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**Department of Defense
Fiscal Year (FY) 2012 Budget Estimates**

February 2011



Defense Information Systems Agency

Justification Book Volume 5

Research, Development, Test & Evaluation, Defense-Wide

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Defense Information Systems Agency • President's Budget FY 2012 • RDT&E Program

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 (Dollars in Thousands)

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Summary Recap of Budget Activities	FY 2010 (Base & OCO)	FY 2011 Base Request with CR Adj*	FY 2011 OCO Request with CR Adj*	FY 2011 Total Request with CR Adj*	FY 2011 Annualized CR Base**	FY 2011 Annualized CR OCO**	FY 2011 Annualized CR Total**
System Development and Demonstration (SDD)	29,500	67,206		67,206	67,087		67,087
Operational Systems Development	244,044	182,405	23,125	205,530	182,083	25,256	207,339
Total Research, Development, Test & Evaluation	273,544	249,611	23,125	272,736	249,170	25,256	274,426
Summary Recap of FYDP Programs							
General Purpose Forces	74,361	74,023		74,023	73,892		73,892
Intelligence and Communications	185,718	126,224	23,125	149,349	126,001	25,256	151,257
Research and Development	13,465	49,364		49,364	49,277		49,277
Total Research, Development, Test & Evaluation	273,544	249,611	23,125	272,736	249,170	25,256	274,426

R-1P: FY 2012 President's Budget (Published Official Position With FY 2011 CR Adjustments), as of February 1, 2011 at 11:42:37

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	FY 2012	FY 2012	FY 2012
	Base	OCO	Total
<u>Summary Recap of Budget Activities</u>			
System Development and Demonstration (SDD)	69,035		69,035
Operational Systems Development	217,317	12,500	229,817
Total Research, Development, Test & Evaluation	286,352	12,500	298,852
<u>Summary Recap of FYDP Programs</u>			
General Purpose Forces	72,403		72,403
Intelligence and Communications	164,751	12,500	177,251
Research and Development	49,198		49,198
Total Research, Development, Test & Evaluation	286,352	12,500	298,852

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Appropriation	FY 2010 (Base & OCO)	FY 2011 Base Request with CR Adj*	FY 2011 OCO Request with CR Adj*	FY 2011 Total Request with CR Adj*	FY 2011 Annualized CR Base**	FY 2011 Annualized CR OCO**	FY 2011 Annualized CR Total**
Defense Information Systems Agency	273,544	249,611	23,125	272,736	249,170	25,256	274,426
Total Research, Development, Test & Evaluation	273,544	249,611	23,125	272,736	249,170	25,256	274,426

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Appropriation -----	FY 2012 Base -----	FY 2012 OCO -----	FY 2012 Total -----
Defense Information Systems Agency	286,352	12,500	298,852
Total Research, Development, Test & Evaluation	286,352	12,500	298,852

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

Line No	Element Number	Program Item	FY 2010 Act	FY 2011 Base Request with CR Adj*	FY 2011 Request with CR Adj*	OCO	Total Request with CR	FY 2011 Annualized CR Base**	FY 2011 Annualized CR OCO**	FY 2011 Annualized CR Total**	S	E	C
121	0604764K	Advanced IT Services Joint Program Office (AITS-JPO)	05	13,465	49,364		49,364	49,277		49,277	U		
135	0303141K	Global Combat Support System	05	16,035	17,842		17,842	17,810		17,810	U		
		System Development and Demonstration (SDD)		29,500	67,206		67,206	67,087		67,087	U		
191	0208045K	C4I Interoperability	07	74,361	74,023		74,023	73,892		73,892	U		
193	0301144K	Joint/Allied Coalition Information Sharing	07	10,713	9,379		9,379	9,362		9,362	U		
200	0302016K	National Military Command System-Wide Support	07	526	467		467	466		466	U		
201	0302019K	Defense Info Infrastructure Engineering and Integration	07	28,188	16,629		16,629	16,600		16,600	U		
202	0303126K	Long-Haul Communications - DCS	07	42,772	9,130	23,125	32,255	9,114	25,256	34,370	U		
203	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	10,588	9,529		9,529	9,512		9,512	U		
208	0303140K	Information Systems Security Program	07							0	U		
209	0303148K	DISA Mission Support Operations	07	1,150						0	U		
211	0303150K	Global Command and Control System	07	37,112	26,247		26,247	26,201		26,201	U		
212	0303153K	Defense Spectrum Organization	07	18,579	20,991		20,991	20,954		20,954	U		
213	0303170K	Net-Centric Enterprise Services (NCES)	07	1,683	3,366		3,366	3,360		3,360	U		
215	0303610K	Teleport Program	07	5,209	6,880		6,880	6,868		6,868	U		
222	0303103K	Cyber Security Initiative	07	10,023	2,251		2,251	2,247		2,247	U		

