. The remaining seven are to be				
determined.				
1) Energy Security Proposal				
2) Military Support to Security Sector Reform Proposal				
3) USFK/Korea Command as a Regionally-Engaged & Globally-Deployable Force Proposal				
4) Anti-Access				
5) Counterterrorism				
FY 2012 Plans:				
Funding provides program support for one concept.				
Accomplishments/Planned Programs Subtotals	0.581	0.018	-	

# C. Other Program Funding Summary (\$ in Millions)

N/A

PE 0204571J: Joint Staff Analytical Support (JSAS)
The Joint Staff

UNCLASSIFIED
Page 2 of 4

R-1 Line #170

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0204571J: Joint Staff Analytical Support (JSAS)	PROJECT P001: Concept Development Red Teaming
D. Acquisition Strategy N/A		
E. Performance Metrics N/A		

PE 0204571J: *Joint Staff Analytical Support (JSAS)* The Joint Staff

UNCLASSIFIED
Page 3 of 4

R-1 Line #170 **Volume 5 - 673** 

Exhibit R-2A, RDT&E Project Just		DATE: February 2012									
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support			PE 0204571J: Joint Staff Analytical Support				PROJECT P002: Global Force Management Data Initative (GFM DI)				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P002: Global Force Management Data Initative (GFM DI)	22.500	-	-	-	-	-	-	-	-	0.000	22.500
Quantity of RDT&E Articles											

## A. Mission Description and Budget Item Justification

The Joint Staff Analytical Support (JSAS) family of programs provides defense analytical support capabilities for the CJCS and COCOMs. JSAS encompasses the developmental tools and infrastructure required to conduct analyses and formulate the results to best assist the Chairman in fulfilling his statutory responsibilities. Key deliverables provided by JSAS include wide-ranging force structure assessments, course of action development for the Joint Force environment, analyses and studies to aid in decision-making, and other analysis efforts to implement timely, low-cost initiatives.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Global Force Management Data Initative (GFM DI)	22.500	-	-
<b>Description:</b> The GFM DI is the Department enterprise solution that enables comprehensive visibility, accessibility, and sharing of the entire DoD force information, which provides the Department with the capacity to integrate data across domains and systems. Provides the Department with improved decision-making ability by enabling solutions at the strategic, operational, and tactical level.			
FY 2011 Accomplishments: - Acheive GFM DI Joint Organization Server full functionality - Completion of KM/DS Capability Development Tracking and Management - Complete Joint Staff Analytic Suite move from TS to Secret - Conduct GFM DI Interoperability Testing			
Accomplishments/Planned Programs Subtotals	22,500	_	_

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

## **E. Performance Metrics**

None.

PE 0204571J: Joint Staff Analytical Support (JSAS)
The Joint Staff

UNCLASSIFIED
Page 4 of 4

R-1 Line #170

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303166J: Support to Information Operations Capability

BA 6: RDT&E Management Support

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	-	8.238	-	8.238	8.394	8.552	8.713	8.876	Continuing	Continuing
001: Information Operations Range	-	-	8.238	-	8.238	8.394	8.552	8.713	8.876	Continuing	Continuing
Quantity of RDT&E Articles											

#### Note

In FY2013 funds transfer to the Joint Staff. For FY2012 and previous, refer to PE 0303166D8Z.

### A. Mission Description and Budget Item Justification

The IO Range provides a secure, flexible, and seamless environment for the Military Services and Joint warfighters to test, train, develop tactics, and exercise selected IO/Cyber capabilities. The basis of the functional structure of the IO Range is the integration of existing ranges, laboratories, information warfare centers, and other Government facilities that currently support IO/Cyber test, training, exercise, and experimentation events. Capabilities at the selected sites are securely connected and integrated into the IO Range. A key feature of this concept is a persistent, secure connection that links the sites together, allowing the exchange of data and the visualization of effects as we employ capabilities. Creation of a "virtual range" based on persistent connections significantly reduces the amount of lead-time required to set up each new warfighter event. The long-term goal for the IO Range is to be a full spectrum IO/Cyber Range supporting: operations security (OPSEC), computer network operations (CNO), electronic warfare (EW), military information support operations (MISO), and military deception (MILDEC). This environment enables the warfighters to visualize non-kinetic weapons effects, understand the intricate and interactive effects generated by kinetic and non-kinetic weapons and achieve the same level of confidence and expertise in employing IO/Cyber capabilities as they have with kinetic capabilities.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013	<u>Γotal</u>
Previous President's Budget	-	-	8.238	-	8	3.238
Current President's Budget	-	-	8.238	-	8	3.238
Total Adjustments	-	-	-	-		-
<ul> <li>Congressional General Reductions</li> </ul>	-	-				
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-				
Congressional Rescissions	-	-				
<ul> <li>Congressional Adds</li> </ul>	-	-				
Congressional Directed Transfers	-	-				
Reprogrammings	-	-				
SBIR/STTR Transfer	-	-				
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2011	FY 2012	FY 2013

Title: IO Range

PE 0303166J: Support to Information Operations Capability
The Joint Staff

UNCLASSIFIED
Page 1 of 3

R-1 Line #174

Volume 5 - 675

8.238

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0303166J: Support to Information Operations Capability

BA 6: RDT&E Management Support

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
FY 2013 Plans:			
<ul> <li>Expand national DoD and Inter-Agency awareness and support regarding IO and cyber related activities</li> </ul>			
Improve the threat representation and operational relevance of the network			
• Improve the integration of live, virtual, and constructive (LVC) simulations with other Joint training and testing communities and infrastructures			
<ul> <li>Develop a long term JIOR infrastructure development, operation and sustainment management plan that supports the application of user resources allocated by JIOR stakeholders to support user activities, to include JIOR expansion and modernization and interoperability with National and DoD Cyber Ranges</li> </ul>			
Improve capability to rapidly reset, regenerate, and adapt events			
Improve capability to provide timely assessment for evaluation			
Establish cost-reimbursable funding construct			
Accomplishments/Planned Programs Subtotals	_	_	8.238

## D. Other Program Funding Summary (\$ in Millions)

N/A

# E. Acquisition Strategy

The Joint IO Range, under the JS Joint and Coalition Warfighting (JCW), manages the development and expansion of Joint IO Range capabilities to an increasing number of customers. Integration into the Joint Exercise program has allowed users to increase the use and capability of the range. Continued development of tools for the range will be required as adversarial capabilities improve.

#### F. Performance Metrics

Performance metrics are measured through internal management controls and external assessments. Performance metrics include, but are not limited to time, money, realism, and fidelity as defined below:

• Time – Will the effort enable the warfighter faster access to non-kinetic capabilities than current capabilities allow?

PE 0303166J: Support to Information Operations Capability
The Joint Staff

Page 2 of 3

R-1 Line #174

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xhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint S	Staff	DATE: February 2012
PPROPRIATION/BUDGET ACTIVITY 400: Research, Development, Test & Evaluation, Defense-Wide A 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0303166J: Support to Information Operations	
<ul> <li>Money – Will the effort enable the warfighter to reduce duplication of capabilities allow?</li> <li>Realism – Will the effort enable the warfighter to create an environr capabilities allow?</li> <li>Fidelity – Will the effort ensure unity of efforts throughout the IO/CY</li> </ul>	ment that is closer to what he/she will operate in duri	

PE 0303166J: Support to Information Operations Capability
The Joint Staff

UNCLASSIFIED
Page 3 of 3



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0607828J: Joint Integration & Interoperability

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	-	5.013	-	5.013	4.997	5.040	5.004	4.832	Continuing	Continuing
P818: Joint Integration & Interoperability	-	-	5.013	-	5.013	4.997	5.040	5.004	4.832	Continuing	Continuing
Quantity of RDT&E Articles											

#### Note

In FY 2013 funds transfer to the Joint Staff. For FY 2012 and previous, refer to PE 0607828D8Z.

### A. Mission Description and Budget Item Justification

Joint Integration and Interoperability Program (JI&I) funds efforts to identify critical characteristics of joint military capabilities and synchronize Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel and Facilities (DOTMLPF) capability elements into a coherent package for employment by joint commanders.

The JI&I Program provide resources for a wide range of efforts to define, refine, and deploy integrated joint capabilities. JI&I-funded endeavors aim to improve US and coalition capabilities to conduct coordinated operations. Necessarily, JI&I-funded projects most frequently address Command & Control (C2) and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) - the capstone capabilities for integrating disparate elements of military force for joint and coalition operations. The JI&I Program supports tasks and projects associated with integration & interoperability of the C2 Portfolio including coordination of C2 operational architectures, standards, and policies. Likewise, JI&I partially funds integration and decision support activities associated with DOD executive level C4 management and oversight.

The JI&I Program deliver outcomes conforming to joint integration missions:

- In concert with the separately funded Joint Systems Integration Command (JSIC) and Joint Fires Integration Interoperability Team (JFIIT), JI&I resources investigate joint C2/C4ISR shortfalls and ascertain characteristics of DOTMLPF remedies to meet mission requirements. The remedies are then pursued through partnerships with Component force development authorities and acquisition sponsors.
- Consistent with the role as operational sponsor for joint C2, JI&I underwrites Joint Combat Capability Developer (JCCD) activities compiling operational requirements for C2/C4ISR capability development and integrated testing.
- Delivers assessment and recommendations for improvement of interoperable Combat Identification (CID) and Situational Awareness (SA) capabilities among United States forces, interagency organizations, and allied/coalition forces;
- Establishes joint data standards and cross domain solutions to facilitate future system interoperability and integration. Joint Integration and Interoperability Program (JI&I) funds efforts to identify critical characteristics of joint military capabilities and synchronize Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel and Facilities (DOTMLPF) capability elements into a coherent package for employment by joint commanders.

PE 0607828J: Joint Integration & Interoperability The Joint Staff

UNCLASSIFIED
Page 1 of 3

R-1 Line #190

Volume 5 - 679

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0607828J: Joint Integration & Interoperability

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	-	5.013	-	5.013
Total Adjustments	-	-	5.013	-	5.013
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>PE transfer to the Joint Staff</li> </ul>	-	-	5.013	-	5.013
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2011	FY 2012 FY 2013

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Joint Integration and Interoperability	-	-	5.013
FY 2013 Plans:			
Effort transfers to the Joint Staff in FY 2013.			
Accomplishments/Planned Programs Subtotals	_	-	5.013

## D. Other Program Funding Summary (\$ in Millions)

N/A

# E. Acquisition Strategy

Not applicable for this item.

#### F. Performance Metrics

Interoperability and Integration:

- Develop coordinated joint C4 operational assessments, tests and evaluations to identify, prioritize and document interoperability deficiencies that produce Component plans and actions to reduce or eliminate identified deficiencies
- Provide mission capable solutions for joint interoperability and integration capability shortfalls to influence and resource joint C2 solutions in the POM

#### Joint Fires:

• Provide situational awareness and cooperative / non-cooperative identification capabilities that enable U.S., NATO / coalition warfighters to identify friendly, enemy and neutral forces for "shoot/don't shoot" decisions

PE 0607828J: Joint Integration & Interoperability
The Joint Staff

Page 2 of 3

R-1 Line #190

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0607828J: Joint Integration & Interoperability

BA 7: Operational Systems Development

- Synchronize Service testing, acquisition and fielding of Mode 5 IFF capability, with an Initial Operating Capability (IOC) in 2014 and Full Operational Capability (FOC) in 2020
- Complete Definition Package for Block 2 of Digitally Aided Close Air Support (DACAS) coordinated implementation in conjunction with participating Service programs of record
- Conduct Accreditation Biennial Visits for 6 Joint Terminal Attack Controller (JTAC) and 2 Joint Fires Observer (JFO) Schoolhouses
- Monitor compliance for Mode 5 IOC in FY14 and FOC in FY20

#### Combat Capability Development:

- Develop annual JROC approved plan to identify prioritized and synchronized capabilities sufficient for near-term development and fielding to warfighters (12-18 month delivery)
- Develop annual assessment of POM impacts on GCCS Joint & Service Family of Systems (\$350M+ annual portfolio) to determine mission impacts in the geographic AORs
- Develop, as required, JROC requirements documentation (ICDs, CDDs, CDPs, CONOPs, MOEs/MOPs) sufficient for agile/flexible use by the acquisition community

#### Architectures:

• Continue development of reusable architecture products to provide capability developers an upfront, operational/systems view at the enterprise level to support of capability acquisition, requirements generation, development, and testing.

#### Data

• Establish common C2 data and service standards and enables access to authoritative data assets in order to provide the warfighter timely access to critical information.

PE 0607828J: Joint Integration & Interoperability The Joint Staff

UNCLASSIFIED
Page 3 of 3



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0208043J: Planning and Decision Aid System (PDAS)

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	2.288	2.402	3.922	-	3.922	3.648	3.761	3.794	3.827	Continuing	Continuing
P001: Planning and Decision Aid System OPS	2.288	2.402	3.922	-	3.922	3.648	3.761	3.794	3.827	Continuing	Continuing
Quantity of RDT&E Articles											

# A. Mission Description and Budget Item Justification

Planning and Decision Aid System (PDAS) is a classified automated information system protected program under Secretary of Defense (SecDef). PDAS supports the planning and execution of Integrated Joint Special Technical Operations.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.288	2.402	3.922	-	3.922
Current President's Budget	2.288	2.402	3.922	-	3.922
Total Adjustments	-	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Planning and Decision Aid System (PDAS)	2.288	2.402	3.922
<b>Description:</b> Planning and Decision Aid System (PDAS) is a classified automated information system protected program under Secretary of Defense (SecDef). PDAS supports the planning and execution of Integrated Joint Special Technical Operations.			
FY 2011 Accomplishments: Details of this program are classified.			
FY 2012 Plans: Details of the program are classified.			
FY 2013 Plans:			

PE 0208043J: *Planning and Decision Aid System (PDAS)*The Joint Staff

UNCLASSIFIED
Page 1 of 2

R-1 Line #191

Volume 5 - 683

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0208043J: Planning and Decision Aid System (PDAS)

BA 7: Operational Systems Development

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Details of the program are classified.			
Accomplishments/Planned Programs Subtotals	2.288	2.402	3.922

## D. Other Program Funding Summary (\$ in Millions)

N/A

# E. Acquisition Strategy

Details of this program are classified.

# F. Performance Metrics

Details of this program are classified.

PE 0208043J: *Planning and Decision Aid System (PDAS)*The Joint Staff

UNCLASSIFIED Page 2 of 2

#101 Volume 5 - 684

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0303149J: Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW)

**DATE:** February 2012

, ,											
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	2.261	-	_	-	-	-	-	-	-	0.000	2.261
P001: Communication Requirements Development Support	0.886	-	-	-	-	-	-	-	-	0.000	0.886
P002: Coalition Warrior Interoperability Demo	-	-	-	-	-	-	-	-	-	0.000	0.000
P003: Communications Operations Analysis and Integration	1.375	-	-	-	-	-	-	-	-	0.000	1.375

## A. Mission Description and Budget Item Justification

The Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW) includes all owned and leased communications and computing systems and services, software (including applications), data, security services, and other associated services to support all DOD, National Security, and related Intelligence Community missions and functions (strategic, operational, tactical and business).

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.261	-	-	-	-
Current President's Budget	2.261	-	-	-	-
Total Adjustments	-	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	_			

# **Change Summary Explanation**

The Joint Staff's FY 2012 Command, Control, Communications, Computers, and Intelligence for the Warrior program is dis-established as a Department efficiency offset.

PE 0303149J: Command, Control, Communications, Computers, and I... The Joint Staff

UNCLASSIFIED
Page 1 of 7

Exhibit R-2A, RDT&E Project Ju	u <b>stification:</b> PE	3 2013 The .	Joint Staff						DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET AC 0400: Research, Development, T BA 7: Operational Systems Deve	est & Evaluation	n, Defense-l	Vide	PE 030314 Communica	IOMENCLA 9J: Commar ations, Comp rior (C4IFTW	nd, Control, outers, and I	ntelligence	PROJECT P001: Com Developme		Requirement	s
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P001: Communication Requirements Development Support	0.886	-	-	-	-	-	-	-	-	0.000	0.886
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

The Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW) vision evolved into the Department's Global Information Grid (GIG) as a means to achieve Information Superiority. The GIG is the globally interconnected, end-to-end set of information capabilities, associated processes, and personnel for collecting, processing, storing, disseminating and managing information on-demand to warfighters, policy makers, and support personnel. The GIG includes all owned and leased communications and computing systems and services, software (including applications), data, security services, and other associated services necessary to achieve Information Superiority. It also includes National Security Systems as defined in section 5142 of the Clinger-Cohen Act of 1996. The GIG supports all DOD, National Security, and related Intelligence Community missions and functions (strategic, operational, tactical and business), in war and in peace. The GIG also provides capabilities from all operating locations (bases, posts, camps, stations, facilities, mobile platforms, and deployed sites). Finally, the GIG provides interfaces to coalition, allied, and non-DOD users and systems.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Communication Requirements Development Support	0.886	-	-
Description: Supports Joint Command, Control, Communications, and Computers (C4) analytical tool development; Global Information Grid (GIG) transformational activities; GIG network operations and related network management and configuration management efforts, cyberspace operations, and joint C4 network and program development. Institutionalizes knowledge management capabilities across the Joint Staff. Ensures synchronization of systems to network capabilities, validates the Net-Ready Key Performance Parameters, and certifies interoperability and supportability.  Beginning in FY 2012, this program absorbs functions from the Communications Operations Analysis and Integration (P003) program. Future operations will rely on seamless and fully integrated Satellite Communications and terrestrial Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems and networks - all capable of supporting network centric operations. The use of creative analytical methodologies, C4ISR assessment tools, modeling and simulation, functional analysis, architecture development and assessment tools, and other analytical techniques, as appropriate, will help the development of insights and solutions to further evolve to a fully connected, integrated, and interoperable force.			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff	•		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0303149J: Command, Control,	P001: Com	munication Requirements
BA 7: Operational Systems Development	Communications, Computers, and Intelligence	Developme	nt Support
	for the Warrior (C4IFTW)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
FY 2011 Accomplishments:  Develop Network Operations C2 policy. Support Cyberspace Joint Operational Concept. Support COCOM planning process.			
FY 2012 Plans: The Joint Staff's FY 2012 Command, Control, Communications, Computers, and Intelligence for the Warrior program is disestablished, as a Department efficiency offset.			
Accomplishments/Planned Programs Subtotals	0.886	-	-

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

## E. Performance Metrics

- FY11: Complete actions required in National Military Strategy for Cyberspace Operations Implementation Plan
- FY11: Track of IPv6 certification criteria
- FY11: Identify/develop venues to certify specific IPv6 criteria

PE 0303149J: Command, Control, Communications, Computers, and I... The Joint Staff

UNCLASSIFIED
Page 3 of 7

R-1 Line #210 Volume 5 - 687

Exhibit R-2A, RDT&E Project Ju	istification: Pl	3 2013 The .	Joint Staff						DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				PE 0303149J: Command, Control, Communications, Computers, and Intelligence				PROJECT P002: Coalition Warrior Interoperability Demo			lity Demo
			<b>-</b> 27/ 22/2		rior (C4IFTV	/) 					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P002: Coalition Warrior Interoperability Demo	-	-	-	-	-	-	-	-	-	0.000	0.000
Quantity of RDT&E Articles	0	0	0		0	0	0				

## A. Mission Description and Budget Item Justification

The Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW) vision evolved into the Department's Global Information Grid (GIG) as a means to achieve Information Superiority. The GIG is the globally interconnected, end-to-end set of information capabilities, associated processes, and personnel for collecting, processing, storing, disseminating and managing information on-demand to warfighters, policy makers, and support personnel. The GIG includes all owned and leased communications and computing systems and services, software (including applications), data, security services, and other associated services necessary to achieve Information Superiority. It also includes National Security Systems as defined in section 5142 of the Clinger-Cohen Act of 1996. The GIG supports all DOD, National Security, and related Intelligence Community missions and functions (strategic, operational, tactical and business), in war and in peace. The GIG also provides capabilities from all operating locations (bases, posts, camps, stations, facilities, mobile platforms, and deployed sites). Finally, the GIG provides interfaces to coalition, allied, and non-DOD users and systems.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Coalition Warrior Interoperability Demonstration	-	-	-
<b>Description:</b> The Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW) program evolved into the Department's Global Information Grid (GIG) as a means to achieve information superiority. Coalition Warrior Interoperability Demonstration (CWID) provides focus and visibility into resolving joint, coalition, and national civil authority C4 interoperability issues and provides organizing principles, techniques, and procedures for achieving information superiority as envisioned by Joint Vision 2020. The GIG stresses interoperability and CWID leverages the rapid pace of C4 technology advancements. CWID is a Chairman's annual event that enables the US combatant commands, national civil authorities, and international community to investigate command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) solutions that focus on relevant and timely objectives for enhancing coalition interoperability and exploring new partnerships. CWID is conducted in a simulated operational environment to provide context for warfighter and national civil authorities' validation of those solutions. Interoperability Trials (ITs) are the activities used to address the core coalition and interagency interoperability objectives selected each year. ITs strive to address warfighter requirements and interoperability deficiencies. The selection of trials is dependent upon the annual overarching objectives, the host combatant command's priorities, Coalition/State/Agency desires to partner in a proposed trial, interagency participation, and the desires of invited coalition participants. CWID is an integral component of the JV 2020 conceptual template.			
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Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Star	DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	ECT Coalition Warrior Interoperability Demo				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
FY 2011 Accomplishments:  None. This program was transferred to USJFCOM, as directed by the	e Vice Chairman, in FY2011.				
FY 2012 Plans: None.					
	Accomplishments/Planned Programs	Subtotals	-	-	
C. Other Program Funding Summary (\$ in Millions)  N/A  D. Acquisition Strategy  N/A					
E. Performance Metrics  None. This program was transferred to USJFCOM, as directed by the second sec	the Vice Chairman, in FY11.				

PE 0303149J: Command, Control, Communications, Computers, and I... The Joint Staff

UNCLASSIFIED
Page 5 of 7

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff									<b>DATE</b> : February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0303149J: Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW)				PROJECT P003: Communications Operations Analysis and Integration			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P003: Communications Operations Analysis and Integration	1.375	-	-	-	-	-	-	-	-	0.000	1.375
Quantity of RDT&E Articles											

## A. Mission Description and Budget Item Justification

The Command, Control, Communications, Computers, and Intelligence for the Warrior (C4IFTW) vision evolved into the Department's Global Information Grid (GIG) as a means to achieve Information Superiority. The GIG is the globally interconnected, end-to-end set of information capabilities, associated processes, and personnel for collecting, processing, storing, disseminating and managing information on-demand to warfighters, policy makers, and support personnel. The GIG includes all owned and leased communications and computing systems and services, software (including applications), data, security services, and other associated services necessary to achieve Information Superiority. It also includes National Security Systems as defined in section 5142 of the Clinger-Cohen Act of 1996. The GIG supports all DOD, National Security, and related Intelligence Community missions and functions (strategic, operational, tactical and business), in war and in peace. The GIG also provides capabilities from all operating locations (bases, posts, camps, stations, facilities, mobile platforms, and deployed sites). Finally, the GIG provides interfaces to coalition, allied, and non-DOD users and systems.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Communications Operations Analysis & Integration	1.375	-	-
Description: Future operations rely on seamless and fully integrated Satellite Communications and terrestrial Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems and networks - all capable of supporting network centric operations. The use of creative analytical methodologies, C4ISR assessment tools, modeling and simulation, functional analysis, architecture development and assessment tools, and other analytical techniques, as appropriate, will help the development of insights and solutions to further evolve to a fully connected, integrated, and interoperable force.  FY 2011 Accomplishments:  Produce a process model for the JS J6 business processes. Support the implementation of the Interoperability and Supportability (I&S) processes. Support the Cyber Division in the execution of the DOD cyber missions. Continue support to the GIG 2.0 processes in the oversight and governance of the GIG.			
FY 2012 Plans: The Joint Staff's FY 2012 Command, Control, Communications, Computers, and Intelligence for the Warrior program is disestablished, as a Department efficiency offset.			
Accomplishments/Planned Programs Subtotals	1.375	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 The Joint Staff	DATE: February 2012	
	D 4 ITEM NOMENCI ATUDE	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide	R-1 ITEM NOMENCLATURE PE 0303149J: Command, Control,	PROJECT P003: Communications Operations Analysis
BA 7: Operational Systems Development	Communications, Computers, and Intelligence	and Integration
5A 1. Operational Systems Development	for the Warrior (C4IFTW)	and integration
C. Other Program Funding Summary (\$ in Millions)  N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics		
Produce written summaries of key Frequency Panel sub-group meetin	igs and preparatory meetings for annual COCOM	spectrum management conferences.

PE 0303149J: *Command, Control, Communications, Computers, and I...* The Joint Staff



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 The Joint Staff

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0902298J: Management Headquarters

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	2.807	2.730	4.100	-	4.100	4.019	4.116	4.171	4.186	Continuing	Continuing
P001: Joint Staff Information Network (JSIN)	2.807	2.730	4.100	-	4.100	4.019	4.116	4.171	4.186	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

Management Headquarters provides the day-to-day financial resources necessary to support TJS operations. Across the Joint Staff, Management Headquarters supports various efforts including network infrastructure, civilian pay accounts, supplies, travel, training, portfolio management, business process reviews, and transformation initiatives.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.807	2.730	2.747	-	2.747
Current President's Budget	2.807	2.730	4.100	-	4.100
Total Adjustments	-	-	1.353	-	1.353
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Increased requirements	-	-	1.353	-	1.353

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Joint Staff Information Network (JSIN)	2.807	2.730	4.100
<b>Description:</b> Provides RDT&E funds for the Joint Staff Information Network (JSIN). JSIN is the network infrastructure (for both classified and unclassified information) enabling collaboration and information-sharing among the Joint Staff, Combatant Commands (COCOMs) and the Services. The JSIN also provides crucial business-related, decision-making information and workflow support affecting military operations in support of the JCS. JSIN improves actions processing for faster coordination of critical issues with COCOMs, Services, and agencies, as well as within TJS.			
FY 2011 Accomplishments:			

PE 0902298J: Management Headquarters

The Joint Staff

UNCLASSIFIED
Page 1 of 2

R-1 Line #251

Volume 5 - 693

**DATE:** February 2012

**Exhibit R-2**, **RDT&E Budget Item Justification:** PB 2013 The Joint Staff **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide PE 0902298J: Management Headquarters

BA 7: Operational Systems Development

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Develop enhanced JS automated task/workflow management system. Modernize network architecture. Upgrade communications			
hardware & software. Research JS IT strategic direction and improvements. Complete web portal and content discovery			
enhancements. Provide secure, mobile electronic data/voice capabilities. Enhance identification/secured network access capabilities. Complete JTIMS implementation.			
FY 2012 Plans:			
Provide support for Hotel Applications, fully mobile multi-domain communications, Enterprise Services Implementation, Thin Client expansion, Content Management and Federated Search, migration to cloud computing, SharePoint services, and eJMAPS.			
FY 2013 Plans:			
Provide support for Hotel Applications, fully mobile multi-domain communications, Enterprise Services Implementation, Thin Client expansion, Content Management and Federated Search, migration to cloud computing, SharePoint services, and eJMAPS.			
Accomplishments/Planned Programs Subtotals	2.807	2.730	4.100

# D. Other Program Funding Summary (\$ in Millions)

N/A

# E. Acquisition Strategy

N/A

### F. Performance Metrics

- Prevent data breaches and respond to incidents within two hours of notification
- 100% on-time patching in accordance with Joint Task Force-Global Network Operations (JTF-GNO) timelines
- Resolve normal urgency tickets within 48 hours
- 100% accountability of IT equipment in JS property book
- Provide resolution for the customer's issues the first time they contact a technician for assistance

PE 0902298J: *Management Headquarters*The Joint Staff

R-1 Line #251 Volume 5 - 694

# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



# **United States Special Operations Command**

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



United States Special Operations Command • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 699
Program Element Table of Contents (by Budget Activity then Line Item Number)	Volume 5 - 715
Program Element Table of Contents (Alphabetically by Program Element Title)	Volume 5 - 719
USSOCOM Organizations	Volume 5 - 721
Acronyms	Volume 5 - 723
Exhibit R-2's	Volume 5 - 749



# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

	FY 2011	FY 2012	FY 2012	FY 2012
Appropriation	Actuals	Base	OCO	Total
<del></del>				
Research, Development, Test & Eval, DW	447,994	467,427	14,450	481,877
Total Research, Development, Test & Evaluation	447,994	467,427	14,450	481,877

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

Appropriation	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Research, Development, Test & Eval, DW	427,465	5,000	432,465
Total Research, Development, Test & Evaluation	427,465	5,000	432,465

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Applied Research	36,300	41,591		41,591
Advanced Technology Development (ATD)	50,635	36,003		36,003
Operational Systems Development	361,059	389,833	14,450	404,283
Total Research, Development, Test & Evaluation	447,994	467,427	14,450	481,877
Summary Recap of FYDP Programs				
Intelligence and Communications	20,666	8,847		8,847
Special Operations Forces	423,902	454,921	14,450	469,371
Classified Programs	3,426	3,659		3,659
Total Research, Development, Test & Evaluation	447,994	467,427	14,450	481,877

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Applied Research	28,739		28,739
Advanced Technology Development (ATD)	51,137		51,137
Operational Systems Development	347,589	5,000	352,589
Total Research, Development, Test & Evaluation	427,465	5,000	432,465
Summary Recap of FYDP Programs			
Intelligence and Communications	25,527	5,000	30,527
Special Operations Forces	401,938		401,938
Classified Programs			
Total Research, Development, Test & Evaluation	427,465	5,000	432,465

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Applied Research	36,300	41,591		41,591
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# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 OCO	FY 2013 Total
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Operational Systems Development	347,589	5,000	352,589
Total Research, Development, Test & Evaluation	427,465	5,000	432,465
Summary Recap of FYDP Programs			
Intelligence and Communications	25,527	5,000	30,527
Special Operations Forces	401,938		401,938
Classified Programs			
Total Research, Development, Test & Evaluation	427,465	5,000	432,465

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

	FY 2011	FY 2012	FY 2012	FY 2012
Appropriation	Actuals	Base	OCO	Total
<del></del>				
Special Operations Command			14,450	
Total Research, Development, Test & Evaluation			14,450	

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

	FY 2013	FY 2013	FY 2013
Appropriation	Base	OCO	Total
	a miles of second	-	100 155
Special Operations Command	427,465	5,000	432,465
Total Research, Development, Test & Evaluation	427,465	5,000	432,465

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

23 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Progra Line Elemen No Number		Act 	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	S e c
24 116040	.BB Special Operations Technology Development	02	36,300	41,591		41,591	U
A	pplied Research		36,300	41,591		41,591	•
70 116040	BB Special Operations Advanced Technology Development	03	41,212	30,242		30,242	U
71 116042	RBB Aviation Engineering Analysis	03	4,628	837		837	U
72 116047	RBB SOF Information and Broadcast Systems Advanced Technology	03	4,795	4,924		4,924	U
A	dvanced Technology Development (ATD)		50,635	36,003		36,003	-
215 030421	OBB Special Applications for Contingencies	07	15,785	5,045		5,045	U
230 030520	BBB Distributed Common Ground/Surface Systems	07	1,283	1,303		1,303	U
235 030521	OBB MQ-1 Predator A UAV	07	3,598	2,499		2,499	U
237 030523	LBB MQ-8 UAV	07					U
251 110521	OBB MQ-9 UAV	07	96	2,499		2,499	U
252 110523	2BB RQ-11 UAV	07		1,500		1,500	U
253 110523	BBB RQ-7 UAV	07		450	2,450	2,900	U
254 116027	9BB Small Business Innovative Research/Small Bus Tech Transfer Pilo	ot Prog 07	9,079				U
255 116040	BBB Special Operations Aviation Systems Advanced Development	07	65,851	74,382	,	74,382	U
256 116040	4BB Special Operations Tactical Systems Development	07	1,534	799		799	U
257 116040	5BB Special Operations Intelligence Systems Development	07	34,789	27,916		27,916	U
258 116040	8BB SOF Operational Enhancements	07	76,736	65,415	12,000	77,415	U
259 116042	1BB Special Operations CV-22 Development	07	13,976	10,775		10,775	U
260 116042	7BB Mission Training and Preparation Systems (MTPS)	07	3,408	4,617		4,617	U
261 116042	9BB AC/MC-130J	07	7,396	18,571		18,571	U

R-1C: FY 2013 President's Budget (Published Version), as of January 23, 2012 at 11:01:08

Volume 5 - 707

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

23 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No 	Program Element Number	2	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	S e c
24	1160401BB	Special Operations Technology Development	02	28,739		28,739	U
	Appli	ed Research		28,739		28,739	
70	1160402BB	Special Operations Advanced Technology Development	03	45,317		45,317	U
71	1160422BB	Aviation Engineering Analysis	03	861		861	U
72	1160472ВВ	SOF Information and Broadcast Systems Advanced Technology	03	4,959		4,959	U
	Advan	ced Technology Development (ATD)		51,137		51,137	
215	0304210BB	Special Applications for Contingencies	07	17,058		17,058	U
230	0305208ВВ	Distributed Common Ground/Surface Systems	07	7,114		7,114	U
235	0305219BB	MQ-1 Predator A UAV	07	1,355		1,355	U
237	0305231BB	MQ-8 UAV	07		5,000	5,000	U
251	1105219вв	MQ-9 UAV	07	3,002		3,002	U
252	1105232BB	RQ-11 UAV	07				U
253	1105233BB	RQ-7 UAV	07				U
254	1160279вв	Small Business Innovative Research/Small Bus Tech Transfer Pilot Prog	07				U
255	1160403BB	Special Operations Aviation Systems Advanced Development	07	97,267		97,267	U
256	1160404ВВ	Special Operations Tactical Systems Development	07	821		821	U
257	1160405BB	Special Operations Intelligence Systems Development	07	25,935		25,935	U
258	1160408BB	SOF Operational Enhancements	07	51,700		51,700	U
259	1160421BB	Special Operations CV-22 Development	07	1,822		1,822	U
260	1160427BB	Mission Training and Preparation Systems (MTPS)	07	10,131		10,131	U
261	1160429BB	AC/MC-130J	07	19,647		19,647	U

R-1C: FY 2013 President's Budget (Published Version), as of January 23, 2012 at 11:01:08

Volume 5 - 708

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

23 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	s e c
262	1160474BB	SOF Communications Equipment and Electronics Systems	07	894	1,392		1,392	U
263	1160476вв	SOF Tactical Radio Systems	07	2,277				U
264	1160477вв	SOF Weapons Systems	07	465	2,610		2,610	U
265	1160478BB	SOF Soldier Protection and Survival Systems	07	574	2,971		2,971	U
266	1160479ВВ	SOF Visual Augmentation, Lasers and Sensor Systems	07		3,000		3,000	U
267	1160480BB	SOF Tactical Vehicles	07	964	3,522		3,522	U
268	1160481BB	SOF Munitions	07		1,500		1,500	U
269	1160482BB	SOF Rotary Wing Aviation	07	54,985	51,123		51,123	U
270	1160483BB	SOF Underwater Systems	07	27,725	68,424		68,424	U
271	1160484BB	SOF Surface Craft	07	18,953	14,475		14,475	U
272	1160488BB	SOF Military Information Support Operations	07	4,109	2,990		2,990	U
273	1160489ВВ	SOF Global Video Surveillance Activities	07	5,109	8,923		8,923	U
274	1160490вв	SOF Operational Enhancements Intelligence	07	8,047	9,473		9,473	U
9999	9999999999	Classified Programs		3,426	3,659		3,659	U
	Opera	tional Systems Development		361,059	389,833	14,450	404,283	
Tota:	l Research,	Development, Test & Eval, DW		447,994	467,427	14,450	481,877	ć

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

23 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	s e c
262	1160474BB	SOF Communications Equipment and Electronics Systems	07	2,225		2,225	U
263	1160476BB	SOF Tactical Radio Systems	07	3,036		3,036	U
264	1160477ВВ	SOF Weapons Systems	07	1,511		1,511	U
265	1160478BB	SOF Soldier Protection and Survival Systems	07	4,263		4,263	U
266	1160479BB	SOF Visual Augmentation, Lasers and Sensor Systems	07	4,448		4,448	U
267	1160480BB	SOF Tactical Vehicles	07	11,325		11,325	U
268	1160481BB	SOF Munitions	07	1,515		1,515	U
269	1160482BB	SOF Rotary Wing Aviation	07	24,430		24,430	U
270	1160483BB	SOF Underwater Systems	07	26,405		26,405	U
271	1160484BB	SOF Surface Craft	07	8,573		8,573	U
272	1160488BB	SOF Military Information Support Operations	07				U
273	1160489ВВ	SOF Global Video Surveillance Activities	07	7,620		7,620	U
274	1160490BB	SOF Operational Enhancements Intelligence	07	16,386		16,386	U
9999	9999999999	Classified Programs					U
	Opera	tional Systems Development		. 347,589	5,000	352,589	
Tota	l Research,	Development, Test & Eval, DW		427,465	5,000	432,465	

R-1C: FY 2013 President's Budget (Published Version), as of January 23, 2012 at 11:01:08

### Special Operations Command FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

23 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Program Line Element No Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	S e c
24 1160401BB	Special Operations Technology Development	02	36,300	41,591		41,591	U
Applied Rese	arch		36,300	41,591		41,591	1
70 1160402BB	Special Operations Advanced Technology Development	03	41,212	30,242		30,242	U
71 1160422BB	Aviation Engineering Analysis	03	4,628	837		837	U
72 1160472BB	SOF Information and Broadcast Systems Advanced Technology	03	4,795	4,924		4,924	U
Advanced Tec	hnology Development (ATD)		50,635	36,003		36,003	,
215 0304210BB	Special Applications for Contingencies	07	15,785	5,045		5,045	U
230 0305208BB	Distributed Common Ground/Surface Systems	07	1,283	1,303		1,303	U
235 0305219ВВ	MQ-1 Predator A UAV	07	3,598	2,499		2,499	U
237 0305231BB	MQ-8 UAV	07					U
251 1105219ВВ	MQ-9 UAV	07	96	2,499		2,499	U
252 1105232BB	RQ-11 UAV	07		1,500		1,500	U
253 1105233BB	RQ-7 UAV	07		450	2,450	2,900	U
254 1160279вв	Small Business Innovative Research/Small Bus Tech Transfer Pilo	t Prog 07	9,079				U
255 1160403BB	Special Operations Aviation Systems Advanced Development	07	65,851	74,382		74,382	U
256 1160404BB	Special Operations Tactical Systems Development	07	1,534	799		799	U
257 1160405BB	Special Operations Intelligence Systems Development	07	34,789	27,916		27,916	U
258 1160408BB	SOF Operational Enhancements	07	76,736	65,415	12,000	77,415	U
259 1160421BB	Special Operations CV-22 Development	07	13,976	10,775		10,775	U
260 1160427BB	Mission Training and Preparation Systems (MTPS)	07	3,408	4,617		4,617	U
261 1160429BB	AC/MC-130J	07	7,396	18,571		18,571	U

R-1C: FY 2013 President's Budget (Published Version), as of January 23, 2012 at 11:01:08

Volume 5 - 711

### Special Operations Command FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

23 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Program Line Element No Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	S e c
24 1160401BB	Special Operations Technology Development	02	28,739		28,739	U
Applied Rese	arch		28,739		28,739	
70 1160402BB	Special Operations Advanced Technology Development	03	45,317		45,317	U
71 1160422BB	Aviation Engineering Analysis	03	861		861	U
72 1160472BB	SOF Information and Broadcast Systems Advanced Technology	03	4,959		4,959	U
Advanced Tec	hnology Development (ATD)		51,137		51,137	
215 0304210BB	Special Applications for Contingencies	07	17,058		17,058	U
230 0305208BB	Distributed Common Ground/Surface Systems	07	7,114		7,114	U
235 0305219BB	MQ-1 Predator A UAV	07	1,355		1,355	U
237 0305231BB	MQ-8 UAV	07		5,000	5,000	U
251 1105219BB	MQ-9 UAV	07	3,002		3,002	U
252 1105232BB	RQ-11 UAV	07				U
253 1105233BB	RQ-7 UAV	07				U
254 1160279BB	Small Business Innovative Research/Small Bus Tech Transfer Pilot P	rog 07				U
255 1160403BB	Special Operations Aviation Systems Advanced Development	07	97,267		97,267	U
256 1160404BB	Special Operations Tactical Systems Development	07	821		821	U
257 1160405BB	Special Operations Intelligence Systems Development	07	25,935		25,935	U
258 1160408BB	SOF Operational Enhancements	07	51,700		51,700	U
259 1160421BB	Special Operations CV-22 Development	07	1,822		1,822	U
260 1160427BB	Mission Training and Preparation Systems (MTPS)	07	10,131		10,131	U
261 1160429BB	AC/MC-130J	07	19,647		19,647	U

R-1C: FY 2013 President's Budget (Published Version), as of January 23, 2012 at 11:01:08

Volume 5 - 712

### Special Operations Command FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

23 Jan 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line No 	Program Element Number	Item	Act 	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	s e c
262	1160474BB	SOF Communications Equipment and Electronics Systems	07	894	1,392		1,392	U
263	1160476BB	SOF Tactical Radio Systems	07	2,277			×	U
264	1160477вв	SOF Weapons Systems	07	465	2,610		2,610	U
265	1160478BB	SOF Soldier Protection and Survival Systems	07	574	2,971		2,971	U
266	1160479ВВ	SOF Visual Augmentation, Lasers and Sensor Systems	07		3,000		3,000	U
267	1160480ВВ	SOF Tactical Vehicles	07	964	3,522	v ,	3,522	U
268	1160481BB	SOF Munitions	07		1,500		1,500	U
269	1160482BB	SOF Rotary Wing Aviation	07	54,985	51,123		51,123	U
270	1160483BB	SOF Underwater Systems	07	27,725	68,424		68,424	U
271	1160484BB	SOF Surface Craft	07	18,953	14,475		14,475	U
272	1160488BB	SOF Military Information Support Operations	07	4,109	2,990		2,990	U
273	1160489ВВ	SOF Global Video Surveillance Activities	07	5,109	8,923		8,923	U
274	1160490вв	SOF Operational Enhancements Intelligence	07	8,047	9,473		9,473	U
0	perational	Systems Development	*	357,633	386,174	14,450	400,624	
Tota	1 Special O	perations Command		444,568	463,768	14,450	478,218	



United States Special Operations Command • President's Budget Submission FY 2013 • RDT&E Program

# Program Element Table of Contents (by Budget Activity then Line Item Number)

**Budget Activity 02: Applied Research** 

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activit	y Program Element Number	Program Element Title	Page
24	02	1160401BB	Special Operations Technology Development	Volume 5 - 749

Budget Activity 03: Advanced Technology Development (ATD)

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title Page
70	03	1160402BB	Special Operations Advanced Technology DevelopmentVolume 5 - 755
71	03	1160422BB	Aviation Engineering Analysis
72	03	1160472BB	SOF Information and Broadcast Systems Advanced TechnologyVolume 5 - 767

United States Special Operations Command • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 07: Operational Systems Development

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title	Page
215	07	0304210BB	Special Applications for Contingencies	Volume 5 - 771
230	07	0305208BB	Distributed Common Ground/Surface Systems	Volume 5 - 779
235	07	0305219BB	MQ-1 Predator A UAV	Volume 5 - 789
251	07	1105219BB	MQ-9 Unmanned Aerial Vehicle	Volume 5 - 797
252	07	1105232BB	RQ-11 UAV	Volume 5 - 805
253	07	1105233BB	RQ-7 UAV	Volume 5 - 809
254	07	1160279BB	Small Business Innovative Research	Volume 5 - 813
255	07	1160403BB	Special Operations Aviation Systems Advanced Development	Volume 5 - 817
256	07	1160404BB	Special Operations Tactical Systems Development	Volume 5 - 829
257	07	1160405BB	Special Operations Intelligence Systems Development	Volume 5 - 833
259	07	1160421BB	Special Operations CV-22 Development	Volume 5 - 845
260	07	1160427BB	Mission Training and Preparation Systems (MTPS)	Volume 5 - 853
261	07	1160429BB	AC/MC-130J	Volume 5 - 861
262	07	1160474BB	SOF Communications Equipment and Electronics Systems	Volume 5 - 869
263	07	1160476BB	SOF Tactical Radio Systems	Volume 5 - 877
264	07	1160477BB	SOF Weapons Systems	Volume 5 - 883

United States Special Operations Command • President's Budget Submission FY 2013 • RDT&E Program

Budget Activity 07: Operational Systems Development Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	Program Element Number	Program Element Title	Page
265	07	1160478BB	Soldier Protection and Survival Systems	5 - 891
266	07	1160479BB	SOF Visual Augmentation, Lasers and Sensor Systems	5 - 907
267	07	1160480BB	SOF Tactical Vehicles	5 - 915
268	07	1160481BB	SOF MunitionsVolume 5	5 - 923
269	07	1160482BB	SOF Rotary Wing AviationVolume 5	5 - 931
270	07	1160483BB	SOF Underwater SystemsVolume 5	5 - 943
271	07	1160484BB	SOF Surface CraftVolume 5	5 - 953
272	07	1160488BB	Military Information Support Operations (MISO) (Formerly SOF PSYOP)Volume	5 - 961



United States Special Operations Command • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
AC/MC-130J	1160429BB	261	07Volume 5 - 861
Aviation Engineering Analysis	1160422BB	71	03Volume 5 - 763
Distributed Common Ground/Surface Systems	0305208BB	230	07Volume 5 - 779
MQ-1 Predator A UAV	0305219BB	235	07Volume 5 - 789
MQ-9 Unmanned Aerial Vehicle	1105219BB	251	07Volume 5 - 797
Military Information Support Operations (MISO) (Formerly SOF PSYOP)	1160488BB	272	07Volume 5 - 961
Mission Training and Preparation Systems (MTPS)	1160427BB	260	07Volume 5 - 853
RQ-11 UAV	1105232BB	252	07Volume 5 - 805
RQ-7 UAV	1105233BB	253	07Volume 5 - 809
SOF Communications Equipment and Electronics Systems	1160474BB	262	07Volume 5 - 869
SOF Information and Broadcast Systems Advanced Technology	1160472BB	72	03Volume 5 - 767
SOF Munitions	1160481BB	268	07Volume 5 - 923
SOF Rotary Wing Aviation	1160482BB	269	07Volume 5 - 931
SOF Surface Craft	1160484BB	271	07Volume 5 - 953
SOF Tactical Radio Systems	1160476BB	263	07Volume 5 - 877
SOF Tactical Vehicles	1160480BB	267	07Volume 5 - 915
SOF Underwater Systems	1160483BB	270	07Volume 5 - 943

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United States Special Operations Command • President's Budget Submission FY 2013 • RDT&E Program

Program Element Title	Program Element Number	Line Item	Budget Activity Page
SOF Visual Augmentation, Lasers and Sensor Systems	1160479BB	266	07Volume 5 - 907
SOF Weapons Systems	1160477BB	264	07Volume 5 - 883
Small Business Innovative Research	1160279BB	254	07Volume 5 - 813
Soldier Protection and Survival Systems	1160478BB	265	07Volume 5 - 891
Special Applications for Contingencies	0304210BB	215	07Volume 5 - 771
Special Operations Advanced Technology Development	1160402BB	70	03Volume 5 - 755
Special Operations Aviation Systems Advanced Development	1160403BB	255	07Volume 5 - 817
Special Operations CV-22 Development	1160421BB	259	07Volume 5 - 845
Special Operations Intelligence Systems Development	1160405BB	257	07Volume 5 - 833
Special Operations Tactical Systems Development	1160404BB	256	07Volume 5 - 829
Special Operations Technology Development	1160401BB	24	02Volume 5 - 749

### **ORGANIZATIONS**

1 SOW 1st Special Operations Wing

160th SOAR

AFSOC

Air Force Special operations Command

ARSOA

Army special operations Aviation

BGAD Blue Grass Army Depot

CERDEC Communications-Electronics Research, Development and Engineering Center

CSO Center for Special Operations

DARPA Defense Advanced research Projects Agency

DTRA Defense Threat Reduction Agency
FDA Federal Drug Administration

JSOAC Joint Special Operations Aviation Component

MARSOC Marine Special Operations Command NATO North Atlantic Treaty Organization

NAVAIR Naval Air Systems Command

NAVSCIATTS Naval Small Craft Instructor and Technical Training School

NAVSPECWARCOM Naval Special Warfare Command

NSA National Security Agency

NSWC Naval Special Warfare Command

PMA-275 V-22 Joint Program Office

SOFSA Special Operations Forces Support Facility
TAPO Technology Applications Program Office
TSOC Theater Special Operations Command

USAF United States Air Force

USASOC United States Army Special Operations Command

USSOCOM United States Special Operations Command



A2C2S Army Aviation Command & Control System

AA Anti-Armor

AAR After Action Review

AAWG Alternative Analysis Working Group
ABIS Automated Biometric Identification System

ACAT Acquisition Category

ACO Administrative Contracting Officer

ACP Automatic Colt Pistol

ACTD Advanced Concepts Technology Demonstration

ADAS Advanced Distributed Aperture System

ADI Attitude Direction Indicator
ADM Area Deterrent Munitions

ADM Acquisition Decision Memorandum

ADM-NVG Advanced Digital Multi-Spectral Night Vision Goggle

ADP Automated Data Processing

ADRAC Altitude Decompression Sickness Risk Assessment Computer

ADSS Adaptive Deployable Sensor Suite
AEA Aviation Engineering Analysis

AECV All Environment Capable Variant (UAS)

AESP Autonomous Expeditionary Support Platform (medical)

AFCS Auto Flight Control System

AFROCC Air Force Operational Capabilities Council
AFSB Afloat Forward Staging Base (Naval Systems)
AFSOC Air Force Special Operations Command

AGE Arterial Gas Embolism

AGTV Armored Ground Tactical Vehicle
AHRS Attitude Heading Reference System
AIP (ASDS) Improvement Program
AIS Automated Information System
ALE Automatic Link Establishment

ALGL Autonomous Landing Guidance System
ALGS Advanced Lightweight Grenade Launcher

ALLTV All Light Level Television

ALMBOS Acquisition, Logistics, Management and Business Operations Support

AMHS Automated Message Handling System
AMP Avionics Modernization Program

AMR Anti-Materiel Rifle

AMSA Acquisition Management System
AMSA Alternative Material Solution Analysis

ANA Afghan National Army ANP Afghan National Police AoA Analysis of Alternatives

AOI Area of Interest

AOPBS Aircraft Occupant Ballistic Protection System

AOR Area of Responsibility

APB Acquisition Program Baseline

APC Acquisition Project Category (USSOCOM)

APM Assistant Program Manager (formerly System Acquisition Manager (SAM))

APWG Acquisition Protection Working Group

ARAP ASDS Reliability Action Panel
ARATS Aircraft Radar APQ-170 Test Station

ARB Acquisition Review Board

ARDC Army Research Development and Engineering Center

ARL Army Research Lab
ARL Army Research Laboratory

ARL - UT Applied Research Lab - University of Texas

ARV Armored Recovery Variant (MRAP)

AS Acquisition Strategy

AS&C Advanced Systems Concept

ASAD Advanced Studies and Development ASC Aeronautical Systems Center

ASD Assistant Secretary of Defense

ASD (NII) ASD for Networks and Information Integration

ASD (SO/LIC) ASD for Special Operations and Low Intensity Conflict ASDS Advanced Sea, Air, Land (SEAL) Delivery System

ASE Aircraft Survivability Equipment
ASFF Afghanistan Security Forces Fund
ASIC Application Specific Integrated Circuit

ASICD Application Specific Integrated Circuit Development

ASM Anti Structural Munitions

ASMA Alternative Solution Materials Analysis
ASOIE Associated Support Items of Equipment
AT&L (OSD) Acquisition, Technology, and Logistics
ATA Alternate (or Additional) Test Aircraft (CV-22)

ATACMS Army Tactical Missile System

ATD Advanced Technology Demonstration

ATD/TB AC-130U Gunship Aircrew Training Devices/Testbed

ATIRCM Advanced Threat Infrared Countermeasures

ATL Advanced Tactical Laser
ATM Asynchronous Transfer Mode

ATPIAL Advanced Tactical Precision Illuminator Aiming Laser

ATPS Advanced Tactical Parachute System ATR Above Threshold Reprogramming

AT-UBA Advanced Technology Underwater Breathing Apparatus

ATV All Terrain Vehicle

AUV Armored Utility Variant (MRAP)
AvFID Aviation Foreign Internal Defense
AWE Aircraft, Weapons, Electronics

AWES Area Weapons Effects Simulation

BAA Broad Area Announcement BAFO Best and Final Offer

BAI Backup Aircraft Inventory

BALCS Body Armor Load Carriage System

BFM Business Financial Manager

BFT Blue Force Tracking
BGAD Blue Grass Army Depot
BIO Basic Input Output
BLOS Beyond Line-of-Site

BLOSeM Below Line-of-Site Electronic Support Measures
BMATT Brief Multi-mission Advanced Tactical Terminal

BMS Battle Management System
BNVS Binocular Night Vision System

BOD Board of Directors
BOI Basis of Issue

BOIA Basis of Issue Approved
BOIP Basis of Issue Plan

BOIR Basis of Issue Requirement

BRP Bombardier Recreational Products
BTR Below Threshold Reprogramming
BUD/S Basic Underwater Demolition School
BULLDOG XL All-Terrain transport (AKA MUTT) vehicle

C2 Command and Control

C3I Command, Control, Communications, and Intelligence C4 Command, Control, Communications, and Computers

C4I Command, Control, Communications, Computers, and Intelligence

C4IAS Command, Control, Communications, Computers, and Intelligence Automation System

CAAP Common Avionics Architecture for Penetration
CAAS Common Avionics Architecture Systems

CAC Cost Accounting Codes

CAE Component Acquisition Executive
CAIG Cost Analysis Improvement Group
CAIV Cost as an Independent Variable

CALS Continuous Acquisition and Life Cycle Support

CAMS Combat Autonomous Mobility System

CAP Combat Air Patrol CAP Cost Analysis Panel

CAPE Cost Assessment and Program Evaluation (OSD; replaces PA&E)

CAPS Counter-Proliferation Analysis and Planning System

CAS Close Air Support

CASEVAC Group Level Casualty Evacuation
CAS-TIC Close Air Support - Troops in Contact

CAT Acquisition Category

CBA Concealable Body Armor

CBN Chemical, Biological and Nuclear

CBS Cost Breakdown Structure CCB Configuration Control Board

CCCEKIT Combat Casualty Care Equipment Kit

CCD Charged Coupled Device (Forward Looking Infrared Radar Only)

CCD Coherent Change Detection

CCFLIR Combatant Craft Forward Looking Infrared (Radar)

CCH Combatant Craft - Heavy

CCJO Capstone Concept for Joint Operations

CCL Combatant Craft - Light CCM Combatant Craft - Medium

CCSA Combat Command Support Agency
CDD Capabilities Development Document

CDR Commander

CDR Critical Design Review

CEP Circular Error Probable/Probability
CEQ Council on Environmental Quality
CERP Capital Equipment Replacement Plan

CERP Cost Estimating Relationships

CERTEX Certification Exercise

CESE Civil Engineering Support Equipment

CET Capability Evaluation Team

CF&DR Conditional Fielding and Deployment Release

CFE Contractor Furnished Equipment
CFR Code of Federal Regulations

CI Counterintelligence

CIDS Capabilities Integration and Development Systems

CIDS Combat Identification
CINC Commander in Chief
CIO Chief Information Officer

CJSOAC Commander Joint Special Operations Air Component

CL Centerline (as in ASDS/JMMS)
CLR Combat Loss Replacement
CM Configuration Management

CMDS Countermeasure Dispensing System
CMNS Combat Mission Needs Statement

CMS Combat Mission Simulator CNO Chief, Naval Operations

CNSWC Commander, Naval Special Warfare Command

CNT Combating Narco Terrorism
CNVD Clip-On Night Vision Device

CO Contracting Officer

COA Cooperative Opportunity Analysis

COA Course of Action

CODEL Congressional Delegation
COE Corps of Engineers

COIL Chemical Oxygen Iodine Laser

COIL Contract of Interest
COIL Critical Operational Issue
COMSEC Communications Security
CONOPS Concept of Operations

COR Contracting Officer's Representative
CORB Command Operations' Review Board

CoS Chief of Staff

COTS Commercial-Off-The-Shelf

COW Cost of War
CP Concealable Pistol
CP Counter-Proliferation
CPAF Cost Plus Award Fee

CPARS Contractor Performance Assessment Reporting System

CPD Capabilities Production Document
CPI Critical Program Information
CRB Capability Review Board

CRIF Consolidated Rapid Integration Facility

CRM Comment Review Matrix
CRRC Combat Rubber Raiding Craft

CS Combat Swimmer

CS Confined Space (Light Anti-Armored Weapons)

CSAR Combat Survivor Evader Locator
CSB Configuration Steering Board
CSEL Combat Search and Rescue
CSH Combat Submersible - Heavy
CSM Combat Submersible - Medium

CSOLO Commando Solo
CSR Critical System Review
CT Counter Terrorism

CTP Critical Technical Parameters

CTTL Clandestine Tagging, Tracking, and Locating

CVR Cockpit Voice Recorder

CW Center Wing

CWG Capability Working Group

DA Direct Action

DAA Designated Approval Authority
DAB Defense Advisory Board
DAC Defense Acquisition Challenge

DAC Discretionary Access Control (in message system)
DAGR Defense Advanced Global Positioning System Receiver

DAMA Demand Assured Multiple Access

DARPA Defense Advanced Research Projects Agency

DAS Distributed Aperture System

DASD-CN Deputy Secretary of Defense - Counter Narcotics

DAWG Deputy Advisory Working Group

DCDR Deputy Commander

DCGS Data Common Ground/Surface System

DCS Decompression Sickness
DDL Digital Data Link

DDP Detachment Deployment Packages (Maritime)
DDR&E Director, Defense Research & Engineering

DDS Dry Deck Shelter
DEPORD Deployment Orders

DERF Defense Emergency Response Fund

DFARS Defense Federal Acquisition Regulation Supplement

DFAS Defense Finance and Accounting Service

DHEA Dehydroepiandrosterone

DHIP Defense Human Intelligence Program
DIAM Data Interface Acquisition Module
DIRCM Directional Infrared Countermeasures

DITPR Defense Information Technology Portfolio Repository

DITPR Directory Information Tree (message system)
DLR Depot Level Replacements (Replenishment)
DMCS Deployable Multi-Channel SATCOM

DMS Defense Message System

DMS Diminished Manufacturing Sources (ASDS)

DMT/DMR Distributed Mission Training/Distributed Mission Rehearsal

DNI Director National Intelligence
DoD Department of Defense

DoDD Department of defense Directive
DODI Department of Defense Instruction

DOE Department of Energy
DoP Director of Procurement

DOTMLPF Doctrine, Organization, Training, Material, Leadership & Education, Personnel & Facilities

DPAP Director of Procurement and Acquisition Policy

DPPC Deployable Print Production Center

DPS Defense Planning Scenarios

DROG Defense Resources Overview Guidance

DS&TI Designated Science and Technology Information

DSLD Dry Submersible Long Duration

DSO Direct Support Operators

DSRV Deep Submergence Rescue Vehicle

DSS Deep Submergence Systems
DT Development and Test

DT&E Development Test and Evaluation
DTA Development & Test Aircraft

DTT Desk Top Trainer

DUSD Deputy Under Secretary of Defense

EA Evolutionary Acquisition

EADS European Aeronautical Defense & Space Company (Airbus Parent)

EADS Expendable Airdrop Delivery System

EAPS Engine Air Particle Separator

ECAC Evasion and Conduct After Capture (part of SERE school)

ECHS Enhanced Cargo Handling System
ECM Electronic Countermeasures
ECO Engineering Change Order
ECOS Enhanced Combat Optical Sights
ECP Engineering Change Proposal
EDM Engineering Development Model
EFIS Electronic Flight Information System
EFP Explosively Forced Penetrator

EFP Explosively Forced Penetrator

EGLM Enhanced Grenade Launcher Module

EIR Embedded Integrated Broadcast System Receiver

EIRS Enhanced Infrared Suppression
ELT Emergency Locator Transmitter

EMD Engineering and Manufacturing Development

EMP Electromagnetic Pulse (weapon)
ENTR Embedded National Tactical Receiver

EO/IR Electro-Optical Infrared EPRO Environmental Protection

ERTP Extended Trans-Regional PSYOP Program

ESA Enhanced Situational Awareness

ESG Expeditionary Strike Group (Naval Systems)
ESOH Environmental Safety and Occupational Health
ESWBS Expanded Ship Work Breakdown Structure

ETCAS Enhanced Traffic Alert and Collision Avoidance System

ETI Evolutionary Technology Insertion

ETV Extreme Terrain Vehicle
EUAS Early User Assessment
EUAS Expeditionary UAS
EUE Extended User Evaluation
EVM Earned Value Management

EW Electronic Warfare

EWAISF Electronic Warfare Avionics Integrated Systems Facility

EWO Electronic Warfare Officer
F&DR Fielding & Deployment Release
F2EA Find & Fix Exploitation Analysis
F3EA Find, Fix, Finish, Exploit, Analyze

FAA Federal Aviation Administration

FAA Functional Area Analysis

FAADC2 Forward Area Air Defense Command and Control

FABS Fly-Away Broadcast System
FAR Federal Acquisition Regulation
FATA Federally Administered Tribal Area

FBCB2 Force XXI Battle Command, Brigade and Below

FCD Field Computing Devices
FCT Foreign Comparative Testing
FDEK Forward Deployed Equipment Kit

FEPSO Field Experimentation Program for Special operations

FFE Fire From Enclosure
FID Foreign Internal Defense

FISA Foreign Intelligence Surveillance Act
FLIR Forward Looking Infrared Radar
FMAV Fleet Maintenance Availabilities
FMBS Family of Muzzle Brake Suppressors

FMS Foreign Military Sales FMV Full Motion Video

FNA Functional Needs Analysis
FNM Foreign & Nonstandard Materiel
FOC Final (or Full) Operational Capability

FOIA Freedom of Information Act
FOL Family of Loud Speakers
FOPEN Foliage Penetration
FOS Forward Operating Site
FOS (or FoS) Family of Systems

FOT&E Follow-on Test and Evaluation FPM Flight Performance Model

FRACAS Failure Reporting Analysis and Corrective Action System

FSA Functional Solutions Analysis
FSDS Family of Sniper Detection Systems

FSOV Family of SOF Vehicles
FSR Field Service Representative
FSW Family of Sniper Weapons
FSWG Force Structure Working Group

FTE Full Time Equivalent FUE First Unit Equipped

FW Fixed Wing FY Fiscal Year

FYDP Future Year(s) Defense Plan

GAB Global Address Book (message system)

GATM Georgia All Terrain Monsters (Vehicle Manufacturer)

GBS Global Broadcasting System

GCC Geographical Combatant Commanders
GDF Guidance for the Development of the Force
GDIP General Defense Intelligence Program

GDS Gunfire Detection System

GDSOF Guidance for the Development of Special Operations Forces

GEF Global Employment of the Force

GEO Geological

GFE Government Furnishment Equipment

GIG Global Information Grid

GMS-2 Gunship Multispectral System - 2
GMTI Ground Moving Target Indicator

GMV Ground Mobility Vehicles

GM-VAS Ground Mobility Visual Augmentation Systems

GOTS Global Observer (UAV)
GOTS Government-Off-the-Shelf
GPK Gunner Protection Kit

GPPC Gov't Property in the Possession of Contractors

GPS Global Positioning System
GR&A Ground Rules and Assumptions

GRID Global War on Terrorism (GWOT) Request Information Database

GSK Ground Signal Intelligence Kit

GSM Global System Mobile
GSN Global Sensor Network
GSP Global SOF Posture

HALE High Altitude Long Endurance
HAR Hazard Assessment Report
HASC House Armed Services Committee

HE High Explosive

HEI High Explosive Incendiary
HF High Fragmentation (munitions)

HF High Frequency

HFIS Hostile Fire Indicating System

HFTTL Hostile Forces Tagging, Tracking, and Locating

HHI Hand Held HHI Hand Held Imager

HIS Human Systems Integration HLA High Level Architecture

HMMWV High Mobility Multi-purpose Wheeled Vehicle

HMU Hydrographic Mapping Unit

HOA Head of Agency HOA Horn of Africa

HPFOTD High Power Fiber Optic Towed Decoys

HPMMR High Performance Multi-Mission Radio (PRC-117F)

HPS Human Patient Simulator

HRLMD Hydrographic Reconnaissance Littoral Mapping Device

HSB High Speed Boat

HSE Host Support Equipment HSR Heavy Sniper Rifle

H-SUV Hardened-Sport Utility Vehicle

HUD Heads Up Display HVI High Value Individual HVT High Value Target

IAS/CMS Integration Avionics System/Cockpit Management System

IAT Integration Assembly & Test
IBR Intelligence Broadcast Receiver

IBS Integrated Bridge System (Naval System)

IBS Integrated Broadcast Service IC Interim Configuration

ICAIndependent Cost AssessmentICADIntegrated Control and DisplayICDInitial Capabilities DocumentICEIndependent Cost Estimate

ICLS Interim Contractor Logistics Support
ICS Interim Combat System (Naval Systems)

ICS Interim Contractor Support ICT Integrated Concept Team

IDAP Integrated Defensive Armed Penetrator
IDAS Interactive Defensive Avionics Subsystem

IDS Infrared Detection System

IDWS Interim Defensive Weapon System (CV-22 All-Quadrant Gun)

IED Improvised Explosive Devices

IFF Identify Friend or Foe

IFTS Integrated Financial Tool for SOAL (integrated Financial Tracking System?)

IGPS (or iGPS) Iridium Global Positioning System

ILM Improved Limpet Mine

ILSPIntegrated Logistics Support PlanILSSIntegrated Logistics Support Strategy

IM Insensitive Munitions

IMFP Integrated Multi-Function Probe

INFOSEC Information Security

INOD Improved Night/Day Observation/Fire Control Device

INS Inertial Navigation System IOC Initial Operational Capability

IOT&EInitial Operational Test & EvaluationIOVIndigenous Operations VehicleIPCInternational Program OfficeIPOCInitial Proof-of-ConceptIPTIntegrated Product Team

IPUMA Intergraded Precision Underwater Mapping

IQAF Iraqi Air Force IR Infrared

IRAM Improvised Rocket Assisted Munitions (or Mortar)

IRCM Infrared Countermeasures
IRD Initial Requirements Document

ISAF International Security Assistance Force (NATO)

ISFF Iraqi Security Forces Fund

ISOCA Improved Special Operations Communications Assemblage

ISP Information Support Plan ISP Integrated Service Desk

ISR Intelligence Surveillance and Reconnaissance

ISSMS Improved SOF Manpack System
ISSO Information Systems Security Office

IT Information Technology
IT&E Integrated Test & Evaluation

ITMP Integrated Technical Management Plan ITPP Information Technology Project Plan

ITTIntegrated Test TeamIUIDItem Unique IdentificationIWISIntegrated Warfare Info SystemJAMSJoint Attack Munitions Systems

JBS Joint Base Station
JCA Joint Cargo Aircraft
JCD Joint Capabilities Document

JCET Joint/Combined Exercise Training

JCIDS Joint Capabilities Integration and Development System

JCS Joint Chiefs of Staff

JCTD Joint Concept Technology Demonstration

JDAM Joint Direct Attack Munitions

JDISS Joint Deployable Intelligence Support System

JEM Joint Enhanced Multi-Purpose Inter/Intra Team Radio

JFA Joint Functional Area
JHL Joint Heavy Lift

JICO Joint Interface Control Officer

JIEDO Joint Improvised Explosive Device Office

JMC Joint Munitions Command

JMDSE Joint Medical Distance Support and Evacuation

JMISC Joint Military Info Systems Command JMMS Joint Multi-Mission Submersible JMPS Joint Mission Planning System JMTG Joint Military Terminology Group

JOS Joint Operational Stocks

JPADS Joint Precision Airdrop System

JPATS Joint Primary Aircraft Trainer System

JPATS Joint Process Action Team
JPG Joint Programming Guidance
JPO Joint Program Office

JPOTF Joint Psychological Task Force
JREC Joint Resources Executive Council
JRMP Joint Resources Management Process
JROC Joint Requirements Oversight Council

JRWG Joint Resources Working Group

JSOAC Joint Special Operations Aviation Components

JSOC Joint Special Operations Command JSOTF Joint Special Operations Task Force

JSTAR Joint Surveillance and Target Attack Radar System

JTAC Joint Terminal Attack Controller

JTC Joint Terminal Control

JTCITS Joint Tactical C4I Information Transceiver System

JTF Joint Task Force

JTRS Joint Tactical Radio System
JTWS Joint Threat Warning System
JUON Joint Urgent Operational Need

JWSTAP Joint Weapons Safety Technical Advisory Panel

KPP Key Performance Parameter

LAIRCM Large Aircraft Infrared Control Measures
LAN/WAN Local Area Network/Wide Area Network
LASAR Light Assault Attack Reconfigurable Simulator

LASIK Laser-Assisted IN-Situ Keratomileusis
LASSO Land and Sea Special Operations (mobility)

LAW Light Anti-Armored Weapons

LBJ Low Band Jammer

LCCE Life Cycle Cost Estimate

LCM Life Cycle Management

LCM Low Cost Modifications

LCMP Life Cycle Management Plan

LCMR Lightweight Counter Mortar Radar

LCSM Life Cycle Sustainment Manager

LCSMP Life Cycle Sustainment Management Plan

LCSP Life-Cycle Sustainment Plan LDS Leaflet Delivery System

LEP Lightweight Environmental Protection

LEVUAS Long Endurance Vertical Take Off and Landing UAS

LFT&E Live Fire Test and Evaluation (Maritime)

LIO Lock In/Out (on ASDS/JMMS)
LIPT Logistics Integrated Product Team

LLTM Long Lead Time Material

LMAMS Lethal Miniature Aerial Munitions System

LMG Lightweight Machine Gun LO Low Observable (UV)

LOE Limited Objective Experimentation

LOGSU Logistics and Support Unit

LOS Line of Sight

LPD Low Probability of Detection LPI Low Probability of Intercept

LPI/D Low Probability of Intercept/Detection

LPI/LPD Low Probability of Intercept/Low Probably of Detection

LRBS Long Range Broadcast System

LR-GMVAS Long Range Ground Mobility Visual Augmentation Systems

LRIP Low Rate Initial Production
LRPP Long Range Planning Process
LRV Light Reconnaissance Vehicle
LSV Logistics Support Vehicle

LTAV Lightweight Tactical All Terrain Vehicle

LTD Laser Target Designator

LTDR Laser Target Designator/Rangefinder

LTI Lightweight Thermal Imager
LTT Locating, Tagging, Tracking
LTV Land Transport Vehicle
LVA Low Visibility Aviation

LVNS Low Visibility Non-Standard (Naval Systems)

LVY Low Volume Terminal
LWC Littoral Warfare Craft
LWCM Lightweight Counter-Mortar

LWIR Long-wave Infrared M&S Modeling & Simulation

M2 Multi-Mission Unmanned Aircraft System

M4MOD M4A1 SOF Carbine Accessory Kit

MAAWS Multi-Purpose Anti-Armor/Anti-Personnel Weapons System

MACE Multi-Agency Collaboration Environment
MAC-II Mission Assurance Category Level 2
MADE Maritime Access to a Denied Environment
MAIS Major Automated Information System

MALET Medium Altitude Long Endurance Tactical (UAS)

MANPAD Man Portable Air Defense System

MARSOC Military Amphibious Reconnaissance System (Army NBOE)

MARSOC U.S. Marine Special Operations Command
MASINT Measurement and Signature Intelligence
MATT Multi-mission Advanced Tactical Terminal

MBE Mission Based Experimentation
MBITR Multi-Band Inter/Intra Team Radio

MBLT Machine Based Language Translator
MBMMR Multi-Band/Multi-Mission Radio
MBSS Maritime Ballistic Survival System
MCADS Maritime Craft Air Drop System

MCAR MC-130 Air Refueling

MCD Man caused disaster (formerly terrorist)

MCU Multipoint Conferencing Unit
MDA Milestone Decision Authority
MDAP Major Defense Acquisition Program

MDNA Mini Day/Night Sight ME Military Equipment

MEDTECH Special Operations Medical Technology Development

MELB Mission Enhancement Little Bird

MET Meteorological

MEV Military Equipment Valuation

MFP Major Force Program
MFP Materiel Fielding Plan
MFP-11 Major Force Program-11

MICH Modular Integrated Communications Helmet
MIDS Multifunction Information Distribution System

MILDEP Military Department

MILES Multiple Integrated Laser Engagement System

MIP Military Intelligence Program
MIST Military Information Support Teams

MIST Miniature ISR Technology
MIU Munitions Interface Unit

MK 8 (or MK 8 Mod 1) Mark 8 Sea, Air, Land (SEAL) Delivery Vehicle (SDV)

MK V Mark V Combatant Craft
MLE Military Liaison Element

MMA Material Management Activity (J4)
MMB Miniature Multiband Beacon
MOA Memorandum of Agreement
MOE Measures of Effectiveness
MONO-HUD Monocular Head Up Display
MOP Measures of Performance

MOSA Modular Open System Architecture
MOST Mobile Over the Snow Transport

MPARE Mission Planning, Analysis, Rehearsal and Execution

MPC Media Production Center

MPC Multi-Purpose Canine (military working dog)

MPK Mission Planning Kits

MPOC Mission Predator Operations Center

MQ-1 Predator Unmanned Vehicle
MQ-9 Reaper Unmanned Vehicle

MRAP Mine Resistant Ambush Protected

MRD Mission Rehearsal Device

MS Milestone

MSGL Multi-Shot Grenade Launcher
MSLO Mass Swimmer Lock-Out
MSV Maritime Support Vessel

MTBM Mean Time Between Maintenance

MTPS Master Test Plan
MTPS Mater Test Plan

MTPS Mission Training and Preparation System MTRC Mobile Technology Repair Center

MTs Mission Tasks

MTT Mobile Training Teams
MUA Military Utility Assessment

MUTT Mobile Utility Terrain Transport (aka Bulldog XL)

MWIR Mid-wave Infrared MWS Missile Warning system

NAVAIR Naval Aviation Systems Command

NAVSCIATTS Naval Small Craft Instructor and Technical Training School

NAVSEA Naval Systems Engineering Command
NAVSPECWARCOM Naval Special Warfare Command
NBC Nuclear, Biological, and Chemical
NBOE Non-Gasoline Burning Outboard Engine

NC-MIO Non Compliant Maritime Interdiction Operations

NDAA National Defense Authorization Act

NDI Non-Developmental Item

NEPA National Environmental Policy Act

NET New Equipment Training

NGES Northrop Grumman Electronics Systems

NGG Next Generation Gunship

NGLDS Next Generation Leaflet Delivery system
NGLRS Next Generation Long Range Strike
NGSB Northrop Grumman Ship Building
NIP National Intelligence Program

NISH National Institute of Severely Handicapped

NM Nautical Miles

NMF National Mission Force

NOSC Network Operations Systems Center

NRE Non-Recurring Engineering

NRT Near Real Time

NSAV Non-Standard Aviation

NSCV Non Standard Commercial Vehicle

NSS National Security Systems

NSSS (aka TENCAP) National Systems Support to SOF

NSW Naval Special Warfare

NSWC Naval Special Warfare Command

NTISR Non-Traditional Intelligence, Surveillance, Reconnaissance

NUWC Naval Undersea Warfare Center

NVD Night Vision DevicesNVEO Night Vision Electro-OpticO&M Operations and Maintenance

OA/CW Obstacle Avoidance/Cable Warning

OACE Open Architecture Computing Environment
OAS Obstacle Avoidance Sonar (or System)
OAS Office of Aerospace Studies (Air Force)
OAS Organization of American States

OBESA On-Board Enhanced Situational Awareness
OCO Operator Compartment (ASDS/JMMS)
OCO Overseas Contingency Operations

ODNI Office of he Director of National Intelligence

OEF Operation Enduring Freedom

OEF-CCA Operation Enduring Freedom - South America Caribbean/Central America

OEF-H Operation Enduring Freedom - Horn of Africa OEF-P Operation Enduring Freedom - Philippines

OEF-TS Operation Enduring Freedom - Trans Saharan Africa

OEP Operations Effectiveness Panel
OGA Other Government Agencies
OIF Operation Iraqi Freedom

OIO Offensive Information Operations
OMB Office of Management and Budget
OMMS Organizational Maintenance Manual Sets

ONS Operational Needs Statement
OPEVAL Operational Evaluation

OPG Operational Planning Guidance

OPTEVOR Operational Test and Evaluation Force
ORD Operational Requirements Document

OSA Open Systems Architecture
OSD Office of the Secretary of Defense
OT Operational Test (or Testing)
OT&E Operational Test and Evaluation

OTA Operational Test Agency
OTB Over The Beach

OTI One Time Inspection

OTRWG Operational Test Readiness Working Group
OWS Operation Willing Spirit (SOUTHCOM)
P3I Pre-Planned Product Improvement
PAB Personal Address Book (message system)

PAC Process Analysis Control

PACCM Psychological Operations Automated Command and Control Module

PAI Primary Aircraft Inventory

PAM Penetration Augmented Munitions
PARD Passive Acoustic Reflection Device

PC Patrol Coastal
PC Personal Computer

PCO Procurement Contracting Officer

PCOR Primary Contracting Officers' Representative

PDA Personal Digital Assistant

PDAE Principle Deputy to the Acquisition Executive

PDM Program Decision Memorandum

PDR Pre-Design Refinement
PDR Preliminary Design Review
PDR Program Deviation Report

PDS Psychological Operations Distribution System

PED Personal Electronic Devices

PED Processing, Exploitation, Dissemination PEO Program Executive Office (or Officer)

PESHE Programmatic Environment Safety and Occupational Health Evaluation

PFPS Portable Flight Planning System

PFS Principle for Safety

PGCB Precision Guided Canister Bomb
PGM Precision Guided Munitions
PGGE Precision Guided Munitions

PGSE Peculiar Ground Support Equipment

PHST Packaging, Handling, Storage, and Transportation

PIA Post Independent Analysis

PIA Primary Training Aircraft Inventory
PIPT Program Integrated Product Team
PLCCE Program Life Cycle Cost Estimate
PLED Polymer Light Emitting Diode
PLTD Precision Laser Targeting Device
PM Program (or Project) Manager

PMAC Program Management Allocation Criteria

PM-MCD Project Manager for Mines, Countermeasures and Demolitions

PMSOA Program Specific Memorandum of Agreement POBS Psychological Operations Broadcasting System

POE Program Office Estimate

POG Psychological Operations Group POMD Program Objective Memorandum

POMD Psychological Operations Media Display POPAS PSYOP Planning and Analysis System POPS Psychological Operations Print System

POPS PSYOP Print System POR Program of Record

POTUS President of the United States

PPBE Planning, Programming, Budget, and Execution PPHE Pre-Fragmented Programmable High Explosive

PPI POM Preparation Instruction

PPIED Pressure Plate Improvised Explosive Device

PPP Program Protection Plan
PRK Photo Refractive Keratectomy

PRTV Production Representative Test Vehicle
PSAS Persistent Surface Attack System-of-Systems

PSMOA Program (or Project) Specific Memorandum of Agreement

PSP Precision Strike Package
PSR Precision Sniper Rifle
PSR Program Support Review
PSYOP Psychological Operations

PTLD Precision Target Locator Designator

PTT Part Task Trainer

QOT&E Qualification Test and Evaluation/Qualification Operational Test and Evaluation

QRF Quick Reaction Force

RAA Required Assets Available (or Availability)
RAM Reliability, Availability, Maintainability
RAMS Remote Activated Munitions System
RCM Requirements Correlation Matrix

RD&A Research, Development, and Acquisition

RDR Radar Warning Receiver

RDT&E Research, Development, Test, and Evaluation

REB Regional Engagement Branch

REITS Rapid Exploitation of Innovative Technologies

RF Radio Frequency
RFF Request for Forces
RFI Ready for Issue

RFI Request for Information

RFIED Radio Frequency Improvised Explosive Device (IED)

RFT Ready for Training
RGB Red, Green, Blue
RGR Ranger Regiment
RIB Rigid Inflatable Boat
RIS Radio Integration System
RMD Resource Management Decision

RMS Root-Mean Square

RMWS Remote Miniature Weather System

ROAR Rover Over the Horizon Augmented Reconnaissance

ROIP Radio Over Internet Protocol (IP)
ROMO Range of Military Operations

ROSES Reduced Optical Signature Emissions System

RPUAS Rucksack Portable Unmanned Aircraft System

RRT Rapid Response Team (CMNS)

RSTA Reconnaissance Surveillance Target Acquisition

RUT Realistic Urban Training

RVM Requirements Validation Matrix

RW Rotary Wing

RWR Radar Warning Receivers
RWS Remote Weapons Station
RWS Remote Weapons System
S&T Science & Technology

SADBU Small and Disadvantaged Business Utilization SAFC Special Applications for Contingencies SAGIS SOF Air-Ground Interface Simulator

SAGIS Study Advisory Group

SAHRV Semi-Autonomous Hydrographic Reconnaissance Vehicle

SAM System Acquisition Manager (no longer used - now called Assistant Program Manager (APM))

SAMP Single Acquisition Management Plan

SAP Special Access Program

SAPR Sexual Assault Prevention and Response

SAR Selected Acquisition Report

SARC Sexual Assault Response Coordinator
SASC Senate Armed Services Committee
SAT Simplified Acquisition Threshold

SATCOM Satellite Communication

SAVE Small Assault Vehicle Expeditionary

SAW Small Arms and Weapons

SBIR Small Business Innovative Research

SBR System Baseline Review
SBSA Small Business Set Aside
SBT Special Boat Team
SBUD Simulator Block Update
SCAR SOF Combat Assault Rifle

SCAR Strike Control and Reconnaissance (Gunship)

SCG Security Classification Guide

SCI Sensitive Compartmented Information

SCPC Single Channel Per Carrier

SCSO USSOCOM Center for Special Operations

SDD System Design and Development

SDD System Development and Demonstration

SDN-M SOF Deployable Node-Medium

SDS Sniper Detection System

SDV Sea, Air, Land (SEAL) Delivery Vehicle SDV-N SEAL Delivery Vehicle - Next Generation

SE Support Equipment

SE Systems Engineering

SEAD Suppression of Enemy Air Defenses

SEAL Sea, Air, Land

SEALION Sea, Air, Land, Insertion Observation Neutralization

SEP Systems Engineering Plan

SERE Survival, Escape, Resistance, and Evasion

SFA Security Force Assistance

SHARK SOF High-Speed Agile Reachback Kit

SIC Special Identifiable (or identifier) Code (message system)

SIE SOF Information Enterprise
SIE SOF Information Environment

SIGINT Signals Intelligence
SIL Systems Integration Lab

SIPE Swimming Induced Pulmonary Edema
SIPRNET Secure Internet Protocol Router Network
SIRCM Suite of Infrared Countermeasures

SIRFC Suite of Integrated Radar Frequency Countermeasures

SIT Squadron Integration Training

SKOS Sets, Kits and Outfits SKR Silent Knight Radar

SLAAMRAM Surface Launched AMRAAM

SLAM Selectable Lightweight Attack Munitions

SLDW SOF logistics Data Warehouse
SLED SOF Long Endurance Demonstrator
SLEP Service Life Extension Program

SLNBOE Submersible Lightweight Non-Gasoline Burning Engine
SMAX Special Operations Command Multipurpose Antenna, X-Band

SME Significant Military Equipment
SME Special Mission Equipment
SME Subject Matter Expert
SMG SOF Machine Gun

SMRS Special Mission Radio System SNSL Standard Navy Stocking List

SO Special Operations

SOAE Special Operations Acquisition Executive

SOAL Special Operations Acquisition and Logistics Center

SOALIS SOAL Information System
SOAL-L/J4 SOAL Directorate of Logistics
SOAL-M SOAL Director of Management

SOAL-T SOAL Directorate of Advanced Technology SOC Special Operations Craft (Naval Systems)

SOC Special Operations Command SOC-R Special Operations Craft-Riverine

SOCRATES Special Operations Command, Research, Analysis and Threat Evaluation System

SOCREB Special Operations Command Requirements Evaluation Board

SOCS Special Operation Command Surgeon SOEP Special Operations Eye Protection

SOF Special Operations Forces

SOFARS Special Operations Federal acquisition regulation Supplement

SOFC Solid Oxide Fuel Cell
SOFDK SOF Demolition Kit
SOFIV SOF Intelligence Vehicle
SOFLAM SOF Laser Acquisition Marker

SOFLRD SOF Laser Range Finder and Designator

SOFM Special Operations Forces Comptroller (or Special Operations Center for Financial Management)

SOFPARS SOF Planning and Rehearsal System SOFSA SOF Forces Support Activity

SOFTACS SOF Tactical Assured Connectivity System
SOFTAPS SOF Tactical Advanced Parachute System
SOFTAV Special Operations Forces Total Asset Visibility

SOIG Special Operations Inspector General
SOIS Special Operations Intelligence System
SOJA Special Operations Judge Advocate

SOJICC Special Operations Joint Interagency Collaboration Center

SOKF Special Operations Knowledge and Futures Center

SOLA Special Operations Legislative Affairs

SOLL Special Operations Low Level

SOMPE Special Operations Mission Planning Environment SOMROV Special Operations Miniature Robotic Vehicle

SOMS-B Special Operations Media Systems B

SONC Special Operations Center for Networks and Communications

SOO Statement of Objectives
SOP Standard Operating Procedure
SOPGM Standoff Precision Guided Munitions

SOPMOD SOF Peculiar Modification

SOPMODM-4 SOF Peculiar Modification-M4 Carbine

SORR Special Operations Force Structure, Requirements, Resources, and Strategic Assessments Center

SORR-J8-O USSOCOM Operational Test and Evaluation Directorate

SORR-J8-R USSOCOM Requirements Directorate
SOSE Special Operations Safety Office
SOST SCAR Ammo (munitions)

SOST Special Operations Special Technology

SOTD Special Operations Technology Development SOTVS Special Operations Tactical Video System

SOVAS HHI Special Operations Visual Augmentation System Hand Held Imagers

SOW Special Operations Wing SOW Statement of Work

SPC Systems Production Certification

SPEAR Senior Procurement Executive

SPEAR SOF Personal Equipment Advanced Requirements

SPG Strategic Planning Guidance
SPIKE Shoulder Fired Smart Round
SPP Strategic Planning Process
SPR Special Purpose Rifle

SPTC SOF Pre-Deployment Training Cycle

SQT SEAL Qualification Training SR Surveillance and Reconnaissance

SRATS Specialized Reconnaissance Assault Transport System

SRC Special Reconnaissance Capabilities

SRC Systems Readiness Center

SRCP Supplemental Resource Collection Process

SRTC Short Infrared Sensor

SSAVIE SOF Sustainment Asset Visibility and Information Exchange

SSC Surface Support Craft
SSE Sensitive Site Exploitation

SSGN Nuclear Guided Missile Submarine

SSL System Safety Lead SSO Site Security Office SSR Sniper Support Rifle

SSRA System Safety Risk Assessment
SSSAR Solid State Synthetic Aperture Radar

SSSP Steady State Security Posture SSTG SOF SIGINT Training Group

START Special Threat Awareness receiver/Transmitter

STC SOF Tactical Communication STD Swimmer Transport Device

STET Strategic Technology Evaluation Team
STRB Strategic Technology Review Board
SUAS Small Unmanned Aerial System

SVEST Suicide Vest

SVMMC Small Versatile Maritime Mobility Craft

SW Short-Wave

SWALIS Special Warfare Automated Logistic Information System

SWAP Size, Weight, and Power

SWCC Special Warfare Combatant-craft Crewman SWCS Shallow Water Combat Submersible

SWIR Short Wave Infrared Radar SWIR Short-Wave Infrared Sensor

SWORDS Special Weapons Observation and Remote Direct-Action System

SYDET Sympathetic Detonator T&E Test and Evaluation

TAC-A Tactical Air Coordinator - Airborne

TACLAN Tactical Local Area Network

TACTICOMP Tactical Computer TACTI-NET Tactical Network

TAPO Technology Application Program Office

TAT To-Accompany Troops
TAV Technical Availabilities
TAV Total Asset Visibility
TAV Total Asset Visibility

TAWS Terrain Awareness and Warning System

TBI Traumatic Brain Injury

TC Transport Compartment (ASDS/JMMS)

TCCC Tactical Combat Casualty Care

TCT Time Critical Target
TCV Transit Case Variant
TDA Technical Direction Agent

TDE Technology Development Exploitation

**TDFD** Time Delay Firing Device Time Division Multiple Access **TDMA** TDO Technology Development Objective TDO **Technology Development Objectives** TDS Technology Development Strategy **TDS** Technology Development Strategy TEI **Technology Exploitation Initiative TEMP** Test and Evaluation Master Plan

TENCAP Tactical Exploitation of National Capabilities (also NSSS)
TERESA Tactical Edge and Response for Enhanced Situation Awareness

TES/TEZ Target Engagement Zones (kill boxes)

TES/TEZ Test and Evaluation Strategy

TF/TA Terrain Following/Terrain Avoidance (Radar)

THDD Tactical Handheld Digital Devices

TIC Technology Infusion Cell

TIC Troops in Contact

TILO Technical Industrial Liaison Officer
TIPT Test Integrated Product Team
TMR Total Munitions Requirement

TO Technical Order
TOR Terms of Reference
TOS Time on Station
TOT Time on Target

TPE Theater Provided Equipment

TPED Tactical Processing, Exploitation, and Dissemination

TR Technical Representative
TRL Technology Readiness Level
TRR Test Readiness Review

TRS Tactical Radio System

TSOC Theater Special Operations Command
TSOST Theater Special Operations Surgical Teams

TSP Time Sensitive Planning
TST Time Sensitive Target

TST Trans Sahara or Trans Saharan (as in JSOTF-TS)

TT&L Tagging, Tracking & Locating
TTHM Titanium Tilting Helmet Mount

TTP(s) Tactics, Techniques, and Procedures (sometimes Targeting is included)
TUTC Terrorism, Unconventional Threats, and Capabilities (Subcommittee)

U.S.C. United States Code

UAGS Unattended Ground Sensor

UARRSI Universal Aerial Refueling Receptacle Slipway

UAS Unmanned Aerial System
UAV Unmanned Aerial Vehicle
UBA Underwater Breathing Apparatus
UCA Undefinitized Contract Action

UCMM Undersea Clandestine Maritime Mobility

UCP Unified Command Plan

UCP Unsolicited Congressional Plus-Up

UCR Unit Cost Report

UDA Urgent Deployment Acquisition
UGV Unmanned Ground Vehicle
UHF Ultra High Frequency

UHMS Undersea and Hyperbaric Medicine Society

UID Unique Identification Device
UJTL Universal Joint Task List

UK United Kingdom
ULT Unit Level Training
UMI User Master Interface

US United States

USASOC U.S. Army Special Operations Command

USD (AT&L) Under Secretary of Defense for Acquisition, Technology, and Logistics

USG U.S. Government

USSOCOM United States Special Operations Command

USTEDA USSOCOM Table of Equipment and Distribution Allowances

UTC Unit Type Code UV Unmanned Vehicles

UVT Unmanned Vehicle Targeting UW Unconventional Warfare

V/STOL Vertical/Short Take-Off and Landing

VAS Victim Advocate

VAS Visual Augmentation System

VB Variable Ballast

VBIED Vehicle-Borne Improvised Explosive Device

VBL Visible Bright Lights

VBSS Visit, Board, Search, and Seizure (Maritime)

VBT Variable Ballast Tank

VCUAS Vehicle-Craft Launched Unmanned Aerial System

VEO Violent Extremist Organization

VESTA Vibro-Electronic Signature Target Analysis

VHF Very High Frequency

VSAT Very Small Aperture Terminal

VSD Variable Speed Drogue VSM Very Small Munitions

VSWMCM Very Shallow Water Mine Countermeasures

VTC Video Teleconferencing
WBS Work Breakdown Structure

WIFI Wireless Fidelity

WIN-T Warfighter Information Network - Tactical

WIRED Wind Tunnel Integrated Real Time In the Cockpit/Real Time Out of the Cockpit Experiments and Demonstrations

WMD Weapons of Mass Destruction

WOT War on Terrorism
WRM War Reserve Materials
WRT With Regards To

WSADS Wind Supported Air Delivery System

WTC World Trade Center

XML Extensible Mark-up Language

ZBT Zero Base Transfer



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160401BB: Special Operations Technology Development

BA 2: Applied Research

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	36.300	41.591	28.739	-	28.739	29.246	29.774	28.936	29.427	Continuing	Continuing
S100: SO Technology Development	36.300	41.591	28.739	-	28.739	29.246	29.774	28.936	29.427	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This program element enables USSOCOM to conduct studies and develop laboratory prototypes for applied research and advanced technology development, as well as leverage other organizations' technology projects that may not otherwise be affordable within MFP-11. Applying small incremental amounts of investments to DoD, other government agencies, and commercial organizations allows USSOCOM to influence the direction of technology development or the schedule against which it is being pursued, and to acquire emerging technologies for Special Operations Forces. This project provides an investment strategy for USSOCOM to link technology opportunities with capability deficiencies, capability objectives, technology thrust areas, human endurance and sensory performance, and technology development objectives.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	26.545	26.591	28.411	-	28.411
Current President's Budget	36.300	41.591	28.739	-	28.739
Total Adjustments	9.755	15.000	0.328	-	0.328
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	15.000			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	0.467	-			
SBIR/STTR Transfer	-0.912	-			
Other Adjustment	10.200	-	0.328	-	0.328

Congressional Add Details (\$ in Millions, and Includes General Reductions)

**Project:** S100: SO Technology Development Congressional Add: Unfunded Requirement

	FY 2011	FY 2012
	15.121	15.000
Congressional Add Subtotals for Project: S100	15.121	15.000
Congressional Add Totals for all Projects	15.121	15.000
•	*	

**DATE:** February 2012

PE 1160401BB: Special Operations Technology Development United States Special Operations Command

UNCLASSIFIED
Page 1 of 6

R-1 Line #24

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States	DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE				
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160401BB: Special Operations Technology Development	nt			
BA 2: Applied Research					
Change Summary Explanation					

Funding:

FY 2011 Net increase of \$9.755 million is due to an increase of a Congressional add (\$15.200 million), a Congressional reduction for unexecutable growth (-\$5.000 million), a economic assumption reduction (-\$0.187 million), a reprogramming to support SORBIS (\$0.365 million), a reprogramming to support Rotary Wing Aviation (\$0.289 million) and a transfer of funds to Small Business Innovation Research (-\$0.912 million).

FY 2012 Program increase due to a congressional add titled "Program Increase - Unfunded Requirement" (\$15.000 million).

FY 2013 Increase of \$0.328 million is due an economic assumption increase.

Schedule: None.

Technical: None.

Exhibit R-2A, RDT&E Project Ju	stification: Pl	3 2013 Unite	d States Sp	ecial Operat	ions Comma	nd			DATE: Feb	uary 2012	
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 2: Applied Research		n, Defense-V	Vide	PE 116040	IOMENCLAT 1BB: Special Developme	l Operations		PROJECT S100: SO Technology Development			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
S100: SO Technology Development	36.300	41.591	28.739	-	28.739	29.246	29.774	28.936	29.427	Continuing	Continuing

## A. Mission Description and Budget Item Justification

This project conducts studies and develops laboratory prototypes for applied research and advanced technology developments, and leverages other organizations' technology projects that may not otherwise be affordable within MFP-11. Small incremental co-investments with DoD, other government agencies, and commercial organizations allows USSOCOM to influence the schedule and direction of technology developments, emerging technologies, and capabilities for Special Operations Forces (SOF), with significant economies of investment. This USSOCOM investment strategy is used to link technology opportunities with USSOCOM capability deficiencies, capability objectives; technology thrust areas, and technology objectives. Requirements in these areas may be advertised to industry and government research and development agencies via broad area announcements and calls for white papers. Sub-projects within the Special Operations Technology Demonstration effort include:

- Rapid Exploitation of Innovative Technologies (REITS). Beginning in FY 2012, funds were moved to PE 1160402BB, Special Operations Advanced Technology Development, to more accurately reflect the correct budget activity for projects in this subproject. REITS provides USSOCOM the ability to identify, assess and exploit emerging innovative technologies for SOF capability deficiencies and expedite technology transitions from the laboratory to operational use. These technologies provide new transformational capabilities and immediate operational impacts, while providing a compass for the direction of future SOF procurement.
- REITS C4, ISR, and Sensors Capability Area. Develop technologies that provide SOF with improved situational awareness and communications and computer resources in all environments. Develop and discover technologies offering significant improvements in areas such as: enhanced sensors; enhanced command and control architectures and solutions; information consolidation, dissemination, and coordination; improved man-machine interface; covert secure communications; and effective antenna solutions.
- REITS Mobility, Power and Energy Capability Area. Exploit and develop technologies to improve the performance and survivability, and reduce the detectability of SOF mobility assets. Develop and discover technologies offering significant improvements in ground, sea, and air mobility areas such as: increased range/operational environment; improved durability; power/propulsion systems including new fuel sources, and reduced signature.
- REITS Warrior Systems and Bio-Medical Capability Area. Exploit and develop technologies to increase the SOF warrior's survivability and performance. Develop and discover technologies offering significant improvements in areas such as: improved target identification and engagement, human identification, electro-optical vision systems, sensor fusion, human endurance, SOF medical equipment, operator safety, and improved weapons and accessories.
- Special Operations Technology Development Sub-Project: This project conducts studies and develops laboratory prototypes for applied research and advanced technology developments, and leverages other organizations' technology projects that may not otherwise be affordable within MFP-11.

UNCLASSIFIED
Page 3 of 6

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States S	DATE: February 2012						
APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT							
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160401BB: Special Operations	S100: SO 7	Technology Development				
BA 2: Applied Research	Technology Development						

- Tagging, Tracking, and Locating (TTL) Sub-Project: TTL technologies are a key element in the ability of SOF to find, fix, and finish targets in overseas contingency operations (OCO). This sub-project invests in critical science and technology efforts to improve operational capabilities for TTL high value individuals and objects in support of the OCO.
- Classified Sub-Project (provided under separate cover).
- The following technology activity was added by congress in FY 2011:
- Congressional add: Unfunded Requirement Increased development of multi-spectral optics which will address night vision capability gaps; concentrated on power requirements for SOF mobility platforms; and initiated efforts to address biometric and non-lethal engagement needs. Classified unfunded requirement details are provided under separate cover.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: REITS C4, ISR, and Sensors Capability Area	5.008	-	-
FY 2011 Accomplishments:  Developed advanced sensors, multi-spectral optics, high bandwith technologies and multi-level security systems.			
Title: REITS Mobility, Power and Energy Capability Area	2.500	-	-
FY 2011 Accomplishments: Pursued low observable and counter low observable technologies to develop advanced lightweight armor and materials. Investigated multi-domain mobility platforms.			
Title: REITS SOF Warrior Systems and Bio-Medical Capability Area	2.100	-	-
FY 2011 Accomplishments:  Developed far-forward Tactical Combat Casualty Care kits. Pursued rapid assays/diagnostics, reduced operator load, and provided advanced protection.			
Title: Special Operations Technology Development	-	11.944	12.226
FY 2012 Plans: Pursue reduced signature technologies; develop advanced lightweight armor and materials; and begin development of multi-domain mobility platforms, long duration small form factor power supplies, alternative fuel power systems and "green" energy devices. Continue to advance technologies for combat medical equipment and tactics. Continue pursuit of methods to reduce operator load and provide advanced protection. Develop technologies for improved Man-Machine Interface and functionality of Target Engagement Systems and investigate technologies that can be applied to increase human performance and endurance; pursue enhancements to technologies that can aid in detection of enemy intentions and movement. Continue further development			

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command		DATE: Fel	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide	R-1 ITEM NOMENCLATURE PE 1160401BB: Special Operations	PROJECT		Develormon	+
BA 2: Applied Research	5100. 50	: SO Technology Development			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
of Multi-Spectral Optics, Digital Night Vision, Digital Fusion, Short-Wa Advanced Optics transition mature technology into programs of record		ems and			
FY 2013 Plans:					
Continue ongoing technology development sub-projects in areas such advanced lightweight armor and materials; multi-domain mobility platf alternative fuel power systems and eco-friendly energy devices. Advatactics; sensor and processing improvements; improve interfaces and of methods to reduce operator load and provide advanced protection. of target engagement (escalation of force); pursue enhancements to the and movement; and continue development and exploration across the maturity metrics, transfer successful projects into programs of record.	forms; long duration small form factor power sup ance technologies for combat medical equipment of displays; and secure communications. Continut Develop technologies for improved and widence technologies that can aid in detection of enemy is the electromagnetic spectrum. Based upon agreed	olies; t and e pursuit d window ntentions			
Title: Tagging, Tracking, and Locating Technologies (TTL)			9.630	12.567	14.37
FY 2011 Accomplishments: Specific objectives, priorities, technical approaches, and potential operation of exploit nanotechnology, biotechnology and chemistry for application to projects linked to the USSOCOM/DoD TTL Roadmap, which is update TTL Quick-Look Capabilities-Based Assessment (QL-CBA).	o TTL and TTL-enabling systems. Initiated and	continued			
FY 2012 Plans: Specific objectives, priorities, technical approaches, and potential ope exploit nanotechnology, biotechnology and chemistry for application to DoD TTL Roadmap. Support the JCS TTL Quick Look Capability Ass	o TTL systems. Initiate projects linked to the US				
FY 2013 Plans: Specific objectives, priorities, technical approaches, and potential ope exploit nanotechnology, biotechnology and chemistry for application to the USSOCOM/DoD TTL Roadmap, which is updated via the JCS/Assessment (QL-CBA).	o TTL and TTL-enabling systems. Initiates proje	cts linked			
Title: Classified			1.941	2.080	2.142
FY 2011 Accomplishments: Details provided under separate cover.					
FY 2012 Plans:					

PE 1160401BB: *Special Operations Technology Development* United States Special Operations Command

UNCLASSIFIED
Page 5 of 6

R-1 Line #24

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160401BB: Special Operations S100: SO Technology Development

BA 2: Applied Research Technology Development

EV 2014 EV 2012 EV 2013

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Details provided under separate cover.			
FY 2013 Plans:			
Details provided under separate cover.			
Accomplishments/Planned Programs Subtotals	21.179	26.591	28.739

	FY 2011	FY 2012
Congressional Add: Unfunded Requirement	15.121	15.000
<b>FY 2011 Accomplishments:</b> Increased development of multi-spectral optics which will address night vision capability gaps; concentrated on power requirements for SOF mobility platforms; and initiated efforts to address biometric and non-lethal engagement needs. Classified unfunded requirement details are provided under separate cover.		
FY 2012 Plans: Expand and enhance current Unclassified Test Bed (UTB) capabilities such as evaluating, developing, prototyping and fabricating quick reaction prototypes. Included in this effort, is a classified area that will provide SOF the ability to quickly transition candidate technologies with multiple levels of classification. Continue integration of Multi-Spectral optics which will address night vision capability gaps and signature management improvements; develop power solutions for SOF mobility platforms; and continued efforts to address non-lethal engagement needs.		
Congressional Adds Subtotals	15.121	15.000

# C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

N/A

**E. Performance Metrics** 

N/A

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160402BB: Special Operations Advanced Technology Development

BA 3: Advanced Technology Development (ATD)

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	41.212	30.242	45.317	-	45.317	46.356	41.645	42.409	43.131	Continuing	Continuing
S200: SO Advanced Technology Development	41.212	30.242	45.317	-	45.317	46.356	41.645	42.409	43.131	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This program element conducts rapid prototyping and Advanced Technology Demonstrations (ATDs). ATDs provide a means for demonstrating and evaluating the utility of emerging/advanced technologies in as realistic an operational environment as possible by Special Operations Forces (SOF) users. Evaluation results are included in a transition package, which assists in the initiation of or insertion into an acquisition program. The program element also addresses projects that are a result of unique joint special mission or area-specific needs for which a few-of-a-kind prototypes must be developed on a rapid response basis, or are of sufficient time sensitivity to accelerate the prototyping effort of a normal acquisition program in any phase.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	30.806	35.242	39.684	-	39.684
Current President's Budget	41.212	30.242	45.317	-	45.317
Total Adjustments	10.406	-5.000	5.633	-	5.633
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	_	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	_	-			
<ul> <li>Reprogrammings</li> </ul>	3.587	-			
SBIR/STTR Transfer	-0.964	-			
Other Adjustments	7.783	-5.000	5.633	-	5.633

# **Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** S200: SO Advanced Technology Development

Congressional Add: SOF Advance Concept Technology Demonstration (ACTD) Programs

grams	7.958	-
Congressional Add Subtotals for Project: S200	7.958	-
Congressional Add Totals for all Projects	7.958	-

FY 2011

**DATE:** February 2012

PE 1160402BB: Special Operations Advanced Technology Development United States Special Operations Command

UNCLASSIFIED
Page 1 of 8

R-1 Line #70

Volume 5 - 755

FY 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States	s Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160402BB: Special Operations Advanced Technology L	Development
BA 3: Advanced Technology Development (ATD)		

## **Change Summary Explanation**

Funding:

FY 2011 Net increase of \$10.406 million is due to an increase for a Congressional add for Advance Capabilities Technology Demonstration (ACTD) (\$8.000 million), below threshold reprogrammings to support YMQ-18A Unmanned Aerial Vehicle (\$2.577 million), and a technical and user assessment of SOCOM APPS Store Software (\$0.990 million), an economic assumption reduction (-\$0.197 million), and a transfer of funds to Small Business Innovative Research (-\$0.964 million).

FY 2012 Decrease of \$5.000 million for an excess to need congressional reduction.

FY 2013 Net increase of \$5.633 million is due to a new start program, Special Communications Field Segment-Enterprise, which will manage and provide clandestine exchanges of information between SOF elements (\$5.100 million), a reprogramming to higher command priorities (-\$0.011 million) and an economic assumption increase (\$0.544 million).

Schedule: None.

Technical: None.

Exhibit R-2A, RDT&E Project Jus	tification: Pl	3 2013 Unite	d States Sp	ecial Operat	ions Comma	nd			DATE: Feb	ruary 2012	ļ
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Tes		n Defense-k	Nide		NOMENCLA 2BB: <i>Specia</i>		Advanced	PROJECT S200: SO A	dvanced Te	chnology De	evelonment
BA 3: Advanced Technology Develo			vide .		Developme	•	Advanced	3200. 30 F			velopment
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
S200: SO Advanced Technology Development	41.212	30.242	45.317	-	45.317	46.356	41.645	42.409	43.131	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This project provides for rapid prototyping, Advanced Technology Demonstrations (ATDs) and Joint Capability Technology Demonstrations. It is a means for demonstrating and evaluating the utility of emerging/advanced technologies in operationally relevant environments with Special Operations Forces (SOF) users. This project integrates emerging technologies and presents them in technology demonstrations, in conjunction with joint experiments and other assessment events. Evaluation results often facilitate the initiation of new programs and the insertion of appropriate technologies to acquisition programs. The element also addresses unique, joint special mission or area-specific needs for which a few rapid prototypes must be developed on a responsive basis, or are of sufficient time sensitivity to accelerate prototyping efforts of a normal acquisition program in any phase. Sub-projects within the Special Operations Special Technology Development effort include:

- Rapid Exploitation of Innovative Technologies (REITS). This sub-project supports both top-down and bottom-up approaches for USSOCOM Components, Theater Special Operations Commands and Special Operations Task Forces to articulate innovative technology recommendations. Concepts, ideas, and needs will be submitted to HQ USSOCOM for review and/or approval as appropriate. The tenets promote speed, evolution, collaboration, and engagement between the SOF user and the technical problem solver. Individual projects or ideas can be submitted from every echelon of command. Initial evaluation clears new ideas for distribution to industry, academia, laboratories or SOF in-country mobile technology repair complexes that have the capability to augment or build solutions in-place. The USSOCOM directive, "Rapid Technology Support to Special Operations" outlines the processes to identify, assess and exploit emerging innovative technologies for SOF in the following Capability Areas: 1) Command, Control, Communications, and Computers (C4), Intelligence, Surveillance and Reconnaissance (ISR), and Sensors; 2) Mobility, Power, and Energy; 3) SOF Warrior Systems and 4) Weapons and Munitions. Technical activities in these areas will provide new operational capabilities and will mature technologies to better shape future SOF procurements.
- REITS C4, ISR, and Sensors Capability Area. Exploit emerging technologies to conduct ATDs that provide SOF with robust C4 and intelligence capabilities such as, but not limited to, ensuring uninterrupted information exchange, influencing situations to support mission accomplishments, reducing an adversary's ability to use information, increasing sensory performance, improving antenna technologies, and achieving near real-time data fusion for sensor systems.
- REITS Mobility, Power, and Energy Capability Area. Exploit emerging technologies to conduct ATDs such as, but not limited to, providing SOF with durable, survivable mobility capabilities in high threat areas; enhanced situational awareness; reconnaissance and direct action in high threat areas using unmanned systems, improved power system technologies for signature reduction, longer endurance, or smaller size; and advanced energy storage for vehicles, sensors, and operational needs.
- REITS SOF Warrior Systems Capability Area. Exploit emerging technologies to conduct ATDs that provide SOF with increased survivability and performance to enhance individual operator capabilities including, but not limited to, ballistic protection, personal equipment, and night vision and optics systems.

Page 3 of 8

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160402BB: Special Operations Advanced	S200: SO A	Advanced Technology Development
BA 3: Advanced Technology Development (ATD)	Technology Development		

- Weapons and Munitions Capability Area. Exploit technologies such as tunable weapons, reduce signature capability, and reduce size and weight.
- Special Operations Special Technology Development Sub-Project. This sub-project integrates emerging technologies and presents them in technology demonstrations, in conjunction with joint experiments and other assessment events.
- Joint Task Force SWORD Sub-Project. Explore use of experimental technologies to provide emergent technologies to quick response task force deployments.
- Tagging, Tracking, and Locating (TTL) Technologies Sub-Project. Exploit emerging technologies as identified in the TTL users' Capabilities Based Assessments. Exploit emerging technologies to locate and track targets or items of interest. Pursue advanced development and prototyping of TTL capabilities that have been proven to be feasible and operationally useful.
- National to Theater Transition Sub-Project. Conduct additional testing required to transition items from national forces to theater forces.
- Foliage Penetration Reconnaissance, Surveillance, Targeting and Engagement Radar (YMQ-18A Unmanned Aerial Vehicle). Conducts planning, payload integration, air vehicle improvements, and training in support of multiple operational demonstrations to evaluate the military utility of the YMQ18A unmanned aerial vehicle.
- Classified Sub-Project (provided under separate cover).
- The Special Communications Field Segment-Enterprise program includes organizations, practices, processes, services, networks, systems and subsystems that manage and provide clandestine exchange of information between elements (field-to-field, field-to-base, base-to-field).

The following technology activity was added by Congress for FY 2011:

• SOF Advance Concept Technology Demonstration (ACTD). Expand and enhance current Unclassified Test Bed (UTB) capabilities such as evaluating, developing, prototyping and fabricating quick reaction prototypes. A classified area is being configured and certified, this area will provide SOF the ability to quickly transition candidate technologies from the unclassified Test and Evaluation (T&E) environment to a classified T&E environment.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Rapid Exploitation of Innovative Technology (REITS) for SOF Sub-Project	-	5.310	5.598
FY 2012 Plans:			
Starting in FY 2012, REITS will be executed only in PE 1160402BB. Continue additional demonstrations and evaluations of C4I			
technologies; warrior survivability improvements; and mobility, power and energy and mobile technology repair center projects.			
Further develop and insert into existing programs, advanced processing techniques and persistent surveillance. Continue			
advanced development of signature reduction technologies. Insert lightweight armor and materials into existing acquisition efforts.			