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

Line No	Element Number	Item	Act	FY 2012 Base	FY 2012 OCO	FY 2012 Total	SEC
121	0604764K	Advanced IT Services Joint Program Office (AITS-JPO)	05	49,198		49,198 U	
135	0303141K	Global Combat Support System	05	19,837		19,837 U	
		System Development and Demonstration (SDD)		69,035	0	69,035 U	
191	0208045K	C4I Interoperability	07	72,403		72,403 U	
193	0301144K	Joint/Allied Coalition Information Sharing	07	7,093		7,093 U	
200	0302016K	National Military Command System-Wide Support	07	481		481 U	
201	0302019K	Defense Info Infrastructure Engineering and Integration	07	8,366		8,366 U	
202	0303126K	Long-Haul Communications - DCS	07	11,324	10,500	21,824 U	
203	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	12,514		12,514 U	
208	0303140K	Information Systems Security Program	07	5,500		5,500 U	
209	0303148K	DISA Mission Support Operations	07			U	
211	0303150K	Global Command and Control System	07	54,739	2,000	56,739 U	
212	0303153K	Defense Spectrum Organization	07	29,154		29,154 U	
213	0303170K	Net-Centric Enterprise Services (NCES)	07	1,830		1,830 U	
215	0303610K	Teleport Program	07	6,418		6,418 U	
222	0305103K	Cyber Security Initiative	07	4,341		4,341 U	

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Program Line Element No Number	Item	Act	FY 2010 (Base & OCO)	FY 2011 Base Request with CR Adj*	FY 2011 Request with CR Adj*	OCO Request with CR Adj*	FY 2011 Total Request with CR Adj*	FY 2011 Annualized CR Base**	FY 2011 Annualized CR OCO**	FY 2011 Annualized CR Total**	S E C
235	0305208K										
	Distributed Common Ground/Surface Systems	07	3,140	3,513			3,513	3,507		3,507	U
	Operational Systems Development		244,044	182,405	23,125	205,530	182,083	25,256		207,339	
Total Research, Development, Test & Eval, DW			273,544	249,611	23,125	272,736	249,170	25,256		274,426	

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Line No	Element Number	Item	Act	FY 2012 Base	FY 2012 OCO	FY 2012 Total	SEC
235	0305208K	Distributed Common Ground/Surface Systems	07	3,154		3,154	U
		Operational Systems Development		217,317	12,500	229,817	
Total Research, Development, Test & Eval, DW				286,352	12,500	298,852	

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135 0303141K	Global Combat Support System	05	16,035	17,842			17,842	17,810		17,810	U
System Development and Demonstration (SDD)			29,500	67,206			67,206	67,087		67,087	U
191 0208045K	C4I Interoperability	07	74,361	74,023			74,023	73,892		73,892	U
193 0301144K	Joint/Allied Coalition Information Sharing	07	10,713	9,379			9,379	9,362		9,362	U
200 0302016K	National Military Command System-Wide Support	07	526	467			467	466		466	U
201 0302019K	Defense Info Infrastructure Engineering and Integration	07	28,188	16,629			16,629	16,600		16,600	U
202 0303126K	Long-Haul Communications - DCS	07	42,772	9,130	23,125		32,255	9,114	25,256	34,370	U
203 0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	10,588	9,529			9,529	9,512		9,512	U
208 0303140K	Information Systems Security Program	07									U
209 0303148K	DISA Mission Support Operations	07	1,150								U
211 0303150K	Global Command and Control System	07	37,112	26,247			26,247	26,201		26,201	U
212 0303153K	Defense Spectrum Organization	07	18,579	20,991			20,991	20,954		20,954	U
213 0303170K	Net-Centric Enterprise Services (NCES)	07	1,683	3,366			3,366	3,360		3,360	U
215 0303610K	Teleport Program	07	5,209	6,880			6,880	6,868		6,868	U
222 0305103K	Cyber Security Initiative	07	10,023	2,251			2,251	2,247		2,247	U