UNCLASSIFIED
Page 4 of 8

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command	DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)		PROJECT S200: SO Advanced T	echnology De	velopment
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013
Continue to exploit technologies that reduce the load of the operator. visualization, and training systems.	Insert into existing programs advanced protection ar	nd		
FY 2013 Plans: Continues to identify and develop technologies which can rapidly transprograms of record or direct fielding. Capabilities such as, but not limicommunications applications, improved target engagement, improved traditional power and energy solutions, and improved electronic warfal and limited field assessment.	nited to: SOF mobility platform improvements, mobile d materials, improved biometrics and forensics tools, r	non-		
Title: REITS C4, ISR, and Sensors Capability Area		5.309	-	-
FY 2011 Accomplishments:  Developed advance processing techniques, persistent surveillance, collocate and defeat threat signals of interest. Executed multiple Joint Collocate Exploitation and Operations 3 Dimension (OP3D).				
Title: REITS Mobility, Power and Energy Capability Area		5.010	-	_
FY 2011 Accomplishments: Investigated multi-domain mobility platforms. Completed prototype in vehicles. Initiated development of long duration, self sustaining power Predator, Seatracker and Joint Unmanned Arial System (UAS) Precise.	er sources. Executed multiple JCTDs to include the M			
Title: REITS SOF Warrior Systems Capability Area		4.422	-	-
FY 2011 Accomplishments: Pursued technologies to reduce the load of the operator and improve of threat detection and location system. Assessed advanced lightweig		ssment		
Title: REITS Weapons and Munitions Capability Area		0.250	-	-
FY 2011 Accomplishments: Assessed ongoing development efforts across this capability area, to munition developments.	include suppression systems, material coatings, and	other		
Title: Special Operations Special Technology Sub-Project		-	6.835	12.56
FY 2012 Plans:				

PE 1160402BB: Special Operations Advanced Technology Development United States Special Operations Command

UNCLASSIFIED
Page 5 of 8

R-1 Line #70

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command		DATE: Feb	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160402BB: Special Operations Advanced Technology Development	PROJECT S200: SO		echnology De	evelopment
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Developed and inserted technology into existing programs. Projects signature profiles; improved weapons, lightweight armor and material devices; long duration, reduced size, high output power supplies; and	ls; alternative power systems; "green" sustainable er				
FY 2013 Plans: Continues to develop and insert technology into existing programs. For signature profiles; improved weapons; lightweight armor and material energy devices; long duration, reduced size, high output power supplementation in the supplementation of technologies supporting undersea mobility; and survivability. Evaluates and develops sensors across the electroupon agreed technology maturity metrics, transfer successful projects.	ls; alternative power systems; eco-friendly sustainab lies; and technologies that reduce the load of the ope develop ground mobility solutions for improved endur promagnetic spectrum to meet operational requirement	le erator. rance			
Title: Joint Task Force SWORD Sub-Project			-	0.199	-
FY 2012 Plans: Continue to explore the use of experimental technology to provide endeployments.	nergent technology to quick response task force				
Title: Tagging, Tracking, and Locating Technologies (TTL) Sub-Proje	ect		11.920	13.919	18.010
FY 2011 Accomplishments: Specific objectives, priorities, technical approaches, and potential operecently-proven and emerging technologies for TTL and TTL-enabling to the USSOCOM/DoD TTL Roadmap, which is updated via the JCS Assessment (QL-CBA).	g systems. Continued projects toward maturity that	are linked			
FY 2012 Plans: Specific objectives, priorities, technical approaches, and potential operecently-proven and emerging technologies for TTL and TTL-enabling to the USSOCOM/DoD TTL Roadmap, which is updated via the JCS/Assessment (QL-CBA).	g systems. Continue projects toward maturity that ar	e linked			
FY 2013 Plans: Specific objectives, priorities, technical approaches, and potential operecently-proven and emerging technologies for TTL and TTL-enabling to the USSOCOM/DoD TTL Roadmap, which is updated via the JCS/Assessment (QL-CBA).	g systems. Continues projects toward maturity that a	re linked			
Title: National to Theater Transition			1.864	1.966	1.993

PE 1160402BB: Special Operations Advanced Technology Development United States Special Operations Command

UNCLASSIFIED
Page 6 of 8

R-1 Line #70

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States S	Special Operations Command			DATE: Fel	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160402BB: Special Operations Advance Technology Development		ROJECT 200: SO		echnology De	evelopment
B. Accomplishments/Planned Programs (\$ in Millions)				FY 2011	FY 2012	FY 2013
FY 2011 Accomplishments: Conducted testing and evaluation required on various equipment items	s being transitioned to the SOF Theater Forces.					
FY 2012 Plans: Conduct additional testing and evaluation required on various equipme	ent items being transitioned to the SOF Theater	Forces	<b>3</b> .			
FY 2013 Plans: Conductes additional testing and evaluation required on various equip	ment items being transitioned to the SOF Theat	er Ford	es.			
Title: Foliage Penetration Reconnaissance, Surveillance, Targeting ar	nd Engagement Radar (YMQ-18A Unmanned A	erial Ve	ehicle)	2.577	-	-
FY 2011 Accomplishments: Conducted planning, payload integration, air vehicle improvements, ar to evaluate the military utility of the YMQ-18A unmanned aerial vehicle		nonstra	itions			
Title: Classified Sub-Project				1.902	2.013	2.050
FY 2011 Accomplishments: Details provided under separate cover.						
FY 2012 Plans: Details provided under separate cover.						
FY 2013 Plans: Details provided under separate cover.						
Title: Special Communications Field Segment - Enterprise (SPCOM)				-	-	5.10
FY 2013 Plans: FY 2013 new start. Initial focus will be on the development of transporenterprise, as well as the development of means and methods (tradec		unicati	ons			
	Accomplishments/Planned Program	ıs Sub	totals	33.254	30.242	45.31
	FY	2011	FY 20	12		
Congressional Add: SOF Advance Concept Technology Demonstrat	ion (ACTD) Programs	7.958		-		
FY 2011 Accomplishments: Expanded and enhanced current Unclas as evaluating, developing, prototyping and fabricating quick reaction p						

PE 1160402BB: Special Operations Advanced Technology Development United States Special Operations Command

UNCLASSIFIED
Page 7 of 8

R-1 Line #70

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160402BB: Special Operations Advanced	S200: SO A	Advanced Technology Development
BA 3: Advanced Technology Development (ATD)	Technology Development		

	FY 2011	FY 2012
classified area that will provide SOF the ability to quickly transition candidate technologies from an unclassified T&E environment to a classified T&E environment.		
Congressional Adds Subtotals	7.958	-

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

# **E. Performance Metrics**

N/A

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160422BB: Aviation Engineering Analysis

BA 3: Advanced Technology Development (ATD)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	4.628	0.837	0.861	-	0.861	0.876	0.891	0.906	0.921	Continuing	Continuing
SF101: Aviation Engineering Analysis	4.628	0.837	0.861	-	0.861	0.876	0.891	0.906	0.921	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This program element provides rapid response capability for the investigation, evaluation, and demonstration of technologies for Special Operations Forces (SOF)-unique aviation requirements. Timely application of SOF-unique technology is critical and necessary to meet requirements in such areas as: sensor integration; enhanced situational awareness; near-real-time intelligence to include data fusion, threat detection and avoidance; electronic support measures for threat geo-location and specific emitter identification; navigation; target detection; and future SOF aircraft requirements.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	4.234	0.837	0.851	-	0.851
Current President's Budget	4.628	0.837	0.861	-	0.861
Total Adjustments	0.394	-	0.010	-	0.010
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	0.521	-			
SBIR/STTR Transfer	-0.105	-			
Other Adjustments	-0.022	-	0.010	-	0.010

### **Change Summary Explanation**

Funding:

FY 2011: Net increase of \$0.394 million is due to economic assumption reduction (-\$0.022 million), transfer to Small Business Innovative Research (-\$0.105 million) and a reprogramming of funding for engineering studies and analysis of (\$0.521 million).

FY 2012: None.

FY 2013: Increase is due to an economic assumption increase (\$0.010 million).

PE 1160422BB: Aviation Engineering Analysis United States Special Operations Command

UNCLASSIFIED
Page 1 of 3

R-1 Line #71

Volume 5 - 763

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	PE 1160422BB: Aviation Engineering Analysis	
Schedule: None.		
Technical: None.		

PE 1160422BB: *Aviation Engineering Analysis* United States Special Operations Command

UNCLASSIFIED Page 2 of 3

Exhibit R-2A, RDT&E Project Jus		DATE: February 2012										
APPROPRIATION/BUDGET ACTIV					IOMENCLAT	ΓURE		PROJECT				
0400: Research, Development, Test & Evaluation, Defense-Wide				PE 1160422BB: Aviation Engineering Analysis				SF101: Aviation Engineering Analysis				
BA 3: Advanced Technology Development (ATD)												
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To		
COST (\$ III WIIIIOIIS)	FY 2011	FY 2012	Base	осо	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost	
SF101: Aviation Engineering	4.628	0.837	0.861	-	0.861	0.876	0.891	0.906	0.921	Continuing	Continuing	
Analysis											1	

#### A. Mission Description and Budget Item Justification

This project provides a rapid response capability to support SOF fixed wing aircraft and unmanned aircraft systems. The purpose is to correct system deficiencies, improve asset life, and enhance mission capability through the means of feasibility studies, analysis of alternatives, pre-developmental risk reduction studies, and engineering analyses. This project provides the engineering required to improve the design and performance integrity of the aircraft support systems, sub-systems, equipment, and embedded computer software as they relate to the maintenance, overhaul, repair, quality assurance, modifications, materiel improvements, and service life extensions. Also conducts risk reduction studies, analyses, and demonstrations to support emerging, time critical weapons and sensor enhancements.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Aviation Engineering Analysis	4.628	0.837	0.861
FY 2011 Accomplishments: Performed engineering studies and analyses for fixed wing aviation SOF-unique equipment and missions.			
FY 2012 Plans: Performs engineering studies and analyses for fixed wing aviation SOF-unique equipment and missions.			
FY 2013 Plans: Perform engineering studies and analyses for fixed wing aviation SOF-unique equipment and missions.			
Accomplishments/Planned Programs Subtotals	4.628	0.837	0.861

### C. Other Program Funding Summary (\$ in Millions)

N/A

### D. Acquisition Strategy

N/A

#### **E. Performance Metrics**

N/A

PE 1160422BB: Aviation Engineering Analysis United States Special Operations Command

UNCLASSIFIED
Page 3 of 3

R-1 Line #71

Volume 5 - 765



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160472BB: SOF Information and Broadcast Systems Advanced Technology

**DATE:** February 2012

BA 3: Advanced Technology Development (ATD)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	4.795	4.924	4.959	-	4.959	5.045	5.133	5.221	5.310	Continuing	Continuing
S225: SOF Information and Broadcast Systems Adv Tech	4.795	4.924	4.959	-	4.959	5.045	5.133	5.221	5.310	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This Program Element (PE) conducts rapid prototyping, advanced technology demonstrations, and advanced concept technology demonstrations of information and broadcast systems technology. Includes planning, analyzing, evaluating, and production information systems capabilities and distribution/dissemination broadcast systems capabilities. It provides a means for demonstrating and evaluating the utility of emerging/advanced technologies in as realistic an operational environment as possible by Special Operations Forces (SOF) users. This PE integrates efforts with each other and conducts technology demonstrations in conjunction with joint experiments and other assessment events. Evaluation results are included in a transition package, which assists in the initiation of or insertion into an acquisition program. The PE also addresses unique, joint special mission or area-specific needs for which prototypes must be developed on a rapid response basis, or are of sufficient time sensitivity to accelerate the prototyping effort of a normal acquisition program in any phase.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	4.942	4.924	4.899	-	4.899
Current President's Budget	4.795	4.924	4.959	-	4.959
Total Adjustments	-0.147	-	0.060	-	0.060
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.122	-			
Other Adjustment	-0.025	-	0.060	-	0.060

### **Change Summary Explanation**

Funding:

FY 2011: Decrease of \$0.147 million is due to economic assumption reductions (-\$0.025 million) and a transfer to Small Business Innovative Research (-\$0.122 million).

FY 2012: None.

PE 1160472BB: SOF Information and Broadcast Systems Advanced Tec...

UNCLASSIFIED
Page 1 of 4

R-1 Line #72

Volume 5 - 767

	UNCLASSIFIED	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United St	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 1160472BB: SOF Information and Broadca	ast Systems Advanced Technology
FY 2013: Increase is due to an economic assumption increase	se (\$.060 million).	
Schedule: None.		
Technical: None.		

PE 1160472BB: SOF Information and Broadcast Systems Advanced Тес...

Exhibit R-2A, RDT&E Project Just		DATE: February 2012									
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)				PE 1160472BB: SOF Information and				PROJECT S225: SOF Information and Broadcast Systems Adv Tech			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
S225: SOF Information and Broadcast Systems Adv Tech	4.795	4.924	4.959	-	4.959	5.045	5.133	5.221	5.310	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This project conducts rapid prototyping of information and broadcast system technology. This includes cyber capabilities that predict the best media channels to reach potential target audiences, data mining and information collections tools, propaganda and social behavior analytical tools, cultural analysis toolsets and emerging technologies that support the planning and analytical needs for the Military Information Support Operations (MISO) forces. It provides a means for demonstrating and evaluating the utility of emerging/advanced technologies in as realistic an operational environment as possible by SOF users. This project integrates efforts and conducts technology demonstrations in conjunction with joint experiments and other assessment events and performs market research on emerging technologies that support all phases of MISO. Evaluation results are included in a transition package, which assists in the initiation of or insertion into an acquisition program. The project also addresses unique, joint special mission or area-specific needs. Seeks technologies that will transform current MISO capabilities through two major objectives: 1) Exploit technologies capable of disseminating products to reach target audiences across a variety of media to include audiences in denied areas. 2) Automate and improve MISO planning and analytical capability through technologies that are integrated into SOF planning systems (Cultural Analysis, Targeting, Theme Development, Media & Product Selection, Distribution & Dissemination, and Measures of Effectiveness). Develops software applications that increase the efficiency and shorten the timeline to get MISO dissemination packages approved. Develops hardware/software tools that facilitate the collaboration and sharing of information and other critical data.

MISO Modernization. This initiative will initiate and continue development of emergent technologies available in the marketplace to transform and modernize MISO planning, analysis, development, broadcast, distribution, dissemination, and feedback capabilities. This initiative will also continue development of appropriate emerging technologies initially identified by ATDs and ACTDs to transition to acquisition programs. Technologies include: multi-frequency broadcast systems; digital broadcast capabilities; remote controlled electronic paper; near-real-time command and control of unattended MISO systems, especially in denied areas; focused/beam speaker sound technologies; visual projection technologies; advanced commercial broadcast technologies including amplitude modulation (AM) and frequency modulation (FM) radio transmitters and antenna; television (TV) transmitter and antenna systems; internet and telephony dissemination and broadcast systems; technologies capable of disseminating MISO products to reach target audiences across a wide variety of media into denied areas; and technologies that automate and improve MISO planning and analytical capability through integrated capabilities.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: MISO Modernization	4.795	4.924	4.959
FY 2011 Accomplishments:			

PE 1160472BB: SOF Information and Broadcast Systems Advanced

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United States Special Operations Command

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States		<b>DATE:</b> February 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	PROJECT S225: SOF Adv Tech	SOF Information and Broadcast Systems				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013		
Transitioned previously developed technologies to programs of record						
Production. These capabilities developed under the MISO modernizal positioned the warfighter to fight future wars.	ns and					

# FY 2012 Plans:

Continues to transition previously developed technologies to programs of record.

#### FY 2013 Plans:

Continue to transition previously developed technologies to programs of record.

**Accomplishments/Planned Programs Subtotals** 4.795 4.924 4.959

### C. Other Program Funding Summary (\$ in Millions)

N/A

#### D. Acquisition Strategy

N/A

#### **E. Performance Metrics**

N/A

PE 1160472BB: SOF Information and Broadcast Systems Advanced Tec...

United States Special Operations Command

**UNCLASSIFIED** Page 4 of 4

R-1 Line #72

**Volume 5 - 770** 

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide PE 0304210BB: Special Applications for Contingencies

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	15.785	5.045	17.058	-	17.058	17.352	17.659	17.964	18.269	Continuing	Continuing
9999: Special Applications for Contingencies	15.785	5.045	17.058	-	17.058	17.352	17.659	17.964	18.269	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This program element develops and deploys special capabilities to perform intelligence, surveillance, and reconnaissance for deployed Special Operations Forces (SOF) using non-traditional means. It provides a mechanism for SOF user combat evaluation of emerging sensor technologies. Special Applications for Contingencies (SAFC) applies focused Research & Development (R&D) for relatively low cost solutions to provide remotely controlled system emplacement and data exfiltration from denied areas. This program also specifically addresses short lead-time contingency planning requirements where focused R&D will allow for test and evaluation of leading edge solutions to an emergent problem set based on requirements validated through a specific Joint Staff/Office of the Secretary of Defense (OSD) chartered approval process.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	16.272	5.045	16.853	-	16.853
Current President's Budget	15.785	5.045	17.058	-	17.058
Total Adjustments	-0.487	_	0.205	-	0.205
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.404	-			
Other Adjustment	-0.083	-	0.205	-	0.205

## **Change Summary Explanation**

Funding:

FY 2011: Decrease of \$0.487 million is due to economic assumption reductions (-\$0.083 million), and a transfer of funds to Small Business Innovative Research (-0.404 million).

FY 2012: None.

PE 0304210BB: Special Applications for Contingencies United States Special Operations Command

UNCLASSIFIED
Page 1 of 7

R-1 Line #215

Volume 5 - 771

**DATE:** February 2012

it R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	<b>DATE</b> : February 2012
OPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
Research, Development, Test & Evaluation, Defense-Wide	PE 0304210BB: Special Applications for Contingencies	
Operational Systems Development		
FY 2013: Increase of \$0.205 million is due to economic assur	mption increase.	
Schedule: None.		
Technical: None.		

PE 0304210BB: Special Applications for Contingencies United States Special Operations Command

R-1 Line #215

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Unite	d States Sp	ecial Operati	ons Comma	nd			<b>DATE:</b> Febr	uary 2012	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Tes BA 7: Operational Systems Develop	t & Evaluation	n, Defense-V	Contingencies					ngencies			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
9999: Special Applications for Contingencies	15.785	5.045	17.058	-	17.058	17.352	17.659	17.964	18.269	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

This project develops and deploys special capabilities to perform intelligence, surveillance, and reconnaissance (ISR) for deployed Special Operations Forces (SOF) using non-traditional means. It provides a mechanism for SOF user combat evaluation of emerging sensor technologies. Special Applications for Contingencies (SAFC) applies focused Research and Development (R&D) for relatively low cost solutions to provide remotely controlled system emplacement and data infiltration. This program also specifically addresses short lead-time contingency planning requirements where focused R&D will allow for test and evaluation of leading edge solutions to an emergent problem set based on requirements validated through a specific Joint Staff/OSD chartered approval process.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: SAFC Contingencies	15.785	5.045	17.058
FY 2011 Accomplishments:  Continued development and combat evaluation of selected sensor delivery platforms and mounted or deliverable ISR capabilities for global contingencies including short notice requirements. Continued to evaluate unique sensor technologies, persistent stare and quick reaction systems.			
FY 2012 Plans: Continue development and combat evaluation of selected sensor delivery platforms and mounted or deliverable ISR capabilities for global contingencies including short notice requirements. Continue to evaluate unique sensor technologies, persistent stare and quick reaction systems.			
FY 2013 Plans: Continues development and combat evaluation of selected sensor delivery platforms and mounted or deliverable ISR capabilities for global contingencies including short notice requirements. Continues to evaluate unique sensor technologies, persistent stare and quick reaction systems.			
Accomplishments/Planned Programs Subtotals	15.785	5.045	17.058

PE 0304210BB: Special Applications for Contingencies United States Special Operations Command

C. Other Program Funding Summary (\$ in Millions)

FY 2011

12.081

FY 2012

12.276

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**UNCLASSIFIED** 

FY 2013

Total

12.945

FY 2013

OCO

FY 2013

**Base** 

12.945

Page 3 of 7 R-1 Line #215

FY 2014

13.166

FY 2015

13.398

**FY 2016** 

13.630

Volume 5 - 773

Cost To

FY 2017 Complete Total Cost

13.875 Continuing Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0304210BB: Special Applications for Contingencies	PROJECT 9999: Special Applications for Contingencies
D. Acquisition Strategy  Special Applications for Contingencies acquisition strategy is evoluted DoD acquisition program, it allows for maximum flexibility to respons through an Executive Integrated Product Team chaired by the Joint	nd to quickly emerging, short lead time, contingen	
E. Performance Metrics		
N/A		

PE 0304210BB: Special Applications for Contingencies United States Special Operations Command

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**DATE:** February 2012

0400: Research, Development, Test & Evaluation, Defense-Wide

|PE 0

**PROJECT** 

BA 7: Operational Systems Development

PE 0304210BB: Special Applications for Contingencies

9999: Special Applications for Contingencies

Product Development (	\$ in Millio	ns)		FY 2	2012		2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Intelligence, Surveillance, and Reconnaissance Sensor and Networking Development	MIPR	Various:Various	61.022	-		17.058	Aug 2013	-		17.058	Continuing	Continuing	
Near-Real-Time Contingencies	MIPR	Various:Various	14.473	5.045	Aug 2012	-		-		-	Continuing	Continuing	
Prior Year Funding	MIPR	Various:Various	82.428	-		-		-		-	0.000	82.428	
		Subtotal	157.923	5.045		17.058		-		17.058			
			Total Prior Years Cost		2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	157.923	5.045		17.058		-		17.058			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 U	Inite	ed S	tates	s Spe	ecia	ΙОр	erati	ons	Cor	nma	nd										D	ATE:	Fet	oruar	ry 2	012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0304210BB: Special Applications for Contingencies  PROJECT 9999: Special Applications for Contingencies							Appl	licati	ons	for	Cont	inge	ncie														
	1	FY 2	201	1 4	1	FY 2	2012	2 4	1	FY 2	2013	1	1	FY:	2014	4	1	FY 2	2015	4	1	FY 2	2016	; 4	1	FY 2	2017	4
Intelligence, Surveillance, and Reconnaissance (ISR) Capabilities Development																-					_				<u> </u>			
ISR Technology Integration & Testing																									Ī			
ISR Prototype Demonstrations																									Ī			
ISR Combat Evaluation																									Ī			

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0304210BB: Special Applications for Contingencies

9999: Special Applications for Contingencies

**DATE:** February 2012

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

### Schedule Details

	St	art	Eı	nd
Events	Quarter	Year	Quarter	Year
Intelligence, Surveillance, and Reconnaissance (ISR) Capabilities Development	1	2011	4	2016
ISR Technology Integration & Testing	1	2011	4	2016
ISR Prototype Demonstrations	1	2011	4	2016
ISR Combat Evaluation	1	2011	4	2016



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0305208BB: Distributed Common Ground/Surface Systems

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	1.283	1.303	7.114	-	7.114	5.767	6.784	5.989	6.091	Continuing	Continuing
S400A: Distributed Common Ground/Surface Systems	1.283	1.303	7.114	-	7.114	5.767	6.784	5.989	6.091	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This program element provides for the identification, development, and testing of the Distributed Common Ground/Surface System Special Operations Forces (DCGS-SOF). The mission tailored infrastructure interconnects the warfighter and sensor data to find and fix enemy combatants and/or terrorists. The DCGS-SOF program is a network-enabled, interoperable construct allowing continual, unimpeded sharing of intelligence data, information and services within SOF and between the Services, other national intelligence agencies, combatant commands and Multi-National partners in support of a Joint Task Force. It connects the SOF warfighter with essential intelligence information and provides situational awareness information to SOF leadership at all echelons. The primary functions of DCGS-SOF are to conduct processing, exploitation and dissemination (PED) for all SOF Intelligence Surveillance and Reconnaissance sensors, permit the collection of SOF data from collection sensors and intelligence databases, share across the DCGS Integration Backbone and provide timely, tailored, all-source, fused intelligence reporting to the SOF warfighter. This program will employ non-development commercial and government off-the-shelf hardware and software and will leverage from existing technology to the greatest degree possible.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	1.290	4.303	4.389	-	4.389
Current President's Budget	1.283	1.303	7.114	-	7.114
Total Adjustments	-0.007	-3.000	2.725	-	2.725
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-3.000			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-0.007	_	2.725	-	2.725

### **Change Summary Explanation**

Funding:

FY 2011: Decrease of \$0.007 million due to economic assumption reductions.

PE 0305208BB: Distributed Common Ground/Surface Systems United States Special Operations Command

UNCLASSIFIED
Page 1 of 9

R-1 Line #230

Volume 5 - 779

**DATE:** February 2012

	UNCLASSIFIED	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United State	es Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0305208BB: Distributed Common Ground/Surf	face Systems
FY 2012: Decrease of \$3.000 million due to a congressional dir	rected reduction.	
FY 2013: Increase of \$2.725 million is due to a reprogramming economic assumption increase (\$0.085 million).	(\$2.640 million) to support development, integration,	, and testing of the DCGS Enterprise, and an
Schedule: None.		
Technical: None.		

PE 0305208BB: *Distributed Common Ground/Surface Systems* United States Special Operations Command

UNCLASSIFIED Page 2 of 9

R-1 Line #230 **Volume 5 - 780** 

Exhibit R-2A, RDT&E Project Ju	stification: PE	2013 Unite	d States Sp	ecial Operati	ons Comma	nd			DATE: February 2012				
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Development		IOMENCLAT 8BB: Distribu stems		PROJECT S400A: Dist Systems	T istributed Common Ground/Sur								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
S400A: Distributed Common Ground/Surface Systems	1.283	1.303	7.114	-	7.114	5.767	6.784	5.989	6.091	Continuing	Continuing		
Quantity of RDT&E Articles													

#### A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

This project provides for the identification, development, and testing of the Distributed Common Ground/Surface System Special Operations Forces (DCGS-SOF). The mission tailored infrastructure interconnects the warfighter and sensor data to find and fix enemy combatants and/or terrorists. The DCGS-SOF program is a network-enabled, interoperable construct allowing continual, unimpeded sharing of intelligence data, information and services within SOF and between the Services. other national intelligence agencies, combatant commands and Multi-National partners in support of a Joint Task Force. It connects the SOF warfighter with essential intelligence information and provides situational awareness information to SOF leadership at all echelons. The primary functions of DCGS-SOF are to conduct processing, exploitation and dissemination (PED) for all SOF Intelligence Surveillance and Reconnaissance (ISR) sensors, permit the collection of SOF data from collection sensors and intelligence databases, share across the DCGS Integration Backbone and provide timely, tailored, all-source, fused intelligence reporting to the SOF warfighter. This program will employ non-development commercial and government off-the-shelf hardware and software and will leverage from existing technology to the greatest degree possible.

•			
Title: Distributed Common Ground/Surface System	1.283	1.303	7.114
FY 2011 Accomplishments:  Achieved Milestone B. Continued to integrate the SOF-unique systems and Multi-INT sensors into service-common capabilities.  Commenced developmental test and evaluation efforts in classified and unclassified test environments. Commenced development of DCGS-SOF v1.0 baseline and conducted DCGS-SOF limited objective events and Empire Challenge exercise demonstrations.			
FY 2012 Plans: Achieved Milestone C for DCGS Enterprise capability. Integrates emerging technologies and capabilities from DCGS family of systems partners and SOF C4 Partners into the DCGS-SOF baseline, commences test and evaluation of these technologies into this baseline, and conducts DCGS-SOF limited objective events and will participate in two Enterprise Resolve demonstrations.			
FY 2013 Plans: Integrate emerging technologies and capabilities for all source information fusion and initial integration of technology to enable disconnected operations into the DCGS-SOF baseline, commence test and evaluation of these technologies into this baseline, and conduct DCGS-SOF limited objective events and Enterprise Resolve demonstrations.			
Accomplishments/Planned Programs Subtotals	1.283	1.303	7.114

PE 0305208BB: Distributed Common Ground/Surface Systems **United States Special Operations Command** 

UNCLASSIFIED Page 3 of 9

R-1 Line #230

Volume 5 - 781

FY 2011

FY 2012

FY 2013

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States S	pecial Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0305208BB: Distributed Common Ground/	S400A: Distributed Common Ground/Surface
BA 7: Operational Systems Development	Surface Systems	Systems

#### C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	<b>FY 2011</b>	FY 2012	Base	OCO	<b>Total</b>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• PROC1: DISTRIBUTED	5.196	18.222	12.767		12.767	17.774	15.422	11.227	10.627	Continuing	Continuing
COMMON GROUND/SURFACE											-

COMMON GROUND/SURFACE

**SYSTEM** 

### **D. Acquisition Strategy**

• DCGS will partner within DoD and with other government agencies to integrate mature technologies into the SOF information enterprise and enable more agile data and services to meet SOF-peculiar documented requirements. The technology will allow for seamless integration with DoD, interagency, and coalition ISR tactical PED systems.

### E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0305208BB: Distributed Common Ground/

Surface Systems

PROJECT

S400A: Distributed Common Ground/Surface

**DATE:** February 2012

Systems

Product Development (	\$ in Millio	ns)		FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DCGS Capabilities Modernization	Various	Various:Various	8.612	0.300	Jan 2012	2.940	Jan 2013	-		2.940	Continuing	Continuing	
Development and Integration	C/FFP	SITEC (TBD):TBD	-	-	Jan 2012	0.685	Jan 2013	-		0.685	Continuing	Continuing	
Independent Verification and Validation	MIPR	MITRE:Bedford, MA	-	0.274	Oct 2011	0.286	Oct 2012	-		0.286	Continuing	Continuing	
Prior Year Funding - Completed Efforts	Various	Various:Various	1.788	-		-		-		-	0.000	1.788	
		Subtotal	10.400	0.574		3.911		-		3.911			

Support (\$ in Millions)				FY :	2012	1	2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DCGS Support	C/FFP	SITEC (TBD):TBD	-	-	Jan 2012	0.914	Jan 2013	-		0.914	Continuing	Continuing	
Prior Year Funding - Completed Efforts	Various	Various:Various	0.576	-		-		-		-	0.000	0.576	
	Subtotal 0.576					0.914		-		0.914			

Test and Evaluation (\$	in Millions	5)		FY 2	012		2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DCGS Test and Evaluation	MIPR	SPAWAR:Charleston, SC	0.853	0.230	Oct 2011	0.235	Oct 2012	-		0.235	Continuing	Continuing	
DCGS Independent Verification and Validation	MIPR	MITRE:Bedford, MA.	1.141	0.273	Oct 2011	0.288	Oct 2012	-		0.288	Continuing	Continuing	
Interoperability Support	MIPR	JITC:Ft Huachuca, AZ	0.196	-	Jan 2012	0.286	Jan 2013	-		0.286	Continuing	Continuing	
Interoperability Testing	C/FFP	SITEC (TBD):TBD	-	0.226	Apr 2012	1.480	Apr 2013	-		1.480	Continuing	Continuing	
		Subtotal	2.190	0.729		2.289		-		2.289			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 U	Inited States	Special	Operation	ns Comman	b			DATE	E: Februar	y 2012			
APPROPRIATION/BUDGET ACTIVITY  0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development  Total Prior  R-1 ITEM NOMENCLATURE PE 0305208BB: Distributed Common Ground/ Surface Systems  PROJECT S400A: Distributed Common Ground/ Systems													
	Total Prior Years Cost	FY 2	012	FY 20 Bas		FY 201 OCO	-	2013 otal	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals	13.166	1.303		7.114		-		7.114					
emarks													

thibit R-4, RDT&E Schedule Profile: PB 2013 U	Jnite	ed S	tates	s Sp	ecia	l Op	erat	ions	Con	nmar	nd										D	ATE	: Fe	bru	ary 2	012		
PPROPRIATION/BUDGET ACTIVITY 00: Research, Development, Test & Evaluation, L 7: Operational Systems Development	Defe	ense	e-Wid	de		Р	E 03	EM 80520 ce Sy	O8BE	3: <i>Di</i>				omm	on G	3rou	ınd/	S	R <b>OJI</b> 400A ysteri	: Di		ute	d Co	mm	on G	Ground	/Sui	rfa
		FY	201	1		FY	201	2		FY 2	2013			FY 2	2014	4		FY	2015	5		FY	201	6		FY 20	17	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Distributed Common Ground/Surface Systems (DCGS) Integration and ETIs																				'								
Milestone B Acquisition Decision																												
Milestone C Acquisition Decision																												
DCGS-SOF Developmental Testing																												
SOF PED Enterprise Enhancements																												
DCGS v1.0 Operational Testing (SOF Data Layer Enterprise Portal)																												
DCGS v2.0 Operational Testing (SOF Data Layer, Data Engine, GEOINT, Fusion)									I																			
DCGS v3.0 Operational Testing (SIGINT FOC, All Source Intelligence Fusion Inc 1)																												
DCGS v4.0 Operational Testing (Enhanced Full Motion Vedio Arch, ASIF Inc 2)	I																											
DCGS Limited Objective Event & Enterprise Resolve - FY11																												
DCGS Limited Objective Event & Enterprise Resolve - FY12 (Sensor Web and Trident Warror)									I																			
DCGS Limited Objective Event & Enterprise Resolve - FY13																												
DCGS Limited Objective Event & Enterprise Resolve - FY14																												
DCGS Limited Objective Event & Enterprise Resolve - FY15																												
DCGS Limited Objective Event & Enterprise Resolve - FY16																												

Exhibit R-4, RDT&E Schedule Profile: PB 2013 U	Jnite	d St	ates	Spe	ecial	Op	eratio	ns (	Cor	nma	nd										D	<b>ATE</b>	: Fel	orua	ry 2	012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, I BA 7: Operational Systems Development	Defe	nse	-Wia	le		PE	-1 ITE E 030 urface	520	8B	B: <i>D</i>				mm	on G	roui	nd/	S4	R <b>OJI</b> 100A vsten	: Dis	strib	ute	d Co	mmo	on G	Groui	nd/S	Gurfac
						FY	2012			FY	201	3		FY 2	2014			FY 2	2015	5		FY	2010	3		FY	2017	7
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DCGS Limited Objective Events & Enterprise Resolve - FY17																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0305208BB: Distributed Common Ground/

Surface Systems

**PROJECT** 

S400A: Distributed Common Ground/Surface

**DATE:** February 2012

Systems

### Schedule Details

	Sta	art	En	d
Events	Quarter	Year	Quarter	Year
Distributed Common Ground/Surface Systems (DCGS) Integration and ETIs	1	2011	4	2017
Milestone B Acquisition Decision	2	2011	2	2011
Milestone C Acquisition Decision	1	2012	1	2012
DCGS-SOF Developmental Testing	2	2011	4	2017
SOF PED Enterprise Enhancements	2	2011	4	2017
DCGS v1.0 Operational Testing (SOF Data Layer Enterprise Portal)	2	2012	3	2012
DCGS v2.0 Operational Testing (SOF Data Layer, Data Engine, GEOINT, Fusion)	3	2012	4	2012
DCGS v3.0 Operational Testing (SIGINT FOC, All Source Intelligence Fusion Inc 1)	2	2014	3	2014
DCGS v4.0 Operational Testing (Enhanced Full Motion Vedio Arch, ASIF Inc 2)	2	2015	3	2015
DCGS Limited Objective Event & Enterprise Resolve - FY11	2	2011	4	2011
DCGS Limited Objective Event & Enterprise Resolve - FY12 (Sensor Web and Trident Warror)	1	2012	4	2012
DCGS Limited Objective Event & Enterprise Resolve - FY13	1	2013	4	2013
DCGS Limited Objective Event & Enterprise Resolve - FY14	1	2014	4	2014
DCGS Limited Objective Event & Enterprise Resolve - FY15	1	2015	4	2015
DCGS Limited Objective Event & Enterprise Resolve - FY16	1	2016	4	2016
DCGS Limited Objective Events & Enterprise Resolve - FY17	1	2017	4	2017



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0305219BB: MQ-1 Predator A UAV

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	3.598	2.499	1.355	-	1.355	2.058	1.933	2.891	2.940	Continuing	Continuing
S400B: MQ-1 Predator A UAV	3.598	2.499	1.355	-	1.355	2.058	1.933	2.891	2.940	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This program element identifies, develops, integrates, and tests Special Operations Forces (SOF) - unique mission kits on the MQ-1 Unmanned Aerial Vehicle (UAV) as a component of the Medium Altitude Long Endurance Tactical Program. USSOCOM is designated as the DoD lead for planning, synchronizing, and as directed, executing Overseas Contingency Operations against terrorist networks. USSOCOM requires the capability to find, fix, finish, exploit, and analyze time-sensitive high-value targets. These targets can often only be identified with patient collection of information and require rapid, decisive action during the short periods in which they present themselves. This program element addresses the primary areas of intelligence, surveillance, reconnaissance, and target acquisition.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	0.098	2.499	1.339	-	1.339
Current President's Budget	3.598	2.499	1.355	-	1.355
Total Adjustments	3.500	-	0.016	-	0.016
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	3.500	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	-	-	0.016	-	0.016

### Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: S400B: MQ-1 Predator A UAV

Congressional Add: MQ-1 Predator A UAV

	1 1 2011	1 1 2012
	3.500	-
Congressional Add Subtotals for Project: S400B	3.500	-
Congressional Add Totals for all Projects	3.500	-

EV 2011

**DATE:** February 2012

### **Change Summary Explanation**

Funding:

PE 0305219BB: MQ-1 Predator A UAV United States Special Operations Command

UNCLASSIFIED
Page 1 of 7

R-1 Line #235

Volume 5 - 789

EV 2012

	UNCLASSIFIED	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0305219BB: MQ-1 Predator A UAV	
FY2011: Congressional add (\$3.500 million) to equip Army SC	OF Extended Range Multi-Purpose UAV with SOF cap	ability.
FY2012: None.		
FY2013: Increase is due to an economic assumption increase	e (\$0.016 million).	
Schedule: None.		
Technical: None.		

PE 0305219BB: MQ-1 Predator A UAV United States Special Operations Command **UNCLASSIFIED** Page 2 of 7

Volume 5 - 790 R-1 Line #235

Exhibit R-2A, RDT&E Project Just	stification: PE	3 2013 Unite	d States Sp	ecial Operat	ions Comma	nd			<b>DATE:</b> Febi	ruary 2012	
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te			IOMENCLA 9BB: <i>MQ-1 F</i>		-1 Predator A UAV						
BA 7: Operational Systems Develo	pment										
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
S400B: MQ-1 Predator A UAV	3.598	2.499	1.355	_	1.355	2.058	1.933	2.891	2.940	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

This project identifies, develops, and tests Special Operations Forces (SOF) organic MQ-1 UAV platforms, payloads, and control systems. As the supported combatant command, USSOCOM has been designated as the DoD lead for planning, synchronizing, and as directed, executing global operations against terrorist networks. USSOCOM requires the capability to find, fix, and finish time-sensitive high-value targets. These targets can often only be identified with patient collection of information and require rapid, decisive action during the short periods in which they present themselves. This project addresses the primary areas of intelligence, surveillance, reconnaissance, and target acquisition (ISR&T).

Title: MQ-1 Predator A UAV			FY 2013
Title: MQ-11 Tedator A OAV	0.098	2.499	1.355
FY 2011 Accomplishments: Continued development, test, and integration of MQ-1 UAV payload and ground control station improvements.			
FY 2012 Plans: Continues development, test, and integration of MQ-1 UAV payload and ground control station improvements.			
FY 2013 Plans: Continue development, test, and integration of MQ-1 UAV payload and ground control station improvements.			
Accomplishments/Planned Programs Subtotals	0.098	2.499	1.355

	FY 2011	FY 2012	
Congressional Add: MQ-1 Predator A UAV	3.500	-	
<b>FY 2011 Accomplishments:</b> Continued development, test, and integration of MQ-1 UAV payload and ground control station improvements.			
Congressional Adds Subtotals	3.500	-	

PE 0305219BB: *MQ-1 Predator A UAV*United States Special Operations Command

UNCLASSIFIED
Page 3 of 7

R-1 Line #235

Volume 5 - 791

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE PROJECT

**APPROPRIATION/BUDGET ACTIVITY** 0400: Research, Development, Test & Evaluation, Defense-Wide

R-TITEWINOWIENCLATURE PROJECT

BA 7: Operational Systems Development

PE 0305219BB: MQ-1 Predator A UAV S400B: MQ-1 Predator A UAV

**DATE:** February 2012

C. Other Program Funding Summary (\$ in Millions)

		-	FY 2013	FY 2013	FY 2013				Cost To
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017 Complete Total Cost
PROC1: MQ-1 Unmanned Aerial	22.859	3.025	3.963		3.963	3.780	4.293	5.310	5.405 Continuing Continuing

Vehicle

#### **D. Acquisition Strategy**

MQ-1 Predator A UAV is an evolutionary acquisition program that provides improvements to SOF MQ-1 aircraft, payloads, and ground control stations to increase the ISR&T acquisition capabilities of SOF.

### E. Performance Metrics

N/A

PE 0305219BB: MQ-1 Predator A UAV United States Special Operations Command

UNCLASSIFIED
Page 4 of 7

R-1 Line #235

Volume 5 - 792

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0305219BB: MQ-1 Predator A UAV S400B: MQ-1 Predator A UAV BA 7: Operational Systems Development FY 2013 FY 2013 FY 2013 **Product Development (\$ in Millions)** FY 2012 oco Base Total **Total Prior** Contract **Target** Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract General Atomics MQ-1 Predator Payloads and C/Various Aeronautical 21.548 2.499 Mar 2012 1.355 Mar 2013 Continuing Continuing 1.355 **Ground Control Stations** Services:San Diego, CA Subtotal 21.548 2.499 1.355 1.355 FY 2013 **FY 2013** FY 2013 Test and Evaluation (\$ in Millions) FY 2012 oco Total Base **Total Prior** Target Contract Value of Method Performing Years Award Award Award Cost To Cost **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Date Cost Complete **Total Cost** Contract MQ-1 Predator Payloads and C/TBD TBD:TBD 6.049 Continuing Continuing Ground Control Stations Subtotal 6.049 FY 2013 FY 2013 FY 2013 Management Services (\$ in Millions) FY 2012 Base oco Total **Total Prior** Contract Target Method Performing Years Award Award Award Cost To Value of **Activity & Location** Cost Cost Date Complete **Total Cost Cost Category Item** & Type Cost Cost Date Date Cost Contract MQ-1 Predator Payloads and Booz Allen C/Various 0.648 Continuing Continuing **Ground Control Stations** Hamilton: Dayton, OH Subtotal 0.648 **Total Prior** Target FY 2013 FY 2013 FY 2013 Years Cost To Value of

Remarks

PE 0305219BB: MQ-1 Predator A UAV **United States Special Operations Command**  UNCLASSIFIED Page 5 of 7

Base

1.355

FY 2012

2 4 9 9

Cost

28.245

**Project Cost Totals** 

R-1 Line #235

oco

Total

1.355

Complete

**Total Cost** 

Volume 5 - 793

Contract

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 0305219BB: MQ-1 Predator A UAV

S400B: MQ-1 Predator A UAV

	FY 2011		FY 2012 FY 2013			FY 2014				FY 2015				FY 2016			;	FY 2017									
	1 2	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MQ-1 Predator Payloads and Ground Control Stations																									·		
Development/Integration																											
Test & Evaluation/User Assessment																											

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

APPROPRIATION/BUDGET ACTIVITY

BA 7: Operational Systems Development

PE 0305219BB: MQ-1 Predator A UAV

S400B: MQ-1 Predator A UAV

**DATE:** February 2012

### Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
MQ-1 Predator Payloads and Ground Control Stations				
Development/Integration	1	2011	4	2017
Test & Evaluation/User Assessment	2	2012	4	2017



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

**R-1 ITEM NOMENCLATURE** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1105219BB: MQ-9 Unmanned Aerial Vehicle

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.096	2.499	3.002	-	3.002	2.059	2.617	3.933	4.000	Continuing	Continuing
S851: MQ-9 Unmanned Aerial Vehicle	0.096	2.499	3.002	-	3.002	2.059	2.617	3.933	4.000	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This program element identifies, develops, integrates, and tests Special Operations Forces (SOF) - unique mission kits on the MQ-9 Unmanned Aerial Vehicle as a component of the Medium Altitude Long Endurance Tactical program. USSOCOM is designated as the DoD lead for planning, synchronizing, and as directed, executing Overseas Contingency Operations against terrorist networks. USSOCOM requires the capability to find, fix, finish, exploit, and analyze time-sensitive high-value targets. These targets can often only be identified with patient collection of information and require rapid, decisive action during the short periods in which they present themselves. This program element addresses the primary areas of intelligence, surveillance, reconnaissance, and target acquisition.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	0.098	2.499	2.966	-	2.966
Current President's Budget	0.096	2.499	3.002	-	3.002
Total Adjustments	-0.002	-	0.036	-	0.036
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-0.002	-			
Other Adjustment	-	-	0.036	-	0.036

## **Change Summary Explanation**

Funding:

FY2011: Decrease is due to a transfer to Small Business Innovation Research (-\$0.002 million).

FY2012: None.

FY2013: Increase due to an economic assumption increase (\$0.036 million).

PE 1105219BB: MQ-9 Unmanned Aerial Vehicle United States Special Operations Command

UNCLASSIFIED
Page 1 of 7

R-1 Line #251

Volume 5 - 797

**DATE:** February 2012

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1105219BB: MQ-9 Unmanned Aerial Vehicle				
Schedule: None.					
Technical: None.					

PE 1105219BB: *MQ-9 Unmanned Aerial Vehicle* United States Special Operations Command

UNCLASSIFIED
Page 2 of 7

R-1 Line #251

Exhibit R-2A, RDT&E Project Just	stification: PE	3 2013 Unite	d States Sp	ecial Operati	ions Comma	ınd			DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Develo	st & Evaluation	n, Defense-V	Vide		IOMENCLA 9BB: <i>MQ-9 (</i>	<b>TURE</b> Jnmanned A	erial	PROJECT S851: MQ-9	9 Unmanned	Aerial Vehic	cle
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
S851: MQ-9 Unmanned Aerial Vehicle	0.096	2.499	3.002	-	3.002	2.059	2.617	3.933	4.000	Continuing	Continuing
Quantity of RDT&E Articles											

## A. Mission Description and Budget Item Justification

This project identifies, develops, integrates, and tests Special Operations Forces (SOF) - unique modifications on MQ-9 Unmanned Aerial Vehicle, intelligence payloads, and control systems. As the supported combatant command in Overseas Contingency Operations (OCO), USSOCOM requires the capability to find, fix, and finish time-sensitive high-value targets. These targets can often only be identified with patient collection of information and require rapid, decisive action during the short periods in which they present themselves. This project addresses the primary areas of intelligence, surveillance, reconnaissance, and target (ISR&T) acquisition.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: MQ-9 Unmanned Aerial Vehicle	0.096	2.499	3.002
FY 2011 Accomplishments: Developed, tested, and integrated MQ-9 Unmanned Aerial Vehicle payload and ground control station improvements.			
FY 2012 Plans: Develops, tests, and integrates MQ-9 Unmanned Aerial Vehicle payload and ground control station improvements.			
FY 2013 Plans: Develop, test, and integrate MQ-9 Unmanned Aerial Vehicle payload and ground control station improvements.			
Accomplishments/Planned Programs Subtotals	0.096	2.499	3.002

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	<b>FY 2011</b>	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• PROC1: MQ-9 Unmanned Aerial	6.322	3.024	3.952		3.952	4.743	4.304	4.304	5.419	Continuing	Continuing
Vehicle											

## D. Acquisition Strategy

MQ-9 Unmanned Aerial Vehicle is an evolutionary acquisition program that provides improvements to SOF MQ-9 aircraft, payloads, and ground control stations to increase the Intelligence Surveillance and Reconnaissance & Target (ISR&T) acquisition capabilities of Special Operations Forces (SOF).

PE 1105219BB: MQ-9 Unmanned Aerial Vehicle United States Special Operations Command

Page 3 of 7

R-1 Line #251

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide 03A 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1105219BB: MQ-9 Unmanned Aerial Vehicle	PROJECT S851: MQ-9 Unmanned Aerial Vehicle
E. Performance Metrics		
N/A		

PE 1105219BB: *MQ-9 Unmanned Aerial Vehicle* United States Special Operations Command

UNCLASSIFIED
Page 4 of 7

R-1 Line #251 **Volume 5 - 800** 

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

**Project Cost Totals** 

5.167

2.499

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**DATE:** February 2012

3.002

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1105219BB: MQ-9 Unmanned Aerial

PROJECT

BA 7: Operational Systems Development

Vehicle

3.002

S851: MQ-9 Unmanned Aerial Vehicle

Test and Evaluation (	in Millions	)		FY 2	2012		2013 Ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
MQ-9 Unmanned Aerial Vehicle	SS/Various	General Atomics Aeronautical Services:San Diego, CA	5.167	2.499	Mar 2012	3.002	Mar 2013	-		3.002	Continuing	Continuing	
		Subtotal	5.167	2.499		3.002		-		3.002			
			Total Prior Years Cost	FY:	2012		2013 Ise		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide PE 1105219BB: MQ-9 Unmanned Aerial S851: MQ-9

BA 7: Operational Systems Development Vehicle

S851: MQ-9 Unmanned Aerial Vehicle

		FY	201	1		FY	201	12		F	Y 20	013	,		FY 2	2014			FY 2	2015	5		FY 2	2016	3		FY 2	2017	
	1	2	3	4	1	2	3	3 4	1		2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MO-0 Unmanned Aerial Vehicle																													_

MQ-9 Unmanned Aerial Vehicle

Development/Integration/Test

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1105219BB: MQ-9 Unmanned Aerial Vehicle

S851: MQ-9 Unmanned Aerial Vehicle

BA 7: Operational Systems Development

### Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
MQ-9 Unmanned Aerial Vehicle				
Development/Integration/Test	1	2011	4	2017



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1105232BB: RQ-11 UAV

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	1.500	-	-	-	-	-	-	-	Continuing	Continuing
S853: RQ-11 UAV	-	1.500	-	-	-	-	-	-	-	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

A new program element was established beginning in FY 2012 for RQ-11 class of SOF Small Unmanned Aircraft Systems (SUAS).

This program element identifies, investigates, develops, integrates, and tests Special Operations Forces (SOF) payload requirements and spiral development efforts for SUAS capabilities for standalone employment from world-wide ground locations, from manned/unmanned aircraft, or from maritime craft. USSOCOM is designated as the DoD lead for planning, synchronizing, and as directed, executing Overseas Contingency Operations against terrorist networks. USSOCOM requires the capability to find, fix, finish, exploit, and analyze time-sensitive high-value-targets. These targets can often only be identified with patient collection of information and require rapid, decisive action during the short periods in which they present themselves.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	3.000	-	-	-
Current President's Budget	-	1.500	-	-	-
Total Adjustments	-	-1.500	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
• Other	-	-1.500	-	-	-

# **Change Summary Explanation**

Funding:

FY 2011: None.

FY 2012: Decrease of \$1.500 million due to a reprogramming to higher command priorities.

FY 2013: None.

PE 1105232BB: RQ-11 UAV

**United States Special Operations Command** 

UNCLASSIFIED Page 1 of 3

R-1 Line #252

Volume 5 - 805

**DATE:** February 2012

	ONOE/ROOM IEB	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United St	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1105232BB: RQ-11 UAV	
Schedule None.		
Technical None.		
1		

PE 1105232BB: *RQ-11 UAV*United States Special Operations Command

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APPROPRIATION/BUDGET ACTIV	ITY			R-1 ITEM N	IOMENCLA	TURE		PROJECT			
0400: Research, Development, Test	& Evaluation	n, Defense-V	Vide	PE 110523	2BB: <i>RQ-11</i>	UAV		S853: RQ-1	11 UAV		
BA 7: Operational Systems Develop	ment										
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
S853: RQ-11 UAV	-	1.500	-	-	-	-	-	-	-	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This project addresses spiral development efforts validated in unmanned aircraft systems requirements documents; supports capabilities investigations; executes development testing; and integrates system payloads and upgrades for increased aircraft endurance, reduced aircraft signature, increased telemetry range, and increased payload capacity and capabilities for Small Unmanned Aircraft Systems to meet Special Operations Forces mission requirements. The Lethal Miniature Aerial Munitions System (LMAMS) will provide a new capability to effectively engage and retarget personnel/non-standard vehicle targets with precision munitions to deliver incapacitating effects using kinetic means against fixed and fleeting threat/target classes.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Lethal Miniature Aerial Munitions System (LMAMS)	-	1.500	-
FY 2012 Plans: Initiate payload development, test and evaluation of LMAMS.			
Accomplishments/Planned Programs Subtotals	-	1.500	-

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• PROC1: RQ-11 Unmanned Aerial	2.078	0.486	2.062		2.062	1.163	9.243	7.387	7.366	Continuing	Continuing
Vehicle											

# D. Acquisition Strategy

Quantity of RDT&E Articles

Investigate and demonstrate possible small lethal miniature aerial munitions systems.

Exhibit R-2A RDT&E Project Justification: PB 2013 United States Special Operations Command

### **E. Performance Metrics**

N/A

PE 1105232BB: *RQ-11 UAV*United States Special Operations Command

UNCLASSIFIED

Page 3 of 3 R-1 Line #252

Volume 5 - 807

DATE: February 2012



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1105233BB: RQ-7 UAV

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	2.900	-	-	-	-	-	-	-	0.000	2.900
S852: RQ-7 UAV	-	2.900	-	-	-	-	-	-	-	0.000	2.900

### A. Mission Description and Budget Item Justification

This program element identifies, develops, integrates, and tests Special Operations Forces (SOF) - Unique Mission Kits for Groups 1 – 3 Unmanned Aircraft Systems (UAS). These mission kits enable SOF to meet continually evolving mission requirements. As the supported combatant command, USSOCOM has been designated as the DoD lead for planning, synchronizing, and as directed, executing Overseas Contingency Operations. USSOCOM requires the capability to find, fix, and finish time-sensitive high-value targets. These targets can often only be identified with patient collection of information and require rapid, decisive action during the short periods in which they present themselves. This program element addresses the primary areas of intelligence, surveillance, reconnaissance, and target acquisition.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	_	2.900	0.457	-	0.457
Current President's Budget	-	2.900	-	-	-
Total Adjustments	-	-	-0.457	-	-0.457
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-	-			
<ul> <li>Other Adjustments</li> </ul>	-	-	-0.457	-	-0.457

# **Change Summary Explanation**

Funding:

FY2011: None.

FY2012: None.

FY2013: Decrease is due to a realignment to higher command priorities (\$0.457 million).

Schedule: None.

PE 1105233BB: RQ-7 UAV

United States Special Operations Command

UNCLASSIFIED
Page 1 of 3

R-1 Line #253

Volume 5 - 809

**DATE:** February 2012

	ONOL/NOON ILD	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1105233BB: RQ-7 UAV	
Technical: None.		

PE 1105233BB: *RQ-7 UAV*United States Special Operations Command

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide PE 1105233BB: RQ-7 UAV S852: RQ-7 UAV

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
S852: RQ-7 UAV	-	2.900	-	-	-	-	-	-	-	0.000	2.900
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

This project identifies, develops, integrates and tests Special Operations Forces (SOF) - unique mission kits for Groups 1-3 Unmanned Aircraft Sytems (UAS). These mission kits enable SOF to meet continually evolving mission requirements. As the supported combatant command, USSOCOM has been designated as the DoD lead for planning, synchronizing, and as directed, executing Overseas Contingency Operations. USSOCOM requires the capability to find, fix, and finish time-sensitive highvalue targets. These targets can often only be identified with patient collection of information and require rapid, decisive action during the short periods in which they present themselves. This project addresses the primary areas of intelligence, surveillance, reconnaissance, and target acquisition.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Unmanned Aircraft Systems	-	2.900	-
FY 2012 Plans:			
Develops, tests and evaluates new payload technology.			
Accomplishments/Planned Programs Subtotals	_	2.900	-

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• PROC1: <i>RQ-7 UAV</i>	0.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.450

# **D. Acquisition Strategy**

SOF unique mission kits will provide the capability to find, fix and finish high-value targets. A competitive source selection process will be conducted for the SOFunique payloads. Proprietary considerations may direct some integration efforts to the original equipment manufacturer.

### E. Performance Metrics

N/A.

PE 1105233BB: RQ-7 UAV



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160279BB: Small Business Innovative Research

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	9.079	-	-	-	-	-	-	-	-	Continuing	Continuing
S050: Small Business Innovative Research	9.079	-	-	-	-	-	-	-	-	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This program element consists of a highly competitive three-phase award system that provides qualified small business concerns with the opportunity to propose high quality innovative ideas that meet specific research and development needs of USSOCOM. Small Business Innovative Research (SBIR) is a result of the Small Business Development Act of 1992. It was enacted by Congress in Public Law 97-219, reenacted by Public Law 99-443, and reauthorized by the SBIR Program Reauthorization Act of 2001. Starting in FY 1994, the SBIR program was refocused toward dual use and defense reinvestment efforts. Phase I projects evaluate the scientific technical merit and feasibility of an idea. Awards are up to \$0.100 million with a maximum six-month period of performance. Phase II projects expand the results of, and further pursue, the developments of Phase I. Awards are up to \$0.750 million with a maximum two-year period of performance. Phase III is for commercialization of the results of Phase II and requires the use of private or non-SBIR federal funding. DOD publishes government agency proposal projects twice per year for a consolidated DoD Request for Proposal. USSOCOM then awards its proposed SBIR projects.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	9.079	-	-	=	-
Total Adjustments	9.079	-	=	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	9.079	-			
Other Adjustment	-	-	=	-	-

## **Change Summary Explanation**

Funding:

FY 2011: Increase of \$9.079 million supports various efforts within the Small Business Innovative Research program.

FY 2012: None.

PE 1160279BB: Small Business Innovative Research United States Special Operations Command

UNCLASSIFIED
Page 1 of 3

R-1 Line #254

Volume 5 - 813

**DATE:** February 2012

nibit R-2, RDT&E Budget Item Justification: PB 2013 United St		DATE: February 2012
PROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
00: Research, Development, Test & Evaluation, Defense-Wide	PE 1160279BB: Small Business Innovative Research	
7: Operational Systems Development		
Schedule: None.		
<del>-</del>		
Technical: None		

PE 1160279BB: *Small Business Innovative Research* United States Special Operations Command

UNCLASSIFIED Page 2 of 3

R-1 Line #254 Volume 5 - 814

Exhibit R-2A, RDT&E Project Jus	tification: PE	3 2013 Unite	ed States Sp	ecial Operat	ions Comma	and			<b>DATE</b> : Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Tes BA 7: Operational Systems Develop	t & Evaluation	n, Defense-l	Vide		I <b>OMENCLA</b> 9BB: <i>Small l</i>	<b>TURE</b> Business Inn	ovative	PROJECT S050: Small	all Business Innov	nnovative Re	esearch
COST (\$ in Millions)	FY 2011				FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
S050: Small Business Innovative Research	9.079	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

This project consists of a highly competitive three-phase award system that provides qualified small business concerns with the opportunity to propose high quality innovative ideas that meet specific research and development needs of USSOCOM. The Small Business Innovative Research (SBIR) project is a result of the Small Business Development Act of 1992. It was enacted by Congress in Public Law 97-219, reenacted by Public Law 99-443, and reauthorized by the SBIR Program Reauthorization Act of 2001. Starting in FY 1994, the SBIR program was refocused toward dual use and defense reinvestment efforts. Phase I projects evaluate the scientific technical merit and feasibility of an idea. Awards are up to \$0.100 million with a maximum six-month period of performance. Phase II projects expand the results of, and further pursue, the developments of Phase I. Awards are up to \$0.750 million with a maximum two-year period of performance. Phase III is for commercialization of the results of Phase II and requires the use of private or non-SBIR federal funding. DOD publishes government agency proposal projects twice per year for a consolidated DoD Request for Proposal. USSOCOM then awards its proposed SBIR projects.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Small Business Innovative Research	9.079	-	-
FY 2011 Accomplishments: Initiated multiple Phase I and Phase II awards for SBIR Topics: Synthetic Biometric Image Generator; Cultural Intelligency Wikiberry; Micro Digital Displays; Airborne Direction Finding; Free Swimming Special Operations Forces Diver Protection System, providing laceration, abrasion, and puncture protection; and the Lightweight, Small Volume, CO2 Removal Technology for Underwater Breathing Apparatus (UBA) and Undersea Platforms.			
Accomplishments/Planned Programs Subtotals	9.079	-	-

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

### **E. Performance Metrics**

N/A

PE 1160279BB: Small Business Innovative Research United States Special Operations Command

UNCLASSIFIED
Page 3 of 3

R-1 Line #254

Volume 5 - 815



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160403BB: Special Operations Aviation Systems Advanced Development

**DATE:** February 2012

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	65.851	74.382	97.267	-	97.267	64.688	54.078	18.369	14.506	Continuing	Continuing
SF100: SO Aviation Systems Advanced Development	65.851	74.382	97.267	-	97.267	64.688	54.078	18.369	14.506	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This program element provides for the development, demonstration, and integration of current and maturing technologies for Special Operations Forces (SOF)-unique aviation requirements. Timely application of SOF-unique technology is critical and necessary to meet requirements in such areas as: SOF specific avionics; low probability of intercept/low probability of detection, terrain following/terrain avoidance radar; Precision Strike Package for MC-130W Multi-Mission Modification, AC-130H Recapitalization, and other SOF airborne platforms; digital terrain elevation data and electronic order of battle; digital maps; enhanced situational awareness; near-real-time intelligence to include data fusion, threat detection and avoidance; electronic support measures for threat geo-location and specific emitter identification; navigation, target detection, and identification technologies; digital broadcast capabilities; and aerial refueling.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	68.691	89.382	93.596	-	93.596
Current President's Budget	65.851	74.382	97.267	-	97.267
Total Adjustments	-2.840	-15.000	3.671	-	3.671
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-15.000			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-0.785	-			
SBIR/STTR Transfer	-1.706	-			
Other Adjustments	-0.349	-	3.671	-	3.671

# **Change Summary Explanation**

Funding:

FY 2011: Net decrease of \$2.840 million due to reprogramming to higher command priorities (-\$1.578 million), EC-130J Multi-Mission Upgrades (+\$0.793 million), economic assumption reduction (-\$0.349 million) and a transfer of funds to Small Business Innovative Research (-\$1.706 million).

FY 2012: Decrease is due to a congressional directed reduction (\$15.000 million).

PE 1160403BB: Special Operations Aviation Systems Advanced Devel... United States Special Operations Command

Page 1 of 11

R-1 Line #255

Volume 5 - 817

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xhibit R-2, RDT&E Budget Item Justification: PB 2013 United State	es Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 400: Research, Development, Test & Evaluation, Defense-Wide A 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160403BB: Special Operations Aviation	
FY 2013: Net increase of \$3.671 million due to reprogramming Avoidance Radar (\$4.316), economic assumptions increase (\$1		

PE 1160403BB: Special Operations Aviation Systems Advanced Devel... United States Special Operations Command

Exhibit R-2A, RDT&E Project Ju	ecial Operati	ons Comma	nd			<b>DATE:</b> Febr	uary 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development			R-1 ITEM NOMENCLATURE PE 1160403BB: Special Operations Aviation Systems Advanced Development				PROJECT SF100: SO Aviation Systems Advanced Development				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
SF100: SO Aviation Systems Advanced Development	65.851	74.382	97.267	-	97.267	64.688	54.078	18.369	14.506	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

This project provides for the investigation, evaluation, demonstration, and integration of current and maturing technologies for Special Operations Forces (SOF)-unique aviation requirements. Timely application of SOF-unique technology is critical and necessary to meet requirements in such areas as: SOF specific avionics; low probability of intercept/low probability of detection (LPI/LPD), terrain following/terrain avoidance (TF/TA) radar; Precision Strike Package (PSP) for MC-130W Multi-Mission Modification, AC-130H replacement aircraft, and other SOF platforms; digital terrain elevation data and electronic order of battle; digital maps; enhanced situational awareness; near-real-time intelligence to include data fusion, threat detection and avoidance; electronic support measures for threat geo-location and specific emitter identification; navigation, target detection and identification technologies; digital broadcast capability; and aerial refueling.

- SOF C-130 Avionics Modifications. Provides for development necessary to maintain current SOF-unique capabilities for SOF C-130 aircraft. Includes the fit/function/interface replacement of the mission computers on the MC-130H and AC-130U aircraft due to obsolescence issues with the current AP-102 mission computer.
- EC-130J Commando Solo Upgrades. Provides for integration of SOF-unique implementation of the C-130J block cycle upgrade as installed on the EC-130J Commando Solo aircraft and development of digital broadcast capabilities.
- Enhanced Situational Awareness for MC-130H. Provides for near-real-time intelligence to include data fusion, threat detection, identification, and avoidance; electronic support measures for threat geo-location and specific emitter identification. This program is a new start in FY 2013.
- PSP MC-130W Multi-Mission Modification. Fulfills an urgent combat requirement to rapidly arm and field multi-mission precision strike platforms. Provides an armed over-watch capability including sensors, communication systems, precision guided munitions, and a single medium-caliber gun. An interim kit was fielded and funded under a Combat Mission Needs Statement.
- PSP for SOF. Supports systems engineering, analysis, development, and enhancement of the baseline PSP for later integration and installation onto host MC-130J aircraft provided by the U.S. Air Force for the AC-130H replacement aircraft, as well as other SOF platforms. Missions for the AC-130H aircraft include, but are not limited to, Close Air Support (CAS), Air Interdiction, Armed Reconnaissance, Escort, and Force Protection Integrated Base Defense. PSP is modular, scalable, and platform neutral, and includes mission management, sensors, and weapons.
- C-130 Terrain Following Radar System. Integrates a TF/TA radar with an on-board processor to provide a multi-mode terrain following capability. This system is targeted for the MC-130J, MC-130W, and MC-130H platforms.

UNCLASSIFIED
Page 3 of 11

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160403BB: Special Operations Aviation	SF100: SO	Aviation Systems Advanced
BA 7: Operational Systems Development	Systems Advanced Development	Developme	nt

- Acquisition Development Support. This funding is required to support systems engineering, analysis, and integration. Primary use of funds is to examine commonality and interoperability across systems. Funding will be used in a multitude of avenues across systems to support cost-benefit analysis; provide additional test support; and further reduce cost, schedule, and technical risk. As required, funds will support manpower costs for experts needed to meet certification, safety, reliability, and other requirements required by Office of the Secretary of Defense, Acquisition, Technology and Logistics, as well as commitments for joint programs.
- SOF Common terrain following/terrain avoidance (TF/TA) (Silent Knight) Radar. Continues Engineering and Manufacturing Development of a SOF common low probability of intercept/low probability of detection (LPI/LPD) radar to defeat advanced passive detection threats while maintaining ability to fly safe TF. This radar is targeted for use on all MH-47G Heavy Assault helicopters, MH-60M Blackhawk helicopters, MC-130H Combat Talon II and CV-22 Tilt-Rotor aircraft.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: SOF C-130 Avionics Modifications	10.231	8.550	-
FY 2011 Accomplishments:  Continued development and integration of aircraft modifications to maintain SOF-unique capabilities executed via an incremental acquisition strategy based on SOF C-130 avionics obsolescence dates, to include MC-130H and AC130U mission computer replacement.			
FY 2012 Plans: Continues development and integration of aircraft modifications to maintain SOF-unique capabilities executed via an incremental acquisition strategy based on SOF C-130 avionics obsolescence dates, to include MC-130H and AC130U mission computer replacement.			
Title: EC-130J Commando Solo Upgrades	2.357	1.782	0.673
FY 2011 Accomplishments: Integrated SOF-unique implementation of the C-130J block cycle upgrade installed on the EC-130J Commando Solo aircraft. Developed and integrated digital broadcast capability for incorporation on EC-130J.			
FY 2012 Plans: Continues integration of SOF-unique implementation of the C-130J block cycle upgrade installed on the EC-130J Commando Solo aircraft and development of digital broadcast capabilities.			
FY 2013 Plans: Continue integration of SOF-unique implementation of the C-130J block cycle upgrade installed on the EC-130J Commando Solo aircraft and development of digital broadcast capabilities.			
Title: Enhanced Situational Awareness for MC-130H	-	-	1.800
FY 2013 Plans:			

PE 1160403BB: Special Operations Aviation Systems Advanced Devel... United States Special Operations Command

UNCLASSIFIED
Page 4 of 11

R-1 Line #255 Volume 5 - 820

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	s Special Operations Command	DATE: Fe	bruary 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE PE 1160403BB: Special Operations Aviation	PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide		): SO Aviation Systems Advanced			
BA 7: Operational Systems Development	Development				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013	
FY 2013 new start. Initiate risk reduction, development and integrati MC-130H aircraft.	ion of an enhanced situational awareness system on				
Title: Precision Strike Package (PSP) MC-130W Multi-Mission Modi	fication	6.307	-	-	
FY 2011 Accomplishments: Continued software development, integration, and test for updated F	PSP capabilities.				
Title: Precision Strike Package (PSP) for SOF		4.651	26.193	29.35	
FY 2011 Accomplishments: Initiated risk reduction, development and integration of the PSP on N	IC-130J aircraft, and continued system improvemen	ts.			
FY 2012 Plans: Continues development, integration, risk reduction, test and system	improvement of the PSP on MC-130J aircraft.				
FY 2013 Plans: Continue development, integration, test, and system improvement of	f the PSP on MC-130J aircraft.				
Title: C-130 Terrain Following Radar System		1.930	17.536	37.52	
FY 2011 Accomplishments: Initiated development and integration of a LPI/LPD TF Radar System	n onto SOF MC-130 platforms.				
FY 2012 Plans: Continues development and integration of the TF Radar System onto	o SOF MC-130 platforms.				
FY 2013 Plans: Continue development and integration of the TF Radar System onto	SOF MC-130 platforms.				
Title: Acquisition Development Support		0.925	-	-	
FY 2011 Accomplishments: Conducted engineering, analysis and integration support across a minteroperability across systems; to support cost-benefit analyses; to schedule, and technical risk.		ost,			
Title: SOF Common Terrain Following/Terrain Avoidance (TF/TA) (S	Silent Knight) Radar	39.450	20.321	27.92	

PE 1160403BB: Special Operations Aviation Systems Advanced Devel... United States Special Operations Command

UNCLASSIFIED
Page 5 of 11

R-1 Line #255 Volume 5 - 821

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160403BB: Special Operations Aviation	SF100: SO	Aviation Systems Advanced
BA 7: Operational Systems Development	Systems Advanced Development	Development	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Continued Engineering and Manufacturing Development (EMD) of SOF Common TF/TA radar. Continued contractor flight testing and platform integration.			
FY 2012 Plans: Continues EMD of SOF Common TF/TA radar. Continues contractor flight testing and platform integration. Begins developmental flight testing.			
FY 2013 Plans: Continue EMD of SOF Common TF/TA radar. Continue developmental flight testing.			
Accomplishments/Planned Programs Subtotals	65.851	74.382	97.267

## C. Other Program Funding Summary (\$ in Millions)

		-	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• PROC1: C-130 MODIFICATIONS	8.907	27.965	25.248		25.248	28.367	15.332	27.161	90.351	Continuing	Continuing
<ul> <li>PROC2: PRECISION STRIKE</li> </ul>	0.000	0.000	73.013		73.013	137.944	181.218	265.073	297.957	Continuing	Continuing
PACKAGE											
<ul> <li>PROC3: Rotary Wing Upgrades</li> </ul>			4.400		4.400	16.706	69.790	70.471	62.935	Continuing	Continuing
and Sustainment											

## D. Acquisition Strategy

- SOF C-130 Avionics Modifications. Develop a fit function and interface replacement mission computer and rehost existing Operational Flight Program and Fire Control Software. Effort is being executed via an incremental acquisition strategy based on SOF C-130 avionics obsolescence mitigation need dates.
- EC-130J Commando Solo Upgrades. Block 7.0 is being develop by the Air Force program office using existing development and production contracts. Digital broadcast capabilities are being procured through an incremental acquisition strategy to incorporate and test readily available equipment into the EC-130J aircraft.
- Enhanced Situational Awareness for MC-130H. Award competitive development contract to add situational awareness processors and displays.
- Precision Strike Package (PSP) MC-130W Multi-Mission Modification. Executing incremental acquisition strategy with development, integration and testing for offensive systems, sensors, and mission management.
- PSP for SOF. Incremental acquisition strategy to integrate and test the PSP on MC-130J aircraft provided by the U.S. Air Force and other SOF platforms. Multiple contract awards.

UNCLASSIFIED
Page 6 of 11

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160403BB: Special Operations Aviation	SF100: SO	Aviation Systems Advanced
BA 7: Operational Systems Development	Systems Advanced Development	Developme	nt

- C-130 Terrain Following Radar System. Award competitive EMD contract for development, integration and test.
- Acquisition Development Support. Conduct engineering, analysis and integration support across a multitude of systems to examine commonality and interoperability issues to ensure cost, schedule and technical issues are addressed.
- SOF Common Terrain Following/Terrain Avoidance (Silent Knight) Radar. Executing incremental acquisition strategy with the MH-47G as the lead platform. A competitive EMD contract with an option for six low-rate initial production (LRIP) units was awarded to Raytheon in FY 2007. MH-60M Group A design and integration effort was awarded in FY 2010. Follow-on platform Group A design and integration efforts will be awarded. Group A production and installation contracts will be awarded. A follow-on radar production contract using LRIP price points will be awarded.

E. Performance M	letrics
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N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160403BB: Special Operations Aviation

Systems Advanced Development

PROJECT

SF100: SO Aviation Systems Advanced

**DATE:** February 2012

Development

Product Development (\$ in Millions)			FY 2012		FY 2 Ba	2013 se		2013 CO	FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SOF C-130 Avionics Modifications	C/FFP	BAE Systems:Rockville, MD	13.192	8.550	May 2012	-		-		-	0.00	21.742	
EC-130J Commando Solo Upgrades	C/CPIF	Lockheed Martin Aero:Marietta, GA	3.791	1.782	Dec 2011	0.673	Dec 2012	-		0.673	Continuing	Continuing	
Precision Strike Package for SOF - Prime Mission Product	SS/Various	Various:Various	4.267	24.740	Mar 2012	29.351	Mar 2013	-		29.351	Continuing	Continuing	
SOF Common TF/TA (Silent Knight) Radar - Systems Engineering	C/CPIF	Raytheon:Dallas, TX	14.407	1.016	Dec 2011	1.396	Dec 2012	-		1.396	Continuing	Continuing	
SOF Common TF/TA (Silent Knight) Radar - Prime Mission Product	C/CPIF	Raytheon:Dallas, TX	76.927	1.016	Dec 2011	1.396	Dec 2012	-		1.396	Continuing	Continuing	
C-130 Terrain Following Radar System	C/TBD	TBD:TBD	1.930	17.536	Feb 2012	37.523	Dec 2012	-		37.523	Continuing	Continuing	
Enhanced Situational Awareness for MC-130H	C/TBD	TBD:TBD	-	-		1.800	Dec 2012	-		1.800	Continuing	Continuing	
Prior Year Funding - Completed Efforts	TBD	Various:Various	63.939	-		-		-		-	0.000	63.939	
		Subtotal	178.453	54.640		72.139		-		72.139			

Support (\$ in Millions)	Support (\$ in Millions)						FY 2013 Base		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Precision Strike Package for SOF	C/Various	Various:Various	0.384	1.453	Mar 2012	-		-		-	Continuing	Continuing	
Prior Year Funding - Completed Efforts	TBD	Various:Various	22.334	-		-		-		-	0.000	22.334	
	<b>Subtotal</b> 22.718					-		-		-			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

C/CPIF

Raytheon: Dallas, TX

23.923

1.626

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160403BB: Special Operations Aviation

2.234

Dec 2012

Systems Advanced Development

**PROJECT** 

SF100: SO Aviation Systems Advanced

**DATE:** February 2012

Continuing

Continuing

2.234

Development

Test and Evaluation (\$	est and Evaluation (\$ in Millions)					FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SOF Common TF/TA (Silent Knight) Radar	C/CPIF	RaYtheon:Dallas TX	37.420	16.663	Dec 2011	22.894	Dec 2012	-		22.894	Continuing	Continuing	
		Subtotal	37.420	16.663		22.894		-		22.894			
Management Services (\$ in Millions)					2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract

Subtotal	23.923	1.626		2.234	-		2.234			
	otal Prior Years Cost	FY 2	012	FY 2013 Base		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	262 514	74 382		97 267	_		97 267	•		

Dec 2011

Remarks

Knight) Radar

SOF Common TF/TA (Silent

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160403BB: Special Operations Aviation SF100: SO Aviation Systems Advanced BA 7: Operational Systems Development Systems Advanced Development Development **FY 2011** FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 3 4 3 1 2 SOF C-130 Avionics SOF C-130 Avionics Modifications EC-130J Commando Solo Upgrades EC-130J Commando Solo Upgrades **Enhanced Situational Awareness for** MC-130H **Enhanced Situational Awareness for** MC-130H Precision Strike Package Precision Strike Package for SOF C-130 Terrain Following Radar System C-130 Terrain Following Radar System SOF Common TF/TA (Silent Knight) Radar Prototype Integration and Testing Developmental Testing (DT) Operational Testing (Combined with DT) Follow-On Platform Integration and Testing

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160403BB: Special Operations Aviation

Systems Advanced Development

**PROJECT** 

SF100: SO Aviation Systems Advanced

**DATE:** February 2012

Development

### Schedule Details

Sta	End		
Quarter	Year	Quarter	Year
3	2011	4	2014
1	2011	4	2017
1	2013	4	2016
1	2011	4	2017
		,	
1	2011	4	2017
1	2011	4	2011
2	2011	4	2014
4	2011	4	2014
1	2013	4	2017
	1 1 1 2	3 2011  1 2011  1 2013  1 2011  1 2011  1 2011  2 2011  4 2011	Quarter         Year         Quarter           3         2011         4           1         2011         4           1         2013         4           1         2011         4           1         2011         4           2         2011         4           4         2011         4           4         2011         4

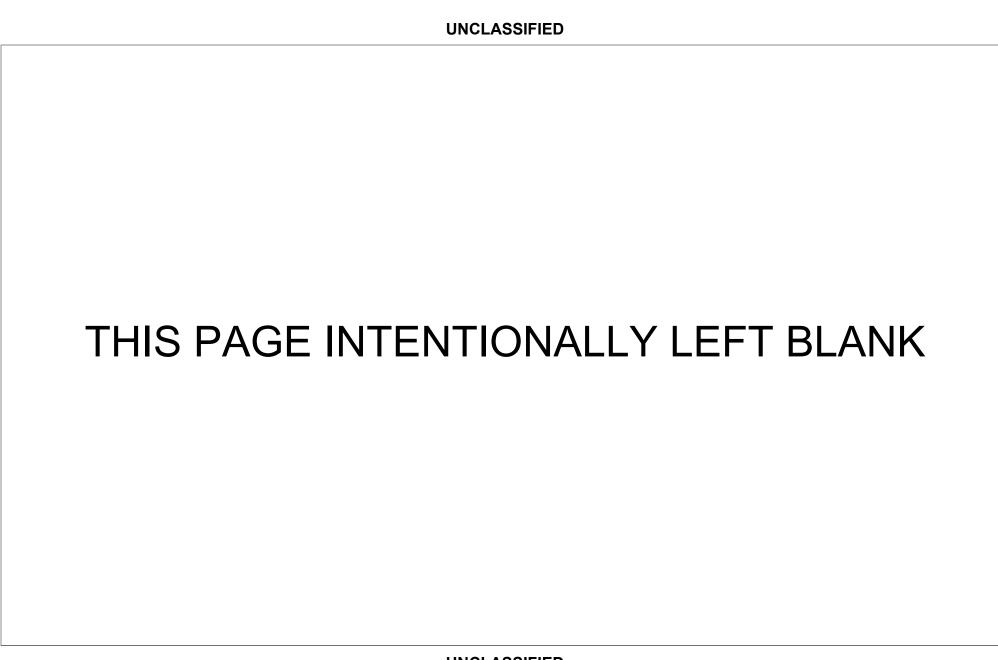


Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160404BB: Special Operations Tactical Systems Development

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	1.534	0.799	0.821	-	0.821	0.834	0.848	0.863	0.877	Continuing	Continuing
S710: SO Tactical Systems (Automation)	1.534	0.799	0.821	-	0.821	0.834	0.848	0.863	0.877	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This program element provides for development, testing, and integration of specialized automation equipment to meet the unique requirements of Special Operations Forces (SOF). Specialized automation equipment will permit small, highly trained forces to conduct required operations across the entire spectrum of conflict. These operations are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy. SOF must infiltrate by land, sea, and air to conduct unconventional warfare, direct action, or deep reconnaissance operations in denied areas against insurgent units, terrorists, or highly sophisticated threat forces. The requirement to operate in denied areas controlled by a sophisticated threat mandates that SOF systems remain technologically superior to threat forces to ensure mission success.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	1.582	0.799	0.811	-	0.811
Current President's Budget	1.534	0.799	0.821	-	0.821
Total Adjustments	-0.048	-	0.010	-	0.010
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.040	-			
Other Adjustment	-0.008	-	0.010	-	0.010

# **Change Summary Explanation**

Funding:

FY 2011: Decrease of \$0.048 million due to economic assumption reductions (-\$0.008 million), and a transfer of funds to Small Business Innovative Research (-\$0.040 million).

FY2012: None.

UNCLASSIFIED

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United St	tates Special Operations Command	<b>DATE:</b> February 2012							
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE								
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	PE 1160404BB: Special Operations Tactical Sy	vstems Development							
FY 2013: Increase of \$0.010 million due to economic assumption	ption increase.								
Schedule: None.									
Technical: None.									

PE 1160404BB: Special Operations Tactical Systems Development United States Special Operations Command

UNCLASSIFIED Page 2 of 4

Exhibit R-2A, RDT&E Project Ju	ustification: PE	3 2013 Unite	d States Sp	ecial Operati	ions Comma	nd			DATE: February 2012			
APPROPRIATION/BUDGET ACT 0400: Research, Development, To BA 7: Operational Systems Devel		IOMENCLA 4BB: Special evelopment		Tactical	PROJECT S710: SO Tactical Systems (Automation)							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
S710: SO Tactical Systems (Automation)	1.534	0.799	0.821	-	0.821	0.834	0.848	0.863	0.877	Continuing	Continuing	
Quantity of RDT&E Articles												

## A. Mission Description and Budget Item Justification

This project provides for development, testing, and integration of specialized automation equipment to meet the unique requirements of Special Operations Forces (SOF). Specialized automation equipment will permit small, highly trained forces to conduct required operations across the entire spectrum of conflict. These operations are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy. SOF must infiltrate by land, sea, and air to conduct unconventional warfare, direct action, or deep reconnaissance operations in denied areas against insurgent units, terrorists, or highly sophisticated threat forces. The requirement to operate in denied areas controlled by a sophisticated threat mandates that SOF systems remain technologically superior to threat forces to ensure mission success.

- The Tactical Local Area Network (TACLAN) provides SOF operational commanders and forward deployed forces advanced automated data processing and display capabilities to support situational awareness, mission planning and execution, and command and control of forces. The program consists of suites, mission planning kits and field computing devices.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: TACLAN Suites	1.534	0.799	0.821	-	0.821
FY 2011 Accomplishments: Conducted research and development on several emerging technologies available to the SOF Force. Capabilities include: Single Sign On, Full Motion Video, Radio Over Internet Protocol (ROIP) using Wide Area Voice Environment (WAVE), Solarwinds Network Management, Secure Wireless, and Lightweight UPS capability.					
FY 2012 Plans: Continues development and integration of evolutionary technology insertions (ETI) such as data at rest, thin client capabilities, smart phone connecitivity, Full Motion Video (FMV), and cross domain solutions.					
FY 2013 Base Plans:					

Page 3 of 4

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

PE 1160404BB: Special Operations Tactical

Systems Development

**PROJECT** 

S710: SO Tactical Systems (Automation)

DATE: February 2012

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Continue development and integration of evolutionary technology insertions (ETI) such as data at rest, thin client capabilities, wireless/personal digital assistant (PDA)/smartphone technologies, Full Motion Video (FMV) and cross domain solutions.					
Accomplishments/Planned Programs Subtotals	1.534	0.799	0.821	-	0.821

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
<ul> <li>PROC1: Automation Systems</li> </ul>	55.645	64.619	66.573	1.000	67.573	52.460	51.769	46.758	51.912	Continuing	Continuing

## **D. Acquisition Strategy**

N/A

# **E. Performance Metrics**

N/A

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160405BB: Special Operations Intelligence Systems Development

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	34.789	27.916	25.935	-	25.935	4.607	4.678	4.759	4.843	Continuing	Continuing
S400: SO Intelligence Systems	34.789	27.916	25.935	-	25.935	4.607	4.678	4.759	4.843	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This program element provides for the identification, development, and testing of Special Operations Forces (SOF) intelligence equipment to identify and eliminate deficiencies in providing timely intelligence to deployed forces. Sub-projects address the primary areas of intelligence dissemination, sensor systems, integrated threat warning to SOF mission platforms, and tactical exploitation of national system capabilities. USSOCOM has developed an overall strategy to ensure that Command, Control, Communications, Computers, and Intelligence (C4I) systems continue to provide SOF with the required capabilities into the 21st century. USSOCOM's C4I systems comprise an integrated network of systems providing positive command and control and timely exchange of intelligence and threat warning to all organizational echelons. The C4I systems that support this new architecture employ the latest standards and technology by transitioning from separate systems to full integration with the Global Information Grid (GIG). The GIG allows SOF elements to operate with any force combination in multiple environments.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	33.319	27.916	28.380	-	28.380
Current President's Budget	34.789	27.916	25.935	-	25.935
Total Adjustments	1.470	-	-2.445	-	-2.445
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	1.470	-	-2.445	-	-2.445

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: S400: SO Intelligence Systems

Congressional Add: National Systems Support to SOF - Single Card Solution

	FY 2011	FY 2012	
	1.592	-	
Congressional Add Subtotals for Project: S400	1.592	-	
Congressional Add Totals for all Projects	1.592	-	

**DATE:** February 2012

PE 1160405BB: Special Operations Intelligence Systems Developmen... United States Special Operations Command

UNCLASSIFIED
Page 1 of 12

R-1 Line #257

Volume 5 - 833

	UNCLASSIFIED					
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160405BB: Special Operations Intelligence Systems Development					
Change Summary Explanation Funding:						
FY 2011: Net increase of \$1.470 million due to an increase for and a decreae due to economic assumption reductions (-\$0.1		Systems Support for SOF Single Card Solution				
FY 2012: None.						
FY 2013: Net decrease of -\$2.445 million is due to reprogram million).	nming to higher command priorities (-\$2.756 million	) and an economic assumption increase (\$0.311				
Schedule: None.						
Technical: None.						

PE 1160405BB: Special Operations Intelligence Systems Developmen... United States Special Operations Command

UNCLASSIFIED
Page 2 of 12

R-1 Line #257

Exhibit R-2A, RDT&E Project Just	Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command										DATE: February 2012				
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Develo	PE 116040	IOMENCLA 5BB: Special Systems De	Operations		PROJECT S400: SO Intelligence Systems										
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost				
S400: SO Intelligence Systems	34.789	27.916	25.935	-	25.935	4.607	4.678	4.759	4.843	Continuing	Continuing				
Quantity of RDT&E Articles															

### A. Mission Description and Budget Item Justification

This project provides for the identification, development, and testing of Special Operations Forces (SOF) intelligence equipment to identify and eliminate deficiencies in providing timely intelligence to deployed forces. Sub-projects address the primary areas of intelligence dissemination, sensor systems, integrated threat warning to SOF mission platforms, and tactical exploitation of national system capabilities. The systems developed in this line item are National Systems Support to SOF (NSSS); Joint Threat Warning System (JTWS); Counter-Proliferation Analysis and Planning System (CAPS); and Special Operations Command Research, Analysis and Threat Evaluation System (SOCRATES).

USSOCOM has developed an overall strategy to ensure that Command, Control, Communications, Computers, and Intelligence (C4I) systems continue to provide SOF with the required capabilities throughout the 21st century. USSOCOM's C4I systems comprise an integrated network of systems providing positive command and control and timely exchange of intelligence and threat warning to all organizational echelons. The C4I systems that support this new architecture employ the latest standards and technology by transitioning from separate systems to full integration with the Global Information Grid (GIG). The GIG allows SOF elements to operate with any force combination in multiple environments. The intelligence programs funded in this project will meet annual emergent requirements and are grouped by the level of organizational element they support: Operational Element (Team) and Above Operational Element (Garrison).

# **OPERATIONAL ELEMENT (TEAM)**

- NSSS is a research and development rapid prototyping program which functions as HQSOCOM's Tactical Exploitation of National Capabilities (TENCAP) program. NSSS improves the combat effectiveness of USSOCOM, its components, and the Theater Special Operations Commands (TSOCs) by leveraging National Agency and Service development efforts focused on improving space-based intelligence products and communications and special communications capabilities to tactical SOF units, to include geographic intelligence (GEOINT), Signal Intelligence (SIGINT), Special Communications, and Intelligence Fusion, Reporting, Dissemination and Processing. The Research and Development (R&D) efforts pursued by NSSS are of a rapid development, fielding and deployment character and focus on USSOCOM's man-hunting mission. Though not exclusive, they are usually adjunct support efforts to USSOCOM's existing Military Intelligence Programs (MIP), to include SOCRATES, Global Video Surveillance, Hostile Forces Tagging, Tracking, and Locating (HF-TTL), JTWS, Distributed Common Ground/Surface System Special Operations Forces (DCGS-SOF), Friendly Force Tracking, and Tactical Local Area Network (TACLAN).
- JTWS is an evolutionary acquisition (EA) program that provides threat warning, force protection, enhanced situational awareness, and target identification/acquisition information to SOF via signal intercept, direction finding and SIGINT. JTWS will employ continuing technology updates to address the changing threat environment. SOF SIGINT operators are globally deployed and fully embedded within Special Operations (SO) teams and aircrews in every operational environment. This state-of-the-art technology enables SOF operators to provide critical time sensitive targeting and actionable intelligence to the operational commander during mission execution. Intelligence derived from operations supports campaign objectives and the National Military Strategy. This system has variants that utilize common technologies

UNCLASSIFIED
Page 3 of 12

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States S	pecial Operations Command		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160405BB: Special Operations	S400: SO I	ntelligence Systems
BA 7: Operational Systems Development	Intelligence Systems Development		

and interfaces allowing operators to task, organize, and scale equipment based on anticipated signal environments and areas of operation. Variants will be modular; lightweight with minimal power requirements; and configurable to support body worn/mobile or static, air, maritime and precision geo-location operations in support of all SOF missions. Each variant, except static, will be capable of operation by a single trained operator. The four variants are Ground SIGINT Kit (GSK) Bodyworn/Mobile, Team Transportable GSK static, Air, Maritime, and Precision Geo-Location (Ground and Air).

## ABOVE OPERATIONAL ELEMENT (GARRISON)

- CAPS. Department of Defense (DoD) has a planning mission for counter-proliferation (CP) contingency operations. CAPS has been identified by the Office of the Secretary of Defense (OSD) as the standard CP planning tool set for DoD, and the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Program has consolidated RDT&E funding at USSOCOM for overall program management. U.S. Strategic Command serves as the coordinator for CAPS production requirements and provides O&M funding. The Defense Threat Reduction Agency (DITRA) provides science and technology expertise and integration support to enhance CAPS capabilities. CAPS provides tools and assessments to DoD and SOF mission planners to aid in worldwide identification and analysis of suspected weapons of mass destruction and potential targets; assesses the associated effectiveness, costs and risks of various CP options and their collateral effects; and develops alternative plans. CAPS is a primary source of CP mission planning information for Combatant Commanders who are the principal customers. CAPS requires ongoing development, integration and testing of leading edge technology for operational planning and processes in order to provide the best possible engineering analysis and to support consequence engineering to meet changing threats. CAPS program funding and responsibility transfers to the Defense Intelligence Agency (DIA) for consolidation and interface with DIA's Counter Weapons of Mass Destruction (CWMD) Analysis Cell (CWAC) beginning in FY 2014.
- SOCRATES is an umbrella program that acquires and supports the network and computing infrastructure for SOF intelligence information up to and including the Top Secret, Sensitive Compartmented Information (TS/SCI) level. SOCRATES integrates intelligence information from national, theater, Service and SOF-specific databases; provides news service and message traffic; automated imagery processing, dissemination, and archival; analyst-to-analyst electronic mail and collaborative tools; web interfaces/search capabilities and browse-down capability to Secret web servers; and secure voice and facsimile. It provides a seamless and interoperable interface enabling SOF-unique intelligence support to mission planning and intelligence preparation of the battle space.
- Classified. Provided under separate cover.
- This project includes the following Congressional add:
- National Systems Support to SOF Single Card Solution effort was to redesign the L-band Single Card Solution (SCS) radio circuits to increase the frequency range to be compatible with USAF and Civil Aviation Identification Friend or Foe (IFF) bands. The resulting design, with further work, will be integrated into the cooperative updating identification aid for dismounted operations (CUIDADO) handset to provide ground forces the capability to respond to air-to-ground/surface/UAS IFF interrogations from USAF assets to establish their friendly status. This unprecedented capability will be an advancement in preventing air-to-ground fratricides and assist in recovery/extraction operations.

UNCLASSIFIED
Page 4 of 12

	UNCLASSIFIED								
Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	S Special Operations Command		D	ATE: Febru	ary 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	PE 1160405BB: Special Operations								
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total			
Title: Counter-Proliferation Analysis and Planning System		17.412	21.230	21.394	-	21.394			
FY 2011 Accomplishments: Completed Spiral 10 and began Spiral 11 development of CAPS engineed tools, and network interfaces for product dissemination to DoD and Captagory Plans:									
Completes Spiral 11 and begins Spiral 12 development of CAPS engineering tools, and network interfaces for product dissemination to DoD and Complete Spiral 12 development of CAPS engineering to the complete Spiral 12 development of CAPS engineering									
FY 2013 Base Plans: Complete Spiral 12 and begin Spiral 13 development of CAPS engin tools, and network interfaces for product dissemination to DoD and C									
Title: National Systems Support to SOF	0.974	0.756	0.783	-	0.783				
FY 2011 Accomplishments:  Developed SOF-required prototype capabilities, primarily through level and assets in the National Intelligence Community (NIC), while coordered Programs of Record for production and operational fielding of the surface included ISR support for Tagging, Tracking, and higher-accuracy Geforce Tracking (BFT), especially in system-challenged environments	dinating with other SOCOM and NIC ccessful capabilities. Emphasis areas colocating hostile forces as well as Blue-								
FY 2011 Overseas Contingency Operations (OCO) Title IX Accompli development of advanced, low power unattended ground sensor technique.									
FY 2012 Plans: Develops SOF-required prototype capabilities, primarily through level and assets in the NIC, while coordinating with other SOCOM and NIC and operational fielding of the successful capabilities. Emphasis are Tracking, and higher-accuracy Geolocating hostile forces as well as environments.	C Programs of Record for production as will include ISR support for Tagging,								
FY 2013 Base Plans: Develop SOF-required prototype capabilities, primarily through lever and assets in the NIC, while coordinating with other SOCOM and NIC and operational fielding of the successful capabilities. Emphasis are	C Programs of Record for production								

PE 1160405BB: Special Operations Intelligence Systems Developmen... United States Special Operations Command

UNCLASSIFIED
Page 5 of 12

Volume 5 - 837

R-1 Line #257

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	s Special Operations Command	,	D	ATE: Febru	ary 2012					
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	Research, Development, Test & Evaluation, Defense-Wide PE 1160405BB: Special Operations									
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total				
Tracking, and higher-accuracy Geolocating hostile forces, as well as environments.	, BFT, especially in system-challenged									
Title: Special Operations Command Research, Analysis, and Threat	Evaluation System	1.508	2.113	-	-	-				
FY 2011 Accomplishments: Integrate SOF Intelligence Data Management System (SIDMS) to the with the Defense Intelligence Information Enterprise to support net-cusing the DCGS-SOF. Developed, integrated and tested technology to include advanced data automation; testing of techniques for integrate repositories; developed a Java-compliant machine language translated developed a data warehousing capability.	entric data sharing with USSOCOM partners y upgrades and experimental technologies rating metadata into existing SOF data									
FY 2012 Plans: Continues to integrate SIDMS to the SOF data layer to enable intero Information Enterprise to support net-centric data sharing with USSO Develops, integrates and tests technology upgrades and experiment automation; testing of techniques for integrating metadata into existing Java-compliant machine language translation; protection level 3 integrapability.	DCOM partners using the DCGS-SOF. cal technologies to include advanced data ng SOF data repositories; develops a									
Title: Joint Threat Warning System		3.863	3.817	3.758	-	3.75				
FY 2011 Accomplishments: Completed evolutionary technology insertions (ETI) development and body worn/mobile and static systems. Integrated Precision Geo-local										
FY 2012 Plans: Continues networking and testing within the JTWS Family of System Arrival. Completes Air Special Signals Processor integration and au										
development, integration and automation. Begins development, intevariant.										

PE 1160405BB: Special Operations Intelligence Systems Developmen... United States Special Operations Command

UNCLASSIFIED
Page 6 of 12

R-1 Line #257

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160405BB: Special Operations Intelligence Systems Development	PROJECT S400: SO Intelligence Systems

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Complete networking and testing within the JTWS Family of Systems and implement Time Difference of Arrival technologies in downsized hardware/software configuration on all variants. Continue development, integration and testing of JTWS Maritime variant.					
<i>Title:</i> Joint Threat Warning System Unmanned Aerial Vehicle (UAV) SIGINT Payload (Overseas Contingeny Operations (OCO) Title IX)	9.440	-	-	-	-
FY 2011 Accomplishments: Completed the development, integration and testing of JTWS UAV SIGINT Payloads on to the Scan eagle UAV. Performed an initial assessment of the technology feasibility of integrating a new dual-band SIGINT payload.					
Accomplishments/Planned Programs Subtotals	33.197	27.916	25.935	-	25.935

	FY 2011	FY 2012	
Congressional Add: National Systems Support to SOF - Single Card Solution	1.592	-	
<b>FY 2011 Accomplishments:</b> Redesigned the L-band Single Card Solution radio circuits to increase frequency range to be compatible with USAF and civil aviation Identification Friend or Foe bands.			
Congressional Adds Subtotals	1.592	-	

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	<b>FY 2011</b>	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	Total Cost
PROC1: Intelligence Systems	186.690	123.760	71.428	30.528	101.956	91.765	82.474	81.199	85.014	Continuing	Continuing

# D. Acquisition Strategy

- NSSS to SOF is a project to introduce and integrate national systems capabilities into the SOF force structure and operations. Activities include increasing national and commercial systems awareness, demonstrating the tactical utility of national systems and commercial data, testing technologies and evaluating operational concepts in biennial Joint Staff Special Projects, and transitioning promising concepts and technologies to other SOF program offices for execution.
- JTWS is an EA program that provides threat warning, force protection, enhanced situational awareness, and target identification/ acquisition information to SOF via signals intercept, direction finding and SIGINT. This program will employ continuing technology updates to address the changing threat environment.

UNCLASSIFIED
Page 7 of 12

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States S	pecial Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160405BB: Special Operations	S400: SO Intelligence Systems
BA 7: Operational Systems Development	Intelligence Systems Development	

- CAPS is an on-going developmental initiative chartered by the Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, which was transferred to USSOCOM from DTRA to develop, integrate and test "leading edge technology" for operational planning, to provide engineering analysis and support consequence engineering tools to meet changing threats.
- SOCRATES will integrate a SOF-peculiar cross-domain solution to support the seamless integration of intelligence data into mission planning and command and control capabilities in both a garrison and tactical environment. USSOCOM will leverage available funds against ongoing efforts by other government agencies to meet SOF-peculiar documented requirements.

#### **E. Performance Metrics**

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160405BB: Special Operations Intelligence Systems Development

**PROJECT** 

S400: SO Intelligence Systems

**DATE:** February 2012

Product Development (	\$ in Millio	ns)		FY 2	012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Threat Warning System (JTWS)-Air Increment 2	MIPR	SPAWAR:Charleston, SC	2.990	0.690	Nov 2011	0.705	Nov 2012	-		0.705	Continuing	Continuing	
JTWS-Team Transportable - Ground Signal Intelligence Kit (GSK) Static	Reqn	USSOCOM SIGINT REV:Various	9.314	0.266	Nov 2011	0.270	Nov 2012	-		0.270	Continuing	Continuing	
JTWS-GSK, Inc 2	Reqn	USSOCOM SIGINT REV:Various	15.964	1.323	May 2012	1.233	May 2013	-		1.233	Continuing	Continuing	
JTWS-Maritime	Reqn	USSOCOM SIGINT REV:Various	0.198	0.450	Nov 2011	0.454	Nov 2012	-		0.454	Continuing	Continuing	
JTWS-NSA Intern Support	MIPR	NSA:Ft. Meade, MD	0.100	0.100	Apr 2012	0.100	Apr 2013	-		0.100	Continuing	Continuing	
Counter-Proliferation Analysis and Planning System	MIPR	Lawrence Livermore National Labs:Livermore, CA	133.582	20.501	Nov 2011	20.757	Nov 2012	-		20.757	Continuing	Continuing	
National Systems Support to SOF	MIPR	Various:Various	13.348	0.409	Dec 2011	0.429	Dec 2012	-		0.429	Continuing	Continuing	
SOCRATES	SS/FFP	SITEC:TBD	-	1.823	Oct 2011	-		-		-	0.000	1.823	
Prior Year Funding - Completed Efforts	Various	Various:Various	42.077	-		-		-		-	0.000	42.077	
		Subtotal	217.573	25.562		23.948		-		23.948			

Support (\$ in Millions)		Support (\$ in Millions)		FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
CAPS Support	MIPR	Lawrence Livermore National Labs:Livermore CA	5.127	0.729	Nov 2011	0.637	Nov 2012	-		0.637	Continuing	Continuing	
	·	Subtotal	5.127	0.729		0.637		-		0.637			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160405BB: Special Operations Intelligence Systems Development

**PROJECT** 

S400: SO Intelligence Systems

**DATE:** February 2012

Test and Evaluation (\$ i	and Evaluation (\$ in Millions)			FY 2012		1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		FY 2013 FY 2013 OCO Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Threat Warning System	MIPR	JITC:Ft. Huachuca, AZ	1.837	0.988	Jun 2012	0.996	Jun 2013	-		0.996	Continuing	Continuing	
Special Operations Command Research, Analysis, and Threat Evaluation System - Independent Verification and Validation	MIPR	MITRE:Bedford, MA	0.276	0.290	Jan 2012	-		-		-	0.000	0.566	
		Subtotal	2.113	1.278		0.996		-		0.996			

Management Services	lanagement Services (\$ in Millions)				2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
National Systems Support to SOF Program Support	C/CPAF	Jacobs:Tampa, FL	4.409	0.347	Oct 2011	0.354	Oct 2012	-		0.354	Continuing	Continuing	
Prior Year Funding - Completed Efforts	Various	Various:Various	15.683	-		-		-		-	0.000	15.683	
	Subtotal 20.092					0.354		-		0.354			

	Total Price	r									Target
	Years			FY	2013	FY	2013	FY 2013	Cost To		Value of
	Cost	FY	2012	Ва	ise	0	CO	Total	Complete	Total Cost	Contract
Project C	Cost Totals 244.90	5 27.916	5	25.935		_		25.935			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160405BB: Special Operations S400: SO Intelligence Systems BA 7: Operational Systems Development Intelligence Systems Development **FY 2011** FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 2 3 4 3 3 2 2 3 4 1 4 4 3 4 1 Special Operations Command Research, Analysis, and Threat Evaluation Special Operations Command, Research, Analysis, and Threat Evaluation National Systems Support to SOF Participation in Space Technology Dev and Demo National Systems Support to SOF Participation in Space Technology Dev and Demo FY2010/2011 Single Card Solution - National Systems Support to SOF FY 2011 Single Card Solution for CID - NSSS (Cong Add) FY2011 OCO Title IX - Joint Treat Warning System - Unmanned Aerial Vehicle SIGINT Payload FY 2011 OCO Title IX- JTWS Unmanned Aerial Vehicle SIGINT Payload Counter-Proliferation Analysis and Planning System Integration Counter-Proliferation Analysis and Planning System Integration Joint Threat Warning System Variant Development, Test and Eval

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160405BB: Special Operations Intelligence Systems Development

**PROJECT** 

S400: SO Intelligence Systems

**DATE:** February 2012

# Schedule Details

	Sta	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Special Operations Command Research, Analysis, and Threat Evaluation				
Special Operations Command, Research, Analysis, and Threat Evaluation	1	2011	4	2012
National Systems Support to SOF Participation in Space Technology Dev and Demo				
National Systems Support to SOF Participation in Space Technology Dev and Demo	1	2011	4	2017
FY2010/2011 Single Card Solution - National Systems Support to SOF				
FY 2011 Single Card Solution for CID - NSSS (Cong Add)	3	2011	4	2011
FY2011 OCO Title IX - Joint Treat Warning System - Unmanned Aerial Vehicle SIGINT Payload				
FY 2011 OCO Title IX- JTWS Unmanned Aerial Vehicle SIGINT Payload	4	2011	4	2012
Counter-Proliferation Analysis and Planning System Integration				
Counter-Proliferation Analysis and Planning System Integration	1	2011	4	2013
Joint Threat Warning System				
Variant Development, Test and Eval	1	2011	4	2017

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide PE 11

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160421BB: Special Operations CV-22 Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	13.976	10.775	1.822	-	1.822	0.911	0.182	-	-	0.000	27.666
SF200: SO CV-22	13.976	10.775	1.822	-	1.822	0.911	0.182	-	-	0.000	27.666

#### A. Mission Description and Budget Item Justification

The CV-22 is a Special Operations Forces (SOF) variant of the V-22 vertical medium lift, multi-mission aircraft. The CV-22 will provide long range, high speed, infiltration, exfiltration, and resupply to Special Forces teams in hostile, denied, and politically sensitive areas. This is a capability not currently provided by existing aircraft. The V-22 Joint Program Office is developing improved capabilities in block increments. The funding in this project supports these block increments as well as associated flight test support. The Block 10 increment was completed in FY 2007, and the Block 20 increment started in FY 2008.

Block 10: Integrate and test Directional Infrared Countermeasures, a system that protects against infrared guided missiles; design, integrate and validate the Troop Commander Situational Awareness Station to provide the embarked troop commander access to the CV-22's communication, navigation and mission management system; relocate the ALE-47 chaff and flare dispenser control head to allow any cockpit crew member to activate defensive countermeasures; add a second forward firing chaff and flare dispenser to provide an adequate quantity of consumable countermeasures for the extended duration of SOF infiltration, exfiltration, and resupply missions; and incorporate a dual access feature to the Digital Map System to allow both the pilot and co-pilot to independently access and control the digital map display from the mission computer.

Block 20: Design, integrate, test, and validate enhancements required to meet SOF-unique mission requirements and correct deficiencies identified in previous testing. This incremental development will provide improved capabilities to include, but not limited to, more robust performance in situational awareness, weapons, avionics, survivability, maneuverability, mission deployment and improved reliability and maintainability of the CV platform. Initial risk reduction and trade studies were initiated in FY 2006, and System Design and Development started in FY 2008. FY 2011 RDT&E activities continued on Block 20 Increment 1 and 2, including Terrain Following Logic, Terrain Following less than 50 knots, Multi Mission Advanced Tactical Terminal, and Improved Crew Interface of Integrated Broadcast Service Data. Block 20 Increment 3 efforts were also initiated in FY2011, including Helmet Mounted Display and Digital Map Upgrade. FY 2012 RDT&E activities continue and complete on Block 20 Increment 1, 2 & 3 efforts. FY 2013 RDT&E activities continue on improvements to the Enhanced Situational Awareness package providing enhanced, correlated, fusion and display, threat response, training and simulation capabilities.

Volume 5 - 845

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

**R-1 ITEM NOMENCLATURE** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160421BB: Special Operations CV-22 Development

BA 7: Operational Systems Development

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	14.406	10.775	-	-	-
Current President's Budget	13.976	10.775	1.822	-	1.822
Total Adjustments	-0.430	-	1.822	-	1.822
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.357	-			
Other Adjustments	-0.073	-	1.822	-	1.822

## **Change Summary Explanation**

Funding:

FY 2011: Decrease of -\$0.357 million is due to Small Business Innovative Research transfer and economic assumption reduction of -\$0.073 million.

FY 2012: None.

FY 2013: Net increase of \$1.822 million is due to an increase of \$1.800 million to continue Enhanced Situational Awareness development efforts and economic assumption increase of \$0.022 million.

Schedule: None.

Technical: None.

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Jus	stification: 만	3 2013 Unite	d States Sp	ecial Operati	ions Comma	nd		DATE: February 2012			
APPROPRIATION/BUDGET ACTI	IVITY			R-1 ITEM N	IOMENCLAT						
0400: Research, Development, Tes	Vide	PE 116042	1BB: <i>Specia</i> i	l Operations	CV-22	SF200: SO	: SO CV-22				
BA 7: Operational Systems Development				Developme	nt						
COOT (¢ in Milliana)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
SF200: SO CV-22	13.976	10.775	1.822	-	1.822	0.911	0.182	-	-	0.000	27.666
Quantity of RDT&E Articles											

# A. Mission Description and Budget Item Justification

A. Mission Description and Budget Item Justification: The CV-22 is a Special Operations Forces (SOF) variant of the V-22 vertical medium lift, multi-mission aircraft. The CV-22 will provide long range, high speed infiltration, exfiltration, and resupply to Special Forces teams in hostile, denied, and politically sensitive areas. This is a capability not currently provided by existing aircraft. The V-22 Joint Program Office is developing improved capabilities in block increments supported with rapid prototyping. The funding in this project supports these block increments as well as associated flight test support. The Block 10 increment completed in FY 2007, and the Block 20 increment started in FY 2008.

Block 10: Integrate and test Directional Infrared Countermeasures, a system that protects against infrared guided missiles; design, integrate and validate the Troop Commander Situational Awareness Station to provide the embarked troop commander access to the CV-22's communication, navigation and mission management system; relocate the ALE-47 chaff and flare dispenser control head to allow any cockpit crew member to activate defensive countermeasures; add a second forward firing chaff and flare dispenser to provide an adequate quantity of consumable countermeasures for the extended duration of SOF infiltration, exfiltration, and resupply missions; and incorporate a dual access feature to the Digital Map System to allow both the pilot and co-pilot to independently access and control the digital map display from the mission computer.