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Line No	Element Number	Item	Act	FY 2012 Base	FY 2012 OCO	FY 2012 Total	SEC
235	0305208K	Distributed Common Ground/Surface Systems	07	3,154		3,154	U
		Operational Systems Development		217,317	12,500	229,817	
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Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

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Budget Activity 07: Operational Systems Development
Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

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193	07	0301144K	Joint/Allied Coalition Information Sharing.....	Volume 5 - 235
200	07	0302016K	National Military Command System-Wide Support.....	Volume 5 - 247
201	07	0302019K	Defense Info. Infrastructure Engineering and Integration.....	Volume 5 - 253
202	07	0303126K	Long-Haul Communications - DCS.....	Volume 5 - 271
203	07	0303131K	Minimum Essential Emergency Communications Network (MEECN).....	Volume 5 - 291
208	07	0303140K	Information Systems Security Program.....	Volume 5 - 301

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Budget Activity 07: Operational Systems Development
Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

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211	07	0303150K	Global Command and Control System.....	Volume 5 - 313
212	07	0303153K	Defense Spectrum Organization.....	Volume 5 - 331
213	07	0303170K	Net-Centric Enterprise Services (NCES).....	Volume 5 - 345
215	07	0303610K	Teleport Program.....	Volume 5 - 357
222	07	0305103K	Cyber Security Initiative.....	Volume 5 - 371
235	07	0305208K	Distributed Common Ground/Surface Systems.....	Volume 5 - 373

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C4I Interoperability	0208045K	191	07.....	Volume 5 - 219
Cyber Security Initiative	0305103K	222	07.....	Volume 5 - 371
DISA Mission Support Operations	0303148K	209	07.....	Volume 5 - 309
Defense Info. Infrastructure Engineering and Integration	0302019K	201	07.....	Volume 5 - 253
Defense Spectrum Organization	0303153K	212	07.....	Volume 5 - 331
Distributed Common Ground/Surface Systems	0305208K	235	07.....	Volume 5 - 373
Global Combat Support System	0303141K	135	05.....	Volume 5 - 209
Global Command and Control System	0303150K	211	07.....	Volume 5 - 313
Information Systems Security Program	0303140K	208	07.....	Volume 5 - 301
Joint/Allied Coalition Information Sharing	0301144K	193	07.....	Volume 5 - 235
Long-Haul Communications - DCS	0303126K	202	07.....	Volume 5 - 271
Minimum Essential Emergency Communications Network (MEECN)	0303131K	203	07.....	Volume 5 - 291
National Military Command System-Wide Support	0302016K	200	07.....	Volume 5 - 247
Net-Centric Enterprise Services (NCES)	0303170K	213	07.....	Volume 5 - 345
Teleport Program	0303610K	215	07.....	Volume 5 - 357

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604764K: <i>Advanced IT Services Joint Program Office (AITS-JPO)</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	13.465	49.364	49.198	-	49.198	51.484	52.140	36.318	28.805	Continuing	Continuing
T26: <i>Leading Edge Pilot Information Technology</i>	13.465	49.364	49.198	-	49.198	51.484	52.140	36.318	28.805	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. It provides the President of the United States (POTUS), Secretary of Defense (SECDEF), Chairman of the Joint Chiefs of Staff (CJCS), Combatant Commands (COCOMs), and Inter-agency participants with critical focus on the long-term warfighting 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 benefits strategic and tactical users in the intelligence, warfighting and business domains by providing them with rich, reliable, persistent collaboration, and networking technologies 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 -- all of 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 four key mechanisms to streamline the process of fielding emergent requirements: (1) Joint Capability Technology Demonstrations (JCTD) with OSD/COCOM/Service/Agency teaming; (2) Joint Ventures with Combatant Commanders/Program of Record (POR) teaming; (3) Risk Mitigation Pilots with POR/Community of Interest (COI) teaming; and, (4) Technology Innovation. The JCTD process aligns with the new Joint Capability Integration and Development System 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 Technology Innovation program concentrates on concept innovation and rapid insertion of advanced data, technology, and knowledge services in the DoD Global Information Grid (GIG).

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), Technology Innovation, and Program Management Support.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	PE 0604764K: <i>Advanced IT Services Joint Program Office (AITS-JPO)</i>

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	14.831	49.364	52.605	-	52.605
Current President's Budget	13.465	49.364	49.198	-	49.198
Total Adjustments	-1.366	-	-3.407	-	-3.407
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	-1.366	-	-3.407	-	-3.407

Change Summary Explanation

The decrease of -\$1.366 in FY 2010 is due to the shifting of priorities to meet new Departmental goals.

The decrease of -\$3.407 in FY 2012 is due to technology initiatives being reduced.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
Title: Command and Control (C2) and Combat Support (CS)	7.912	7.029	4.075
FY 2010 Accomplishments:			
<p>In FY 2010, work continued on the Vice Chairman of the Joints Chiefs of Staff (VCJCS) National Senior Leaders Decision Support System (NSLDSS) initiative. The NSLDSS is a set of technology initiatives and tactics, techniques and processes for national senior leaders to quickly gain situational awareness of global events affecting national interests. NSLDSS includes Joint User Messaging (JUM), the next generation Machine-to-Machine (M2M) messaging functionality that provides improved messaging reliability, and more flexible, capable messaging functionality; and is scalable based on the performance needs of the user community. The JUM web service implementation also supports multiple message brokers to support the distributed, federated, GIG network. The project completed testing analyses, a final Operational Assessment Report was issued, and an Executive Decision Capability was delivered. JUM transitioned into its POR in FY 2010.</p> <p>Significant accomplishments include: migrated the VCJCS initiative NSLDSS to the robust, highly available Defense Enterprise Computing Center (DECC); using the agile development process, delivered 15 incremental releases providing new capability to rapidly expose and present information to Senior Leaders; started the Rapid Deployment of Enterprise Mission Services (RDEMS) enabling technology which JFCOM called a "brilliant concept". Rapidly enabled an enterprise level implementation of a data</p>			

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
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transformation capability and an XML data initiative that provides information in the schema required for the NSLDSS community; pioneered an early implementation of an attribute-based access control capability that enabled the 'unanticipated user' unfettered access to information leveraging the Joint Enterprise Directory Service and the emerging Enterprise Attribute Service. Many of these activities supported the Vice Chairman's vision of information sharing and the ability to access information anytime, anywhere.

FY 2011 Plans:

In FY 2011, work continues on the VCJCS NSLDSS initiative. The focus of the FY 2011 capabilities include 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. Further, decision aid tools are 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 expand user credentialing to interface with the Enterprise Identity Attribute Service to securely harvest the personal information to improve unanticipated user access. Additional mediation services for Universal Core and DoD Metadata Standard schemas provide improved data interoperability. Preferred Force Generator and Rapid Development of Enterprise Mission Services JCTDs allow secure and reliable access and exposure of C2 and other COCOM-designated data sources and NCES-compliant web services.

FY 2012 Plans:

For FY 2012, there will be a continued intense focus on the CTO mission as 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 Joint Chiefs of Staff 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 situation awareness and collaboration toolset.

As a result of the FY 2010 reduction in PE64K, the full range of WEB 2.0 functionality planned for FY 2010 could not be delivered. Specifically, contextual decision enterprise mission services to accelerate decision making and improve decision quality was delayed: simple alerting and contextual reasoning was not delivered. Further, the persistent collaboration social networking capabilities to IT-enable the Warfighter was not provided. We were unable to stand up the full complement of Web 2.0 capabilities

FY 2010	FY 2011	FY 2012

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
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supporting the VC vision. In order to provide a more robust and reliable infrastructure, plans entailed standing up an initial combat cloud/cloud computing capability. This would have supported an anytime, anywhere Warfighter access to critical information and services. This requirement was to be able to stand up an environment that meets industry standards, web services specifications, and referenced implementations so that DoD users could rapidly integrate and interface with the enterprise. The ability to determine compliance on an automated basis would have provided DoD Services and Agencies faster access to the enterprise. Reuse of specifications and standards reduces development time; gets product to the enterprise quicker; allows Services and Agencies to expose info to the enterprise faster; and ensures the ability to interface with other DoD assets in a more efficient and cost-effective manner.

The decrease of -\$2.954 between FY 2011 and FY 2012 is due to the transitioning of JCTD's. The National Senior Leaders Decision Support System Initiative will be transitioning from a JCTD Initiative, and will become operational during the 3rd or 4th quarter of FY 2011.