Block 20: Design, integrate, test, and validate enhancements required to meet SOF-unique mission requirements and correct deficiencies identified in previous testing. This incremental development will provide improved capabilities to include, but not limited to, robust performance in situational awareness, weapons, avionics, survivability, maneuverability, mission deployment, improved reliability and maintainability of the CV platform. Initial risk reduction and trade studies were initiated in FY 2006, and System Development and Demonstration started in FY 2011 RDT&E activities continue on Block 20, initiating Block 20 Increment 3 and continuing Increment 1 and 2 efforts. FY 2012 RDT&E activities continue on Block 20 Increment 1, 2 and 3 efforts. FY 2013 RDT&E activities continue on improvements to the Enhanced Situational Awareness package providing enhanced, correlated, fusion and display, threat response, training and simulation capabilities.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: CV-22 Aircraft Block 20	13.976	10.775	1.822
FY 2011 Accomplishments: Continued flight test support and design and development of Block 20.			
FY 2012 Plans: Continues flight test support and design and development of Block 20.			
FY 2013 Plans:			

PE 1160421BB: Special Operations CV-22 Development United States Special Operations Command

Page 3 of 7

R-1 Line #259

Volume 5 - 847

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

PROJECT

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160421BB: Special Operations CV-22

SF200: SO CV-22

**DATE:** February 2012

BA 7: Operational Systems Development

Development

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Continue Enhanced Situational Awareness development providing enhanced, correlated, fusion and display, threat response, training and simulation capabilities.			
Accomplishments/Planned Programs Subtotals	13.976	10.775	1.822

# C. Other Program Funding Summary (\$ in Millions)

				FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
	<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• 1	PROC1: CV-22 SOF MOD	138.350	133.002	139.147		139.147	98.927	19.843	6.491	6.607	Continuing	Continuing
• 1	PROC2/0401318F: Aircraft	597.881	431.332	423.475		423.475	319.598	106.152	71.958	72.007	194.510	5,558.792
P	rocurement Air Force											
• 1	RDT&E1/0401318F: <i>RDT&amp;E,</i>	17.648	13.223	28.027		28.027	25.438	21.223	14.656	14.484	20.399	479.852
U	SAF											
•	RDT&E/0604262N: <i>V-22 RDT&amp;E,</i>	42.686	84.477	54.436		54.436	40.316	54.929	51.217	52.292	111.055	9,397.300
∣ N	BA-05											

# D. Acquisition Strategy

The CV-22 program is managed by the Navy V-22 Joint Program Office (NAVAIRSYSCOM PMA-275). This ensures that the CV-22 changes are incorporated into the ongoing V-22 production line with minimum impact. Funding for the baseline CV-22 Engineering Manufacturing and Development, known as Block 0, is embedded in the Navy budget. Block 10 RDT&E funding was sent from USSOCOM to NAVAIRSYSCOM to be placed on contract with the V-22 prime contractor. Block 10 capability is required for compliance with the Joint Operational Requirements Document and associated Milestone III Capabilities Production Document. Block 20 and subsequent block upgrades are planned to follow the same acquisition strategy, with NAVAIRSYSCOM PMA-275 ensuring the integration of SOF-unique systems with the ongoing basic vehicle improvements supporting both the CV-22 and the Marine Corps MV 22.

#### **E. Performance Metrics**

N/A

PE 1160421BB: Special Operations CV-22 Development United States Special Operations Command

UNCLASSIFIED
Page 4 of 7

R-1 Line #259

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160421BB: Special Operations CV-22

FY 2013

Development

PROJECT

KOJLO I

FV 2013

SF200: SO CV-22

FV 2013

**DATE:** February 2012

Product Development (	roduct Development (\$ in Millions)			FY 2	2012	FY 2 Ba	2013 ise		2013 CO	FY 2013 Total	Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Integration, Assembly, Test and Checkout (Block 20)	SS/CPFF	Bell-Boeing:Amarillo, TX	52.687	7.995	Dec 2011	-		-		-	0.000	60.682		
Systems Engineering	SS/CPFF	Raytheon:Indianapolis, IN	5.465	-		-		-		-	0.000	5.465		
Enhanced Situational Awareness	SS/TBD	TBD:TBD	-	-		1.822	Feb 2013	-		1.822	Continuing	Continuing		
Prior Year Funding - Completed Efforts	SS/Various	Various:Various	389.472	-		-		-		-	0.000	389.472		
		Subtotal	447.624	7.995		1.822		-		1.822				
Test and Evaluation (\$	in Millions	s)		FY	2012	FY 2 Ba	2013 ise		2013 CO	FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract	
Systems Test and Evaluation (Block 20)	SS/Various	Bell-Boeing;	8.506	1.795	Nov 2011	-		-		-	0.000	10.301		
System Test and Evaluation (ATA)	SS/Various	Bell-Boeing; DynCorp:Amarillo, TX; Fort Worth, TX	13.241	0.985	Dec 2011	-		-		-	0.000	14.226		
Prior Year Funding - Completed Efforts	SS/Various	Various:Various	43.584	-		-		-		-	0.000	43.584		
	Subtotal		65.331	2.780		-		-		-	0.000	68.111		
	_		Total Prior Years Cost		2012		2013 ise		2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract	
		Project Cost Totals	512.955	10.775		1.822		-		1.822				

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160421BB: Special Operations CV-22 SF200: SO CV-22 BA 7: Operational Systems Development Development FY 2011 FY 2017 FY 2012 FY 2013 FY 2014 FY 2015 **FY 2016** 2 2 4 2 1 2 4 1 3 2 3 3 4 3 4 1 1 CV-22

CV-22 Block 20 Development/Test
CV-22 Aircraft Deliveries (PROC)

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

PE 1160421BB: Special Operations CV-22

SF200: SO CV-22

**DATE:** February 2012

Development

# Schedule Details

	St	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
CV-22		-			
CV-22 Block 20 Development/Test	1	2011	4	2015	
CV-22 Aircraft Deliveries (PROC)	1	2011	4	2016	



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160427BB: Mission Training and Preparation Systems (MTPS)

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	3.408	4.617	10.131	-	10.131	8.285	9.219	9.399	9.527	Continuing	Continuing
S750: Mission Training and Preparation Systems	3.408	4.617	10.131	-	10.131	8.285	9.219	9.399	9.527	Continuing	Continuing

# A. Mission Description and Budget Item Justification

This program element funds the definition, design, development, prototyping, integration, and testing of Mission Training and Preparation Systems (MTPS) to support training, avoid obsolescence, and maintain simulator concurrency with weapon systems' configurations; support mission planning and rehearsal systems enhancements required to meet Special Operations Forces (SOF)-unique mission requirements and correct deficiencies identified in previous testing; and support mission planning and rehearsal capabilities in current MTPS. The MTPS program element also includes program management, systems engineering, configuration management, architecture development, risk reduction, and trade study initiatives, as well as initiatives to assure interoperability and commonality between diverse SOF training systems.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.915	4.617	10.209	-	10.209
Current President's Budget	3.408	4.617	10.131	-	10.131
Total Adjustments	0.493	-	-0.078	-	-0.078
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	0.580	-			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-	-			
Other Adjustment	-0.087	-	-0.078	-	-0.078

# **Change Summary Explanation**

Funding:

FY 2011: Net increase of \$0.493 million due to reprogramming \$0.580 million to MTPS for automated flight performance software for non-standard aviation aircraft, and an economic assumption decrease of (-\$0.087 million).

FY 2012: None.

UNCLASSIFIED

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United St	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	,
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160427BB: Mission Training and Prepar	ation Systems (MTPS)
BA 7: Operational Systems Development		
FY 2013: Net decrease of \$0.078 million is due to a reprogra	amming to higher command priorities (-\$.200 million	n) and an economic assumption increase of \$.122
million.		
Schedule: None.		
Tashniadi, Nana		
Technical: None.		

PE 1160427BB: *Mission Training and Preparation Systems (MTPS)*United States Special Operations Command

UNCLASSIFIED Page 2 of 8

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command										DATE: February 2012				
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Development	est & Evaluation	n, Defense-V	Vide	PE 116042	IOMENCLAT 7BB: Missior Systems (M	n Training an	d	PROJECT S750: Mission Training and Preparation Systems						
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 FY 2013 OCO Total FY 2014 FY 2015				FY 2016	FY 2017	Cost To Complete	Total Cost			
S750: Mission Training and Preparation Systems	3.408	4.617	10.131	-	10.131	8.285	9.219	9.399	9.527	Continuing	Continuing			
Quantity of RDT&E Articles														

#### A. Mission Description and Budget Item Justification

This project funds the definition, design, development, prototyping, integration, and testing of Mission Training and Preparation Systems (MTPS) to support training, avoid obsolescence, and maintain simulator concurrency with weapon system configurations; support mission planning and rehearsal systems enhancements required to meet Special Operations Force (SOF)-unique mission requirements and correct deficiencies identified in previous testing; and support mission planning and rehearsal capabilities in current MTPS. The MTPS project also includes program management, systems engineering, configuration management, architecture development, risk reduction, and trade study initiatives, as well as initiatives to assure interoperability and commonality between diverse SOF training systems.

#### Sub-projects include:

- Special Operations Mission Planning Environment (SOMPE): Develops, integrates, tests, and validates software enhancements required to meet SOF-unique requirements for, and correct deficiencies to, mission planning, preview, and execution software tools to support all phases of SOF operations from deliberate to time critical. The SOMPE project automates time-sensitive planning activities and provides enhanced situational awareness during mission execution. SOMPE provides the interoperable environment for SOF adaptive planning to integrate global operations including, but not limited to, precision strike software, digital navigation, and unmanned aerial systems command & control. This project also provides the integration of SOMPE with multi-dimensional visualization systems, providing immersive mission rehearsal in minimal timeframes from the SOMPE mission plan. SOMPE is embedded in the USSOCOM Headquarters, Theater Special Operations Commands, Joint Special Operations Task Forces, Joint Special Operations Aviation Components, SOF warfighters, and SOF warfighter platforms
- MC/AC-130J Simulator (MC/AC-130J): Conducts integration, assembly, test and checkout of SOF-unique MC-130J and AC-130J simulator development efforts modifications along with AC-130J to include all efforts of technical and functional activities associated with the design, development, and production of mating surfaces, structures, equipment, parts, materiels, and software required to assemble equipment (hardware/software) elements into training mission equipment as a whole and not directly part of any other individual element.
- Terrain Following/Terrain Avoidance Silent Knight Radar Simulator (TF/TA SKR): This program will integrate Silent Knight Radar (SKR) into the MH-47G and MH-60 simulators. It will design, develop, integrate, test, and field a SOF common multi-mode radar characterized by a Low Probability of Intercept, Low Probability of Detection (LPI/LPD) capability. This program is a FY 2013 new start.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Special Operations Mission Planning Environment (SOMPE)	3.408	1.417	4.766

PE 1160427BB: Mission Training and Preparation Systems (MTPS) United States Special Operations Command

UNCLASSIFIED
Page 3 of 8

R-1 Line #260

Volume 5 - 855

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	s Special Operations Command	DATE: F	ebruary 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	ROJECT 750: Mission Trainin estems	: Mission Training and Preparation					
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013			
Description:							
FY 2011 Accomplishments:  Developed software applications to address SOF-unique aviation, gr addressed by other Service mission planning efforts. Developed SC planning systems to SOF helicopters, airplanes, and simulator/rehea	F-specific mission data transfer software from mission						
FY 2012 Plans: Continues software development for mission data-loading software to Improves ground and maritime planning modules and capabilities.	o interface with mission planning and rehearsal systems						
FY 2013 Plans: Continue required development of software applications to address software requirements, data transfer software from mission planning systems systems, and automated performance models and performance prectransfer and performance software completing development.	to SOF helicopters, airplanes, and simulator/rehearsal						
Title: MC/AC-130J Simulator (MC/AC-130J SIM)		-	3.200	4.04			
FY 2012 Plans: FY 2012 new start. Initiates development of SOF - unique training cases, MC/AC-130J aircraft.	apabilities to support training for the new Mission Desig	n					
FY 2013 Plans: Continues development of Special Operations Forces unique training Series, MC/AC-130J aircraft.	g capabilities to support training for the new Mission De	sign					
Title: Terrain Following/Terrain Avoidance Simulator (TF/TA SIM)		-	-	1.32			
FY 2013 Plans: FY 2013 new start. Initiate development and integration of TF/TA cap	pabilities into SOF Rotary Wing simulators.						
	Accomplishments/Planned Programs Sub	totals 3.408	4.617	10.13 <sup>-</sup>			

PE 1160427BB: *Mission Training and Preparation Systems (MTPS)*United States Special Operations Command

UNCLASSIFIED Page 4 of 8

R-1 Line #260

Volume 5 - 856

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	pecial Operations Command		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160427BB: Mission Training and	S750: Missi	ion Training and Preparation
BA 7: Operational Systems Development	Preparation Systems (MTPS)	Systems	

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	<b>FY 2011</b>	FY 2012	Base	OCO	<b>Total</b>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• PROC1: MISSION TRAINING	18.253	46.242	36.949		36.949	24.278	18.327	27.288	28.667	Continuing	Continuing
AND PREPARATION SYSTEMS											

#### **D. Acquisition Strategy**

- SOMPE: Subprogram comprises multiple software development projects awarded annually to selected contractors. Acquisition strategies depend on the type of development effort. For minor software development projects, contracts may be awarded as sole source acquisitions from existing contract vehicles. For major software development projects, contracts may be awarded as limited or full & open competition acquisitions. Individual acquisition strategies are developed as the scope of software development projects are identified. and defined.
- MC/AC-130J Simulator: Subprogram comprises contract(s) that may be awarded via competition or sole source, with selected contractors under each research and development project. Funding executed via contractual action to ensure training device development conform to MC/AC-130J Special Operations Forces unique capabilities.
- TF/TA SKR: Contract may be awarded via competition or sole source with selected contractors under each modification/increment project. Individual acquisition strategies are developed as projects are identified.

## **E. Performance Metrics**

None

UNCLASSIFIED Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **PROJECT** R-1 ITEM NOMENCLATURE 0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160427BB: Mission Training and S750: Mission Training and Preparation BA 7: Operational Systems Development Preparation Systems (MTPS) Systems FY 2013 FY 2013 FY 2013 **Product Development (\$ in Millions)** FY 2012 Base oco Total **Total Prior** Contract Target Method Performing Years Award Award Award Cost To Value of **Activity & Location Cost Category Item** Cost Date Date Cost Date Complete **Total Cost** Contract & Type Cost Cost Cost Special Operations Mission Planning Environment C/TBD Various:Various 10.299 0.712 Jan 2012 4.034 Jan 2013 Continuina 4.034 Continuing Software (SOMPE) MC/AC-130J Simulator **TBD** TBD:TBD 3.200 Mar 2012 Mar 2013 0.000 7.241 4.041 4.041 TF/TA SKR Simulator C/TBD PEO-STRI:Orlando, FL 0.883 Feb 2013 0.883 Continuing Continuing 8.958 Subtotal 10.299 3.912 8.958 **FY 2013** FY 2013 FY 2013 Support (\$ in Millions) FY 2012 Base oco Total **Total Prior** Contract Target Method Performing Years Award **Cost To** Value of Award Award **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Complete **Total Cost** Contract Cost Special Operations Mission Special Operations Planning Environment Mission Planning Feb 2013 Continuing **MIPR** 0.971 0.251 Feb 2012 0.260 0.260 Continuing Software (SOMPE) Office:Fort Eustis, VA TF/TA SKR Simulator **MIPR** PEO-STRI:Orlando, FL 0 441 Feb 2013 0.441 Continuing Continuing 0.971 0.251 0.701 Subtotal 0.701 FY 2013 **FY 2013** FY 2013 Test and Evaluation (\$ in Millions) FY 2012 Base oco Total Contract **Total Prior** Target Method Performing Years Award Award Award **Cost To** Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Special Operations Mission Wyle-CAS:Huntsville, Planning Environment C/CPFF 0.454 0 472 0.472 1.827 Jan 2012 Jan 2013 Continuina Continuina AL Software (SOMPE) 0.454 0.472 Subtotal 1.827 0.472 **Total Prior** Target FY 2013 FY 2013 Value of Years FY 2013 Cost To Cost FY 2012 Base oco Total Complete **Total Cost** Contract **Project Cost Totals** 13.097 4 617 10.131 10 131 Remarks

PE 1160427BB: Mission Training and Preparation Systems (MTPS) United States Special Operations Command

UNCLASSIFIED Page 6 of 8

R-1 Line #260

Volume 5 - 858

APPROPRIATION/BUDGET ACTIVITY 400: Research, Development, Test & Evaluation, Defense-Wide AA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 1160427BB: Mission Training and Preparation Systems (MTPS)								5	PROJECT S750: Mission Training and Preparation Systems															
		FY	<b>′</b> 201	l1		FY	2012	2		FY	2013	}		FY	201	4		FY	201	15		F	Y 20	16			FY	201	7
	•	1 2	2 3	4	1	2	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	. 1	1	2	3	4	1	2	3	4
Special Operations Mission Planning Environment (SOMPE)		'	'		•	'										'			'		•		<u>'</u>					-	
Software Development																													
Development Support																													
Test & Evaluation																													
MC/AC-130J Simulator																													
MC/AC-130J Simulator Development																													
TF/TA SKR Simulator																													
TF/TA SKR Simulator Development																													
Development Support																													

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command

**DATE:** February 2012

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

APPROPRIATION/BUDGET ACTIVITY

PE 1160427BB: Mission Training and

S750: Mission Training and Preparation Systems

**DATE:** February 2012

BA 7: Operational Systems Development

Preparation Systems (MTPS)

# Schedule Details

	Si	tart	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Special Operations Mission Planning Environment (SOMPE)				
Software Development	1	2011	4	2017
Development Support	1	2011	4	2017
Test & Evaluation	1	2011	4	2017
MC/AC-130J Simulator				
MC/AC-130J Simulator Development	2	2012	4	2014
TF/TA SKR Simulator				
TF/TA SKR Simulator Development	2	2013	4	2017
Development Support	2	2013	4	2017

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160429BB: AC/MC-130J

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	7.396	18.571	19.647	-	19.647	8.225	3.672	0.586	0.412	Continuing	Continuing
S875: AC/MC-130J (formerly SOF Tanker Recapitalization)	7.396	18.571	19.647	-	19.647	8.225	3.672	0.586	0.412	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

NOTE: Beginning in FY 2012, Program Element 1160429BB was renamed AC/MC-130J. Former name was- SOF Tanker Recapitalization.

The AC/MC-130J program element funds core SOF-unique modifications to replace aging MC-130E Combat Talon I, MC-130P Combat Shadow, and AC-130H Spectre airframes. The 8 AC-130H Spectre airframes will be replaced with MC-130J aircraft modified with the Precision Strike Package (PSP) to achieve the AC-130J configuration. These platforms perform clandestine or low visibility, single- or multi-ship low-level missions intruding politically-sensitive or hostile territories; provide air refueling for special operations helicopters and CV-22 aircraft; airdrop of leaflets, small special operations teams, resupply bundles and combat rubber raiding craft; and provide close air support (CAS), air interdiction, armed reconnaissance, escort, and force protection - integrated base defense. Additional capabilities include low-light navigation and in-flight refueling as a receiver. The Air Force will procure and field basic aircraft, common support equipment, and trainers for USSOCOM. An incremental upgrade approach will be used to incorporate SOF capabilities onto the aircraft.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	7.624	18.571	19.411	-	19.411
Current President's Budget	7.396	18.571	19.647	-	19.647
Total Adjustments	-0.228	-	0.236	-	0.236
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	_			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	_			
<ul> <li>Reprogrammings</li> </ul>	-	_			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-0.189	_			
<ul> <li>Other Adjustments</li> </ul>	-0.039	_	0.236	-	0.236

# **Change Summary Explanation**

Funding:

FY 2011: Decrease of \$0.228 million due to transfer to Small Business Innovative Research (-\$0.189 million) and economic assumption reduction (-\$0.039 million).

PE 1160429BB: *AC/MC-130J* 

United States Special Operations Command

UNCLASSIFIED
Page 1 of 7

R-1 Line #261

Volume 5 - 861

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command  DATE: February 2012								
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE							
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160429BB: AC/MC-130J							
BA 7: Operational Systems Development								
FY 2012: None.								
FY 2013: Increase due to economic assumption (\$0.236 million)	on).							
Schedule: None.								
Technical: None								

PE 1160429BB: *AC/MC-130J*United States Special Operations Command

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Unite	d States Sp	ecial Operati	ons Comma	nd			<b>DATE</b> : Febr	uary 2012		
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop	& Evaluation	n, Defense-V			OMENCLAT OBB: <i>AC/MC</i>	_		PROJECT S875: AC/M Recapitaliza	,	ormerly SOF Tanker		
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
S875: AC/MC-130J (formerly SOF Tanker Recapitalization)	7.396	18.571	19.647	-	19.647	8.225	3.672	0.586	0.412	Continuing	Continuing	
Quantity of RDT&E Articles												

### A. Mission Description and Budget Item Justification

NOTE: Beginning in FY 2012, this project was renamed AC/MC-130J. Former name was SOF Tanker Recapitalization.

The AC/MC-130J project funds core Special Operations Forces (SOF)-unique modifications to replace aging MC-130E Combat Talon I, MC-130P Combat Shadow, and AC-130H Spectre airframes. The 8 AC-130H Spectre airframes will be replaced with MC-130J aircraft modified with the Precision Strike Package (PSP) to achieve the AC-130J configuration. These platforms perform clandestine or low visibility, single- or multi-ship low-level missions intruding politically-sensitive or hostile territories; provide air refueling for special operations helicopters and CV-22 aircraft; airdrop leaflets, small special operations teams, resupply bundles and combat rubber raiding craft; and close air support (CAS), air interdiction, armed reconnaissance, escort, and force protection - integrated base defense. Additional capabilities include low-light navigation and in-flight refueling as a receiver. The Air Force will procure and field basic aircraft, common support equipment, and trainers for USSOCOM. USSOCOM will then employ an incremental upgrade approach to incorporate SOF capabilities onto the Air Force-provided aircraft.

Conducts development, integration, and testing of aircraft enhancements to meet SOF-unique mission requirements. Enhancements include, but are not limited to, SOF communications, aircraft performance enhancements, electron warfare and survivability systems, and other SOF mission kits. Provides Precision Strike Package aircraft infrastructure development.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: AC/MC-130J	7.396	18.571	19.647
FY 2011 Accomplishments: Continued development of SOF-unique mission improvements. Initiated Precision Strike Package aircraft infrastructure development and other SOF mission kits.			
FY 2012 Plans: Continues development of SOF-unique mission improvements and continued Precision Strike Package aircraft infrastructure development and other SOF mission kits.			
FY 2013 Plans:			

PE 1160429BB: *AC/MC-130J* 

United States Special Operations Command

UNCLASSIFIED
Page 3 of 7

R-1 Line #261

Volume 5 - 863

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160429BB: AC/MC-130J	S875: AC/MC-130J (formerly SOF Tanker
BA 7: Operational Systems Development		Recapitalization)

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Continue SOF-unique mission improvements including, but not limited to, MC-130J Increment 3 development, integration, and			
test efforts. Develop and test aircraft modification designs for Precision Strike Package kit installation. Update interface designs			
based on results of initial design evaluation.			
Accomplishments/Planned Programs Subtotals	7.396	18.571	19.647

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• PROC1: SOF TANKER	4.968	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.00	102.638
RECAPITALIZATION											
• PROC2: <i>AC/MC-130J</i>	0.000	74.891	51.484		51.484	81.877	97.267	51.875	46.865	Continuing	Continuing
• PROC3: PRECISION STRIKE	0.000	0.000	73.013		73.013	137.944	181.218	265.073	297.957	0.000	955.205
PACKAGE											

## D. Acquisition Strategy

The basic AC/MC-130J aircraft will be acquired under the United States Air Force HC/MC-130J Recapitalization procurement program. USSOCOM will fund development, integration, test and production/retrofit of SOF-unique mission equipment under this program and the USSOCOM Precision Strike Package program.

# E. Performance Metrics

N/A.

PE 1160429BB: AC/MC-130J

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160429BB: AC/MC-130J

**PROJECT** 

S875: AC/MC-130J (formerly SOF Tanker

**DATE:** February 2012

Recapitalization)

Product Development (	\$ in Millio	ns)		FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
MC-130J	C/Various	Lockheed Martin Aero:Marietta, GA	23.293	13.671	Mar 2012	7.634	Mar 2013	-		7.634	Continuing	Continuing	
AC-130J	C/Various	Various:Various	1.592	4.900	Jan 2012	12.013	Jan 2013	-		12.013	Continuing	Continuing	
	•	Subtotal	24.885	18.571		19.647		-		19.647			

Support (\$ in Millions)				FY 2	2012		2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	Allot	ACS/WIS:Wright Patterson AFB, OH	0.613	-		-		-		-	Continuing	Continuing	
		Subtotal	0.613	-		-		-		-			

	Total Prior Years Cost	FY 2	2012	FY 2013 Base		2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	25.498	18.571		19.647	-		19.647			

Remarks

PE 1160429BB: AC/MC-130J

**DATE:** February 2012 Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** PE 1160429BB: AC/MC-130J 0400: Research, Development, Test & Evaluation, Defense-Wide S875: AC/MC-130J (formerly SOF Tanker BA 7: Operational Systems Development Recapitalization) FY 2011 FY 2017 FY 2012 FY 2013 FY 2014 FY 2015 **FY 2016** 4 3 2 1 2 4 3 4 3 1 1 AC/MC-130J

Development/Test

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160429BB: AC/MC-130J

S875: AC/MC-130J (formerly SOF Tanker

Recapitalization)

# Schedule Details

	St	art	Ei	nd
Events by Sub Project	Quarter	Year	Quarter	Year
AC/MC-130J				
Development/Test	1	2011	4	2017



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160474BB: SOF Communications Equipment and Electronics Systems

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.894	1.392	2.225	-	2.225	2.428	2.836	2.938	1.213	Continuing	Continuing
S700: SOF Communications Equipment and Electronics Sys	0.894	1.392	2.225	-	2.225	2.428	2.836	2.938	1.213	Continuing	Continuing

# A. Mission Description and Budget Item Justification

This program element provides for communication systems to meet emergent requirements to support Special Operations Forces (SOF). The SOF mission mandates that SOF systems remain technologically superior to any threat to provide a maximum degree of survivability. SOF units require communications equipment that improves their warfighting capability without degrading their mobility. Therefore, SOF Communications Equipment and Electronics is a continuing effort to develop smaller, lighter, more efficient and more robust SOF Command, Control, Communications, and Computer (C4) capabilities.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	1.922	1.392	0.785	-	0.785
Current President's Budget	0.894	1.392	2.225	-	2.225
Total Adjustments	-1.028	-	1.440	-	1.440
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.023	-			
Other Adjustment	-1.005	_	1.440	-	1.440

# **Change Summary Explanation**

Funding:

FY 2011: Decrease of \$1.028 million due to economic assumption reductions (-\$0.005 million), a congressional reduction as result of execution delays (-\$1.000 million), and a transfer to Small Business Innovative Research (-\$0.005 million).

FY 2012: None.

FY2013: Increase of \$1.440 million due to reprogramming to support development and testing of 3G/4G technology (\$1.413 million), and an economic assumption increase (\$0.027 million).

PE 1160474BB: SOF Communications Equipment and Electronics Syste...

UNCLASSIFIED

Page 1 of 7 R-1 Line #262

**DATE:** February 2012

y 2012	<b>DATE:</b> February 20	tes Special Operations Command	xhibit R-2, RDT&E Budget Item Justification: PB 2013 United Statement of the Company of the C
		R-1 ITEM NOMENCLATURE	PPROPRIATION/BUDGET ACTIVITY
	nt and Electronics Systems	PE 1160474BB: SOF Communications Equipm	00: Research, Development, Test & Evaluation, Defense-Wide
			A 7: Operational Systems Development
			Schedule: None.
			Technical: None.
			rechnical. None.

PE 1160474BB: SOF Communications Equipment and Electronics Syste...
United States Special Operations Command

Exhibit R-2A, RDT&E Project Jus	stification: PE	3 2013 Unite	d States Sp	ecial Operat	ions Comma		DATE: February 2012					
APPROPRIATION/BUDGET ACTI 0400: Research, Development, Tes BA 7: Operational Systems Develo	pment, Test & Evaluation, Defense-Wide ms Development				IOMENCLAT 4BB: SOF Co and Electron	ommunicatio		PROJECT S700: SOF Communications Equipment and Electronics Sys				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
S700: SOF Communications Equipment and Electronics Sys	0.894	1.392	2.225	-	2.225	2.428	2.836	2.938	1.213	Continuing	Continuing	
Quantity of RDT&E Articles												

#### A. Mission Description and Budget Item Justification

This project provides for communication systems to meet emergent requirements to support Special Operations Forces (SOF). The SOF mission mandates that SOF systems remain technologically superior to any threat to provide a maximum degree of survivability. SOF units require communications equipment that improves their warfighting capability without degrading their mobility. Therefore, SOF Communications Advanced Development is a continuing effort to develop smaller, lighter, more efficient and more robust SOF Command, Control, Communications, and Computer (C4) capabilities.

United States Special Operations Command (USSOCOM) has developed an overall strategy to ensure that C4 systems continue to provide SOF with the required capabilities throughout the 21st century. USSOCOM's C4 systems comprise an integrated network of systems providing positive command and control and the timely exchange of information to all organizational echelons. The C4I systems that support this new architecture employ the latest standards and technology by transitioning from separate systems to full integration within the Global Information Grid (GIG). The GIG is a multitude of existing and projected national assets that allows SOF elements to operate with any force combination in multiple environments.

• SOF Deployable Node (SDN) is a family of satellite communications assemblages that includes the following subprograms: heavy, medium, light, and Evolutionary Technology Insertions (ETI). The SDN provides new technology for the next generation antenna capability for all systems: heavy, medium, and light. This program consists of a family of deployable super high frequency, multi-band, satellite communications assemblages capable of supporting high-capacity, voice, data, video teleconferencing and video at all levels of classification. ETIs include Satellite on the Move version A (float and ground variants).

	4 000		oco	Total
Title: SOF Deployable Node 0.89	1.392	2.225	-	2.225
FY 2011 Accomplishments: Developed, tested, and evaluated next generation SOF Deployable Node Light manpack systems and multipurpose baseband, and the next generation SOF Deployable Medium terminal. Tested and evaluated migration to Ka-band 1.6 meter antenna. Developed and tested next generation enhanced line of sight capability. Tested and evaluated new wideband Satellite Communications (SATCOM) systems and encryption devices.  FY 2012 Plans:				

PE 1160474BB: SOF Communications Equipment and Electronics Syste...
United States Special Operations Command

UNCLASSIFIED

R-1 Line #262

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	pecial Operations Command		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160474BB: SOF Communications	S700: SOF	Communications Equipment and
BA 7: Operational Systems Development	Equipment and Electronics Systems	Electronics	Svs

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Continues to develop, test, and evaluate next generation light manpack systems and multi-purpose baseband, and the next generation medium terminal.					
FY 2013 Base Plans: Continue to develop, test, and evaluate next generation light manpack systems and multi-purpose baseband, and the next generation medium terminal. Also extend current SOF assured communications services to the tactical operator leveraging hand-held 3G/4G technology.					
Accomplishments/Planned Programs Subtotals	0.894	1.392	2.225	-	2.225

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
Line Item	<b>FY 2011</b>	FY 2012	Base	000	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• PROC3: COMMUNICATIONS	77.260	166.814	99.838	0.151	99.989	115.999	106.603	117.792	107.725	Continuing	Continuing
LECTURNENT AND											Į.

EQUIPMENT AND ELECTRONICS

# D. Acquisition Strategy

• SOF Deployable Node is a fielded program being upgraded for next generation evolutionary technology insertions for all systems: heavy, medium, and light variants. Commercial and government agency sources will be leveraged for required certifications, functional and operational test, and acceptance support.

## E. Performance Metrics

N/A

PE 1160474BB: SOF Communications Equipment and Electronics Syste...
United States Special Operations Command

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160474BB: SOF Communications Equipment and Electronics Systems

**PROJECT** 

S700: SOF Communications Equipment and

**DATE:** February 2012

Electronics Sys

Product Development	(\$ in Millio	ns)		FY 2	2012		2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SOF Deployable Node Antenna	MIPR	AFRL:Dayton, OH	1.600	1.392	Nov 2011	2.225	Nov 2012	-		2.225	Continuing	Continuing	
		Subtotal	1.600	1.392		2.225		-		2.225			
			Total Prior Years Cost	FY 2	2012	FY 2 Ba	2013 ise		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	1.600	1.392		2.225		_		2.225			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160474BB: SOF Communications Equipment and Electronics Systems

**PROJECT** 

S700: SOF Communications Equipment and

Electronics Sys

		FY 2011			FY	2012	2	FY 2013			FY 2014		FY 2015		5		FY 2	2016	;	FY 2017		,						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SOF Deployable Node Antenna							,			,																		
FY12 Evolutionary Technology Insertions																												
FY13 Evolutionary Technology Insertions																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160474BB: SOF Communications Equipment and Electronics Systems

S700: SOF Communications Equipment and

Electronics Sys

## Schedule Details

	St	art	End			
Events by Sub Project	Quarter	Year	Quarter	Year		
SOF Deployable Node Antenna						
FY12 Evolutionary Technology Insertions	1	2012	4	2012		
FY13 Evolutionary Technology Insertions	1	2013	4	2013		



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160476BB: SOF Tactical Radio Systems

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	2.277	-	3.036	-	3.036	3.089	3.145	3.199	3.254	Continuing	Continuing
S725: SOF Tactical Radio Systems	2.277	-	3.036	-	3.036	3.089	3.145	3.199	3.254	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This program element is for development of all Special Operations Forces (SOF) tactical radio programs. The SOF mission mandates that SOF systems remain technologically superior to any threat to provide a maximum degree of survivability. SOF units require radio communication equipment that improves their warfighting capability without degrading their mobility. United States Special Operations Command (USSOCOM) has developed an overall strategy to ensure that Tactical Radio Systems continue to provide SOF with the required capabilities throughout the 21st century. SOF Tactical Radios provide the critical Command, Control, and Communication (C3) link between SOF Commanders and SOF Teams involved in overseas contingency operations (OCO) and training exercises. They also provide interoperability with all Services, various agencies of the U.S. Government, Air Traffic Control, commercial agencies, and allied foreign forces. Tactical Radios rapidly and seamlessly establish and maintain mobile and fixed Command and Control (C2) communications between infiltrated/operational elements and higher echelon headquarters, allowing SOF to operate with any force combination in multiple environments.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.347	-	-	-	-
Current President's Budget	2.277	-	3.036	-	3.036
Total Adjustments	-0.070	-	3.036	-	3.036
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.058	-			
Other Adjustment	-0.012	-	3.036	-	3.036

# **Change Summary Explanation**

Funding:

FY 2011: Decrease of \$.070 million due to economic assumption reductions (-\$.012 million) and a transfer to Small Business Innovative Research (-\$.058 million).

FY 2012: None.

PE 1160476BB: SOF Tactical Radio Systems
United States Special Operations Command

UNCLASSIFIED
Page 1 of 6

R-1 Line #263

Volume 5 - 877

**DATE:** February 2012

	UNULAGOII ILD	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160476BB: SOF Tactical Radio Systems	
FY 2013: Increase of \$3.036 million due to reprogramming to economic assumption increase (\$0.036 million).	develop and test DoD on-orbit capacity in order to e	enhance C2 capabilities (\$3.000 million), and ar
Schedule: None.		
Technical: None.		

PE 1160476BB: SOF Tactical Radio Systems United States Special Operations Command

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Unite	d States Sp	ecial Operati	ions Comma	nd			<b>DATE:</b> Febr	ruary 2012	
APPROPRIATION/BUDGET ACTIV					IOMENCLAT			PROJECT			
0400: Research, Development, Test		n, Defense-V	Vide	PE 116047	6BB: <i>SOF Ta</i>	actical Radio	Systems	S725: SOF	Tactical Rac	lio Systems	
BA 7: Operational Systems Develop	ment										
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ III WIIIIOTIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
S725: SOF Tactical Radio Systems	2.277	-	3.036	-	3.036	3.089	3.145	3.199	3.254	Continuing	Continuing
Quantity of RDT&F Articles											

#### A. Mission Description and Budget Item Justification

This project is for development of all SOF tactical radio programs. The SOF mission mandates that SOF systems remain technologically superior to any threat to provide a maximum degree of survivability. SOF units require radio communication equipment that improves their war-fighting capability without degrading their mobility. USSOCOM has developed an overall strategy to ensure that Tactical Radio Systems continue to provide SOF with the required capabilities throughout the 21st century. Tactical Radios provide the critical C3 link between SOF Commanders and SOF Teams involved in overseas contingency operations (OCO) and training exercises. They also provide interoperability with all Services, various agencies of the U.S. Government, Air Traffic Control, commercial agencies, and allied foreign forces. Tactical Radios rapidly and seamlessly establish and maintain mobile and fixed C2 communications between infiltrated/operational elements and higher echelon headquarters, allowing SOF to operate with any force combination in multiple environments.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: SOF Tactical Communications (STC)	2.277	-	3.036
FY 2011 Accomplishments: Continued developing and testing Low Probability of Intercept/Low Probability of Detection (LPI/LPD) transceiver board upgrades and waveforms for SOF tactical radio application.			
FY 2013 Plans: Develop and test DoD on-orbit capacity in order to enhance C2 capabilities. The STC program incorporates the Special Mission Radio System, Multi-Band Inter/Intra Team Radio, and the Multi-Band, Multi-Mission Radio.			
Accomplishments/Planned Programs Subtotals	2.277	-	3.036

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
PROC1: Tactical Radio Systems	59.860	151.353	75.132	0.000	75.132	63.922	52.859	55.205	57.670	Continuing	Continuing

## D. Acquisition Strategy

N/A

### **E. Performance Metrics**

N/A

PE 1160476BB: SOF Tactical Radio Systems United States Special Operations Command

# UNCLASSIFIED Page 3 of 6

R-1 Line #263

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

**DATE:** February 2012 PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160476BB: SOF Tactical Radio Systems

S725: SOF Tactical Radio Systems

Product Development (S	roduct Development (\$ in Millions)			FY 2	2012	FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SOF Tactical Communications (STC)	MIPR	Various:Various	2.277	-		3.036	Jan 2013	-		3.036	Continuing	Continuing	
Prior Year Funding - Completed Efforts	MIPR	Technical Support Group (TSG):Norfolk, VA	56.279	-		-		-		-	0.000	56.279	
		Subtotal	58.556	-		3.036		-		3.036			
	Years		Total Prior Years Cost	FY 2	2012	FY 2	2013 se		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract

	Total Prior Years Cost	FY 2	2012	FY 2013 Base		2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	58.556	-		3.036	-		3.036			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160476BB: SOF Tactical Radio Systems

PROJECT

S725: SOF Tactical Radio Systems

**DATE:** February 2012

	FY 2011		FY 2011 FY 2012		FY 2013		FY 2014		FY 2015		5 FY 2016 I		FY 2017														
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	1	1 2	1 2 3	1 2 3 4	1 2 3 4 1	1 2 3 4 1 2	1 2 3 4 1 2 3	1 2 3 4 1 2 3 4	1 2 3 4 1 2 3 4 1	1 2 3 4 1 2 3 4 1 2	1 2 3 4 1 2 3 4 1 2 3	1 2 3 4 1 2 3 4 1 2 3 4	1 2 3 4 1 2 3 4 1 2 3 4 1	1 2 3 4 1 2 3 4 1 2 3 4 1 2	1 2 3 4 1 2 3 4 1 2 3	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 1 2 3 4 1	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 3 4	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160476BB: SOF Tactical Radio Systems

S725: SOF Tactical Radio Systems

## Schedule Details

	St	art	End			
Events by Sub Project	Quarter	Year	Quarter	Year		
SOF Tactical Radios		-				
SOF Tactical Communications (STC) Radio Development	2	2013	4	2013		

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160477BB: SOF Weapons Systems

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.465	2.610	1.511	-	1.511	-	-	0.005	0.005	Continuing	Continuing
S375: SOF Weapons Systems	0.465	2.610	1.511	-	1.511	-	-	0.005	0.005	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This program element provides for development, testing, and integration of specialized weapon systems and weapon accessories to meet the unique requirements of Special Operations Forces (SOF). This specialized equipment will permit small, highly trained forces to conduct required operations across the entire spectrum of conflict. These operations are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy. SOF must infiltrate by land, sea, and air to conduct unconventional warfare, direct action, or deep reconnaissance operations in denied areas against insurgent units, terrorists, or highly sophisticated threat forces. The requirement to operate in denied areas controlled by a sophisticated threat mandates that SOF systems remain technologically superior to threat forces to ensure mission success.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	0.479	2.610	3.493	-	3.493
Current President's Budget	0.465	2.610	1.511	-	1.511
Total Adjustments	-0.014	-	-1.982	-	-1.982
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-0.002	-			
SBIR/STTR Transfer	-0.012	-			
<ul> <li>Reprogrammings</li> </ul>	-	-	-1.982	-	-1.982

# **Change Summary Explanation**

Funding:

FY 2011: Decrease of -\$0.014 million is due to reprogramming to higher command priorities of (-\$0.002 million) and Small Business Innovative Research transfer (-\$0.012 million).

FY 2012: No change.

PE 1160477BB: SOF Weapons Systems
United States Special Operations Command

UNCLASSIFIED
Page 1 of 7

R-1 Line #264

Volume 5 - 883

**DATE:** February 2012

	UNCLASSIFIED	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160477BB: SOF Weapons Systems	
FY 2013: Net decrease of -\$1.982 million due to a decrease o (\$0.018 million).	f (-\$2.000 million) realigned to higher command prio	rities and an economic assumption increase
Schedule: None.		
Technical: None.		

PE 1160477BB: SOF Weapons Systems
United States Special Operations Command

UNCLASSIFIED Page 2 of 7

R-1 Line #264

Exhibit R-2A, RDT&E Project Just	stification: PE	3 2013 Unite	d States Sp	ecial Operati	ions Comma	nd		DATE: February 2012						
APPROPRIATION/BUDGET ACT	VITY			R-1 ITEM N	IOMENCLAT	ΓURE		PROJECT	-					
0400: Research, Development, Te	Vide	PE 116047	7BB: <i>SOF W</i>	/eapons Sys	tems	S375: SOF	F Weapons Systems							
BA 7: Operational Systems Development														
COST (\$ in Millions)	FY 2013							Cost To						
COST (\$ III WIIIIOIIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost			
S375: SOF Weapons Systems	0.465	2.610	1.511	-	1.511	-	-	0.005	0.005	Continuing	Continuing			
Quantity of RDT&E Articles														

#### A. Mission Description and Budget Item Justification

This project provides for development and testing of specialized, lightweight individual, assault, crew-served weapons, and fire control/surveillance devices to meet the unique requirements of Special Operations forces (SOF). SOF often deploys as small, independent, quick reaction, foot-mobile teams independent of primary logistics support. Existing weapons and combat equipment are frequently unsuited to these conditions. Sub-projects include:

- Family of Sniper Weapon Systems (FSWS). This program includes next generation system development and pre-planned product improvements (P3I) to current sniper systems. Next-generation systems include two variants: a Precision Sniper Rifle (PSR) as a life cycle replacement of the current .300 Winchester Magnum rifle (MK13) that is intended to provide SOF with a highly accurate weapon system capable of engaging targets at ranges equal to or better than the MK13, and an antimaterial rifle that will pursue heavy sniper system technology to provide SOF with precision engagement capabilities on material targets.
- Weapons Accessories (WPNAC). This program effort enhances all SOF weapons, both individual and crew served, by leveraging the latest technological advances in optional accessories (up to 30 different functions/capabilities) such as day scopes, clip-on night scopes, active aiming laser module, visible lights, grenade launchers, suppressors, hand grips, and close quarters battle sights. Miniature Day-Night Sight (MDNS) for Crew-served Weapons enhances all SOF weapons, by leveraging existing image intensification and thermal technology to improve combat effectiveness for all crew served weapon systems. Development efforts include test and evaluation of the Advanced Target Pointer Illuminator Aiming Laser (ATPIAL) hardening to withstand the live-fire shock profiles for the Combat Assault Rifle (CAR), Clip-on Night Vision Devices (CNVD), and Family of Muzzle Breaks and Suppressors (FMBS). Leveraging extensive modeling and simulation efforts executed by National Labs, competitively award RDT&E contracts to select vendors to develop suppressors and flashhiders for select SOF weapon systems. These accessories greatly improve the combat effectiveness of the weapon systems and the survivability of the SOF operator. This program was increased by FY 2001, FY 2002, FY 2004, FY 2006, FY 2007 and FY2010 Congressional Adds.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: FSWS	0.222	-	-
FY 2011 Accomplishments: FY11 Purchased PSR labor support and ammunition to conduct operational testing and user assessments.			
Title: WPNAC	0.243	2.610	1.511
FY 2011 Accomplishments:			

PE 1160477BB: SOF Weapons Systems
United States Special Operations Command

UNCLASSIFIED
Page 3 of 7

R-1 Line #264

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATU

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE PR

PE 1160477BB: SOF Weapons Systems

PROJECT

S375: SOF Weapons Systems

FY 2011

**DATE:** February 2012

FY 2012

# B. Accomplishments/Planned Programs (\$ in Millions)

Purchased labor support for down select, conducted market research, purchased test articles, and labor support for operational testing and field user assessments for the CNVD P3I and FMBS program.

#### FY 2012 Plans:

Conducts market research, purchase labor support for down select, test articles, operational and developmental testing and field user assessment that support the Sniper CNVD and FMBS programs.

#### FY 2013 Plans:

Continue development of Sniper CNVD and FMBS programs. Conduct market research, continue down select support, test articles, operational and developmental testing, and user assessment that support the Sniper CNVD and FMBS programs.

Accomplishments/Planned Programs Subtotals

0.465 2.610

1.511

FY 2013

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• PROC: SMALL ARMS AND	31.454	17.684	27.108		27.108	9.848	8.119	9.165	8.680	Continuing	Continuing
WEAPONS											

# D. Acquisition Strategy

- FSWS. Develops, tests, and evaluates highly accurate, long-range weapon systems to enable the SOF operator to engage the enemy and materiel targets utilizing pre-planned product improvement and incremental development based on technological advances.
- WPNAC. Develops, tests, and evaluates accessories to optimize the effectiveness of all SOF weapons in order to increase their operational effectiveness through improved target recognition, acquisition and hit capability during day and night from close quarters to maximum effective range of each weapon. Develops long range CNVD for SOF weapons systems. Devices will provide the SOF operator with the ability to engage enemy combatants in all lighting conditions utilizing SOF weapons systems. Develops next generation suppressors for SOF rifle/carbine and light machine gun weapons systems to enhance SOF operational security during engagement with enemy combatants.

#### **E. Performance Metrics**

N/A

PE 1160477BB: SOF Weapons Systems
United States Special Operations Command

UNCLASSIFIED
Page 4 of 7

R-1 Line #264

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command DATE: February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160477BB: SOF Weapons Systems S375: SOF Weapons Systems BA 7: Operational Systems Development FY 2013 FY 2013 FY 2013 **Product Development (\$ in Millions)** FY 2012 oco Base Total **Total Prior** Contract Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Date Cost Date Cost Date Complete **Total Cost** Contract Cost Cost Family of Muzzle Brakes and C/FFP NSWC-Crane: Crane, IN 0.703 0.812 Jul 2012 0.818 Mar 2013 0.818 Continuing Continuing Suppressors (FMBS) Subtotal 0.703 0.812 0.818 0.818 **FY 2013** FY 2013 FY 2013 Support (\$ in Millions) FY 2012 Base oco Total **Total Prior** Contract Target Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract **FMBS** C/FFP NSWC-Crane: Crane. IN 0.723 Dec 2011 Dec 2012 Continuina 0.108 0.493 0.493 Continuina Subtotal 0.108 0.723 0.493 0.493 FY 2013 FY 2013 FY 2013 Test and Evaluation (\$ in Millions) FY 2012 Base oco Total Contract **Total Prior Target** Value of Method Performing Years Award Award Award Cost To **Activity & Location Cost Category Item** & Type Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract C/FFP NSWC-Crane: Crane, IN 0.200 **FMBS** 0.100 Dec 2012 0.200 Continuing Continuing **CNVD** C/FFP NSWC-Crane: Crane. IN 1.075 Mar 2013 Continuing Continuing 1 075 Subtotal 0.100 0.200 0.200 **Total Prior Target** FY 2013 FY 2013 Years FY 2013 **Cost To** Value of

Remarks

PE 1160477BB: SOF Weapons Systems **United States Special Operations Command**  UNCLASSIFIED Page 5 of 7

Base

1.511

FY 2012

2.610

Cost

0.911

**Project Cost Totals** 

R-1 Line #264

oco

Total

1.511

Complete

**Total Cost** 

Volume 5 - 887

Contract

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160477BB: SOF Weapons Systems

S375: SOF Weapons Systems

**DATE:** February 2012

		FΥ	201	1		FY	201	2		FY	2013	3		FY :	2014			FY 2	2015	5		FY	2016	5	FY 2017			
	1	2	3	4	1	2	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Clip-on Night Vission Device Development					_																							
Develop/release solicitation																												
Source Selection																												
Contract Award																												
Receive Prototype Systems																												
Developmental Testing/User Assessment of Prototypes																												
Prototype Down-Select Decision																												
Delivery of Low Rate Initial Production LRIP Systems																												
Developmental Testing/Operational Testing																												
Milestone C FRP (Full Rate Production) Decisions																												
Family of Muzzle Break Suppressors Development																												
Lightweight Machine Gun (LMG) Suppressor Solicitation																												
LMG Research and Development Contract Award																												
LMG Modeling																												
LMG Conduct Initial Prototyping																												
LMG MS B Decision																												
LMG Conduct Fellow-on Prototyping																												
LMG - MS C LRIP Decision																												
Award LMG Suppressor Contract																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160477BB: SOF Weapons Systems

**PROJECT** 

S375: SOF Weapons Systems

**DATE:** February 2012

## Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Clip-on Night Vission Device Development				
Develop/release solicitation	1	2012	1	2012
Source Selection	2	2012	2	2012
Contract Award	3	2012	3	2012
Receive Prototype Systems	4	2012	4	2012
Developmental Testing/User Assessment of Prototypes	2	2013	4	2013
Prototype Down-Select Decision	2	2013	2	2013
Delivery of Low Rate Initial Production LRIP Systems	4	2013	4	2013
Developmental Testing/Operational Testing	1	2014	2	2014
Milestone C FRP (Full Rate Production) Decisions	2	2014	2	2014
Family of Muzzle Break Suppressors Development				
Lightweight Machine Gun (LMG) Suppressor Solicitation	1	2012	2	2012
LMG Research and Development Contract Award	4	2012	4	2012
LMG Modeling	1	2013	1	2013
LMG Conduct Initial Prototyping	2	2013	2	2013
LMG MS B Decision	2	2013	2	2013
LMG Conduct Fellow-on Prototyping	3	2013	3	2013
LMG - MS C LRIP Decision	4	2013	4	2013
Award LMG Suppressor Contract	4	2013	4	2013



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160478BB: Soldier Protection and Survival Systems

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.574	2.971	4.263	-	4.263	3.029	3.363	1.865	1.898	Continuing	Continuing
S385: Soldier Protection and Survival Systems	0.470	2.100	3.383	-	3.383	2.203	2.616	1.242	1.264	Continuing	Continuing
S385A: Theater Body Armor and Associated Equipment	0.104	0.871	0.880	-	0.880	0.826	0.747	0.623	0.634	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

This program element provides for development, testing, and integration of specialized equipment to meet the unique soldier protection and survival requirements of Special Operations Forces (SOF). Specialized equipment will improve survivability and mobility of SOF while conducting varied missions. These missions are generally conducted in harsh environments, for unspecified periods, and in locations requiring small unit autonomy. The National Defense Authorization Act of 2010 directed a separate project (S385A) be created for ballistic protection efforts within the existing program element.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	0.593	2.971	3.191	-	3.191
Current President's Budget	0.574	2.971	4.263	-	4.263
Total Adjustments	-0.019	-	1.072	-	1.072
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.016	-			
<ul> <li>Congressional General Reductions</li> </ul>	-0.003	-	-	-	-
<ul> <li>Reprogrammings</li> </ul>	-	-	1.072	-	1.072

# **Change Summary Explanation**

Funding:

FY 2011: Decrease of (-\$0.019 million) is due to an adjustment for the Small Business Innovative Research account (-\$0.016 million) and an economic assumption adjustment (-\$0.003 million).

FY 2012: No change.

**UNCLASSIFIED** 

**DATE:** February 2012

PE 1160478BB: Soldier Protection and Survival Systems

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160478BB: Soldier Protection and Survival S	Systems
FY 2013: Net increase of \$1.072 million is due to a reprogram assumption increase of \$0.051 million.	nming of \$1.021 million to support Counter-Improvised	Explosive Device efforts and an economic
Schedule: None.		
Technical: None.		

PE 1160478BB: *Soldier Protection and Survival Systems* United States Special Operations Command

Exhibit R-2A, RDT&E Project Ju	chibit R-2A, RDT&E Project Justification: PB 2013 United State						pecial Operations Command						
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Development	Vide		IOMENCLAT 8BB: Soldier	_	nd Survival	PROJECT  S385: Soldier Protection and Survival Systems							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
S385: Soldier Protection and Survival Systems	0.470	2.100	3.383	-	3.383	2.203	2.616	1.242	1.264	Continuing	Continuing		
Quantity of RDT&E Articles													

#### A. Mission Description and Budget Item Justification

- This project provides specialized equipment to meet the unique soldier protection and survival requirements of SOF to include: Army Rangers; Army Special Forces; Navy Sea, Air, Land (SEAL) teams; Navy Special Boat Units; Air Force Special Tactics Operators; and Marine Forces Special Operations Command. Specialized equipment improves survivability protection from the environment and load bearing equipment to improve the mobility of SOF while conducting varied missions. These missions are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy.
- SOF Personal Equipment Advanced Requirements (SPEAR) program provides for the research, development, testing and evaluation of a variety of individual and survival equipment to include: ballistic and environmental protective systems, combat uniforms, load carriage systems, communications headsets, and visual augmentation system (VAS) mounts. NOTE: In compliance with the National Defense Authorization Act of 2010, resources to support ballistic protection efforts were moved from SPEAR to a separate project (S385A) beginning in FY 2012.
- Tactical Combat Casualty Care (TCCC) Casualty Evacuation (CASEVAC) Set provides the capability for the extraction, movement, sustainment and transportation of wounded. The set contains a variety of medical items and equipment approved by the Food and Drug Administration to include intraosseous infusion devices, patient monitoring and assessment devices, emergency airway kits, and devices that support patient management and en-route care capabilities for the far forward treatment of SOF casualties in remote and austere environments. Research, development, testing, and evaluation efforts will be aimed at maintaining the CASEVAC Set capabilities by performing equipment upgrades and additions as obsolescence surfaces and new and enhanced equipment becomes available. Product improvement and replacement will require: additional functional testing, air worthiness testing as applicable, miniaturization and /or hardening, and packaging enhancements.
- Counter-Improvised Explosive Device (C-IED) program provides SOF with the ability to counter current and future improvised explosive devices threats used by terrorist networks. NOTE: The C-IED efforts were conducted in the program element 1160408BB. The resources for these efforts were split beginning in FY2013 to support the SOF theater force requirements.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: SOF Personal Equipment Advanced Requirements (SPEAR)	-	2.100	2.350
FY 2012 Plans: Continues flame/heat characterization testing and increased thermal protective capabilities of the protective combat uniform and validation of pre-planned product improvements (P3I). Continues development of lightweight/high strength and water repellent materials for personal and load carriage equipment. Conducts investigating perceptual encapsulation and load effects on survivability and marksmanship. Investigates and initiates efforts to develop secure wireless link to Modular Integrated			

PE 1160478BB: Soldier Protection and Survival Systems United States Special Operations Command

UNCLASSIFIED
Page 3 of 15

R-1 Line #265

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command

evaluation, systems engineering, and internal contracting and finance for range activities.

	operations command			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160478BB: Soldier Protection and Survival Systems	PROJECT S385: Soldier Protecti	on and Survi	val Systems
B. Accomplishments/Planned Programs (\$ in Millions)  Communications Helmet individual communications headsets to enhalor extremity protection efforts.	nce operator mobility. Identifies lightweight power s	FY 2011 ources	FY 2012	FY 2013
FY 2013 Plans: Provide continuation of profile refinement to support signature managuniforms. Develops a solicitation for an advanced maritime communic testing of nano-coatings for water repellency for individual equipment. effects for survivability and marksmanship.	cations system. Develop safety belt and lanyard test	ing, and		
Title: Tactical Combat Casualty Care (TCCC)		0.470	-	-
FY 2011 Accomplishments:  Provided test and evaluation on production demonstration models and CASEVAC Set.	d airworthiness testing of electronic components in th	ne TCCC		

## C. Other Program Funding Summary (\$ in Millions)

*Title:* Counter-Improvised Explosive Device (C-IED)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
0607SPSS: Soldier Protection	5.630	37.862	14.961		14.961	15.284	12.636	12.850	13.081	Continuing	Continuing
and Survival Systems											

**Accomplishments/Planned Programs Subtotals** 

FY 2013 provides for NAG C-IED test support to include program management, market surveys, test article acquisition, test and

# D. Acquisition Strategy

FY 2013 Plans:

- SPEAR SPEAR primarily takes advantage of modified commercial off the shelf (COTS) or non-developmental items (NDI) through open competition. Majority of these SPEAR purchases are made with O&M.
- TCCC The TCCC CASEVAC takes advantage of COTS equipment and/or NDI. A Fixed Firm Price Indefinite Delivery/Indefinite Quantity contract was awarded in the 4th quarter of FY 2011. Beginning in FY 2012, procurement funding increased to support the purchase of the TCCC CASEVAC sets.
- C-IED Beginning in FY 2012, procurement funding increased to support the purchase of next generation electronic countermeasures force protection C-IED systems. In FY 2013, procurement funding begins acquiring force protection C-IED system jammers.