Title: Information Sharing (IS)

FY 2010 Accomplishments:

In FY 2010, funds supported the Integrated Satellite Communication (SATCOM)-GIG Operations and Management (ISOM) JCTD. The Transnational Information Sharing Cooperation (TISC) JCTD was completed, delivering the capability to rapidly share information in a protected, non-classified environment at an affordable cost. Also, the FY 2010 funding aided DISA's ability to meet the Nation's ever increasing humanitarian missions, such as TISC systems provided at the recent natural disasters in Chile and Haiti.

FY 2011 Plans:

In FY 2011, DISA continues to provide capabilities for crisis action planning tools, joint force protection, and coalition interoperability. DISA is establishing a more robust information sharing environment to support wireless and emerging technologies, NSLDSS operations, and to provide expanded information sharing across all supported organizations.

FY 2012 Plans:

In FY 2012, DISA will continue to develop the means for significantly expanded information sharing to provide JCS the best military advice and to rapidly transform information to knowledge. Information Sharing will be improved to provide the ability to share information that will cut across JCS, COCOM, Inter-Agency and Service/Agency (S/A) organizations.

The funding increase of +\$3.459 between FY 2011 and FY 2012 is required for a framework that will be put in place for the Advanced Technology Information, Identification, and Development Process (ATIIP). This development of technology framework

1.334	1.547	5.006
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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
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will consist of the following: Tool Sweep; Coordination; Processes Development; Federated-integrated Assessment Infrastructure; Evaluation Methodology.			
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<p>Title: Network Infrastructure (NI)</p> <p>FY 2010 Accomplishments: In FY 2010, NI provided the information infrastructure to support C2/CS and IS efforts. The enterprise-wide information infrastructure was enhanced with advanced capabilities that support global data access and visualization of geospatially referenced data. In FY 2010, support to the ISOM JCTD was provided; however, the lack of FY 2010 funding significantly impacted the ability to establish a heterogeneous roaming capability which would expand the warfighter reach. This was to be accomplished by enabling interoperability between dissimilar network types (e.g., WI-MAX, WiFi, non 802-standard, etc). Within the network infrastructure, the ability to provide a universal standard layer based visual display and manipulation of electromagnetic spectrum within a browser was stopped. Further, the capability to enable interoperability and improved network experience for deployed users supporting low bandwidth high latency Satellite links was also stopped.</p> <p>FY 2011 Plans: In FY 2011, DISA continues to provide support to the ISOM JCTD. The enterprise-wide information infrastructure is further enhanced with advanced capabilities that support global data access and visualization of geospatially referenced data.</p> <p>FY 2012 Plans: In FY 2012, DISA will continue providing infrastructure to support the JCTDs, Risk Mitigation Pilots, and Joint Ventures. Features will include wideband networking integrated with smart remote data storage, data conferencing and collaboration, and search and visualization.</p> <p>The increase of +\$0.244 between FY 2011 and FY 2012 is due to a new requirement to provide interface between Terrestrial and Satellite Communications.</p>	1.112	1.856	2.100
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<p>Title: Network Operations (NetOps)</p> <p>FY 2010 Accomplishments: In FY 2010, Mission Assurance Decision Support System (MADSS) provided the COCOMs a joint, globally-available, common operating picture of network status during missions, integrated real-time communications anomaly data feeds and provided a mission area knowledge base for rapid event analysis and course of action development. DISA provided technical support to the Naval Surface Weapons Center (NSWC), Dahlgren.</p> <p>FY 2011 Plans:</p>	1.200	1.238	1.272
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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
<p>In FY 2011, DISA focuses efforts on NetOps support of all of the Leading Edge IT capabilities. Funding leverages the GIG to improve situational awareness, alerting and visualization, and to provide more efficient collaboration.</p> <p>FY 2012 Plans: In FY 2012, DISA will work with the Joint Staff Anti-terrorism/Force Protection community to provide integration support to expose web services and information, and to provide transition capabilities to assist COCOMs in employing a decision-support environment that will provide a tailored rendering of relevant information to the Commanders, their staff, Joint Task Forces, non-government organizations, and coalition forces. Additionally, DISA will address the ability to rapidly restore communications and IT infrastructure to enable emergency relief for DoD. The intent is to address response to events that highlight challenged infrastructures and the complexity of reconstituting communications infrastructures supporting ad hoc teams, multi-agency environments and ensuring interoperability to military and civilian responders.</p> <p>The increase of +\$0.034 between FY 2011 and FY 2012 will enhance user requirement documents.</p>			
<p>Title: Technology Innovation</p> <p>FY 2010 Accomplishments: In FY 2010, an ability to provide for the unanticipated user leveraging the attribute based access control (ABAC) was the VCJCS' number one priority. A small pilot was provided as a proof of concept in FY 2010. DISA was able to stand up a partial implementation of a canonical mediation service. However, without further development, each warfighting application will need to perform mediaiton services to transform information into the desired format, delaying the timely parsing and understanding of the data and putting it in context. This ripples to the ability to effect timely decisions to act on the data that has been gathered.</p> <p>FY 2011 Plans: The FY 2011 funding provides the decision aid capability to accelerate the orient, observe, decide, and act cycle among the National Senior Leadership. This will speed up target acquisition and execution authorization process so that the warfighter can more effectively perform their jobs. In FY 2011, the ABAC pilot is expanded to fully support the department. Working with the Defense Management Data Center as Executive Agent for Enterprise Identity Attribute Service, the ABAC capability pulls unique information (attributes) to build the persona to allow access to information and services across the DOD. The FY 2011 funding expands this functional to a larger audience, to include the warfighting, business, and intelligence communities. FY 2011 also provides the mediation service to transform from multiple DoD formats so that the data is understandable and presentable to the warfighter.</p> <p>FY 2012 Plans: In FY 2012, DISA will bring dot com to dot mil (.com to .mil) by building the middleware to rapidly integrate commercial products which will reduce training cost and time through ease-of-use and implementing familiar commercial web-based technologies</p>	-	25.669	25.374