UNCLASSIFIED
Page 4 of 15

1.033

3.383

**DATE:** February 2012

0.470

2.100

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	<b>R-1 ITEM NOMENCLATURE</b> PE 1160478BB: Soldier Protection and Survival Systems	PROJECT S385: Soldier Protection and Survival Systems
E. Performance Metrics N/A.		

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

PE 1160478BB: Soldier Protection and Survival S385: Soldier Protection and Survival Systems

**DATE:** February 2012

Systems

Product Development (	in Millio	ns)		FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SPEAR MICH Land/Maritime Communication System	Various	PM-SSES:Natick, MA	-	0.350	Mar 2012	0.109	Mar 2013	-		0.109	Continuing	Continuing	
Protective Combat Uniform (PCU)	Various	PM-SSES:Natick, MA	0.361	0.500	Feb 2012	0.500	Feb 2013	-		0.500	Continuing	Continuing	
Load Carriage System (LCS) and Backpacks	Various	PM-SSES:Natick, MA	0.050	-		0.200	Mar 2013	-		0.200	Continuing	Continuing	
Modular Glove System (MGS)	Various	PM-SSES:Natick, MA	-	-		0.100	Mar 2013	-		0.100	Continuing	Continuing	
		Subtotal	0.411	0.850		0.909		-		0.909			

Test and Evaluation (\$ i	n Millions	s)		FY 2	2012		2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
PCU Fire Retardant Test/P3I	Various	PM-SSES:Natick, MA	0.387	0.453	Feb 2012	0.150	Feb 2013	-		0.150	Continuing	Continuing	
Signature Management Profile Characterization	Various	PM-SSES:Natick, MA	-	0.300	Mar 2012	0.391	Mar 2013	-		0.391	Continuing	Continuing	
LCS/BAV/Backpack Material and Prototype Testing	Various	PM-SSES:Natick, MA	-	0.187	Feb 2012	0.100	Mar 2013	-		0.100	Continuing	Continuing	
MGS Testing	Various	PM-SSES:Natick, MA	-	-		0.100	Mar 2013	-		0.100	Continuing	Continuing	
Maritime Comms Testing	Various	PM-SSES:Natick, MA	-	0.310	Jan 2012	0.700	Jan 2013	-		0.700	Continuing	Continuing	
National Assessment Group C-IED Test Support	Various	PM-SSES:Natick, MA	-	-		1.033	Mar 2013	-		1.033	Continuing	Continuing	
Prior Year Funding	MIPR	PM-SSES:Natick, MA	1.080	-		-		-		-	Continuing	Continuing	
		Subtotal	1.467	1.250		2.474		-		2.474			

	-								
	Total Prior Years Cost	FY 2012	FY 2013 Base		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract
							•		
Project Cost Totals	1.878	2.100	3.383	-		3.383			

Remarks

N/A.

PE 1160478BB: Soldier Protection and Survival Systems United States Special Operations Command

**UNCLASSIFIED** Page 6 of 15

R-1 Line #265

ibit R-4, RDT&E Schedule Profile: PB 2013 Up PROPRIATION/BUDGET ACTIVITY						ITEM				TUE	?F					PR	ROJE	-CT				ruar	<i>,</i> –			
0: Research, Development, Test & Evaluation, D 7: Operational Systems Development	efense	e-Wide	<del>)</del>		PE	11604 tems						tion	ano	Sur	vival				ier I	Prote	ectio	n an	d S	urviv	al S	iys —
	FY	2011			FY 20	12		FY	2013	}		FY 2	2014	4		FY 2	2015			FY 2	2016	,		FY 2	017	,
	1 2	3	4	1	2	3 4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SPEAR Protective Combat Uniform (PCU)																										
Block II Test Contract																										
Block II Fire Retardant (FR) Prototyping																										
Phase I FR Baseline Test																										
Reactive Fiber Testing																										
Level 3A Development Exterior Jacket Low Loft																										
Phase II FR Block II Testing																										
PCU P3I																										
Signature Management Profile Characterization																										
Materials Research																										
Modular Glove System																										
Market Research, Lightweight Power for Active Heating																										
SPEAR MICH Comms																										
Market Research/Interoperability Assessment																										
Maritime Comms Solicitation/Solicitation Develop				ĺ																						
SPEAR LCS, Body Armor Vest (BAV and Backpacks)																										
LCS/BAV/Backpack Material and Prototyping Testing																										
Safety Belt and Lanyard Test Methods																										
Testing Water Repellant Nanocoatings																										

PE 1160478BB: *Soldier Protection and Survival Systems* United States Special Operations Command

UNCLASSIFIED
Page 7 of 15

R-1 Line #265

Exhibit R-4, RDT&E Schedule Profile: PB 2013 U	it R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command												D	DATE: February 2012													
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, BA 7: Operational Systems Development	e		PE	. <b>1 ITI</b> ∃ 116 ⁄sten	6047	_			_		tion	and	Surv	ival		JEC 5: Sol	-	Pro	tectio	on a	nd S	Survi	val S	Syste			
		FY	2011			FY	2012			FY 2	2013	3		FY	2014		F١	′ 20	15		FY	201	6		FY:	2017	,
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1 2	2 :	3 4	1	2	3	4	1	2	3	4
Tactical Combat Casualty Care Equipment														,					'								
Prototype Testing and Airworthiness Certification																											
C-IED																											
NAG C-IED Test Support																											

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160478BB: Soldier Protection and Survival S385: Soldier Protection and Survival Systems

BA 7: Operational Systems Development Systems

## Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
SPEAR Protective Combat Uniform (PCU)				
Block II Test Contract	1	2011	2	2011
Block II Fire Retardant (FR) Prototyping	1	2011	4	2011
Phase I FR Baseline Test	1	2011	2	2011
Reactive Fiber Testing	1	2012	4	2013
Level 3A Development Exterior Jacket Low Loft	1	2011	2	2011
Phase II FR Block II Testing	3	2011	4	2011
PCU P3I	1	2011	4	2017
Signature Management Profile Characterization	1	2012	4	2017
Materials Research	1	2012	4	2012
Modular Glove System	2	2013	4	2017
Market Research, Lightweight Power for Active Heating	1	2012	4	2012
SPEAR MICH Comms				
Market Research/Interoperability Assessment	1	2012	4	2017
Maritime Comms Solicitation/Solicitation Develop	2	2012	4	2013
SPEAR LCS, Body Armor Vest (BAV and Backpacks)				
LCS/BAV/Backpack Material and Prototyping Testing	2	2012	4	2017
Safety Belt and Lanyard Test Methods	2	2012	4	2012
Testing Water Repellant Nanocoatings	2	2012	4	2013
Load Effects on Survivability	2	2012	4	2013
Tactical Combat Casualty Care Equipment				
Prototype Testing and Airworthiness Certification	2	2011	4	2012

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160478BB: Soldier Protection and Survival S385: Soldier Protection and Survival Systems

Systems

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
C-IED				
NAG C-IED Test Support	2	2013	4	2017

Exhibit R-2A, RDT&E Project Just	hibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command											
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop	Vide		OMENCLAT BBB: Soldier	_	PROJECT S385A: The Equipment	85A: Theater Body Armor and Associated						
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
S385A: Theater Body Armor and Associated Equipment	0.104	0.871	0.880	-	0.880	0.826	0.747	0.623	0.634	Continuing	Continuing	
Quantity of RDT&E Articles												

## A. Mission Description and Budget Item Justification

B. Accomplishments/Planned Programs (\$ in Millions)

This project provides specialized equipment to meet the unique soldier protection and survival requirements of SOF, to include: Army Rangers; Army Special Forces; Navy Sea, Air, Land (SEAL) teams; Navy Special Boat Units; Air Force Special Tactics Operators; and Marine Forces Special Operations Command. Specialized ballistic equipment improves survivability and load bearing equipment impacting the mobility of SOF while conducting varied missions. These missions are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy.

This budget line enhances the SPEAR program by supporting body armor plates, soft armor, helmets, and eye protection. It also provides for the research, development, and testing of a variety of body armor and personal protective equipment. Creation of a separate project for ballistic protection efforts was directed in the National Defense Authorization Act of 2010.

<u> </u>	1 1 2011	1 1 2012	1 1 2013
Title: SOF Personal Equipment Advanced Requirements (SPEAR)	0.104	0.871	0.880
FY 2011 Accomplishments:  Continued true threat round and high velocity testing and ballistic validation of current armor systems and technical insertions into the USSOCOM SPEAR body armor systems and technologies. Continued non-destructive inspection (N-DI) effort to produce robust capability for inspection of ballistic plates and initiated development of advanced soft armor products.			
FY 2012 Plans: Conducts high temperature ammunition testing and threat validation to assess effectiveness of fielded armor systems. Continues research on advanced N-DI of body armor systems and material/density exploitation for quantitative ballistic data in support of a next generation armor plate. Conducts material testing and prototype evaluation of advanced body armor vest designs; baseline testing and development of specifications for a next generation helmet. Conducts market survey and evaluation of transparent ballistic lens products in preparation for development of a future Special Operations Eye Protection capability.			
FY 2013 Plans: Continue foreign ammunition testing and threat validation to assess armor effectiveness. Continue the helmet design and blast studies. Conduct body armor material research and testing along with the soldier load analysis and research on behind armor effects. Conduct evaluation of transparent armor products will include ballistic and optical testing of transition lenses. Initiate			

PE 1160478BB: Soldier Protection and Survival Systems United States Special Operations Command

Page 11 of 15

R-1 Line #265

Volume 5 - 901

FY 2011 FY 2012 FY 2013

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	ecial Operations Command		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160478BB: Soldier Protection and Survival	S385A: The	eater Body Armor and Associated
BA 7: Operational Systems Development	Systems	Equipment	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
work on anti-fogging technologies and continue development of low visibility eyewear to support future Special Operations Eye Protection capabilities.			
Accomplishments/Planned Programs Subtotals	0.104	0.871	0.880

# C. Other Program Funding Summary (\$ in Millions)

N/A

## D. Acquisition Strategy

SPEAR ballistic protection equipment takes advantage of modified commercial-off-the-shelf or non-developmental items acquired through full and open competition. Currently these SPEAR purchases are made with O&M. As USSOCOM requirements are different from those of the Services, items leveraged from industry are often on the cutting edge of technology and require substantial testing in the SOF environments. Some SPEAR ballistic systems have transitioned to the U.S. Army, other services and other government agencies.

#### E. Performance Metrics

N/A.

PE 1160478BB: Soldier Protection and Survival Systems United States Special Operations Command

# UNCLASSIFIED Page 12 of 15

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**DATE:** February 2012 **PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

PE 1160478BB: Soldier Protection and Survival S385A: Theater Body Armor and Associated

Systems

Equipment

Product Development (	Product Development (\$ in Millions)			FY 2	2012	FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Body Armor	Various	PM-SSES:Natick, MA	0.104	-	Feb 2012	0.300	Feb 2013	-		0.300	Continuing	Continuing	
Laser Eye Protection	Various	PM-SSES:Natick, MA	-	-	May 2012	0.050	May 2013	-		0.050	Continuing	Continuing	
		Subtotal	0.104	-		0.350		-		0.350			

Test and Evaluation (\$ in Millions)				FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Body Armor Testing	Various	PM-SSES:Natick, MA	-	0.568	Mar 2012	0.380	Mar 2013	-		0.380	Continuing	Continuing	
Lightweight Helmet Testing	Various	PM-SSES:Natick, MA	-	0.239	Mar 2012	0.100	Mar 2013	-		0.100	Continuing	Continuing	
Transparent Armor Testing	Various	PM-SSES:Natick, MA	-	0.064	Jan 2012	0.050	Jan 2013	-		0.050	Continuing	Continuing	
		Subtotal	-	0.871		0.530		-		0.530			

_											
	Total Prior										Target
	Years			FY 2	2013	FY:	2013	FY 2013	Cost To		Value of
	Cost	FY 2	2012	Ba	se	0	co	Total	Complete	Total Cost	Contract
Project Cost Totals	0.104	0.871		0.880		_		0.880			

Remarks

N/A.

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command **DATE:** February 2012 **PROJECT** APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160478BB: Soldier Protection and Survival S385A: Theater Body Armor and Associated BA 7: Operational Systems Development Systems Equipment FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 3 4 2 3 4 2 4 1 Body Armor (BA) Market Survey (Pre-Solicitation) Verification Testing (Pre-Validation) Soldier Load Analysis Research BA Materials/Testing SPEAR Eye Protection Market Survey Ballistic & Optical Development of Transition Lenses Anti-Fogging Development Low Visibility Eyewear SPEAR Ballistic/Life Support **Threat Validation** Foreign Ammunition Exploitation Testing Non-Destructive Inspection Development & **Testing** Helmet Design Research Next Generation Helmet **Next Generation Lightweight Materials Behind Armor Effects** Slow Impact Research Material Development/Analysis Blast Research

PE 1160478BB: Soldier Protection and Survival Systems United States Special Operations Command

Page 14 of 15

R-1 Line #265 Volume 5 - 904

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160478BB: Soldier Protection and Survival S385A: Theater Body Armor and Associated

Systems

**PROJECT** 

**DATE:** February 2012

**Equipment** 

## Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Body Armor (BA)				
Market Survey (Pre-Solicitation)	3	2011	3	2013
Verification Testing (Pre-Validation)	1	2012	1	2012
Soldier Load Analysis Research	1	2012	4	2013
BA Materials/Testing	1	2012	4	2014
SPEAR Eye Protection				
Market Survey	1	2012	4	2012
Ballistic & Optical Development of Transition Lenses	1	2012	4	2013
Anti-Fogging Development	1	2013	4	2015
Low Visibility Eyewear	1	2012	4	2013
SPEAR Ballistic/Life Support				
Threat Validation	1	2012	4	2017
Foreign Ammunition Exploitation Testing	1	2013	4	2017
Non-Destructive Inspection Development & Testing	1	2012	4	2012
Helmet Design Research	1	2012	4	2013
Next Generation Helmet	1	2015	4	2016
Next Generation Lightweight Materials	1	2015	4	2017
Behind Armor Effects	1	2012	4	2014
Slow Impact Research	1	2012	4	2012
Material Development/Analysis	1	2015	4	2017
Blast Research	1	2012	4	2014



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160479BB: SOF Visual Augmentation, Lasers and Sensor Systems

**DATE:** February 2012

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	3.000	4.448	-	4.448	-	-	-	-	Continuing	Continuing
S395: SOF Visual Augmentation, Lasers and Sensor Systems	-	3.000	4.448	-	4.448	-	-	-	-	Continuing	Continuing

## A. Mission Description and Budget Item Justification

This program element provides for development, testing, and integration of specialized visual augmentation, laser and sensor systems equipment to meet the unique requirements of Special Operations Forces (SOF). Specialized equipment will permit small, highly trained forces to conduct required operations across the entire spectrum of conflict. These operations are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy. SOF must infiltrate by land, sea, and air to conduct unconventional warfare, direct action, or deep reconnaissance operations in denied areas against insurgent units, terrorists, or highly sophisticated threat forces. The requirement to operate in denied areas controlled by a sophisticated threat mandates that SOF systems remain technologically superior to enemy threats to ensure mission success.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	3.000	2.395	-	2.395
Current President's Budget	-	3.000	4.448	-	4.448
Total Adjustments	-	-	2.053	-	2.053
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-	-	2.053	-	2.053

# **Change Summary Explanation**

Funding:

FY 2011: None.

FY 2012: None.

UNCLASSIFIED

PE 1160479BB: SOF Visual Augmentation, Lasers and Sensor Systems

	UNCLASSIFIED	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160479BB: SOF Visual Augmentation, La	·
FY 2013: Net increase of \$2.053 million is due to a reprogran development and integration of operator-borne visual augment assumption increase of \$0.053 million.		
Schedule: None.		
Technical: None.		

PE 1160479BB: *SOF Visual Augmentation, Lasers and Sensor Systems* United States Special Operations Command

UNCLASSIFIED
Page 2 of 7

Exhibit R-2A, RDT&E Project Just	R-2A, RDT&E Project Justification: PB 2013 United States					nd	DATE: February 2012								
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop	t & Evaluatio	n, Defense-V	Vide	PE 116047	IOMENCLA 9BB: SOF Vi Sensor Syst	isual Augme		JECT 5: SOF Visual Augmentation, Lasers and sor Systems							
COST (\$ in Millions)	OST (\$ in Millions) FY 2011 FY 2012		FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost				
S395: SOF Visual Augmentation, Lasers and Sensor Systems	-	3.000	4.448	-	4.448	-	-	-	-	Continuing	Continuing				
Quantity of RDT&E Articles															

#### A. Mission Description and Budget Item Justification

This project provides for development, testing and integration of specialized visual augmentation, laser and sensor system equipment to meet the unique requirements of Special Operations Forces(SOF). Specialized equipment will permit small, highly trained forces to conduct required operations within harsh environments, for unspecified periods and in locations requiring small unit autonomy. SOF must infiltrate by land, sea, and air to conduct unconventional warfare, direct action, or deep reconnaissance operations in denied areas against insurgent units, terrorist, or highly sophisticated threat mandates that SOF systems remain technologically superior to enemy threats to ensure mission success.

- Visual Augmentation Systems (VAS). This program develops, buys prototypes, and fields operator-borne night vision devices for SOF. These devices provide the SOF operator the ability to maneuver, conduct fire control operations, and perform surveillance and reconnaissance. Research and Development efforts will develop, test, and evaluate prototype systems of the next generation fusion system.
- These Visual Augmentation Systems will provide an all-weather, low-light capability for SOF personnel by employing a Block approach. This Block approach produces a family of VAS systems which will utilize a variety of different sensor technologies to satisfy the capabilities defined by individual Block requirement. Some examples of the types of sensor technologies that these systems may utilize include: Image Intensification, Thermal, Short Wave Infrared (SWIR) and/or multi-spectral. To date the Target Engagement Portfolio has utilized several Block system approaches that have been fielded by the VAS program. These VAS programs will be a developmental effort to produce and field the next generation systems for SOF personnel. Some of the capability shortfalls identified by the SOF community are the following: (1) ability to detect, classify, and engage targets out to 800 m without the use of an infra-red illuminator; (2) ability to determine wind speed at ranges out to 500 m or greater and (3) ability to observe bullet trace at ranges of 800 m or greater.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2013	FY 2013	FY 2013
	FY 2011	FY 2012	Base	OCO	Total
Title: VAS	-	3.000	4.448	-	4.448
FY 2012 Plans: Initiates the development of the next generation of operator-borne visual augmentation devices to improve situational awareness, sharing of data/images and target acquisition.					
FY 2013 Base Plans: Continue the development of the next generation of operator-borne visual augmentation devices to improve situational awareness, sharing of data/images and target acquisition. The primary capability shortfalls addressed					

UNCLASSIFIED
Page 3 of 7

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160479BB: SOF Visual Augmentation,

Lasers and Sensor Systems

PROJECT

S395: SOF Visual Augmentation, Lasers and

**DATE:** February 2012

Sensor Systems

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
include the following under all lighting conditions: (1) Ability to detect, classify, and engage targets out to 800 m without the use of an infra-red illuminator; (2) Ability to determine wind speed at ranges out to 500 m or greater; and (3) Ability to observe bullet trace at ranges of 800 m or greater.					
Accomplishments/Planned Programs Subtotals	-	3.000	4.448	-	4.448

# C. Other Program Funding Summary (\$ in Millions)

		FY 2013	FY 2013	FY 2013					Cost To	
FY 2011	FY 2012	<u>Base</u>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
43.090	19.289	33.920	0.108	34.028	18.532	18.610	14.589	11.213	Continuing	Continuing
			FY 2011 FY 2012 Base	FY 2011 FY 2012 Base OCO	FY 2011 FY 2012 Base OCO Total	<u>FY 2011</u> <u>FY 2012</u> <u>Base</u> <u>OCO</u> <u>Total</u> <u>FY 2014</u>	FY 2011 FY 2012 Base OCO Total FY 2014 FY 2015	FY 2011 FY 2012 Base OCO Total FY 2014 FY 2015 FY 2016	FY 2011 FY 2012 Base OCO Total FY 2014 FY 2015 FY 2016 FY 2017	FY 2011 FY 2012 Base OCO Total FY 2014 FY 2015 FY 2016 FY 2017 Complete

AUGMENTATION, LASERS AND

SENSOR SYSTEMS

## D. Acquisition Strategy

• VAS utilizes FY 2012 and FY 2013 RDT&E funds to develop prototypes for the SOF next generation soldier-borne visual augmentation devices. These developmental efforts will leverage Science and Technology projects conducted to date and lead to the development of prototype systems for SOF to evaluate and an Indefinite Delivery Indefinite Quantity production contract in FY 2014 to support SOF procurement of the production version of the next generation soldier-borne visual augmentation devices.

### **E. Performance Metrics**

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160479BB: SOF Visual Augmentation,

Lasers and Sensor Systems

PROJECT

S395: SOF Visual Augmentation, Lasers and

**DATE:** February 2012

Sensor Systems

<b>Product Development</b>	(\$ in Millio	ns)		FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
VAS	C/FFP	Joint Special Operations Program Office:Crane, IN	1.015	2.800	Jun 2012	3.453	Jun 2013	-		3.453	Continuing	Continuing	
Prior Year Funding	C/CPFF	PM Sensors and Lasers:Ft Belvoir, VA	7.844	-		-		-		-	Continuing	Continuing	
		Subtotal	8.859	2.800		3.453		-		3.453			

Test and Evaluation (\$	in Millions	5)		FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
VAS	C/CPFF	Joint Special Operations Program Office:Crane, IN	-	0.200	Jan 2012	0.995	Jan 2013	-		0.995	Continuing	Continuing	
Prior Year Funding	C/CPFF	HQ USSOCOM:Tampa, FL	2.390	-		-		-		-	Continuing	Continuing	
		Subtotal	2.390	0.200		0.995		-		0.995			

_											
	Total Prior										Target
	Years			FY 2	2013	FY	2013	FY 2013	Cost To		Value of
	Cost	FY 2	012	Ba	ise	0	CO	Total	Complete	Total Cost	Contract
Project Cost Totals	11.249	3.000		4.448		-		4.448			

Remarks

**DATE:** February 2012 Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** PE 1160479BB: SOF Visual Augmentation, S395: SOF Visual Augmentation, Lasers and 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development Lasers and Sensor Systems Sensor Systems

		FY	201	11		Ī	FY 2	2012	2		FY	2013	3		FY	2014	4		FY	2015	5		FY	2010	3		FY 2	2017	•
	1	2	3	. 4	ļ.	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Visual Augmentation System Binocular/ Monocular				·		· ·										·	·		·	·				·					
Development of the Next Generation Soldier- borne Night Vision Devices																													
Integration and Testing of the Next Generation Soldier-borne Night Vision Devices																													
Development of the Next Generation Night Vision Devices for Target Engagement Systems																													
Integration and Testing of the Next Generation Night Vision Devices for Target Engagement Systems																													

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160479BB: SOF Visual Augmentation,

Lasers and Sensor Systems

**PROJECT** 

S395: SOF Visual Augmentation, Lasers and

**DATE:** February 2012

Sensor Systems

## Schedule Details

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Visual Augmentation System Binocular/Monocular		-		
Development of the Next Generation Soldier-borne Night Vision Devices	1	2012	4	2013
Integration and Testing of the Next Generation Soldier-borne Night Vision Devices	3	2013	2	2014
Development of the Next Generation Night Vision Devices for Target Engagement Systems	2	2013	2	2014
Integration and Testing of the Next Generation Night Vision Devices for Target Engagement Systems	2	2014	2	2015



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160480BB: SOF Tactical Vehicles

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.964	3.522	11.325	-	11.325	8.110	2.329	2.368	2.408	Continuing	Continuing
S910: SOF Tactical Vehicles	0.964	3.522	11.325	-	11.325	8.110	2.329	2.368	2.408	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This program element provides for the development and testing of a variety of spiral upgrades to Special Operations Vehicles and ancillary equipment. The current SOF tactical vehicles include: All Terrain Vehicles and Lightweight Tactical All Terrain Vehicles (Individual), Light Mobility Vehicles (Light), Ground Mobility Vehicles (Medium), Non-Standard Commercial Vehicles (Commercial) for use in tactical missions, and Mine Resistant Ambush Protected Vehicles (Heavy). The SOF mission mandates that SOF vehicles remain technologically superior, operate in multiple environments and be able to meet any threat to provide a maximum degree of survivability.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	1.994	3.522	3.819	-	3.819
Current President's Budget	0.964	3.522	11.325	-	11.325
Total Adjustments	-1.030	-	7.506	-	7.506
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-1.000	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.030	-			
Other Adjustments	-	_	7.506	-	7.506

# **Change Summary Explanation**

Funding:

FY 2011: Net decrease of -\$1.030 million due to Congressional reduction (-\$1.000 million) and Small Business Innovative Research transfer of (-\$0.030 million).

FY 2012: No change.

FY 2013: Increase of \$7.370 million supports Medium Mobility Vehicle (Ground Mobility Vehicle 1.1) system development, engineering and test (\$4.000 million), Mine Resistant Ambush Protected (MRAP) vehicle SOF peculiar integration kit development (\$3.370 million) and an economic assumption increase of \$0.136 million.

PE 1160480BB: SOF Tactical Vehicles
United States Special Operations Command

UNCLASSIFIED
Page 1 of 7

R-1 Line #267

Volume 5 - 915

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	,
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	PE 1160480BB: SOF Tactical Vehicles	
Schedule: None.		
Technical: None.		

PE 1160480BB: SOF Tactical Vehicles
United States Special Operations Command

UNCLASSIFIED
Page 2 of 7

R-1 Line #267 **Volume 5 - 916** 

Exhibit R-2A, RDT&E Project Ju	ı <b>stification:</b> PE	3 2013 Unite	d States Sp	ecial Operat	ions Comma	ınd			<b>DATE</b> : Feb	ruary 2012		
APPROPRIATION/BUDGET ACT	IVITY			R-1 ITEM N	NOMENCLA <sup>T</sup>	TURE		PROJECT				
0400: Research, Development, Te		n, Defense-V	Vide	PE 116048	0BB: SOF T	actical Vehic	les	S910: SOF	Tactical Veh	icles		
A 7: Operational Systems Development												
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To		
233: (\$ 111 11111113)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost	
S910: SOF Tactical Vehicles	0.964	3.522	11.325	-	11.325	8.110	2.329	2.368	2.408	Continuing	Continuing	
Quantity of RDT&E Articles												

### A. Mission Description and Budget Item Justification

This project develops, tests, and evaluates Special Operations vehicles and modifications. The Special Operations Forces (SOF) mission mandates that SOF vehicles remain technologically superior, operate in multiple environments and be able to meet any threat to provide a maximum degree of survivability. The current family of SOF tactical vehicles include: individual mobility vehicles, light mobility vehicles, medium mobility vehicles, non-standard commercial vehicles and heavy mobility vehicles. Sub-projects include:

- Family of Special Operations Vehicles (FSOV). This initiative provides for product improvements in the areas of suspension, power management, armor protection and unique vehicle design for all SOF tactical vehicle configurations. Designs must be standardized across all SOF Components that utilize a tactical vehicle. Improvements include, but are not limited to, new engineering change proposals (ECPs), field safety issues and theater endorsed requirements that make it essential to keep up with the increased weight and minimize the impact to mobility on the basic vehicle. Develop, integrate and test C4ISR systems in order to reduce space and power claim on vehicles. Develop safety and engineering improvements that specifically address the enemy's changing tactics on the battlefield which typically focuses on survivability, force protection, or mobility. Efforts include, but are not limited to, the following:
- Medium Mobility Vehicle Version 1.1. This effort provides for a projected multi-vendor award to acquire product samples for a medium vehicle variant capable of meeting specific requirements of internal aircraft transport on the C/MH47. The effort also provides for engineering costs related to performance, endurance, safety testing, integration and logistical analysis of product samples.
- Mine Resistant Ambush Protected (MRAP) Vehicle Kits. This effort provides design, prototyping, testing and installation manual development of SOF peculiar integration kits for multiple models of Service-common MRAPs employed by SOF. Kits will enable SOF unique C4ISR installation and Common Remote Operator Weapons Station integration to Service-common MRAPs.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Family of Special Operations Vehicle	0.964	3.522	11.325	-	11.325
FY 2011 Accomplishments: Continued development of ECPs that implement spiral upgrades and improve the design of the medium mobility vehicles.					
FY 2012 Plans:					

PE 1160480BB: SOF Tactical Vehicles
United States Special Operations Command

UNCLASSIFIED
Page 3 of 7

R-1 Line #267

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

PE 1160480BB: SOF Tactical Vehicles

**PROJECT** 

S910: SOF Tactical Vehicles

**DATE:** February 2012

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Continues development of ECPs that implement spiral upgrades and improve the design of the medium mobility vehicles, to include development, integration and testing of a Single Joint Platform C4ISR solution.					
FY 2013 Base Plans: Continue development of ECPs that implement spiral upgrades and improve the design of the medium mobility vehicles, efforts include development, prototyping and testing of version 1.1 of medium mobility vehicle and SOF-Peculiar Integration Kits for service variant MRAPs.					
Accomplishments/Planned Programs Subtotals	0.964	3.522	11.325	-	11.325

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• PROC: TACTICAL VEHICLES	109.355	53.733	37.421	1.843	39.264	71.537	117.128	113.892	114.588	Continuing	Continuing

# D. Acquisition Strategy

• Vehicle improvements integrate emerging technology or commercial-off-the-shelf/non-developmental items. Materiel solutions will be procured via existing contracts or through a competitive procurement.

## **E. Performance Metrics**

N/A

PE 1160480BB: SOF Tactical Vehicles
United States Special Operations Command

UNCLASSIFIED
Page 4 of 7

R-1 Line #267

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160480BB: SOF Tactical Vehicles

S910: SOF Tactical Vehicles

**DATE:** February 2012

Support (\$ in Millions)				FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Change Proposal Developmental Test Support	MIPR	Aberdeen Test Center:Aberdeen, MD	0.508	0.375	Dec 2011	0.300	Dec 2012	-		0.300	Continuing	Continuing	
C4l Engineering Change Proposal Developmental Test Support	MIPR	Space and Naval Warfare Systems Command:Charleston, SC	0.952	0.850	Feb 2012	1.350	Feb 2013	-		1.350	Continuing	Continuing	
Medium Mobility Vehicle Engineering Change Proposal Development	MIPR	Naval Air Systems Command:Patuxent River, MD	1.046	0.600	Mar 2012	0.900	Apr 2013	-		0.900	Continuing	Continuing	
Medium Mobility Vehicle Engineering Change Proposal Development	WR	GSE Engineering:Houghton, MI	1.633	1.697	Jan 2012	1.269	Jan 2013	-		1.269	Continuing	Continuing	
Mine Resistant Ambush Protective (MRAP) SOF Peculiar Integration Kit Development	MIPR	TBD:TBD	-	-		3.370	Jan 2013	-		3.370	1.750	5.120	
		Subtotal	4.139	3.522		7.189		-		7.189			

Test and Evaluation (\$	in Millions	)		FY 2	2012	FY 2 Ba	2013 se	FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Ground Mobility Vehicle (GMV) 1.1 SOF Modification Integration and Test	C/FFP	TBD:TBD	-	-		4.136	May 2013	-		4.136	4.000	8.136	
		Subtotal	-	-		4.136		-		4.136	4.000	8.136	

	Total Prior										Target
	Years			FY 2	2013	FY 2	2013	FY 2013	Cost To		Value of
	Cost	FY 2	012	Ва	se	00	co	Total	Complete	Total Cost	Contract
Project Cost Totals	4.139	3.522		11.325		-		11.325			

Remarks

PE 1160480BB: *SOF Tactical Vehicles*United States Special Operations Command

UNCLASSIFIED
Page 5 of 7

R-1 Line #267

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command **DATE:** February 2012 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160480BB: SOF Tactical Vehicles S910: SOF Tactical Vehicles BA 7: Operational Systems Development **FY 2011** FY 2012 FY 2013 FY 2014 FY 2015 FY 2016 FY 2017 2 3 4 2 3 4 3 2 2 3 4 2 1 3 4 2 4 3 4 1 Engineering Change Proposal **Developmental Test Support Engineering Change Proposal Developmental** Test Support C4ISR Engineering Change Proposal **Developmental Test Support** C4ISR Engineering Change Proposal **Developmental Test Support** Medium Mobility Vehicle Engineering Change Proposal Development Medium Mobility Vehicle Engineering Change Proposal Development Ground Mobility Vehicle (GMV) 1.1 SOF **Modification Integration and Test** Ground Mobility Vehicle (GMV) 1.1 SOF **Modification Integration and Test** Mine Resistant Ambush Protective (MRAP) SOF Peculiar Integration Kit Development Mine Resistant Ambush Protective (MRAP) SOF Peculiar Integration Kit Development

PE 1160480BB: SOF Tactical Vehicles
United States Special Operations Command

UNCLASSIFIED
Page 6 of 7

R-1 Line #267

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

PE 1160480BB: SOF Tactical Vehicles

S910: SOF Tactical Vehicles

**DATE:** February 2012

## Schedule Details

Sta	art	En	d
Quarter	Year	Quarter	Year
1	2011	4	2017
1	2011	4	2017
1	2011	4	2017
2	2013	2	2014
'		,	
2	2013	4	2014
	Quarter  1  1  2	1 2011  1 2011  1 2011  2 2013	Quarter         Year         Quarter           1         2011         4           1         2011         4           1         2011         4           2         2013         2



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160481BB: SOF Munitions

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	1.500	1.515	-	1.515	-	-	-	-	0.000	3.015
S800: SO Munitions Advanced Development	-	1.500	1.515	-	1.515	-	-	-	-	0.000	3.015

#### Note

There are prior year funds being obligated against the Insensitive Munitions (IM) requirement. However, according to the "New Start" criteria, the FY 2012 RDT&E request constitutes a New Start since there is more than one skip year in the appropriation. Prior to FY 2010, the Insensitive Munitions RDT&E was executed under Program Element 1160404BB.

# A. Mission Description and Budget Item Justification

This program element provides for the advanced engineering operational system development and qualification efforts related to Special Operations Forces peculiar munitions and equipment. Funding supports development of IM technology and evaluation, in accordance with statutory requirement set forth in U.S. Code, Title 10, Chapter 141, Section 2389 (December 2001). (Including bullet impact, fast cook off, fragment impact, slow cook off, sympathetic detonation, and shaped charge test.) Testing is in accordance with the United States Special Operations Command IM Strategic Plan.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	1.500	1.497	-	1.497
Current President's Budget	-	1.500	1.515	-	1.515
Total Adjustments	-	-	0.018	-	0.018
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustment	-	-	0.018	-	0.018

## **Change Summary Explanation**

Funding:

FY 2011: No change.

PE 1160481BB: *SOF Munitions*United States Special Operations Command

UNCLASSIFIED
Page 1 of 7

R-1 Line #268

Volume 5 - 923

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160481BB: SOF Munitions	
FY 2012: No change.		
FY 2013: Increase is due to an economic assumption increas	se (\$0.018 million).	
Schedule: None.		
Technical: None.		

PE 1160481BB: *SOF Munitions*United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				IOMENCLAT 1BB: SOF M			PROJECT S800: SO Munitions Advanced Development				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
S800: SO Munitions Advanced Development	-	1.500	1.515	-	1.515	-	-	-	-	0.000	3.015

# A. Mission Description and Budget Item Justification

Quantity of RDT&E Articles

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command

- This project funds advanced engineering, operational system development and qualification efforts related to specialized munitions and equipment
- Non-Standard Materiel (NSM). Provides for Insensitive Munitions (IM) technology development and evaluation that allows SOF munitions to pass testing which includes bullet impact, fragment impact, sympathetic detonation, fast cook off, slow cook off and shaped charge test. Testing is in accordance with the United States Special Operations IM Testing Plan.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: NSM	-	1.500	1.515
FY 2012 Plans: Conducts proof of principle and IM testing on various munitions then full scale testing to satisfy safety requirements in Military Standard 2105C (Department of Defense Test and Method Standard: Hazard Assessment Test for Non-Nuclear Munition, 26 Sep 2006).			
FY 2013 Plans: Conduct proof of principle and IM testing on various munitions then full scale testing to satisfy safety requirements in Military Standard 2105C (Department of Defense Test and Method Standard: Hazard Assessment Test for Non-Nuclear Munition, 26 Sep 2006).			
Accomplishments/Planned Programs Subtotals	-	1.500	1.515

# C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• PROC1: ORDNANCE	59.180	33.681	36.981		36.981	37.259	35.267	32.115	26.666	Continuing	Continuing
ACQUISITION											

## D. Acquisition Strategy

NSM: Munitions and packaging redesign shall take place within government laboratories, as well as in industry, depending on the munitions. IM solutions shall be tested on a small scale for proof of principle.

PE 1160481BB: *SOF Munitions*United States Special Operations Command

UNCLASSIFIED
Page 3 of 7

R-1 Line #268

Volume 5 - 925

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command	DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160481BB: SOF Munitions	PROJECT S800: SO Munitions Advanced Development				
E. Performance Metrics N/A						

PE 1160481BB: *SOF Munitions*United States Special Operations Command

UNCLASSIFIED
Page 4 of 7

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

**Project Cost Totals** 

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160481BB: SOF Munitions

S800: SO Munitions Advanced Development

**DATE:** February 2012

Test and Evaluation (\$ in Millions)			FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
NSM - Obtain Munitions Test Articles	C/FFP	General Dynamics:Canada	-	0.400	Jan 2012	0.418	Jan 2013	-		0.418	0.000	0.818	
Evaluation of IM	C/FFP	Campagnuolo:Sarasota, FL	-	0.150	Jan 2012	0.150	Jan 2013	-		0.150	0.000	0.300	
Testing of IM	Allot	ARDEC:Picatinny Arsenal, NJ	-	0.950	Jan 2012	0.947	Jan 2013	-		0.947	0.000	1.897	
		Subtotal	-	1.500		1.515		-		1.515	0.000	3.015	
			Total Prior Years Cost	FY 2	2012	FY 2 Ba	2013 se	FY 2	2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract

1.515

1.500

Remarks

PE 1160481BB: SOF Munitions **United States Special Operations Command**  **UNCLASSIFIED** Page 5 of 7

R-1 Line #268

1.515

0.000

3.015

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160481BB: SOF Munitions S800: SO Munitions Advanced Development BA 7: Operational Systems Development **FY 2011** FY 2012 FY 2013 FY 2014 FY 2015 **FY 2016** FY 2017 4 2 3 2 1 2 4 3 3 4 4 3 1 1 4 Non-Standard Materiel Purchase Test Articles **Evaluation of Insensitive Munitions (IM)** Evaluation of IM

Testing of IM
Testing of IM

**DATE:** February 2012

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160481BB: SOF Munitions

**PROJECT** 

S800: SO Munitions Advanced Development

**DATE:** February 2012

## Schedule Details

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Non-Standard Materiel				
Purchase Test Articles	2	2012	2	2013
Evaluation of Insensitive Munitions (IM)				
Evaluation of IM	2	2012	4	2013
Testing of IM				
Testing of IM	2	2012	4	2013



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160482BB: SOF Rotary Wing Aviation

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	54.985	51.123	24.430	-	24.430	47.448	32.663	14.820	18.268	Continuing	Continuing
D615: SOF Rotary Wing Aviation	54.985	51.123	24.430	-	24.430	47.448	32.663	14.820	18.268	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This program element develops SOF-unique modifications and upgrades to SOF rotary wing aircraft that operate in increasingly hostile environments. Rotary wing aircraft supported by this project include: MH-60L/M, MH-47G, and A/MH-6M. These aircraft provide aviation support to Special Operations Forces (SOF) in worldwide contingency operations and low-intensity conflicts. They must be capable of rapid deployment; undetected penetration of hostile areas; and operating at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract SOF. The threat is characterized by an extensive and sophisticated ground based air defense system and an upgraded air-to-air capability targeted against helicopters.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	14.473	51.123	35.551	-	35.551
Current President's Budget	54.985	51.123	24.430	-	24.430
Total Adjustments	40.512	-	-11.121	-	-11.121
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	41.520	-			
SBIR/STTR Transfer	-0.837	-			
Other Adjustment	-0.171	_	-11.121	-	-11.121

## **Change Summary Explanation**

FY 2011: Net increase of \$40.512 million is due to a USSOCOM request for Congressional transfer of procurement to RDT&E (\$19.292 million) for MH-60 SOF Modernization flight and qualification testing, a reprogramming of (-\$4.086 million) to several program elements that were used for MH-60 SOF Modernization flight and qualification testing, a reprogramming (-\$0.496 million) to the YMQ-18A Forester Advanced Concepts Technology Demonstration; an Omnibus reprogramming (FY11-25 PA, dated 6 September 2011) to support Hostile Fire Indication Systems: integration into the AVR-2B laser warning sensor (\$9.600 million), a Hostile Fire Indication System fully fused extended user evaluation (\$5.610 million), development of Degraded Visual Environment (DVE) (\$6.0 million) and Multiple Impact Transparent Armor System (MITAS) (\$5.650 million) to procure shipsets on MH-47s and MH-60s to increase aircrew and passenger safety; 1415-3 internal reprogramming request is pending to transfer the MITAS \$5.650 million from RDT&E to procurement to procure shipsets; and economic adjustments of (-\$0.171 million) and a transfer to Small Business Innovative Research (-\$0.837 million).

PE 1160482BB: SOF Rotary Wing Aviation United States Special Operations Command

Page 1 of 11

R-1 Line #269

Volume 5 - 931

**DATE:** February 2012

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160482BB: SOF Rotary Wing Aviation	
FY 2012: None.		
FY 2013: Net decrease of (-\$11.121 million) is due to reprogr of \$0.294 million.	ramming to support higher command priorities (-\$11.	415 million), and economic assumption increas
Schedule: None.		
Technical: None.		

PE 1160482BB: SOF Rotary Wing Aviation United States Special Operations Command

<b>Exhibit R-2A</b> , <b>RDT&amp;E Project Justification</b> : PB 2013 United States Special Operations Command <b>DATE</b> : February 2012											
0400: Research, Development, Tes	PROPRIATION/BUDGET ACTIVITY  0: Research, Development, Test & Evaluation, Defense-Wide 7: Operational Systems Development  R-1 ITEM NOMENCLATURE PE 1160482BB: SOF Rotary Wing Aviation D615: SOF Rotary Wing Aviation						111111111111111111111111111111111111111				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
D615: SOF Rotary Wing Aviation	54.985	51.123	24.430	- 24.430 47.448 32.663 14.820 18.268 Continuing						Continuing	
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

This project develops/upgrades SOF rotary wing aircraft systems that operate in increasingly hostile environments. Rotary wing aircraft supported by this project include: MH-60L/M, MH-47G, and A/MH-6M. These aircraft provide aviation support to SOF in worldwide contingency operations and low-intensity conflicts, and they must be capable of rapid deployment; undetected penetration of hostile areas; and operating at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract SOF. The threat is characterized by an extensive and sophisticated ground based air defense system and an upgraded air-to-air capability targeted against helicopters. Sub-projects include:

- A/MH-6M Block 3.0 Upgrade includes development of an integrated digital moving map, upgraded multifunctional displays, improved communication/navigation suites, lightweight mission processor, structural upgrades, and next generation main/tail rotor systems. This upgrade modification will increase safety margins and increase operational capabilities at higher altitude and temperature conditions.
- The A/MH-6 Improved Seat system will provide a crash-worthy ballistic protection, crash attenuation, and restraint system upgrades to prevent severe injury to Army Special Operations Aviation (ARSOA) pilots. The Center for Army Lessons Learned reported that over a three year period, 50 ARSOA pilots suffered serious back injuries and were grounded due to hard landings.
- Hostile Fire Indicating System (HFIS) detects, classifies, and alerts the aircrew to the presence of small caliber weapons fire for SOF MH-47/60 platforms. By providing detection and angle of arrival information, the HFIS will allow the aircrew to perform evasive and counter-fire actions significantly increasing the aircraft's probability of survival. The Helicopter Survivability Task Force (HSTF) additional funds will incorporate Hostile Fire Indication in the Infrared Spectrum as well as providing sensor fusion of Infrared, Ultra-Violet, and acoustic sensors in order to reduce false alarms and increase probability of detection.
- The MH-47 Engine Automatic Re-Light (EARL) system will detect the presence of an impending or an in-progress engine flame-out event and re-establish combustion within the engine to avoid an actual engine flame-out. EARL will recognize the event much faster than a pilot and then proceed to reignite/restart the engine while monitoring and adjusting engine parameters including the ignition system and fuel flow scheduling. EARL is required to address safety issues in the MH-47 fleet where engine flame-out has been cited as one of the probable causes of the loss of an MH-47G with loss of life in support of Operation Enduring Freedom.
- MH-47 Low Cost Modifications program is an effort to integrate an improved Common Rotor Blade (CRB) being developed by the Army into the MH-47G.
- MH-60 SOF Modernization program provides for the systems engineering and platform integration efforts, to include continued flight and qualification testing and test support.

PE 1160482BB: SOF Rotary Wing Aviation United States Special Operations Command

Page 3 of 11

R-1 Line #269

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	<b>PROJECT</b>	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160482BB: SOF Rotary Wing Aviation	D615: SOF	Rotary Wing Aviation
BA 7: Operational Systems Development			

- Next Generation Forward Looking Infrared Radar (NGFLIR) develops and qualifies a laser rangefinder/designator (LRF/D) for the AN/ZSQ-3 Electro Optical Sighting System (EOSS).
- Reduced Optical Signature Emissions Solution (ROSES) program reduces the optical signature output of the current infrared expendable decoys for purposes of reducing Army Special Operations Aviation (ARSOA) aircraft vulnerabilities. This flare solution will have the capability to decoy currently fielded infrared missiles and more sophisticated emerging threats, and is an interim solution pending flare technology advancements.
- Degraded Visual Environment (DVE) Solution will fuse information from currently fielded aircraft sensors with emerging technology to display real-time reference points, obstacles, and landing zone information to the aviator. The DVE solution will provide MH-47/60/6 aircrews with visual cues for obstacle avoidance and aircraft control during all phases of flight and significantly increase crew and passenger survivability in DVE such as dirt and snow. Additional funding is provided to enhance the maturity of the rotor-craft and begin software development.
- Aircraft Occupant Ballistic Protection System (AOBPS) is a follow-on procurement for ship-sets of Multiple Impact Transparent Armor System (MITAS) panels that were developed with Helicopter Survivability Task Force (HSTF) FY 2010 RDT&E funds. These components will replace panels and windows to increase aircrew and passenger safety and survivability.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: A/MH-6M Block 3.0 Upgrade	-	18.765	13.145
FY 2012 Plans: Begins development of cockpit upgrades, improved rotor systems, and upgrades to airframe.			
FY 2013 Plans: Continue development of cockpit upgrades, improved rotor systems, and upgrades to airframe.			
Title: A/MH-6 Improved Seat System	2.616	-	-
FY 2011 Accomplishments: Completed development of integrated crash-worthy seat system for the A/MH-6M.			
Title: Hostile Fire Indicating System (HFIS)	18.872	-	-
FY 2011 Accomplishments: Completed development of the detection, classification and alert systems for the HFIS. HSTF provided additional \$15.210 million for AVR-2B HFIS integration and HFIS sensor fusion with extended user evaluation.			
Title: MH-47 Engine Automatic Re-Light (EARL)	-	2.563	0.793
FY 2012 Plans:			

PE 1160482BB: SOF Rotary Wing Aviation United States Special Operations Command

Page 4 of 11

R-1 Line #269

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	s Special Operations Command	DATE: Fe	bruary 2012					
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	00: Research, Development, Test & Evaluation, Defense-Wide PE 1160482BB: SOF Rotary Wing Aviation D615:							
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2011	FY 2012	FY 2013				
Begins development of the MH-47 fleet EARL system.								
FY 2013 Plans: Continue development of the MH-47 fleet EARL system.								
Title: MH-47 Low Cost Modifications		-	5.122	5.73				
FY 2012 Plans: Begins integration of the Army's improved common rotor blade into t	he MH-47G.							
FY 2013 Plans: Continue integration of the Army's improved common rotor blade into	o the MH-47G.							
Title: MH-60 SOF Modernization Program		19.045	22.782	-				
FY 2011 Accomplishments: Continued systems integration and qualification efforts on one protot	type MH-60M helicopter.							
FY 2012 Plans: Completes systems integration and qualification efforts on one proto	type MH-60M helicopter.							
Title: Next Generation FLIR		1.391	-	-				
FY 2011 Accomplishments: Completed development, integration and qualification of LRF/D for the	ne AN/ZSQ-3 Electrical Optical Sighting System.							
Title: Reduced Optical Signature Emissions Solution (ROSES)		1.411	1.891	-				
FY 2011 Accomplishments: Continued development of ROSES.								
FY 2012 Plans: Completes development of ROSES.								
Title: Degraded Visual Environment (DVE)		6.000	-	4.75				
FY 2011 Accomplishments:  Omnibus provided for a collaborative effort with Defense Advanced I of firmware/software for the DVE sensor solution with avionics backle foundation to the FY 2013 sensor solution effort.								
FY 2013 Plans:								

PE 1160482BB: SOF Rotary Wing Aviation United States Special Operations Command

UNCLASSIFIED
Page 5 of 11

R-1 Line #269

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Sp	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160482BB: SOF Rotary Wing Aviation	D615: SOF	Rotary Wing Aviation
BA 7: Operational Systems Development			

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Begin development, integration, and testing of DVE sensors solution with avionics backbone (developed with FY 2011 funds) for Army Special Operations Aviation (ARSOA) platforms.			
Title: Aircraft Occupant Ballistic Protection System (AOBPS)	5.650	-	-
FY 2011 Accomplishments:  Reprogramming to procurement in order to procure shipsets of MITAS panels that were developed with HSTF FY 2010 RDT&E funds. These components will replace panels and windows to increase aircrew and passenger safety and survivability.			
Accomplishments/Planned Programs Subtotals	54.985	51.123	24.430

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• PROC2: ROTARY WING	95.473	41.411	73.888		73.888	83.608	162.768	182.903	183.589	Continuing	Continuing
UPGRADES AND SUSTAINMENT											

## D. Acquisition Strategy

- A/MH-6M Block 3.0 Upgrade This effort develops and qualifies several aircraft improvements such as an integrated digital moving map, upgraded multifunctional displays, improved communication/navigation suites, lightweight mission processor, structural upgrades, and next generation main and tail rotor systems. This effort is critically required to make the A/MH-6M more relevant on the battlefield today and well into 2020 decade. This effort will increase safety margins and increase operational capabilities at higher altitude and temperature conditions. Competitive source selection processes will be conducted for the Block 3.0 upgrades to the extent possible. Proprietary considerations may direct some efforts to the original equipment manufacturer.
- A/MH-6M Improved Seat System This effort develops and qualifies an integrated ballistic tolerant, ergonomic, and crashworthy crew seat system for the A/MH-6M fleet. This modification will provide critical protection from crash loads and airframe vibrations by upgrading the current A/MH-6M seat and restraint system. A competitive source selection process will be conducted for the crashworthy seat system replacement to the extent possible. Proprietary considerations may direct some efforts to the original equipment manufacturer.
- HFIS This effort will develop, integrate, install, and field the capability to detect, classify, and alert the aircrew to the presence of small arms fire, Anti-Aircraft Artillery, and Rocket Propelled Grenades. HFIS will allow aircrews to perform evasive and counter-fire actions, which will increase aircraft survivability and mission success. A competitive source selection process will be conducted for the HFIS effort to the extent possible. Proprietary considerations may direct some efforts to the original equipment manufacturer. The HSTF additional funds will incorporate Hostile Fire Indication in the Infrared Spectrum as well as providing sensor fusion of Infrared, Ultra-violet, and acoustic sensors in order to reduce false alarms and increase probability of detection.

PE 1160482BB: SOF Rotary Wing Aviation United States Special Operations Command

Page 6 of 11

R-1 Line #269

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States S	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160482BB: SOF Rotary Wing Aviation	D615: SOF	Rotary Wing Aviation
BA 7: Operational Systems Development			

- MH-47 EARL System This effort develops and qualifies a solution to address safety issues in the MH-47 fleet through the development, test, qualification, and fielding of changes to the engine control system to perform automatic engine failure detection and flame-out protection. A competitive source selection process will be conducted for the EARL system to the extent possible. Proprietary considerations may direct some efforts to the original equipment manufacturer.
- MH-47 Low Cost Modification to integrate the Army Common Rotor Blade (CRB) This effort integrates and qualifies a CRB solution that significantly increases payload capability, expands forward flight envelope, improves manufacturing and maintenance characteristics, and maintains commonality with the Army. As the MH-47 CRB integration leverages Army CRB development activities with the original equipment manufacturer, this effort will consist mostly of Government executed integration, testing, and qualification efforts with some analytical engineering services to be procured. Because of proprietary considerations, efforts may be directed to the original equipment manufacturer.
- MH-60M SOF Modernization Program This supports the Systems Integration and Qualification efforts on the prototype MH-60M helicopter. This includes, but is not limited to, government and contractor flight test support, engineering analysis, documentation, and airworthiness substantiation. There are no proprietary considerations that may direct some efforts to the original equipment manufacturer.
- NGFLIR Develops, integrates and qualifies the laser rangefinder and designator to the AN/ZSQ-3 and develops a drop-in, advanced, dual-color (long and midwave) IR detector upgrade for the AN/ZSQ-2. NGFLIR will be installed on the MH-47/60 and AH-6M platforms within the ARSOA fleet. Proprietary considerations may direct some efforts to the original equipment manufacturer.
- ROSES This effort develops and qualifies a flare solution that discharges fewer expendables per dispense and emits less visible light to improve aircrew's ability to survive in sophisticated threat environments. A competitive source selection process will be conducted for the ROSES to the extent possible. Proprietary considerations may direct some efforts to the original equipment manufacturer.
- DVE This effort integrates and qualifies a solution to address a safety of flight issue while flying in degraded visual environments. A competitive source process will be conducted for the DVE solution to the extent possible while capitalizing on Science and Technology initiatives and other Service DVE investments. Proprietary considerations may direct some efforts to the original equipment manufacturer. Additional funds will be employed to begin the development of the software/firmware for the Synthetic Vision Backbone which uses Digital Terrain Elevation Data or High Resolution digital elevation maps, Threat Data, and Blue Force Tracker combined with Q2 Electro-Optic Sighting System overlay and Silent Knight Radar or DVE sensors (not yet defined) to provide a synthetic vision scene to aid the aircrew in degraded visual environments. The Synthetic Vision Backbone is sensor agnostic, maximizing the use of a priori data with sensors used for change detection.
- AOBPS -This is a follow-on procurement for shipsets of Multiple Impact Transparent Armor System panels that were developed with HSTF FY 2010 RDT&E funds. These components will replace panels and windows to increase aircrew and passenger safety and survivability.

### **E. Performance Metrics**

N/A

PE 1160482BB: SOF Rotary Wing Aviation United States Special Operations Command

Page 7 of 11

R-1 Line #269

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**DATE:** February 2012 **PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160482BB: SOF Rotary Wing Aviation

D615: SOF Rotary Wing Aviation

Product Development (	\$ in Millio	ns)		FY 2	012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
A/MH-6M Block 3.0 Upgrades	C/Various	PM MELB:Ft. Eustis, VA.	-	18.765	Jan 2012	13.145	Jan 2013	-		13.145	Continuing	Continuing	
MH-47G EARL	C/Various	PM TAPO:Ft. Eustis, VA.	-	2.563	Jan 2012	0.793	Apr 2013	-		0.793	Continuing	Continuing	
MH-47G Low Cost Mods	C/Various	PM TAPO:Ft. Eustis, VA.	-	5.122	Jan 2012	5.735	Jan 2013	-		5.735	Continuing	Continuing	
ROSES	C/Various	PM TAPO:Ft. Eustis, VA.	6.667	1.891	Jan 2012	-		-		-	0.000	8.558	
DVE	C/Various	PM TAPO:Ft. Eustis, VA.	-	-		4.757	Jan 2013	-		4.757	Continuing	Continuing	
Prior Year - Completed efforts	Various	Various:Various	81.258	-		-		-		-	0.000	81.258	
		Subtotal	87.925	28.341		24.430		-		24.430			

Test and Evaluation (\$ in Millions)		FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
MH-60 SOF Modernization Program	C/Various	Various:Various	49.261	22.782	Nov 2011	-		-		-	0.000	72.043	
Prior Years	Various	Various:Various	15.836	-		-		-		-	0.000	15.836	
		Subtotal	65.097	22.782		-		-		-	0.000	87.879	

Management Services (\$ in Millions)			FY 2	2012	FY 2 Ba		FY 2		FY 2013 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior Years	Various	Various:Various	5.279	-		-		-		-	0.000	5.279	
		Subtotal	5.279	-		-		-		-	0.000	5.279	

PE 1160482BB: *SOF Rotary Wing Aviation* United States Special Operations Command

UNCLASSIFIED
Page 8 of 11

R-1 Line #269

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Sp	ecial Operations Command		DATE: February 2012					
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE		PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160482BB: SOF Rotary I	Ving Aviation	D615: SOF	Rotary Wing Av	<i>riation</i>			
BA 7: Operational Systems Development								

	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 201: OCO	3 FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	158.301	51.123	24.430	-	24.430			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

R-1 ITEM NOMENCLATURE

PE 1160482BB: SOF Rotary Wing Aviation

DATE: February 2012

PROJECT

D615: SOF Rotary Wing Aviation

BA 7: Operational Systems Development

	FY 2011			1	FY 2012				FY 2013				FY 2014			4	FY 2015				FY 2016				FY 2017			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A/MH-6M Block 3.0 Development/Qualification/ Testing					'																						l	
A/MH-6M Improved Seat System Development																												
HFIS																												
MH-47G EARL/Qualification/Test																												
MH-47G Low Cost Mods Qualification/Testing																												
MH-60 SOF Modernization Program Qualification/Testing																												
NGFLIR Development/Qualification/Testing for AN/ZSQ-3																												
NGFLIR Development/Qualification/Testing for AN/ZSQ-2																												
ROSES Development/Qualification/Test				,		,																						
DVE																												
AOBPS																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160482BB: SOF Rotary Wing Aviation

**PROJECT** 

D615: SOF Rotary Wing Aviation

**DATE:** February 2012

## Schedule Details

	Sta	Er	nd	
Events	Quarter	Year	Quarter	Year
A/MH-6M Block 3.0 Development/Qualification/Testing	2	2012	4	2015
A/MH-6M Improved Seat System Development	2	2011	2	2012
HFIS	1	2011	1	2012
MH-47G EARL/Qualification/Test	2	2012	4	2014
MH-47G Low Cost Mods Qualification/Testing	2	2012	4	2015
MH-60 SOF Modernization Program Qualification/Testing	1	2011	4	2012
NGFLIR Development/Qualification/Testing for AN/ZSQ-3	1	2011	4	2011
NGFLIR Development/Qualification/Testing for AN/ZSQ-2	2	2016	4	2017
ROSES Development/Qualification/Test	2	2011	4	2012
DVE	1	2012	4	2015
AOBPS	2	2012	4	2012



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

**R-1 ITEM NOMENCLATURE** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160483BB: SOF Underwater Systems

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	27.725	68.424	26.405	-	26.405	67.308	17.748	0.096	0.098	0.000	207.804
S0417: SOF Underwater Systems	27.725	68.424	26.405	-	26.405	67.308	17.748	0.096	0.098	0.000	207.804

### A. Mission Description and Budget Item Justification

This program element provides for engineering and manufacturing development and operational systems development of small combat underwater submersibles and underwater support systems and equipment. This program element also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to respond to emergent requirements. These submersibles, systems, and equipment are used by Special Operations Forces (SOF) in the conduct of infiltration/extraction, hydrographic/inland reconnaissance, beach obstacle clearance, underwater ship attack, and other missions. The capabilities of the submersible systems and unique equipment provides small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	13.986	92.424	104.988	-	104.988
Current President's Budget	27.725	68.424	26.405	-	26.405
Total Adjustments	13.739	-24.000	-78.583	-	-78.583
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-24.000			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-0.718	-			
<ul> <li>Other Adjustment</li> </ul>	14.457	-	-78.583	-	-78.583

# **Change Summary Explanation**

Funding:

FY 2011: Net increase of \$13.739 million is due to a reprogramming from the Joint Multi-Mission Submersible program via the FY 2011 Appropriations Bill (\$14.924 million), an economic assumption reduction (-\$0.467 million) and a transfer of funds to Small Business Innovation Research (-\$0.718 million).

FY 2012: Decrease of \$24.000 million due to a congressional reduction for program excessive growth (-\$24.000 million).

PE 1160483BB: *SOF Underwater Systems* United States Special Operations Command

UNCLASSIFIED
Page 1 of 9

R-1 Line #270

Volume 5 - 943

**DATE:** February 2012

	ONOLAGOII ILD	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United State	tes Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160483BB: SOF Underwater Systems	
FY 2013: Net decrease of \$78.583 million is due to postponen programs (-\$68.716 million), reprogramming to higher commar		
Schedule: Delays in Dry Combat Submersible programs due to	o manpower limitations and competing priorities	S.
Technical: None.		

PE 1160483BB: *SOF Underwater Systems*United States Special Operations Command

UNCLASSIFIED Page 2 of 9

R-1 Line #270

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Unite	d States Sp	ecial Operati	ions Comma	nd			<b>DATE</b> : Febr	ruary 2012	
APPROPRIATION/BUDGET ACTIV	'ITY			R-1 ITEM N	IOMENCLAT	TURE		PROJECT			
0400: Research, Development, Test		n, Defense-V	Vide	PE 116048	3BB: <i>SOF Ui</i>	nderwater S	ystems –	S0417: SOF	- Underwate	r Systems	
BA 7: Operational Systems Develop	ment										
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ III MIIIIOIIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
S0417: SOF Underwater Systems	27.725	68.424	26.405	-	26.405	67.308	17.748	0.096	0.098	0.000	207.804
Quantity of RDT&F Articles											

#### A. Mission Description and Budget Item Justification

This project provides for engineering and manufacturing development and operational systems development of small combat underwater submersibles and underwater support systems and equipment. Also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to respond to emergent requirements. These submersibles, systems, and equipment are used by Special Operations Forces (SOF) in the conduct of infiltration/extraction, hydrographic/inland reconnaissance, beach obstacle clearance, underwater ship attack, and other missions. The capabilities of the submersible systems and unique equipment provides small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions. Sub-projects include:

- Combat Submersibles: Includes incorporating obsolescence solutions and conducting product improvement efforts for the in-service SEAL Delivery Vehicle MK 8 and conducting technology development and engineering and manufacturing development for the follow-on combat submersibles such as the various types of shallow water combat submersibles. The shallow water combat submersibles use an evolutionary acquisition approach to develop a family of submersibles, to include a new wet submersible capable of operating from existing Dry Deck Shelters, and more capable wet and/or dry submersibles that will operate from future large submarine shelters/systems and/or surface ships. The combat submersible sub-project leverages existing SEAL Delivery Vehicle components, develops new state-of-the-art components where appropriate, and leases or purchases commercial-off-the-shelf components and vehicles for test and evaluation and operational assessment.
- Underwater Support Systems and Equipment: Includes conducting product improvement efforts for in-service submarine support systems such as the Dry Deck Shelters, unmanned underwater vehicles such as the Semi-autonomous Hydrographic Reconnaissance Vehicle, and diver equipment such as the Hydrographic Mapping Unit, Non-gasoline Burning Outboard Engines and Diver Propulsion Devices. Also provides for technology development and engineering and manufacturing development, and studies and analysis for follow-on underwater systems and support equipment.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Shallow Water Combat Submersible (Block I)	12.413	26.566	8.989
FY 2011 Accomplishments: Completed source selection and made down-select to single contractor for detailed design and development for a new Shallow Water Combat Submersible capability.			
FY 2012 Plans: Complete critical design review for Block I and conduct developmental test.  FY 2013 Plans:			

PE 1160483BB: SOF Underwater Systems United States Special Operations Command

UNCLASSIFIED
Page 3 of 9

R-1 Line #270

Volume 5 - 945

	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2013 United States	Special Operations Command		DATE: Feb	oruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160483BB: SOF Underwater Systems	PROJECT S0417: S0		Underwater Systems		
B. Accomplishments/Planned Programs (\$ in Millions)  Completes contractor quality assurance, acceptance and system builbegins contractor verification trials.	d up test. Continues test and evaluation of SWCS	Block I.	FY 2011	FY 2012	FY 2013	
Title: Dry Combat Submersibles			14.064	39.858	9.234	
FY 2011 Accomplishments: Completed design and engineering assessment of user operational e submersible. Commenced design and construction of an advanced to commercial dry submersible technology to demonstrate potential key	echnology demonstrator prototype (UOES #2) that	uses				
FY 2012 Plans: Procure government furnished equipment, continues commercial sub demonstrator (UOES #2). Commence additional prototyping efforts. SOF Submersible Concept Design Study in Program Element 116048	Project initiated as part of Congressional Adds: Al					
FY 2013 Plans: Continues commercial submersible prototype efforts, including the co of additional advanced technology demonstrator prototypes.	nstruction of UOES #2 and potential design and co	onstruction				
Title: Dry Deck Shelter			0.068	2.000	3.154	
FY 2011 Accomplishments: Drafted acquisition program documentation, and contract request for	proposal for dry deck shelter extension.					
FY 2012 Plans: Conduct Analysis of Alternatives for next generation shelter to accom	modate family of combat submersibles.					
FY 2013 Plans: Continues Analysis of Alternatives for next generation shelter and eva	aluate SOF Underwater Systems mobility needs.					
Title: Dry Combat Submersible Medium (DCSM)			-	-	5.028	
FY 2013 Plans: Performs studies and analysis to prepare for the commencement of a of user operational evaluation projects.	DCSM acquisition program at Milestone B based	on results				
Title: SEAL Delivery Vehicle (SDV) Technology Refresh			1.180	-	_	
FY 2011 Accomplishments: Tested and integrated upgraded systems to the SDV for improved co	mmunications and navigation.					
	Accomplishments/Planned Programs	Subtotals	27.725	68.424	26.405	

PE 1160483BB: *SOF Underwater Systems*United States Special Operations Command

UNCLASSIFIED Page 4 of 9

R-1 Line #270

Volume 5 - 946

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command

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**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160483BB: SOF Underwater Systems

S0417: SOF Underwater Systems

C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
Line Item	<b>FY 2011</b>	FY 2012	<b>Base</b>	000	<b>Total</b>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
<ul> <li>PROC1: Underwater Systems</li> </ul>	0.000	6.999	23.037		23.037	33.017	36.213	80.813	73.834	37.000	290.913
• PROC2: MK8 MOD1 SEAL	0.818									0.000	0.818
Delivery Vehicle											
PROC3: Maritime Equip	0.800									0.000	0.800

#### **D. Acquisition Strategy**

- Combat Submersibles: Shallow Water Combat Submersible Block I used full and open competition, with a down-select to a single contractor. Broad Agency Announcements were issued for Dry Combat Submersible multiple design efforts with follow-on prototyping. Additionally, existing contracts are utilized where appropriate for various component development and prototypes.
- Dry Deck Shelter Extension Modification: Dry Deck Shelter will use full and open competition for the modification to the current Dry Deck Shelter system.
- Underwater Support Systems and Equipment: Existing contracts are utilized where appropriate, and various new contracts are awarded as necessary.

#### **E. Performance Metrics**

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160483BB: SOF Underwater Systems

S0417: SOF Underwater Systems

**DATE:** February 2012

Product Development	(\$ in Millio	ns)		FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Shallow Water Combat Submersible (Block I)	C/Various	Teledyne Brown Engineering:Huntsville, AL	19.128	19.885	Apr 2012	4.549	May 2013	-		4.549	1.874	45.436	44.727
Dry Combat Submersibles	C/Various	Various:Various	16.162	38.521	Jul 2012	6.144	Aug 2013	-		6.144	4.083	64.910	
Prior Year Funding	Various	Multiple:Multiple	15.860	-		-		-		-	0.000	15.860	
		Subtotal	51.150	58.406		10.693		-		10.693	5.957	126.206	

Support (\$ in Millions)				FY 2	2012		2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Shallow Water Combat Submersibles (Block I)	Various	NSWC and NAVSEA:Panama City, FL and Washington, DC	1.632	1.289	Jan 2012	0.200	Feb 2013	-		0.200	0.000	3.121	
Dry Combat Submersibles	Various	TBD:TBD	2.643	-		-		-		-	0.000	2.643	
Dry Deck Shelter	Various	Various:Various	-	1.761	May 2012	2.917	May 2013	-		2.917	0.000	4.678	
Dry Combat Submersible Medium	TBD	TBD:TBD	-	-		2.322	May 2013	-		2.322	4.253	6.575	
		Subtotal	4.275	3.050		5.439		-		5.439	4.253	17.017	

Test and Evaluation (\$	in Millions	)		FY 2	2012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Shallow Water Combat Submersible (Block I)	Various	NSWC, NAVSEA:Panama City, FL/Washington, DC	2.486	3.802	Apr 2012	2.522	Jan 2013	-		2.522	1.516	10.326	
Dry Combat Submersible	C/Various	TBD:TBD	-	0.451	May 2012	1.992	May 2013	-		1.992	8.065	10.508	
		Subtotal	2.486	4.253		4.514		-		4.514	9.581	20.834	

PE 1160483BB: *SOF Underwater Systems* United States Special Operations Command

UNCLASSIFIED
Page 6 of 9

R-1 Line #270

Volume 5 - 948

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

**Project Cost Totals** 

65.458

68.424

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**DATE:** February 2012 **PROJECT** 

26.405

30.404

190.691

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160483BB: SOF Underwater Systems

26.405

S0417: SOF Underwater Systems

Management Services	(\$ in Millio	ons)		FY 2	2012		2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Shallow Water Combat Submersible (Block I)	Various	NSWC/ NAVSEA:Panama City, FL/Washington, DC	3.435	1.590	Feb 2012	1.926	Jan 2013	-		1.926	1.256	8.207	
Dry Combat Submersible	Various	SRA:MacDill AFB, FL	2.615	0.886	Jun 2012	0.965	May 2013	-		0.965	2.197	6.663	
Dry Deck Shelter	MIPR	NAVSEA:Washington, DC	1.497	0.239	Mar 2012	0.200	Jan 2013	-		0.200	0.660	2.596	
Dry Combat Submersible Medium	Various	Various:Various	-	-		2.668	Jan 2013	-		2.668	6.500	9.168	
		Subtotal	7.547	2.715		5.759		-		5.759	10.613	26.634	
			Total Prior Years Cost	FY 2	2012		2013 se		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

R-1 ITEM NOMENCLATURE

PE 1160483BB: SOF Underwater Systems

S0417: SOF Underwater Systems

BA 7: Operational Systems Development

**FY 2011** FY 2014 FY 2015 FY 2012 FY 2013 FY 2016 FY 2017 2 3 4 3 4 3 4 3 2 3 2 1 1 1 Shallow Water Combat Submersible (Block Milestone B Engineering & Manufacturing Development (Block I) Developmental Test (Block I)

Operational Test (Block 1)

Dry Combat Submersibles

Analysis, Component Development and Prototypes

Dry Deck Shelter

Analysis of Alternatives for Next Generation Shelter

Dry Combat Submersible Medium

Engineering Analysis and Program Planning

Milestone B

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

R-1 ITEM NOMENCLATURE

PROJECT

R-1 Line #270

0400: Research, Development, Test & Evaluation, Defense-Wide

APPROPRIATION/BUDGET ACTIVITY

BA 7: Operational Systems Development

PE 1160483BB: SOF Underwater Systems

S0417: SOF Underwater Systems

**DATE:** February 2012

### Schedule Details

Sta	End		
Quarter	Year	Quarter	Year
1	2011	1	2011
1	2011	1	2014
2	2012	2	2014
3	2014	1	2015
4	2011	4	2014
3	2012	4	2013
3	2013	4	2015
4	2015	1	2016
	Quarter  1 1 2 3 4 3	1 2011 1 2011 2 2012 3 2014 4 2011 3 2012	Quarter         Year         Quarter           1         2011         1           1         2011         1           2         2012         2           3         2014         1           4         2011         4           3         2012         4           3         2013         4



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160484BB: SOF Surface Craft

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	18.953	14.475	8.573	-	8.573	5.917	-	-	-	0.000	47.918
S1684: SOF Surface Craft Advanced Systems	18.953	14.475	8.573	-	8.573	5.917	-	-	-	0.000	47.918

### A. Mission Description and Budget Item Justification

This program element provides for engineering & manufacturing development and operational systems development of light, medium, and heavy surface combatant craft and selected items of specialized equipment to meet the unique requirements of Special Operations Forces (SOF). This program element also provides for pre-acquisition activities (materiel solutions analysis, advanced component development & prototypes) to quickly respond to new requirements for surface craft and equipment, such as the light and heavy combatant crafts that are currently being studied in the Joint Capabilities Integration and Development System process. The craft capabilities and unique equipment provide small, highly trained forces the ability to successfully engage the enemy and conduct operations associated with SOF maritime missions.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	2.933	14.475	2.165	-	2.165
Current President's Budget	18.953	14.475	8.573	-	8.573
Total Adjustments	16.020	-	6.408	-	6.408
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	0.490	-			
SBIR/STTR Transfer	-0.470	-			
Other Adjustment	16.000	-	6.408	-	6.408

# **Change Summary Explanation**

Funding:

FY 2011: Net increase of \$16.020 million is due to a Congressional Add for the Combatant Craft Medium (CCM) (\$16.000 million), an economic assumption reduction (-\$0.490 million) and a transfer of funds to Small Business Innovative Research (-\$0.470 million).

FY 2012: None.

PE 1160484BB: SOF Surface Craft
United States Special Operations Command

Page 1 of 8

R-1 Line #271

Volume 5 - 953

**DATE:** February 2012

	UNCLASSIFIED	
Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	tes Special Operations Command	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 1160484BB: SOF Surface Craft	
FY 2013: Increase of \$6.408 million supports engineering, ma economic assumption increase (\$0.103 million).	anufacturing, development and test of the Combata	ant Craft Medium (CCM) (\$6.305 million) and an
Schedule: Contracts awarded for CCM to Oregon Iron Works Awards protested to Government Accountability Office (GAO)		e, Inc, (USMI), Gulfport, MS, September 2011.
Technical: None.		

PE 1160484BB: SOF Surface Craft
United States Special Operations Command

Exhibit R-2A, RDT&E Project Ju	xhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command											
APPROPRIATION/BUDGET AC 0400: Research, Development, T BA 7: Operational Systems Deve	est & Evaluation						raft Advance	d Systems				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
S1684: SOF Surface Craft Advanced Systems	18.953	14.475	8.573	-	8.573	5.917	-	-	-	0.000	47.918	
Quantity of RDT&E Articles												

#### A. Mission Description and Budget Item Justification

This project provides for engineering and manufacturing development, and operational systems development of light, medium, and heavy surface combatant craft and selected items of specialized equipment to meet the unique requirements of Special Operations Forces (SOF). This project also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to quickly respond to new requirements for surface craft and equipment, such as the light and heavy combatant crafts that are currently being studied in the Joint Capabilities Integration Development System process. The craft capabilities and unique equipment provide small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions. Sub-projects include:

- The Combatant Craft Medium (CCM) sub-project provides a family of next generation combatant craft to replace the current rigid inflatable boat (RIB) and the MKV. One version of these craft will be a reconfigurable, multi-mission surface tactical mobility craft with a primary mission of insertion and extraction of SOF in a medium threat environment. It will incorporate additional performance capabilities above current platform capabilities such as shock mitigation, low observability, improved maneuverability and SOF warfighting capabilities required to operate in future threat environments. Other variants of craft will be developed to support foreign security assistance missions and operations in low or permissive threat environments. These variants are dependent on the threat environment, training requirement, or mission.
- The Combatant Craft Heavy (CCH) sub-project represents a family of solutions that will provide engineering support for design and specification of a development combatant craft for movement and maneuver of SOF personnel. Requirements include maneuverability, reduced detectability with enhanced shock mitigation, and human systems integration.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Combatant Craft Medium	18.953	13.620	8.573
FY 2011 Accomplishments: Completed source selection, awarded contracts, and initiated development of components and test articles (advanced prototypes).			
FY 2012 Plans: Build and test components and test articles.			
FY 2013 Plans:			

PE 1160484BB: SOF Surface Craft **United States Special Operations Command**  UNCLASSIFIED Page 3 of 8

R-1 Line #271

Volume 5 - 955

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States Special Operations Command  DATE: February 2012								
APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT								
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160484BB: SOF Surface Craft	S1684: SOF Surface Craft Advanced Systems						
BA 7: Operational Systems Development								

		1	
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Completes build and contractor testing; delivers and conducts operational testing of test articles.			
Title: Combatant Craft Heavy	-	0.855	-
FY 2012 Plans:			
Conduct risk reduction activities, develop documentation for a replacement combatant craft and refine requirements.			
Accomplishments/Planned Programs Subtotals	18.953	14.475	8.573

#### C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
• PROC1: SOF COMBATANT	8.260	70.899	42.348		42.348	43.860	50.085	23.097	23.170	87.852	349.571
CRAFT SYSTEMS											

### D. Acquisition Strategy

- Combatant Craft Medium acquisition strategy is a competition using a two-phase source selection process. Phase I involves a Small Business Set-Aside competition for two or more companies to design, build and deliver test articles. Phase II selects a single company to provide a fully integrated baseline craft system for test and evaluation with options for production, engineering support and contractor logistic support. Acquisition strategies for other craft may be based on the rapid acquisition of available non-developmental commercial-off-the-shelf/government-off-the-shelf craft.
- Combatant Craft Heavy acquisition strategy is to complete the initial planning and studies for the craft, which will be performed in-house with some support from other government agencies or existing contract services.

#### **E. Performance Metrics**

N/A

PE 1160484BB: SOF Surface Craft United States Special Operations Command

UNCLASSIFIED
Page 4 of 8

R-1 Line #271

Volume 5 - 956

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160484BB: SOF Surface Craft

S1684: SOF Surface Craft Advanced Systems

**DATE:** February 2012

BA 7: Operational Systems Development

Product Development (\$ in Millions)			FY 2	2012	FY 2013 FY 2013 Base OCO		FY 2013 Total						
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Combatant Craft Medium	C/Various	USMI / OIW:Gulfprort, MS / Clackamas, OR	15.917	12.061	Sep 2012	3.833	Jul 2013	-		3.833	2.500	34.311	
Prior Year Funding	C/Various	Various:Various	19.514	-		-		-		-	0.000	19.514	
		Subtotal	35.431	12.061		3.833		-		3.833	2.500	53.825	

Test and Evaluation (\$	Test and Evaluation (\$ in Millions)			FY 2	2012	FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Combatant Craft Medium	MIPR	NSWC / TBD:Norfolk, VA / TBD	0.244	0.244	Aug 2012	3.340	Aug 2013	-		3.340	2.113	5.941	
Combatant Craft Heavy	WR	TBD:TBD	-	0.180	Jun 2012	-		-		-	0.000	0.180	
Prior Year Funding	C/Various	Various:Various	1.273	-		-		-		-	0.000	1.273	
		Subtotal	1.517	0.424		3.340		-		3.340	2.113	7.394	

Management Services (\$ in Millions)				FY 2	2012	FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Combatant Craft Medium	C/Various	NSWC,:Norfolk, VA	3.378	0.220	Mar 2012	0.230	Mar 2013	-		0.230	0.230	4.058	
Combatant Craft Medium	C/Various	NSWC:Crane, IN	-	0.125	Mar 2012	0.150	Mar 2013	-		0.150	0.150	0.425	
Combatant Craft Medium	C/Various	Global Battlestaff & Program Support:MacDill AFB, FL	-	0.970	May 2012	1.020	May 2013	-		1.020	0.850	2.840	
Combatant Craft Heavy	C/Various	TBD:TBD	-	0.675	Mar 2012	-		-		-	0.000	0.675	
Prior Year Funding	C/Various	Various:Various	1.128	-		-		-		-	0.000	1.128	
		Subtotal	4.506	1.990		1.400		-		1.400	1.230	9.126	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOI	MENCLATURE	PROJECT						
0400: Research, Development, Test & Evaluation, Defen BA 7: Operational Systems Development	se-Wide	PE 1160484B	AABB: SOF Surface Craft S1684: SOF Surface Craft Advance					Advanced .	Systems
	Total Prior Years		FY 2013	FY 201	3 FY	2013	Cost To		Target Value of

	Total Prior Years Cost	FY 2	FY 2 2012 Ba		2013 FY 2013 CO Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	41.454	14.475	8.573	-	8.573	5.843	70.345	

Remarks

PE 1160484BB: *SOF Surface Craft*United States Special Operations Command

**DATE:** February 2012

**DATE:** February 2012 Exhibit R-4, RDT&E Schedule Profile: PB 2013 United States Special Operations Command APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** 0400: Research, Development, Test & Evaluation, Defense-Wide PE 1160484BB: SOF Surface Craft S1684: SOF Surface Craft Advanced Systems

BA 7: Operational Systems Development

		FY	2011	011 FY 2012				FY 2013			FY 2014				FY 2015		FY 2016				FΥ	201	7					
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Combatant Craft Medium					,			,										,								,	,	
Proposals, Source Selection & Contract Award																												
Build Competitive Prototypes																												
Developmental Test/Operational Test																												_
Final Downselect																												
Low Rate Initial Production																												
Operational Evaluation																												
Initial Operational Capability																												
Combatant Craft Heavy																												
Risk Reduction Activities																												

Exhibit R-4A, RDT&E Schedule Details: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 1160484BB: SOF Surface Craft

**PROJECT** 

S1684: SOF Surface Craft Advanced Systems

**DATE:** February 2012

# Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Combatant Craft Medium					
Proposals, Source Selection & Contract Award	1	2011	4	2011	
Build Competitive Prototypes	1	2012	4	2013	
Developmental Test/Operational Test	4	2013	1	2014	
Final Downselect	3	2013	4	2013	
Low Rate Initial Production	1	2014	4	2014	
Operational Evaluation	1	2015	2	2015	
Initial Operational Capability	2	2015	2	2015	
Combatant Craft Heavy					
Risk Reduction Activities	3	2012	1	2013	

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160488BB: Military Information Support Operations (MISO) (Formerly SOF PSYOP)

**DATE:** February 2012

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	4.109	2.990	-	-	-	-	-	-	-	0.000	7.099
D476: Military Information Support Operations	4.109	2.990	-	-	-	-	-	-	-	0.000	7.099

#### A. Mission Description and Budget Item Justification

Beginning in FY2012, Program Element 1160488BB was renamed Military Information Support Operations (MISO). Former name was SOF PSYOP.

The Military Information Support Operations (MISO) program element provides for the development, test and integration of MISO equipment. MISO are planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately, the behavior of foreign governments, organizations, groups, and individuals. This program element funds transformational systems and equipment to conduct MISO in support of combatant commanders.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	4.193	2.990	<u>-</u>	-	-
Current President's Budget	4.109	2.990	-	-	-
Total Adjustments	-0.084	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	0.041	-			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-0.104	-			
Other Adjustments	-0.021	-	-	-	-

# **Change Summary Explanation**

Funding:

FY 2011: Net decrease of \$0.084 million due to reprogramming to higher command priorities (\$0.041 million), economic assumption reductions (-\$0.021 million), and a transfer to Small Business Innovative Research (-\$0.104 million).

FY 2012: None.

PE 1160488BB: *Military Information Support Operations (MISO) (Fo...* United States Special Operations Command

UNCLASSIFIED

Page 1 of 5 R-1 Line #272

thibit R-2, RDT&E Budget Item Justification: PB 2013 United Sta	ates Special Operations Command	<b>DATE:</b> February 2012
PPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	·
00: Research, Development, Test & Evaluation, Defense-Wide 7: Operational Systems Development	PE 1160488BB: Military Information Support	Operations (MISO) (Formerly SOF PSYOP)
FY 2013: N/A.		
Schedule: None.		
Technical: None.		

PE 1160488BB: *Military Information Support Operations (MISO) (Fo...* United States Special Operations Command

UNCLASSIFIED Page 2 of 5

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Unite	d States Sp	ecial Operat	ions Comma	ınd		<b>DATE</b> : February 2012					
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop	Vide	PE 116048	NOMENCLA 8BB: Military (MISO) (For	Information		PROJECT D476: Military Information Support Operations							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
D476: Military Information Support Operations	4.109	2.990	-	-	-	-	-	-	-	0.000	7.099		

#### A. Mission Description and Budget Item Justification

Quantity of RDT&E Articles

This project provides for the development and acquisition of Military Information Support Operations (MISO) equipment. MISO are planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately, the behavior of foreign governments, organizations, groups, and individuals. This project funds transformational systems and equipment to conduct MISO in support of combatant commanders. The MISO sub-projects funded are grouped by the level of organization they support. Sub-projects include:

- The MISO Broadcast System consists of fixed and deployable multi-media production facilities for radio and television programming, distribution systems, and dissemination systems to provide MISO support to theater commanders. This program is comprised of several interfacing systems that can stand alone or interoperate with other MISO systems as determined by mission requirements. This program includes the fixed site media production center; a lightweight, deployable media production capability; a distribution system that provides a product distribution link to systems worldwide; a media system; a transit case fly-away broadcast systems that consists of a combination of amplitude modulation (AM), frequency modulation (FM), shortwave (SW), and television (TV) transmitters, and radio/TV production systems; software defined radio and a long range broadcast system which transmits analog and digital broadcasts. The long range broadcast system will include unmanned aerial vehicle payloads, scatterable media, telephony, and Internet broadcast. MISO media displays will consist of easily transportable, state of the art, electronic media displays designed to disseminate and direct broadcast electronic messages, which will influence foreign target audiences, and will support the MISO direct broadcast mission requirements. The Special Operations Media System-B is a tactical deployable radio and television broadcast system. It is designed to act as the forward deployed broadcast platform of products. It has limited production capabilities and consists of two independent systems: a mobile radio broadcast system (AM, FM, SW) and a mobile television broadcast system (VHF, UHF) capable of receiving audio and video products for broadcasting. Additionally, lightweight and tactical media development work stations will allow soldiers to produce MISO products in deployed locations.
- Commando Solo: Commando Solo supports combat operations by flying broadcast missions for the purpose of broadcasting analog and digital radio and/or television signals deep into denied territory. These broadcasts are made from EC-130J aircraft that are equipped with high powered transmitters and large antenna arrays that operate in the 0.45 1,000 MHz frequency range. The Commando Solo program acquisition strategy includes conducting engineering analyses to develop digital broadcast capabilities for the EC-130J and C-130J aircraft. Commando SOLO will leverage development and hardware from the Fly-Away Broadcast System.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: MISO Broadcast System	3.909	2.990	-
FY 2011 Accomplishments:			

PE 1160488BB: *Military Information Support Operations (MISO) (Fo...* United States Special Operations Command

UNCLASSIFIED
Page 3 of 5

R-1 Line #272

Volume 5 - 963

Exhibit R-2A, RDT&E Project Justification: PB 2013 United States S		DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160488BB: Military Information Support	D476: Milita	ary Information Support Operations
BA 7: Operational Systems Development	Operations (MISO) (Formerly SOF PSYOP)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Continued primary hardware development, systems engineering, and DT&E on the long range broadcast technology, broadcast modernization efforts and media displays.			
FY 2012 Plans: Continues primary hardware development, systems engineering, and DT&E on the long range broadcast technology, broadcast modernization efforts and media displays.			
Title: EC-130J Commando Solo	0.200	-	-
FY 2011 Accomplishments: Completed engineering study of government and commercial digital broadcast technologies applicable to MISO.			
Accomplishments/Planned Programs Subtotals	4.109	2.990	-

## C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	<b>Complete</b>	<b>Total Cost</b>
PROC1: Military Information	20.331	4.142	27.417		27.417	14.471	12.690	14.752	14.352	Continuing	Continuing
Support Operations Systems											

# D. Acquisition Strategy

- MISO Broadcast System consists of wide-area systems providing radio, television programming and multi-media production, distribution and dissemination support to the theater commander. This system is comprised of several interfacing systems that can stand alone or interoperate with other systems as determined by mission requirements. These various sub-programs are in a post-Milestone C or various stages of milestone decisions. Media displays consist of electronic media displays, modular systems, electronic paper, and electronic games. The program acquires and modifies, as necessary, commercial off-the-shelf /government off-the-shelf COTS/GOTS systems and equipment to provide the system capabilities.
- Commando Solo funds modifications of the Commando Solo special mission equipment that broadcasts television and radio messages to target audiences in denied areas. Enhancements are periodically required to meet theater commander operational requirements and maintain compatibility with forces equipment upgrades to allow in-flight receipt of products for dissemination. The program acquires and integrates into the EC-130J commercial and GOTS systems to replace or enhance current system capabilities and address equipment shortfalls due to obsolescence.

#### **E. Performance Metrics**

N/A

PE 1160488BB: *Military Information Support Operations (MISO) (Fo...* United States Special Operations Command

UNCLASSIFIED
Page 4 of 5

R-1 Line #272

Volume 5 - 964

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**DATE:** February 2012

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 7: Operational Systems Development

PE 1160488BB: Military Information Support Operations (MISO) (Formerly SOF PSYOP)

D476: Military Information Support Operations

<b>Product Development</b>	oduct Development (\$ in Millions)			FY 2012			2013 ise		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
MISO Broadcast System	C/Various	Various:Various	18.398	2.990	Mar 2012	-		-		-	0.000	21.388	
Prior Year Funding - Completed Efforts	Various	Various:Various	11.271	-		-		-		-	0.000	11.271	
		Subtotal	29.669	2.990		-		-		-	0.000	32.659	
	Total Prior Years Cost		FY 2	012		2013 Ise		2013 CO	FY 2013 Total	Cost To	Total Cost	Target Value of Contract	
		Project Cost Totals	29.669	2.990		-		-		-	0.000	32.659	

Remarks



# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



# **Washington Headquarters Service**

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide



Washington Headquarters Service • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 97
Program Element Table of Contents (by Budget Activity then Line Item Number)	.Volume 5 - 98
Program Element Table of Contents (Alphabetically by Program Element Title)	.Volume 5 - 98
Exhibit R-2's	Volume 5 - 98



# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Research, Development, Test & Eval, DW	277	167		167
Total Research, Development, Test & Evaluation	277	167		167

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Research, Development, Test & Eval, DW	104		104
Total Research, Development, Test & Evaluation	104		104

#### Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
RDT&E Management Support	277	167		167
Total Research, Development, Test & Evaluation	277	167		167
Summary Recap of FYDP Programs				
Research and Development	8			
Administration and Associated Activities	269	167		167
Total Research, Development, Test & Evaluation	277	167		167

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 OCO	FY 2013 Total
RDT&E Management Support	104		104
Total Research, Development, Test & Evaluation	104		104
Summary Recap of FYDP Programs			
Research and Development			
Administration and Associated Activities	104		104
Total Research, Development, Test & Evaluation	104		104

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
RDT&E Management Support	277	167		167
Total Research, Development, Test & Evaluation	277	167		167
Summary Recap of FYDP Programs				
Research and Development	8			
Administration and Associated Activities	269	167		167
Total Research, Development, Test & Evaluation	277	167		167

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 OCO	FY 2013 Total
RDT&E Management Support	104		104
Total Research, Development, Test & Evaluation	104		104
Summary Recap of FYDP Programs			
Research and Development			
Administration and Associated Activities	104		104
Total Research, Development, Test & Evaluation	104		104

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Washington Headquarters Services	277	167		167
Total Research, Development, Test & Evaluation	277	167		167

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation	FY 2013 Base	FY 2013 FY 2013 OCO Total
Washington Headquarters Services	104	104
Total Research, Development, Test & Evaluation	104	104

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

02 Feb 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program								S
Line	Element				FY 2011	FY 2012	FY 2012	FY 2012	е
No	Number	Item		Act	Actuals	Base	oco	Total	C
									-
155	0605502D8W Small	Business Innovative Researc	h	06	8				U
183	0901598D8W Manage	ement Headquarters WHS		06	269	167		167	U
	RDT&E Manage	ement Support			277	167		167	
		THE TANK DATE OF STREET AND THE PROPERTY.							
Tota.	Research, Develo	opment, Test & Eval, DW			277	167		167	

R-1C: FY 2013 President's Budget (Published Version), as of February 2, 2012 at 06:46:30

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

02 Feb 2012

Appropriation: 0400D Research, Development, Test & Eval, DW

Line	Program Element			FY 2013	FY 2013	FY 2013	S e
No	Number	Item	Act	Base	OCO	Total	C
							-
155	0605502D8W	Small Business Innovative Research	06				U
183	0901598D8W	Management Headquarters WHS	06	104		104	U
	RDT&E	Management Support		104		104	
Tota	l Research,	Development, Test & Eval, DW		104		104	

R-1C: FY 2013 President's Budget (Published Version), as of February 2, 2012 at 06:46:30

Washington Headquarters Service • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (by Budget Activity then Line Item Number)**

Budget Activity 06: RDT&E Management Support

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line Item	Budget Activity	y Program Element Number	Program Element Title Pag	je
157	06	0605502D8W	Small Business Innovative Research	55
183	06	0901598D8W	IT Software Development InitiativesVolume 5 - 98	7



Washington Headquarters Service • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
IT Software Development Initiatives	0901598D8W	183	06Volume 5 - 987
Small Business Innovative Research	0605502D8W	157	06Volume 5 - 985



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Washington Headquarters Service

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0605502D8W: Small Business Innovative Research

BA 6: RDT&E Management Support

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.008	-	-	-	-	-	-	-	-	Continuing	Continuing
948: Small Business Innovative Research	0.008	-	-	-	-	-	-	-	-	Continuing	Continuing

## A. Mission Description and Budget Item Justification

Establishment of WHS Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) Program

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	0.008	-	-	-	-
Total Adjustments	0.008	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	0.008	-			

Exhibit R-2A, RDT&E Project Jus	tification: PB	2013 Washington H	eadquarters S	ervice				DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTI	VITY		R-1 ITEM I	NOMENCLA	TURE		PROJECT			
0400: Research, Development, Tes BA 6: RDT&E Management Suppo	0400: Research, Development, Test & Evaluation, Defense-Wide					nnovative	948: Small Business Innovative Research			earch
Brt of the rail management cappe	<u> </u>		Research							
COST (¢ in Millions)	3 FY 2013	FY 2013					Cost To			

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
948: Small Business Innovative Research	0.008	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

# A. Mission Description and Budget Item Justification

Establishment of WHS SBIR/STTR

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Small Business Innovative Research and Small Business Technology Transfer Program	0.008	-	-
Description: Establishment of WHS SBIR/STTR			
FY 2011 Accomplishments: Establishment of WHS SBIR/STTR			
Accomplishments/Planned Programs Subtotals	0.008	-	-

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

N/A

# E. Performance Metrics

SBIR/STTR

PE 0605502D8W: Small Business Innovative Research Washington Headquarters Service

UNCLASSIFIED Page 2 of 2

R-1 Line #157

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Washington Headquarters Service

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0901598D8W: IT Software Development Initiatives

BA 6: RDT&E Management Support

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.269	0.167	0.104	-	0.104	0.107	0.103	0.097	0.099	Continuing	Continuing
945: 945 Miscellaneous IT Initiative	0.269	0.167	0.104	-	0.104	0.107	0.103	0.097	0.099	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Washington Headquarters Services (WHS) Information Technology (IT) program provides ongoing research, test, development and enhancement initiatives for the Office of the Secretary of Defense (OSD), OSD Principal Staff Assistants, and WHS Directorates. Ongoing initiatives include enterprise storage testing, enterprise performance and productivity analysis, enterprise/business applications development and enhancements, operational support enhancements, and information assurance testing and development.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	0.278	0.167	0.103	-	0.103
Current President's Budget	0.269	0.167	0.104	-	0.104
Total Adjustments	-0.009	-	0.001	-	0.001
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-0.008	-			
<ul> <li>other program adjustments</li> </ul>	-0.001	-	0.001	-	0.001

# **Change Summary Explanation**

Enterprise Information Technology Services Directorate (EITSD) reflects the merger of OSD Networks (OSD NET) and Information Technology Management Directorate (ITMD). The consolidation of services will reduce overhead, flatten and streamline hierarchy along with combining or eliminating repetitive or overlapping functions.

PE 0901598D8W: *IT Software Development Initiatives* Washington Headquarters Service

UNCLASSIFIED
Page 1 of 3

R-1 Line #183

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2013 Wash	nington Head	dquarters Se	rvice				<b>DATE:</b> Febi	uary 2012	
APPROPRIATION/BUDGET ACTIV	PPROPRIATION/BUDGET ACTIVITY							PROJECT			
0400: Research, Development, Test	Vide	PE 0901598	8D8W: <i>IT So</i>	ftware Deve	lopment	945: 945 Miscellaneous IT Initiative					
BA 6: RDT&E Management Support		Initiatives									
COST (\$ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ III WIIIIOTIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
945: 945 Miscellaneous IT Initiative	0.104	-	0.104	0.107	0.103	0.097	0.099	Continuing	Continuing		
Quantity of RDT&E Articles											

### Note

The WHS RDT&E efficiency is in compliance with the SecDef established Defense Efficiency Task Force Directive to achieve additional efficiencies. WHS conducted a detailed review of its accounts and has identified additional efficiencies by combining two Information Technology (IT) directorates (OSD Net and ITMD) into Enterprise Information Technology Services Directorate (EITSD).

## A. Mission Description and Budget Item Justification

R Accomplishments/Planned Programs (\$ in Millions)

P945 – Miscellaneous IT Initiative - The WHS provides various IT support for the OSD and throughout the Field Activity to align electronic processes and to ensure efficiency by implementing several miscellaneous IT initiatives.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Enterprise Information Technology Services Directorate (EITSD) IT Cost Model and Analysis	0.175	_	-
FY 2011 Accomplishments:  Complete the development and implementation of the IT Total Cost Ownership (TCO) model with an expected model delivered by the end of FY 2011. Expected deliverables include a finalized TCO analysis model, TCO formulas used to calculate major cost categories (e.g., hardware, software, operations, labor by portfolio, labor by service area, etc.), a final report with an executive summary, an analysis of OSD & WHS IT infrastructure costs compared to 2010 government benchmarks and industry recommendations regarding potential cost savings for 2012 and beyond.			
Title: Certification and Accreditation	0.094	0.167	0.104
FY 2011 Accomplishments: Full-scope Certification and Accreditation Support for the Sec Def Comms (SDC) program including Trusted Thin Clients for SDC. Additional tasks also include Department of Defense Information Assurance Certification and Accreditation Process (DIACAP), Situational Awareness support, External Reporting, Configuration Control, and Workforce Improvement Program support.			
FY 2012 Plans: Full-scope Certification and Accreditation Support for the SDC program including Trusted Thin Clients for SDC. Additional tasks also include DIACAP, Situational Awareness support, External Reporting, Configuration Control, and Workforce Improvement Program support.			
FY 2013 Plans:			

PE 0901598D8W: *IT Software Development Initiatives* Washington Headquarters Service

UNCLASSIFIED Page 2 of 3

R-1 Line #183

Volume 5 - 988

EV 2011 EV 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Washington Headquarters Service			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	-

0400: Research, Development, Test & Evaluation, Defense-Wide PE 0901598D8W: IT Software Development

BA 6: RDT&E Management Support Initiatives 945: 945 Miscellaneous IT Initiative

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Full-scope Certification and Accreditation Support for the SDC program including Trusted Thin Clients for SDC. Additional tasks also include DIACAP, Situational Awareness support, External Reporting, Configuration Control, and Workforce Improvement Program support.			
Accomplishments/Planned Programs Subtotals	0.269	0.167	0.104

# C. Other Program Funding Summary (\$ in Millions)

N/A

# **D. Acquisition Strategy**

Not applicable for this item

### **E. Performance Metrics**

Implement TCO model and complete cost analysis and benchmarking by January 2012.

Identify cost savings by March 2012.

Obtain National Security Agency (NSA) certification to implement cross domain access architecture by end of FY 2012

Ninety (90) percent of thin client devices will be certified and accredited in FY 2013



# Department of Defense Fiscal Year (FY) 2013 President's Budget Submission

February 2012



# **Operational Test and Evaluation, Defense**

Justification Book Volume 5

Operational Test and Evaluation, Defense

OT&E



Operational Test and Evaluation, Defense • President's Budget Submission FY 2013 • RDT&E Program

# **Volume 5 Table of Contents**

Comptroller Exhibit R-1	Volume 5 - 995
Program Element Table of Contents (by Budget Activity then Line Item Number)	Volume 5 - 1003
Program Element Table of Contents (Alphabetically by Program Element Title)	Volume 5 - 1005
Exhibit R-2's	Volume 5 - 1007



# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Appropriation	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Operational Test & Eval, Defense	192,094	188,037		188,037
Total Research, Development, Test & Evaluation	192,094	188,037		188,037

R-1C: FY 2013 President's Budget (Published Version), as of January 24, 2012 at 14:54:22

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

	FY 2013 FY 2013	FY 2013
Appropriation	Base OCO	Total
Operational Test & Eval, Defense	185,268	185,268
Total Research, Development, Test & Evaluation	185,268	185,268

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
RDT&E Management Support	192,094	188,037		188,037
Total Research, Development, Test & Evaluation	192,094	188,037		188,037
Summary Recap of FYDP Programs				
Research and Development	192,094	188,037		188,037
Total Research, Development, Test & Evaluation	192,094	188,037		188,037

# Department of Defense FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Summary Recap of Budget Activities	FY 2013 FY 2013 Base OCO	FY 2013 Total
DDWG Nagarana Guarant	337777777777777	
RDT&E Management Support  Total Research, Development, Test & Evaluation	185,268 185,268	185,268 185,268
rocal Research, Severophene, rese a Evaluation	103,200	103,200
Summary Recap of FYDP Programs		
Research and Development	185,268	185,268
Total Research, Development, Test & Evaluation	185,268	185,268

R-1C: FY 2013 President's Budget (Published Version), as of January 24, 2012 at 14:54:22

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

24 Jan 2012

Summary Recap of Budget Activities	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
RDT&E Management Support		188,037		188,037
Total Research, Development, Test & Evaluation	192,094	188,037		188,037
Summary Recap of FYDP Programs				
Research and Development	192,094	188,037		188,037
Total Research, Development, Test & Evaluation	192,094	188,037		188,037

# Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority (Dollars in Thousands)

24 Jan 2012

Summary Recap of Budget Activities	FY 2013 Base	FY 2013 OCO	FY 2013 Total
RDT&E Management Support	185,268		185,268
Total Research, Development, Test & Evaluation	185,268		185,268
Summary Recap of FYDP Programs			
Research and Development	185,268		185,268
Total Research, Development, Test & Evaluation	185,268		185,268

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

al Obligational Authority 24 Jan 2012 (Dollars in Thousands)

Appropriation: 0460D Operational Test & Eval, Defense

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	s e c
~ -		9122						-
1	06051180TE Opera	tional Test and Evaluation	06	59,125	60,444		60,444	U
2	06051310TE Live	Fire Test and Evaluation	06	12,834	12,126		12,126	U
3	06058140TE Opera	tional Test Activities and Analyses	06	120,135	115,467	*********	115,467	U
	RDT&E Manage	ement Support		192,094	188,037		188,037	
Tota	l Operational Tes	t & Eval, Defense		192,094	188,037		188,037	

R-1C: FY 2013 President's Budget (Published Version), as of January 24, 2012 at 14:54:22

### Defense-Wide FY 2013 President's Budget Exhibit R-1 FY 2013 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0460D Operational Test & Eval, Defense

	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	S e c
	Number	7222	ACC	base	000	TOTAL	
		ational Test and Evaluation	06	72,501		72,501	υ
2	06051310TE Live	Fire Test and Evaluation	06	49,201		49,201	U
3	_	ational Test Activities and Analyses	06	63,566  185,268		63,566  185,268	U
Total		st & Eval, Defense		185,268	*******	185,268	

R-1C: FY 2013 President's Budget (Published Version), as of January 24, 2012 at 14:54:22

24 Jan 2012

Operational Test and Evaluation, Defense • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (by Budget Activity then Line Item Number)**

Budget Activity 06: RDT&E Management Support

Appropriation 0460: Operational Test and Evaluation, Defense

Line Item	Budget Activity	Program Element Number	Program Element Title Page
1	06	0605118OTE	Operational Test and Evaluation
2	06	0605131OTE	Live Fire Test and Evaluation
3	06	0605814OTE	Operational Test Activities and Analyses



Operational Test and Evaluation, Defense • President's Budget Submission FY 2013 • RDT&E Program

# **Program Element Table of Contents (Alphabetically by Program Element Title)**

Program Element Title	Program Element Number	Line Item	Budget Activity Page
Live Fire Test and Evaluation	0605131OTE	2	06Volume 5 - 1013
Operational Test Activities and Analyses	0605814OTE	3	06Volume 5 - 1021
Operational Test and Evaluation	0605118OTE	1	06Volume 5 - 1007



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Operational Test and Evaluation, Defense

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0460: Operational Test and Evaluation, Defense

PE 0605118OTE: Operational Test and Evaluation

BA 6: RDT&E Management Support

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	59.125	60.444	72.501	-	72.501	73.546	75.620	78.232	80.688	Continuing	Continuing
0605118OTE: Operational Test and Evaluation	59.125	60.444	72.501	-	72.501	73.546	75.620	78.232	80.688	Continuing	Continuing

### Note

As a result of the Department's recognition of the importance of enhanced cyber assessment capabilities, additional resources were added in fiscal year 2013.

### A. Mission Description and Budget Item Justification

The Director of Operational Test and Evaluation (DOT&E) was created by Congress in 1983. The Director is responsible under Title 10 for policy and procedures for all aspects of Operational Test and Evaluation (OT&E) within the Department of Defense (DoD). Particular focus is given to OT&E that supports major weapon system production decisions for acquisition programs included on the Office of Secretary of Defense Test and Evaluation Oversight List that is prepared and approved annually. Generally, there are about 300 programs on the oversight list including all Major Defense Acquisition Programs (MDAP) and Major Automated Information Systems (MAIS). MDAPs may not proceed beyond low-rate initial production (BLRIP) until OT&E of the program is complete. DOT&E is involved early in the planning phase of each program to ensure adequate testing is planned and executed. Key elements of DOT&E's oversight authority include:

- The approval of component Test and Evaluation Master Plans (TEMPS).
- The approval of component OT&E Test Plans.
- Oversight of Military Department preparation and conduct of field operational tests; analysis and evaluation of the resultant test data; the assessment of the adequacy of the executed test and evaluation programs; and assessment of the operational effectiveness and suitability of the weapon systems.
- Reporting results of OT&E that support BLRIP decisions to the Secretary of Defense and Congress, as well as providing an annual report summarizing all OT&E activities and the adequacy of test resources within DoD during the previous fiscal year.

DOT&E also oversees and resources OT&E community efforts to plan and execute joint operational evaluations of information assurance and interoperability of fielded systems and networks during major Combatant Command (COCOM) and Service exercises, and reports the trends and findings in the annual report. As a result of the Department's recognition of the importance of enhanced cyber assessment capabilities, additional resources were added in fiscal year 2013. These enhancements will include expanded threat assessments of the advanced cyber adversary, more representative portrayal of the cyber adversary by Red Teams, and improvements to the Joint Information Operations Range that will support more operationally realistic and threat representative assessment and training events.

This Program Element includes funds to obtain Federally Funded Research and Development Center (FFRDC) support in performing the described tasks, travel funds to carry out oversight of the OT&E program, funds for Service teams performing information assurance and interoperability assessments during exercises, administrative and financial support services, and engineering and technical support services related to the conduct of operational test and evaluation.

PE 0605118OTE: Operational Test and Evaluation Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 1 of 6

R-1 Line #1

Volume 5 - 1007

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Operational Test and Evaluation, Defense

R-1 ITEM NOMENCLATURE

0460: Operational Test and Evaluation, Defense

PE 0605118OTE: Operational Test and Evaluation

BA 6: RDT&E Management Support

APPROPRIATION/BUDGET ACTIVITY

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	59.430	60.444	62.695	-	62.695
Current President's Budget	59.125	60.444	72.501	-	72.501
Total Adjustments	-0.305	-	9.806	-	9.806
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Congressional General Reductions</li> </ul>	-0.305	-	-	-	-
<ul> <li>Progam Realignment/Adjustments</li> </ul>	-	-	1.956	-	1.956
Cyber Enhancement Capabilities	-	-	7.850	-	7.850

# **Change Summary Explanation**

As a result of the Department's recognition of the importance of enhanced cyber assessment capabilities, additional resources (\$7.850 million) were added in fiscal year 2013.

PE 0605118OTE: *Operational Test and Evaluation* Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 2 of 6

R-1 Line #1

Volume 5 - 1008

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test and Evaluation, Defense DATE: February 2012											
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605118OTE: Operational Test and Evaluation				PROJECT 0605118OTE: Operational Test and Evaluation			
COST (\$ in Millions) FY 2011 FY 2012 Base				FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0605118OTE: Operational Test and Evaluation	59.125	60.444	72.501	-	72.501	73.546	75.620	78.232	80.688	Continuing	Continuing
Quantity of RDT&E Articles											

### A. Mission Description and Budget Item Justification

The Director of Operational Test and Evaluation (DOT&E) was created by Congress in 1983. The Director is responsible under Title 10 for policy and procedures for all aspects of Operational Test and Evaluation (OT&E) within the Department of Defense (DoD). Particular focus is given to OT&E that supports major weapon system production decisions for acquisition programs included on the Office of Secretary of Defense Test and Evaluation Oversight List that is prepared and approved annually. Generally, there are about 300 programs on the oversight list including all Major Defense Acquisition Programs (MDAP) and Major Automated Information Systems (MAIS). MDAPs may not proceed beyond low-rate initial production (BLRIP) until OT&E of the program is complete. DOT&E is involved early in the planning phase of each program to ensure adequate testing is planned and executed. Key elements of DOT&E's oversight authority include:

- The approval of component Test and Evaluation Master Plans (TEMPS).
- The approval of component OT&E Test Plans.
- Oversight of Military Department preparation and conduct of field operational tests; analysis and evaluation of the resultant test data; the assessment of the adequacy of the executed test and evaluation programs; and assessment of the operational effectiveness and suitability of the weapon systems.
- Reporting results of OT&E that support BLRIP decisions to the Secretary of Defense and Congress, as well as providing an annual report summarizing all OT&E activities and the adequacy of test resources within DoD during the previous fiscal year.