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
<p>used in our homes. DISA will accelerate time-to-market for new capabilities through agile development and hosting on enterprise compliant middleware. Reduce development costs through shared infrastructure by applying commercial cloud concepts rather than multiple buildout of same capability at various locations. DISA will extend the value of these enterprise capabilities beyond DoD to Non-Government Organizations, the Federal Government and non-traditional partners. DISA will rapidly deliver high-value capabilities and expose them to the enterprise and warfighter.</p> <p>The decrease of -\$0.295 from FY 2011 to FY 2012 is due to infrastructure stand-up costs that will not be required.</p>			
<p>Title: Program Management Support</p> <p>FY 2010 Accomplishments: In FY 2010, shared services and support functions were consolidated across the CTO. An information assurance roadmap for future program integration activities was developed, contracting requirements were consolidated into fewer contract vehicles, and knowledge management repositories were refined for contracting and DISA executive views. Additionally, DISA properly realigned the CTO civilian pay funding from O&M to RDT&E, to support those personnel engaged in non-headquarters RDT&E activities.</p> <p>FY 2011 Plans: In FY 2011, Program Management Support provides managers with project management, financial management, contract management assistance, information assurance technical expertise, knowledge management, outreach, and transition engineering. Program management resources continue to support the AITS-JPO growth in all key mission areas of C2/C2, IS, NI, NetOps, and Technology Innovation. Funds will be used for personnel support, supplies, and services.</p> <p>FY 2012 Plans: In FY 2012, there will be a continued need for core program management support to the AITS-JPO 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.</p>	1.907	12.025	11.371
Accomplishments/Planned Programs Subtotals	13.465	49.364	49.198

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

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• O&M, DW/PE 0604764K: O&M, DW	14.653	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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. The DISA CTO makes a concerted effort to award many of its contracts to small businesses. Additionally, many of the DISA contracts were awarded with multiple options 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 the CTO. 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 BAA was successful in FY 2010 and was re-established for FY 2011, with increased management review and wider sharing throughout DISA to foster partnerships. The vendors holding separate contracts for transition engineering, technical oversight support, and program management services are prohibited from competing for design and development work for which they had prior knowledge or had worked on developing requirements.

F. Performance Metrics

Metrics are tracked for each type of technology project within the program, which utilizes JCTDs, Joint Ventures, and Risk Mitigation Pilots to support DISA's mandate to deliver prioritized emergent IT capabilities and services faster, extend enterprise services to the edge, accelerate operational effectiveness and efficiency, and enable information sharing and assurance. The model is to build it, allow the user to try it, and provide comments. Then fixes can be made which allows for an agile process and identifies failure early and enables the capabilities to the users earlier. For JCTDs, the program office develops an Implementation