DOT&E also oversees and resources OT&E community efforts to plan and execute joint operational evaluations of information assurance and interoperability of fielded systems and networks during major Combatant Command (COCOM) and Service exercises, and reports the trends and findings in the annual report. As a result of the Department's recognition of the importance of enhanced cyber assessment capabilities, additional resources and emphasis were added in fiscal year 2013. These enhancements will include expanded threat assessments of the advanced cyber adversary, more representative portrayal of the cyber adversary by Red Teams, and improvements to the Joint Information Operations Range that will support more operationally realistic and threat representative assessment and training events.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Operational Test and Evaluation	59.125	60.444	72.501	
FY 2011 Accomplishments: Operational Test and Evaluation Oversight				
This effort is in direct support of the Director's Title 10 responsibilities to conduct independent, rigorous, and comprehensive evaluation of the operational effectiveness and suitability of the Department's weapons programs. Funding for FY 2011 provided				

PE 0605118OTE: Operational Test and Evaluation Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 3 of 6

R-1 Line #1

Volume 5 - 1009

Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Tes	t and Evaluation, Defense		DATE: Fe	bruary 2012			
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJEC	T				
0460: Operational Test and Evaluation, Defense	PE 0605118OTE: Operational Test and	06051180	DTE: Operati	ional Test and	d Evaluation		
BA 6: RDT&E Management Support	Evaluation						
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013		
Operational Test and Evaluation inputs for Test and Evaluation Master Acquisition Executive Summary Reports for those programs designated of DOT&E oversight authority were identified in Calendar Year 2011 Of Oversight List.	I for oversight by DOT&E and OUSD(AT&L). Ke	ey elements					
Information Assurance and Interoperability Evaluations							
Information assurance and interoperability assessments were performe during real-world operations. Warfighter responses to computer network captured in all information assurance events. Portrayal of advanced the assessments were guided by a more rigorous process that includes explict In partnership with Joint Staff J8 (previously the Joint Forces Command and executed with emphasis on the systems and capabilities contained Mix Study. Assessment support to units deploying to theaters of operate enhancements to their network defense postures. Fiscal year 2011 informational formation and pod leadership for their awareness and remediation actions, as apsupported two assessment events for added operational realism and response to the systems.	rk attack (ability to protect, detect, react, and restreats were included in several events. Interoper banded research and linkage to warfighter mission 138), two interoperability assessments were plant in the Joint Forces Command C2 Optimum Caption was completed for four assessments, resultion matter assurance and interoperability evaluations assurance and interoperability evaluations as COCOMs. Critical findings were transmitted to propriate. The Joint Information Operations Rai	tore) were ability on threads. Inned bability ong in ons on Service nge					
FY 2012 Plans: Operational Test and Evaluation Oversight							
This is a continuing effort and is in direct support of the Director's Title 1 Test and Evaluation inputs for Test and Evaluation Master Plans, Test F Executive Summary Reports for those programs designated for oversig Defense for Acquisition, Technology and Logistics (OUSD(AT&L)). Key Calendar Year 2012 Office of the Secretary of Defense Test and Evaluation	Plans, System Acquisition Reports, Defense Acc ht by DOT&E and the Office of the Under Secre relements of DOT&E oversight authority are ide	quisition tary of					
Information Assurance and Interoperability Evaluations							
Approximately 25 information assurance and interoperability assessment and Service exercises. Full assessment of warfighter responses to confrestore) will be captured in all information assurance events. Portrayal most events, in accordance with the CJCS Red Team EXORD, and interesting the captured in	nputer network attack (ability to protect, detect, roughly selected advanced-cyber threats will be included.	eact, and ded in					

PE 0605118OTE: Operational Test and Evaluation Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 4 of 6

R-1 Line #1

Volume 5 - 1010

	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test	and Evaluation, Defense		DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605118OTE: Operational Test and Evaluation	PROJECT 0605118OTE: Operational Test and Evaluate				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013	
threat environments will be examined. In partnership with US CYBER C reflect DIA assessments, and application of these teams will be synchror priorities. In partnership with the Joint Staff J8, focused interoperability with emphasis on the systems and capabilities contained in the C2 Optin units deploying to theaters of operation will continue as needed. Fiscally evaluations will include trend analyses across prior year results, both with transmitted to Service and DoD leadership for their awareness and remed Operations Range will support events across multiple COCOMS for added assessments.	nized across Cyber Command and DOT&E assessments will be planned and executed in two mum Capability Mix Study. Assessment support year 2012 information assurance and interoperathin and across COCOMs. Critical findings will be diation actions, as appropriate. The Joint Information actions.	essment o events to bility be mation				
FY 2013 Plans: Operational Test and Evaluation Oversight						
This is a continuing effort and is in direct support of the Director's Title 10 Test and Evaluation inputs for Test and Evaluation Master Plans, Test P Executive Summary Reports for those programs designated for oversigh Defense for Acquisition, Technology and Logistics (OUSD(AT&L)). Key Calendar Year 2013 Office of the Secretary of Defense Test and Evaluation	lans, System Acquisition Reports, Defense Acquisit by DOT&E and the Office of the Under Secreta elements of DOT&E oversight authority are iden	uisition ary of				
Information Assurance and Interoperability Evaluations						
Approximately 25 information assurance and interoperability assessment and Service exercises. Full assessment of warfighter responses to compand restore) will be captured in all information assurance events. Portratevents, in accordance with the CJCS Red Team EXORD, and interoperate threat environments will be examined. In partnership with US CYBER C reflect DIA assessments, and application of these teams will be synchror priorities. In partnership with the Joint Staff J8, focused interoperability a with emphasis on the systems and capabilities contained in the C2 Optin units deploying to theaters of operation will continue as needed. Fiscally evaluations will include trend analyses across prior year results, both wit transmitted to Service and DoD leadership for their awareness and remed Operations Range with Red Teams portraying advanced cyber adversar added threat realism and required security.	puter network attack (ability to protect, detect, regal of advanced-cyber threats will be included in ability and mission accomplishment in representations of the command, DoD Red Team capabilities will be entized across Cyber Command and DOT&E assessessments will be planned and executed in formum Capability Mix Study. Assessment support year 2013 information assurance and interoperath and across COCOMs. Critical findings will be diation actions, as appropriate. The Information	eact, all ative hanced to essment ur events to bility				

PE 0605118OTE: *Operational Test and Evaluation* Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 5 of 6

R-1 Line #1 Volume 5 - 1011

Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test	DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
0460: Operational Test and Evaluation, Defense	PE 0605118OTE: Operational Test and	0605118OT	E: Operational Test and Evaluation	
BA 6: RDT&E Management Support	Evaluation			

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
As a result of the Department's recognition of the importance of enhanced cyber assessment capabilities, additional resources and emphasis were added in fiscal year 2013. These enhancements will include expanded threat assessments of the advanced cyber adversary, more representative portrayal of the cyber adversary by Red Teams, and improvements to the Joint Information Operations Range that will support more operationally realistic and threat representative assessment and training events.			
Accomplishments/Planned Programs Subtotals	59.125	60.444	72.501

### C. Other Program Funding Summary (\$ in Millions)

N/A

### D. Acquisition Strategy

N/A

### **E. Performance Metrics**

Performance Measure: Percentage of required operational test planning documents, assessments, and reports applicable to acquisition programs on the OSD Test and Evaluation Oversight List and other special interest programs/legacy systems that are completed and delivered to the appropriate decision makers on time.

Actual Performance and Goals:

Operational Test and Evaluation

On-Time Completion Rate FY 2011 (Actual) 94% FY 2012 (Goal) 95% FY 2013 (Goal) 96%

The on-time completion rate was computed on the basis of the number of required products that were submitted within established time standards relative to the total number of such products that fell due during the fiscal year. Products included in the measure include beyond low-rate initial production reports, Test Plans, and Test and Evaluation Master Plans for operational test and evaluation oversight as well as assessment plans, "quick look" reports, and final reports for the information assurance and interoperability testing associated with scheduled test events. DOT&E plans to maintain its on-time completion rates for FY 2012 and FY 2013 through continued management emphasis on timely delivery of required products to customer activities.

PE 0605118OTE: Operational Test and Evaluation Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 6 of 6

R-1 Line #1

Volume 5 - 1012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Operational Test and Evaluation, Defense

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

0460: Operational Test and Evaluation, Defense

PE 0605131OTE: Live Fire Test and Evaluation

BA 6: RDT&E Management Support

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	12.834	12.126	49.201	-	49.201	48.423	49.587	50.255	51.306	Continuing	Continuing
0605131OTE: Live Fire Test and Evaluation	12.834	12.126	49.201	-	49.201	48.423	49.587	50.255	51.306	Continuing	Continuing

### Note

Starting in FY 2013 the increase in funding is the result of the realignment of the JASP and JTCG/ME programs from the Operational Test Activities and Analyses program (0605814OTE) to the Live Fire Test and Evaluation program (0605131OTE).

### A. Mission Description and Budget Item Justification

This Program Element consists of three programs: Live Fire Test and Evaluation, Joint Aircraft Survivability Program (JASP) and Joint Technical Coordinating Group for Munitions Effectiveness (JTCG/ME). Starting in FY 2013 the JASP and JTCG/ME programs are realigned from the Operational Test Activities and Analyses program (0605814OTE) to the Live Fire Test and Evaluation program element (0605131OTE). The JASP and JTCG/ME programs focus on the survivability of currently fielded systems; therefore, the two programs are more appropriately funded within the Live Fire Test and Evaluation program element.

This Program Element directly supports the Congressional statutory requirements for oversight of Live Fire Test and Evaluation (LFT&E). The primary objective of LFT&E is to assure that the vulnerability and survivability of Department of Defense (DoD) crew-carrying platforms and the lethality of our conventional munitions are known and acceptable before entering full-rate production. LFT&E encompasses realistic tests involving actual United States (U.S.) and foreign threat hardware or, if not available, acceptable surrogate threat hardware. The objective is to identify and correct design deficiencies early in the development process. A completed LFT&E program and test report is required before programs proceed beyond low-rate initial production (BLRIP). LFT&E also includes realistic modeling and simulation (M&S) to examine survivability and lethality attributes not assessed during testing.

This Program Element also supports DoD's Joint Live Fire (JLF) Program and other LFT&E related initiatives. JLF was begun in 1984 under an Office of the Secretary of Defense (OSD) charter to test fielded front-line combat aircraft and armor systems for their vulnerabilities as well as fielded weapons, both U.S. and foreign, for their lethalities against their respective targets. Funds are also used to support other initiatives related to quick reaction requests from theater and other areas of personnel survivability.

The Joint Aircraft Survivability Program is the DoD's focal point for joint service enhancement of military aircraft non-nuclear survivability. The JASP is chartered by the commanders of the USN Naval Air Systems Command, USA Aviation and Missile Command and USAF Aeronautical Systems Center to coordinate and conduct RDT&E to improve military aircraft survivability, develop and standardize aircraft survivability modeling and simulation (M&S), facilitate information exchange on aircraft survivability and support aircraft survivability education for the DoD and U.S. aircraft community. Each chartering command provides a senior aircraft survivability expert for the JASP Principal Members Steering Group (PMSG), which guides the program and approves projects for funding. The JASP assesses and reports on combat damage incidents through the Joint Combat Assessment Team (JCAT), is the Executive Agent for the Joint Live Fire Aircraft Systems Program managed by

PE 06051310TE: *Live Fire Test and Evaluation* Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 1 of 7

R-1 Line #2

Volume 5 - 1013

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Operational Test and Evaluation, Defense

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0460: Operational Test and Evaluation, Defense PE 06051310TE: Live Fire Test and Evaluation

BA 6: RDT&E Management Support

the Live Fire Test office of DOT&E and is also an Executive Agent for the Survivability Vulnerability Information Analysis Center (SURVIAC), the repository for aircraft survivability information.

The Joint Logistics Commanders Joint Technical Coordinating Group for Munitions Effectiveness (JTCG/ME) was chartered more than 40 years ago to serve as DoD's focal point for munitions effectiveness information. This has taken the form of widely used Joint Munitions Effectiveness Manuals (JMEMs) which address all major non-nuclear U.S. weapons. JTCG/ME authenticates weapons effectiveness data for use in training, systems acquisition, weapon procurement, and combat modeling and simulation. JMEMs are used by the Armed Forces of the U.S., NATO, and other allies to plan operational missions, support training and tactics development, and support force-level analyses. JTCG/ME also develops and standardizes methodologies for evaluation of munitions effectiveness and maintains databases for target vulnerability, munitions lethality, and weapon system accuracy. The JMEM requirements and development processes continues to be driven by operational lessons learned (Enduring Freedom, Iraqi Freedom, and Odyssey Dawn) and the needs of Combatant Commands, Services, Military Targeting Committee, and Operational Users Working Groups input for specific weapon-target pairings and methodologies.

This program element also includes funds to obtain Federally Funded Research and Development Center (FFRDC) expertise in performing analyses in support of described Live Fire Test and Evaluation tasks, as well as travel funds to carry out the LFT&E programs.

This program element is budgeted in Budget Activity 6, RDT&E Management Support, to support LFT&E management activities for the oversight of RDT&E of new systems, as well as RDT&E of fielded systems.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	<b>FY 2013 Base</b>	FY 2013 OCO	FY 2013 Total
Previous President's Budget	12.899	12.126	11.982	-	11.982
Current President's Budget	12.834	12.126	49.201	-	49.201
Total Adjustments	-0.065	-	37.219	-	37.219
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Congressional General Reductions</li> </ul>	-0.065	-	-	-	-
Program Realignment	-	-	36.925	-	36.925
<ul> <li>Revised Economic Assumptions</li> </ul>	-	-	0.294	-	0.294

# **Change Summary Explanation**

Starting in FY 2013 the increase in funding is the result of the realignment of the JASP and JTCG/ME programs from the Operational Test Activities and Analyses program (0605814OTE) to the Live Fire Test and Evaluation program (0605131OTE).

PE 06051310TE: *Live Fire Test and Evaluation* Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 2 of 7

R-1 Line #2

Volume 5 - 1014

**DATE:** February 2012

Exhibit R-2A, RD1&E Project Just			DAIE: Febr	uary 2012								
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support					R-1 ITEM NOMENCLATURE PE 06051310TE: Live Fire Test and Evaluation				PROJECT 06051310TE: Live Fire Test and Evaluation			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
0605131OTE: Live Fire Test and Evaluation	12.834	12.126	49.201	-	49.201	48.423	49.587	50.255	51.306	Continuing	Continuing	
Quantity of RDT&E Articles												

### A. Mission Description and Budget Item Justification

B Accomplishments/Planned Programs (\$ in Millions)

Fubility D. O.A. DDTOF Business Investigations DD 0040 On authorist Tast and Fusionation Defense

This Program Element consists of three programs: Live Fire Test and Evaluation, Joint Aircraft Survivability Program (JASP) and Joint Technical Coordinating Group for Munitions Effectiveness (JTCG/ME). Starting in FY 2013 the JASP and JTCG/ME programs are realigned from the Operational Test Activities and Analyses program (0605814OTE) to the Live Fire Test and Evaluation program element (0605131OTE). The JASP and JTCG/ME programs focus on the survivability of currently fielded systems; therefore, the two programs are more appropriately funded within the Live Fire Test and Evaluation program element.

B. Accomplishments/Planned Programs (\$\frac{1}{2}\) in Millions)	FY 2011	FY 2012	FY 2013
Title: Live Fire Test and Evaluation	12.834	12.126	49.201
FY 2011 Accomplishments: Live Fire Test and Evaluation Major Test and Evaluation Programs			
The FY 2011 budget provided Live Fire Test and Evaluation input for Test and Evaluation Master Plans, Test Plans, System Acquisition Reports, Defense Acquisition Executive Summary reports, and Beyond Low Rate Initial Production (BLRIP) reports for those programs designated for oversight by DOT&E and OUSD(AT&L). The oversight list is developed and published annually.			
JLF Programs and LFT&E Initiatives			
Conducted tests of fielded systems not previously tested under Air, Land, or Sea Joint Live Fire programs to support DOT&E and warfighter needs. The need for these tests results from systems being exposed to new threats, used in new unanticipated tactics, or being operated in new combat environments, and the subsequent need for an assessment of their performance. Provided support and continued to partner with the Joint Improvised Explosive Device Defeat Organization. Urgent requests directly supporting deployed operators and issues of importance to the Congress in the areas of personnel body armor and combat helmets were addressed. Supported helicopter survivability efforts of the Department to recommend quickly fielded survivability improvements to the combat theater. An initiative to investigate aortic injuries was completed. This initiative was in partnership with OUSD (Personnel and Readiness) and NASA as part of Occupant Casualty initiatives.			
JLF projects continued to be performed to provide survivability data on currently fielded U.S. systems. JLF Air projects investigated vulnerabilities of aircraft to man-portable air defense systems (MANPADS). Projects are updating models and			

PE 06051310TE: *Live Fire Test and Evaluation* Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 3 of 7

R-1 Line #2

Volume 5 - 1015

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DATE: Calamiam, 2012

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	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test	and Evaluation, Defense		DATE: Fe	bruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605131OTE: Live Fire Test and Evaluation	<b>PROJECT</b> 06051310				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013	
simulation to more accurately take into account vulnerabilities to MANPA continued work on large engine vulnerability to MANPADS, including hit Land projects continued investigating the vulnerability of vehicles to new against typical in-theater targets, as well as improving modeling and sim projects continued developing key components of alternatives to tradition investigating ship vulnerabilities in the areas of commercial standards are and compartment fires.	point analyses and miss distance measurements. threats from theater and the lethality of U.S. wea ulation tools by providing validation data. JLF Senal shock trials of ships and submarines and bega	JLF pons a				
FY 2012 Plans: Live Fire Test and Evaluation Major Test and Evaluation Programs						
This is a continuing effort. The FY 2012 budget provides Live Fire Test and Plans, Test Plans, System Acquisition Reports, Defense Acquisition Exerprograms designated for oversight by DOT&E and OUSD(AT&L). The o	nose					
JLF Programs and LFT&E Initiatives						
Conduct tests of fielded systems not previously tested under Air, Land, of operator needs. The need for these tests results from systems being extended or being operated in new combat environments, and the subsequent need continue to support and partner with the Joint Trauma Analysis and Prevefforts in support of Personnel Protection Equipment, including combat by requests that directly support deployed operators and issues of important	tactics, ecessary, ontinue					
Continue to perform JLF projects to provide survivability data on currently investigation of an emerging threat first seen in a CH 47 combat incident engine nacelle vulnerability reduction techniques, as well as generic vulnerams, and the performance of self sealing fuel tanks using bio-fuels. New and missile debris on aircraft vulnerability, the vulnerability of turboproper threats. JLF Land projects will continue to investigate the vulnerability of weapons against typical in-theater targets, as well as improving modeling projects will study the use and validity of manikins, helmets, and improved and simulation. JLF Sea projects will continue to develop key componer	it, test the vulnerability of sponsons to RPGs, evaluate the relationship in the result in the result in the relationship is to all aircraft, such as to MANPADS, so we projects will investigate the effect of yawed project in the project in the project in the relation of commonly used test of vehicles to underbody blast and the lethality of U g and simulation tools by providing validation data aments to material characteristics used in modelin	uate mall ectiles st J.S. a. New				

PE 0605131OTE: *Live Fire Test and Evaluation* Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 4 of 7

R-1 Line #2

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational	Test and Evaluation, Defense		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605131OTE: Live Fire Test and Evaluation	<b>PROJEC</b> 06051310		re Test and E	valuation
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
submarines, will continue to investigate ship vulnerabilities in the are damage, and will investigate vulnerabilities of designs and compone	· · · · · ·	ent			
FY 2013 Plans: Live Fire Test and Evaluation Major Test and Evaluation Programs					
This is a continuing effort. The FY 2013 budget provides Live Fire T Plans, Test Plans, System Acquisition Reports, Defense Acquisition programs designated for oversight by DOT&E and OUSD(AT&L). T	Executive Summary reports, and BLRIP reports for the	nose			
JLF Programs					
Conduct tests of fielded systems not previously tested under Air, Lar warfighter needs. The need for these tests result from systems being or being operated in new combat environments, and the subsequent continue to support and partner with the JTAPIC. Continue initiative support deployed warfighters and issues of importance to the Congression.	tactics, ecessary,				
Joint Aircraft Survivability Program (JASP)					
In FY 2013 the JASP will continue work on at least 29 multi-year RD Principal Members Steering Group and OSD/DOT&E. The JASP wirotorcraft combat survivability. In the area of susceptibility reduction countermeasures, electronic countermeasures technology and technology. In the area of vulnerability reduction, the JASP will continue vulnerability reduction technology (e.g., armor, fuel containment, fire aircraft survivability M&S, the JASP will continue to improve survivab survivability data, integrate DIA threat missile models into threat eng passenger injuries, and address M&S requirements identified by the	Il apply resources to address aircraft occupant casual , the JASP will address improving directed energy infiniques, aircrew situational awareness and urgent oper to address requirements for lighter and more effective suppression, and aircrew and passenger protection). Dility M&S credibility, address operator requirements for aggregation to aircrew and passessment of aircrew and passessment aircrew aircrew and passessment aircrew air	ties and rared rator e In			
The JCAT will continue to support the Air Force, Army, Marine Corpoperators on threat effects and combat damage assessment, and re DoD science and technology and acquisition communities. The JAS and information exchange through internet sites (restricted access a	porting their findings to combatant commanders and the service of the supporting aircraft survivability educated the service of the service o	the			

PE 0605131OTE: *Live Fire Test and Evaluation* Operational Test and Evaluation, Defense

UNCLASSIFIED
Page 5 of 7

R-1 Line #2

Volume 5 - 1017

ibit R-2A, RDT&E Project Justification: PB 2013 Operational Test and Evaluation, Defense		<b>DATE:</b> February 2012				
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605131OTE: Live Fire Test and Evaluation	<b>PROJEC</b> 06051310		e Test and Ev	valuation	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013	
developing educational materials and conducting training for the complete other projects as approved by the JASP Principal Me		ue and				
Joint Technical Coordinating Group for Munitions Effectiveness	s (JTCG/ME)					
In support of operational commanders, DoD targeteers, weapo Weaponeering System (JWS) v2.x in September 2013 and Join (AS) v5.2 in September 2013.						
JWS v2.x will provide new COCOM high priority targets and we Integrated Structural Tool (FIST), and Passive Vehicle Target I J-ACE v5.2 will add Browse descriptive material to support new Kill-chain Models and Data (SAK-MD) capability; and update ex	Model (PVTM); and a capability to drop-in critical data and v weapons in Joint Anti-air Model (JAAM); expand Suite of					
JTCG/ME will continue to; (i) develop a predictive capability to synergism and incorporate these mechanisms in the JTCG/ME the use of computational physics to improve test design and datcharacterization of weapons addressing blast interactions with	estimation process for small, precision weapons; and (ii) eata analysis to support both analytical model development	expand and the				
JMEMs will continue to be evolved. Fast running operational to typically used to support system acquisition decisions. Necess configuration management and validation required to insure the investment will allow more effective and efficient use of DoD re application of conventional weapons; and will increase operation in an environment where zero collateral casualties is the expect preferred and prepositioned munitions; (iii) reduced uncertaintie (BDA); (iv) weapon effects in a CM environment; and (v) reduced	sary investment will be made in those models for the developing applicability in support of warfighting operations. This esources; build on a record of success in supporting Warfigonal capability in areas such as: (i) precision application of extation; (ii) optimal use of scarce and/or high value resource and delays in strike planning and Battle Damage Assested risk to personnel, materiel and mission accomplishment	opment, hter firepower es, sment t.				
	Accomplishments/Planned Programs S	Subtotals	12.834	12.126	49.201	

C. Other Program Funding Summary (\$ in Millions)

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test and Evaluation, Defense

APPROPRIATION/BUDGET ACTIVITY

0460: Operational Test and Evaluation, Defense

BA 6: RDT&E Management Support

DATE: February 2012

R-1 ITEM NOMENCLATURE

PE 0605131OTE: Live Fire Test and Evaluation

O605131OTE: Live Fire Test and Evaluation

### D. Acquisition Strategy

N/A

#### **E. Performance Metrics**

Performance Measure: Percentage of required live fire test planning documents, assessments, and reports applicable to acquisition programs on the OSD Test and Evaluation Oversight List and other special interest programs/legacy systems that are completed and delivered to the appropriate decision makers on time. Percentage of required products, such as test planning documents, munitions effectiveness manuals, tactic-techniques and reports that are developed and delivered to program managers and customers on time.

Actual Performance and Goals:

Live Fire Test and Evaluation FY 2011 Actual FY 2012 Goal FY 2013 Goal On-Time Completion Rate 90% 93% 95%

The on-time completion rate was computed on the basis of the number required reports that were submitted within established time standards relative to the total number of such products that fell due during the fiscal year. DOT&E plans to achieve its goals for FY 2012 and FY 2013 through continued management emphasis on timely delivery of required reports to customer activities.

PE 06051310TE: *Live Fire Test and Evaluation* Operational Test and Evaluation, Defense

Page 7 of 7

Volume 5 - 1019



Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Operational Test and Evaluation, Defense

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

0460: Operational Test and Evaluation, Defense PE 0605814OTE: Operational Test Activities and Analyses

BA 6: RDT&E Management Support

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	120.135	115.467	63.566	-	63.566	63.382	64.771	64.637	64.377	Continuing	Continuing
0605814OTE: <i>OT&amp;A</i>	120.135	115.467	63.566	-	63.566	63.382	64.771	64.637	64.377	Continuing	Continuing

#### Note

Starting in FY 2013 the decreases in funding are the result of the realignment of the JASP and JTCG/ME programs from the Operational Test Activities and Analyses program (0605814OTE) to the Live Fire Test and Evaluation program (0605131OTE) and a reduction to the Joint Live Fire Program as part of the overall DoD budget reduction effort.

### A. Mission Description and Budget Item Justification

The Test and Evaluation programs are continuing efforts that provide management and oversight of test and evaluation functions and expertise to the Department of Defense (DoD). The T&E programs consist of five activities: Joint Test and Evaluation (JT&E); Threat Systems (TS); Center for Countermeasures (CCM); Joint Technical Coordinating Group for Munitions Effectiveness (JTCG/ME); and Joint Aircraft Survivability Program (JASP). Starting in FY 2013 the JTCG/ME and JASP programs are realigned from the Operational Test Activities and Analyses program element (06058140TE) to the Live Fire Test and Evaluation program element (06051310TE). Since the JTCG/ME and JASP programs focus on the survivability of currently fielded systems the two programs are more appropriately funded within the Live Fire Test and Evaluation program element.

Joint Test and Evaluation projects are test and evaluation activities conducted in a joint military environment that develop process improvements. These multi-Service projects, chartered by the Office of the Secretary of Defense and coordinated with the Joint Staff, appropriate combatant commanders, and the Services, provide non-material solutions that improve: joint interoperability of Service systems, technical and operational concepts, joint operational issues, development and validation of joint test methodologies, and test data for validating models, simulations, and test beds. The JT&E projects address relevant joint war fighting issues in a joint test and evaluation environment by developing and providing new tactics, techniques, and procedures to improve joint test capabilities and methodologies.

Threat Systems, based on a memorandum of agreement between the Director, Operational Test and Evaluation (DOT&E) and the Defense Intelligence Agency, provides DOT&E support in the areas of threat resource analysis, intelligence support and threat systems investments. Threat Systems provides threat resource analyses on the availability, capabilities and limitations of threat representations (threat simulators, targets, models, U.S. surrogates and foreign materiel) and analysis of test resources used for operational testing to support DOT&E's assessment of the adequacy of testing for those programs designated for oversight by DOT&E and the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (OUSD(AT&L)). Threat Systems provides DOT&E assessment officers and other DOT&E activities with program specific threat intelligence support. Threat Systems also funds management, oversight, and development of common-use threat specifications for threat simulators, threat representative targets, and digital threat models used for test and evaluation.

The Center, a Joint Service Countermeasure (CM) Test and Evaluation Center, serves as DoD's independent evaluator for electro-optical systems with emphasis on rotary wing survivability, precision guided weapons (PGWs), CMs/ counter-countermeasures (CCMs) employment, and warning devices. The Center conducts tests, analyzes test results and provides CM expertise that benefits the Services, Joint activities, T&E Agencies, DoD Acquisition Community, the Intelligence Community,

PE 0605814OTE: Operational Test Activities and Analyses
Operational Test and Evaluation, Defense

Page 1 of 13

R-1 Line #3

Volume 5 - 1021

**DATE:** February 2012

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Operational Test and Evaluation, Defense

APPROPRIATION/BUDGET ACTIVITY
0460: Operational Test and Evaluation, Defense

PE 0605814OTE: Operational Test Activities and Analyses

BA 6: RDT&E Management Support

Homeland Defense and Overseas Contingency Operations (OCO). Data collected during Center test activities provides valuable information to OSD assessment officers for select oversight programs. The Center assesses current and developing systems, using carefully developed test and evaluation methodologies to provide the basis for understanding how CMs might affect systems used in current and future battlefields. Additionally, the Center develops CM specific test equipment that can be used for both Title 10 programs and OCO urgent operational needs.

The Joint Logistics Commanders Joint Technical Coordinating Group for Munitions Effectiveness (JTCG/ME) was chartered more than 40 years ago to serve as DoD's focal point for munitions effectiveness information. This has taken the form of widely used Joint Munitions Effectiveness Manuals (JMEMs) which address all major non-nuclear U.S. weapons. JTCG/ME authenticates weapons effectiveness data for use in training, systems acquisition, weapon procurement, and combat modeling and simulation. JMEMs are used by the Armed Forces of the U.S., NATO, and other allies to plan operational missions, support training and tactics development, and support force-level analyses. JTCG/ME also develops and standardizes methodologies for evaluation of munitions effectiveness and maintains databases for target vulnerability, munitions lethality, and weapon system accuracy. The JMEM requirements and development processes continues to be driven by operational lessons learned (Enduring Freedom, Iraqi Freedom, and Odyssey Dawn) and the needs of Combatant Commands, Services, Military Targeting Committee, and Operational Users Working Groups input for specific weapon-target pairings and methodologies.

The Joint Aircraft Survivability Program is the DoD's focal point for joint service enhancement of military aircraft non-nuclear survivability. The JASP is chartered by the commanders of the USN Naval Air Systems Command, USA Aviation and Missile Command and USAF Aeronautical Systems Center to coordinate and conduct RDT&E to improve military aircraft survivability, develop and standardize aircraft survivability modeling and simulation (M&S), facilitate information exchange on aircraft survivability and support aircraft survivability education for the DoD and U.S. aircraft community. Each chartering command provides a senior aircraft survivability expert for the JASP Principal Members Steering Group (PMSG), which guides the program and approves projects for funding. The JASP assesses and reports on combat damage incidents through the Joint Combat Assessment Team (JCAT), is the Executive Agent for the Joint Live Fire Aircraft Systems Program managed by the Live Fire Test office of DOT&E and is also an Executive Agent for the Survivability Information Analysis Center (SURVIAC), the repository for aircraft survivability information.

This Program Element was reduced in FY 2013 and the outyears as part of the overall DoD budget reduction effort.

This Program Element is budgeted in Budget Activity 6, RDT&E Management Support, to support management activities for the DOTE oversight responsibilities of test and evaluation functions.

PE 0605814OTE: Operational Test Activities and Analyses Operational Test and Evaluation, Defense

Page 2 of 13

R-1 Line #3

Volume 5 - 1022

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Operational Test and Evaluation, Defense

**R-1 ITEM NOMENCLATURE** 

0460: Operational Test and Evaluation, Defense

PE 0605814OTE: Operational Test Activities and Analyses

BA 6: RDT&E Management Support

APPROPRIATION/BUDGET ACTIVITY

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	122.581	118.722	121.012	-	121.012
Current President's Budget	120.135	115.467	63.566	=	63.566
Total Adjustments	-2.446	-3.255	-57.446	-	-57.446
<ul> <li>Congressional General Reductions</li> </ul>	-	-3.255			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Congressional General Reductions</li> </ul>	-2.446	-	-	-	-
<ul> <li>Revised Economic Assumptions</li> </ul>	-	-	2.000	-	2.000
<ul> <li>Program Reductions</li> </ul>	-	-	-20.489	-	-20.489
<ul> <li>Other Program Realignments</li> </ul>	-	-	-38.957	-	-38.957

## **Change Summary Explanation**

Starting in FY 2013 the decreases in funding are the result of the realignment of the JASP and JTCG/ME programs from the Operational Test Activities and Analyses program (0605814OTE) to the Live Fire Test and Evaluation program (0605131OTE) and a reduction to the Joint Live Fire Program as part of the overall DoD budget reduction effort.

**DATE:** February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test and Evaluation, Defense									<b>DATE</b> : February 2012			
APPROPRIATION/BUDGET ACTIV	APPROPRIATION/BUDGET ACTIVITY				OMENCLA	TURE		PROJECT				
0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support				PE 0605814OTE: Operational Test Activities and Analyses				0605814OTE: <i>OT&amp;A</i>				
												COST (\$ in Millions)
COST (\$ III WIIIIOIIS)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost	
0605814OTE: <i>OT&amp;A</i>	120.135	115.467	63.566	-	63.566	63.382	64.771	64.637	64.377	Continuing	Continuing	
Quantity of RDT&E Articles												

### A. Mission Description and Budget Item Justification

The Test and Evaluation programs are continuing efforts that provide management and oversight of test and evaluation functions and expertise to the Department of Defense (DoD). The T&E programs consist of five activities: Joint Test and Evaluation (JT&E); Threat Systems (TS); Center for Countermeasures (CCM); Joint Technical Coordinating Group for Munitions Effectiveness (JTCG/ME); and Joint Aircraft Survivability Program (JASP). Starting in FY 2013 the JTCG/ME and JASP programs are realigned from the Operational Test Activities and Analyses program element (0605814OTE) to the Live Fire Test and Evaluation program element (0605131OTE). Since the JTCG/ME and JASP programs focus on the survivability of currently fielded systems the two programs are more appropriately funded within the Live Fire Test and Evaluation program element.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Operational Test Activities and Analyses	120.135	115.467	63.566	
FY 2011 Accomplishments: Joint Test and Evaluation (JT&E)				
In FY 2011, JT&E had three projects close and four projects ongoing from FYs 2009 and 2010. The Joint Civil Info Management Joint Test, closed June 2011, developed joint tactics, techniques, and procedures to collect, consolidative civil information at the tactical and operational levels so that the joint task force commander will have better informat operations. Another project that closed in FY 2011 was Joint Data Integration. This project researched, tested, and tactics, techniques, and procedures for use in standardizing the common tactical picture by addressing the quality of tracks, time latency, common operational picture synchronization, channel disruptions, position/location discrepance naming schema discrepancies. On a continual basis, JT&E reviews nominations for new projects, manages ongoing ensures that closing projects transition products to their customers are debriefed, and that their final reports are discappropriate Service organizations. Two projects were initiated in FY 2011.	late, and share ation to plan and evaluated the of: duplicate cies, and ng projects, and			
Threat Systems				
During FY 2011, Threat Systems completed development of standard, DIA-validated airborne jammer models for use the Department to evaluate effects on U.S. aircraft; evaluated proposals to develop and implement a more robust of environment to make operational testing more realistic; continued to address testing against advanced threats that	ppen-air threat			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Opera	tional Test and Evaluation, Defense		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJEC	T		
0460: Operational Test and Evaluation, Defense	PE 0605814OTE: Operational Test Activities	06058140	OTE: <i>OT&amp;A</i>		
BA 6: RDT&E Management Support	and Analyses				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
encountered from adversarial nations; and initiated a project to systems for use in Iraq and Afghanistan.	o obtain data to support fielding of upgraded hostile fire inc	dicator			
Threat Systems continued test planning working group participand provided current intelligence support tailored to specific U connectivity for enhanced weapons systems testing and improsystems. These efforts continued to develop threat test asset year of a four-year project to integrate current intelligence concountermeasure test facilities; successfully demonstrated the to control sub-scale aerial targets; completed the design and a effective full-scale aerial target that embodies the critical attributions comprehensive requirements analysis for a new full-scale rotal	S. weapon systems acquisition; and demonstrated test far oving end-to-end testing of U.S. threat warning and counters used for testing in a joint test environment; continued with munity-based missile models into all DoD Hardware-In-Thability of recently developed standards for target control into analysis phase to develop a set of prototype designs for a coutes of future 5th generation threat fighter aircraft; and per	cility rmeasures h the third ne-Loop terfaces cost			
These activities help DOT&E carry out its Title 10 responsibility realistic and suitable and promotes common solutions to Serv		g is			
Center for Countermeasures (the Center)					
The Center tested, analyzed, and reported on more than 40 e survivability, countermeasures (CM)/ counter-countermeasure precision guided weapons (PGWs). Each program supported support for CM/ CCM evaluations. Approximately 66% of the testing; the majority of these efforts in support of rotary wing a 18% of the Center effort was dedicated to overseas contingent deployment training for rotary wing units. About 4% of Center efforts were spent on internal programs to improve test capable activities. The Center continued development of the Central 1	es (CCMs) employment, warning and targeting systems and received an independent assessment of our findings and Center efforts were spent on Aircraft Survivability Equipment and Hostile Fire Indication (HFI) capabilities. Approacy operations (OCO) support with emphasis on CM based reffort was spent on PGW testing. Thirteen percent of the illities and to develop test methodologies for new types of T	d test ent (ASE) ximately pre- Center			

Threat System, Towed Aerial Plume Simulator and Multi-Spectral Sea and Land Target Simulator that will be used in support of testing for both Title 10 programs and OCO aircraft survivability equipment urgent operational needs. Our support was distributed

The Center provided expertise to many organizations and was actively involved in the following panels: Joint Expendable Countermeasures (JECM) Integrated Product Team, Joint, Infrared Countermeasures Multi Sensing Symposia Working Group (MSS IRCM WG), Joint Aircraft Survivability Program (JASP), Foreign Material Exploitation Working Group, Foreign Material

across all the Services as well as intelligence agencies and research and development activities.

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test	and Evaluation, Defense		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605814OTE: Operational Test Activities and Analyses	<b>PROJECT</b> 0605814O	ΓΕ: <i>ΟΤ&amp;Α</i>		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
Program Test and Evaluation (T&E) Subcommittee, Joint Project Mallari Group (JCMT&E WG), and JCMT&E WG Hostile Fire Indicator (HFI) sul					2010
Joint Technical Coordinating Group for Munitions Effectiveness (JTCG/N	ME)				
JWS v2.0.1 and the JTCG/ME generated Chairman of the Joint Chiefs of Radii (CER) tables were used for operational weaponeering and collater Odyssey Dawn Tomahawk Land Attack Missile (TLAM) and Joint Direct of operational commanders, DoD targeteers, weaponeers, and planners Weaponeering System (JWS) v2.1 beta version in June 2011. In addition 2011. Joint-Antiair Combat Effectiveness System (J-ACE) Air Superiorit was released in September 2011.	peration poport ut FY				
JWS v2.1 beta version contained the Fast Integrated Structural Tool (FIS incorporates the integral modules from Building Analysis Module (BAM) tool that generates weapon effectiveness and damage assessments againd tunnels. In addition, JWS v2.1 release will contain approximately 18 Explosive Equivalent Weights based on blast testing and an improved 3	and Hardened Target Module (HTM) to create a ainst infrastructure targets to include buildings, bu 80 new/updated munition	merged inkers,			
J-ACE v4.1 contained additional threat Surface-to-Air (SAM) Flyout Mod and improved Blue Air-to-Air missile FOMs. J-ACE 4.1 was released in software, consistent with Operational Flight Programs in the currently fie "FrankenWEZ" software was used for threat aircraft missile engagement simulations were added for the US AIM-7, AIM-9, and AIM-120 and NAS improved MSIC threat surface-to-air missiles (SAM) were also added. Suser requirements; and, interface with other models, simulations, training J-ACE v5.0 provided the initial release of the Suite of Antiair Killchain Massignificant increase in J-ACE capability. The faster than real time calc miss distance, effects of countermeasures, fuze performance, missile leelements are provided for RED and BLUE weapons. To more effectively USSTRATCOM, the JAAM 5.0 release also provides a direct interface to expansion was provided only to specific users for extended testing, while to all users.	October 2010. Weapon Engagement Zone (WEzelded fighter fleet was provided for U.S. missiles; let zone determination. New or updated air-to-air not be considered and PL-12. Sixteen not be considered air-to-air not be co	Z) NASIC nissile ew or rational oftware. d data is aneuver, ain" ly at eability			

	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational	Test and Evaluation, Defense		DATE: Fe	bruary 2012		
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605814OTE: Operational Test Activities and Analyses	<b>PROJEC</b> 06058140	<b>T</b> DTE: <i>OT&amp;A</i>			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013	
In support of the Combatant Commands and the CJCSI 3160.01, JT systems. In addition, the JTCG/ME accredited the Digital Precision tool version 1.0.0 in July 2011 for operational use. This tool displays effective radii reference tables. Additionally, JTCG/ME trained near FY 2011 continued development and refinement of the Joint Blast A were implemented in JBAM software, the user interface and docume implementation of the Operational Requirement-based Casualty Assweapon systems to inflict varying levels of personnel incapacitation	Strike Suite (DPSS) Collateral Damage Estimation (Is accredited Collateral Damage Estimate Level 1-5 Ally 150 users at 10 different Commands.  Analysis Model (JBAM). Additional damage modules entation. Additionally, JTCG/ME developed a strategoessment (ORCA) methodology in evaluating the cap to include complete and immediate loss of function.	OCiDE) A-C series By for pability of	11 2011	112012	11 2010	
The JTCG/ME assessed fielded and emerging Information Operations (IO), Directed Energy (DE) and Non-lethal (NL) systems as part of early efforts to create an Effects Based Operations (EBO) evaluation capability set. The scope includes weapon characterization, coordinating test data development and providing operational tools for the IO elements of Computer Network Attack and Electronic Warfare; Laser and Radio Frequency DE; and, NL systems against materiel and personnel targets. This weapon effectiveness and associated confidence level data are critical enablers for application of these weapons as it will provide senior leaders and warfighters with information to develop policy and concepts of operations for their use.						
Joint Aircraft Survivability Program (JASP)						
In FY 2011 the JASP continued work on 28 multi-year RDT&E proje Principal Members Steering Group and OSD/DOT&E. In the area of directed energy infrared countermeasures, electronic countermeasure and immediate operator needs. In the area of vulnerability reduction more effective armor, fuel containment, fire suppression; and aircrevand Simulation (M&S), the JASP continued to improve survivability I data, integrate DIA threat missile models into threat engagement coinjuries, and address M&S requirements identified by the joint aircradocumenting projects completed in FY 2011.	f susceptibility reduction, the JASP addressed impro- ires technology and techniques, aircrew situational and the JASP continued to address requirements for light w and passenger protection. In aircraft survivability M M&S credibility, address operator requirements for suddes, improve the assessment of aircrew and passent	ving wareness ghter and Modeling urvivability ger				
The JCAT continued to support the Air Force, Army, Marine Corps a operators on threat effects and combat damage assessment, and re DoD science and technology and acquisition communities. The JAS	eporting their findings to combatant commanders and	the				

Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test and Evaluation, Defense  DATE: February 2012							
APPROPRIATIO	N/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT				
0460: Operation	al Test and Evaluation, Defense	PE 0605814OTE: Operational Test Activities	060581407	ΓΕ: <i>ΟΤ&amp;Α</i>			
BA 6: <i>RDT&amp;E M</i>	anagement Support	and Analyses					

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
information exchange through internet sites (restricted access and classified), by publishing the Aircraft Survivability Journal, developing educational materials and conducting training for the DoD and their contractors.			
FY 2012 Plans: Joint Test and Evaluation (JT&E)			
In FY 2012 JT&E has two projects slated for closing and an estimated four projects ongoing from FY 2010 and FY 2011. The Joint Integration of Maritime Domain Awareness Joint Test, expected to close in FY 2012, is looking to develop joint tactics, techniques, and procedures to synchronize maritime domain information for key decision markers across operations centers for homeland defense. The other project closing in FY 2012 is Joint Jamming Assessment and Mitigation Joint Test. This project will develop joint tactics, techniques, and procedures to sustain operations in the presence of purposeful interference on the ultra- and super-high frequencies of the satellite communication bands. This will allow commanders and operators to execute operations when satellite communications are degraded. On a continual basis, JT&E reviews nominations for new projects, manages ongoing projects, and ensures that closing projects transition products to their customers are debriefed, and that their final reports are distributed to the appropriate Service organizations.			
Threat Systems			
As part of the Secretary of Defense FY 2012 efficiency initiatives, the Target Management Initiative (TMI) was eliminated and funding for investments in advanced threat surrogate developments was reduced. TMI elimination will make the Services solely responsible for the development and acquisition of new threat representative targets and target control systems. Reducing threat surrogate investments will slow but not eliminate development of advanced threat surrogates used in operational test and evaluation.			
Threat Systems will complete the four-year project to integrate current intelligence community-based missile models into all DoD Hardware-In-The-Loop countermeasure test facilities, continue test planning working group participation to identify threat shortfalls; conduct special studies and provide current intelligence support tailored to specific U.S. weapon systems acquisition. In addition, Threat Systems will develop an unmanned aerial vehicle Global Positioning Satellite jamming capability using micro jammers to increase threat realism at test ranges, and use existing live fire data to verify and compare MANPAD laboratory and hardware-in-the-loop facility testing capabilities to increase confidence in using other than open air live fire events for operational testing. Initiatives for FY 2012 include development of a modeling and simulation (M&S) roadmap to identify projects that support effective testing of US and Allied countermeasure systems; integration of authoritative, DIA-approved models into simulations used for testing advanced systems in an integrated air defense network; data collection to support the development of a hostile fire signature model for use in testing new hostile fire indicator technologies being developed by the Army and Navy;			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Opera	itional Test and Evaluation, Defense		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605814OTE: Operational Test Activities and Analyses	PROJECT 0605814OTE: <i>OT&amp;A</i>			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
investigations into digital radio frequency memory use against GPS jammers and their potential impact of US weapon system management and command, control, communications and co	ms; and translation of all source technical intelligence on a imputer system into a model to support test and evaluation.	battle			
These activities help DOT&E carry out its Title 10 responsibilirealistic and suitable and promotes common solutions to Serv		gis			
Center for Countermeasures (the Center)					
The Center will test, analyze, and report on more than 30 syst (CM)/counter-countermeasures (CCMs) employment, warning Each program supported will receive an independent assessment Center will continue to emphasize support of the DOT&E enter survivability and hostile fire initiatives. Additionally, a large per in support of current OCO. Furthermore, the Center will continuate well as CM/CCM focused tactics and procedures developing Evaluation Investment Program sponsored, Towed Aerial Plut will be used in support of testing for both Title 10 programs and The Center will be developing the Threat Simulator Working Could be distributed across all the Services as well as intelligence.	g and targeting systems and precision guided weapons (Poment of our findings and test support for CM/CCM evaluation erprise with a clear focus on Title 10 weapons systems, air corcentage of on-going efforts will focus on aircraft survivabilinue providing CM expertise in pre-deployment events and ment. The Center will continue to develop, the Central Test me Simulator and Multi-Spectral Sea and Land Target Simulator aircraft survivability equipment urgent operational of Group sponsored Hostile Fire Signature model. The Center	GWs). ons. The craft lity testing training, and ulator that needs.			
The Center provided expertise to many organizations and was Countermeasures (JECM) Integrated Product Team, Joint , In (MSS IRCM WG), Joint Aircraft Survivability Program (JASP), Program Test and Evaluation (T & E) Subcommittee, Joint Program (JCMT&E WG), and JCMT&E WG Hostile Fire Indicated	nfrared Countermeasures Multi Sensing Symposia Working, Foreign Material Exploitation Working Group, Foreign Matoject Mallari Working Group, Joint Countermeasures T&E N	Group terial			
Joint Technical Coordinating Group for Munitions Effectivenes	ss (JTCG/ME)				
In support of operational commanders, DoD targeteers, weap Weaponeering System (JWS) v2.1 in December 2011, JWS v System (J-ACE) Air Superiority (AS) v5.1 in September 2012.	2.1.1 in September 2012 and the Joint-Antiair Combat Effe	ectiveness			
		'		•	

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test and Evaluation, Defense			DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605814OTE: Operational Test Activities and Analyses	<b>PROJECT</b> 0605814OTE: <i>OT&amp;A</i>			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
JWS v2.1 will provide a major capability increase to include Fast Cratering Effects (PCEffects), Precision Munitions Planning Too Weaponeering and Estimation Tool, Mine methodology, and Hell Combatant Command targets, other critical data and methodolog develop releasable versions of JWS v2.1 in support of combined	ol (PMPT), Joint Smart Weapons Model (JSWM), Improvi fire weaponeering data. JWS v2.1.1 will provide addition gy fixes to warfighters. In addition, the JTCG/ME will pla	ved Ship onal			
J-ACE v5.1 will contain Joint Antiair Model (JAAM) v5.1 and additional Blue and Red effectiveness data (e.g., B-2, A-10, C-130H, F-18 C/E, MiG-29 Fulcrum, Su-27 Flanker, Rafale, Jian-10/F-10, MiG-19 Farmer, and F-1 Mirage) and architectural/modularity/GUI improvements. J-ACE v5.1 will also include distribution of the SAK-MD capability introduced in J-ACE v5.0.					
In support of Combatant Commands and the CJCSI 3160.01, JTCG/ME will continue to provide updates for CER values for newly fielded systems. JTCG/ME will continue to monitor the DCiDE tool version 1.0.0 configuration management process to ensure that subsequent versions of DCiDE accurately reflect the latest JTCG/ME accredited tables; Combatant Command specified population density factors and associated user input. The DCiDE tool will evolve to be the foundation for collateral damage estimation on JWS.					
Advanced Joint Effectiveness Model (AJEM) updates will focus of to respond to shortfalls within existing methodology and expanding weapons to more precise weapons. The precision of these new Specific methodology tasks will be to (i) add partial impact to preciple or use in JTCG/ME studies with AJEM; (iii) expand the supports and as plug-in for higher level codes; and (iv) improve blast	ng to support the ongoing paradigm shift from overmated weapons requires a better understanding of target respondent vent under-prediction of JWS lethality; (ii) develop unde uite of penetration methodology modules as standalone	hing onse. rstating of			
JTCG/ME will continue to: (i) develop JMEM data for most critical update cycles through incremental updates; (iii) accredit tri-Servic incorporate newly fielded weapons (i.e., Air-to-Surface, Surface-to-damage and hardened target structure methodology; and, (vi) presensitive targets.	ce JMEM operational tools; (iv) expand existing databas to-Surface Direct/Indirect Fire, and Antiair); (v) enhance	ses to collateral			
FY 2013 Plans: Joint Test and Evaluation (JT&E)					
In FY 2013 JT&E has two projects slated for closing and an estin Joint Cyber Operations Joint Test, anticipated to close in January					

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2013 Operation	onal Test and Evaluation, Defense		DATE: Fe	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0605814OTE: Operational Test Activities and Analyses	<b>PROJECT</b> 0605814OTE: <i>OT&amp;A</i>			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2011	FY 2012	FY 2013
and procedures to enable the joint task force commander to encommand and control services from cyber threats across the D Exchange Joint Test is scheduled to close in September 2013.					
In FY 2013, the JT&E Program will begin to experience the imp digress from its business model of funding three Joint Feasibilit (QRTs) annually. FY 2013 will have no new JFS and one addit any Joint Tests chartered in FY 2013.	y Studies (JFS), two Joint Tests, and three Quick Reaction	on Tests			
As part of the Secretary of Defense FY 2012 efficiency initiatives, JT&E Program's business model was reengineered to meet the requirements of its stakeholders with the reduction in budget. The new model reduces the life span of a project while maintaining rigorous Test and Evaluation methods to produce effective solutions to joint military operational problems. The new business model will be implemented and refined starting in FY 2013.					
Threat Systems					
Threat Systems will continue integration of current intelligence continue test planning working group participation to identify the intelligence support tailored to specific U.S. weapon systems at to increase threat realism at our test ranges, and complete the signature model for use in hostile fire indicator systems. Threat intelligence agencies and develop models for use in test and expradio frequency memory technology to develop modern threat j	reat shortfalls; conduct special studies and provide currer equisition; develop Global Positioning Satellite jamming condevelopment of an ammunition and rocket propelled grent Systems will propose candidate threat systems from the valuation. Threat Systems will investigate the integration	nt apability nade e various			
New initiatives for FY 2013 include implementation of M&S road countermeasure systems are available for testing, developmen on US weapon systems, providing representative cyber warfare resources that represent land and sea threats.	t of next generation threat GPS jammers and their potent	ial impact			
These activities help DOT&E carry out its Title 10 responsibilities realistic and suitable, and promotes common solutions to Service.		g is			
Center for Countermeasures (CCM)					
					1

Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test and Evaluation, Defense

APPROPRIATION/BUDGET ACTIVITY

0460: Operational Test and Evaluation, Defense

BA 6: RDT&E Management Support

DATE: February 2012

PROJECT

0605814OTE: Operational Test Activities and Analyses

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
The Center will test, analyze, and report on more than 30 electro-optical systems with special emphasis on rotary wing survivability, counter measures (CM)/counter-countermeasures (CCMs) employment, warning and targeting systems and precision guided weapons. Each program supported will receive an independent assessment of our findings and test support for CM/CCM evaluations. We will continue to emphasize support of the DOT&E enterprise with a clear focus on Title 10 weapons systems, aircraft survivability and hostile fire initiatives. Additionally, a large percentage of on-going efforts will focus on aircraft survivability testing in support of current OCO. Furthermore, the Center will continue providing CM expertise in pre-deployment events and training, as well as CM/CCM focused tactics and procedures development. The Center will continue to develop, the Central Test and Evaluation Investment Program sponsored Multi-Spectral Sea and Land Target Simulator that will be used in support of testing for both Title 10 programs and OCO aircraft survivability equipment urgent operational needs. The Center will continue to develop the Threat Simulator Working Group sponsored Hostile Fire Signature model. Our support will be distributed across all the Services as well as intelligence agencies and research and development activities.			
The Center will continue to be actively engaged, to include attending various conferences, with a number of organizations providing advice on CM/CMS.			
Joint Technical Coordinating Group for Munitions Effectiveness (JTCG/ME) (Starting in FY 2013 JTCG/ME is funded under program element 6050113OTE Live Fire Test and Evaluation.)			
Joint Aircraft Survivability Program (JASP) (Starting in FY 2013 JASP is funded under program element 6050113OTE Live Fire Test and Evaluation.)			
Accomplishments/Planned Programs Subtotals	120.135	115.467	63.566

# C. Other Program Funding Summary (\$ in Millions)

N/A

# D. Acquisition Strategy

Not Applicable

## **E. Performance Metrics**

(U) PERFORMANCE METRICS:

Performance Measure: Percentage of required products, such as test planning documents, munitions effectiveness manuals, tactics, techniques, procedures, threat characteristics, assessments, and reports that are developed and delivered to program managers and customers on time.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Operational Test	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0460: Operational Test and Evaluation, Defense	PE 0605814OTE: Operational Test Activities	0605814OT	E: <i>0T&amp;A</i>
BA 6: RDT&E Management Support	and Analyses		

Actual Performance and Goals:

Operational Test Activities and Analyses FY 2011 (Actual) FY 2012 (Goal) FY 2013 (Goal) On-Time Completion Rate 94% 95% 96%

The on-time completion rate was computed on the basis of the number of required products that were submitted within established time standards relative to the total number of such products that fell due during the fiscal year. DOT&E plans to maintain its on-time completion rates for FY 2012 and FY 2013 through increased management emphasis on timely delivery of required products to customer activities.

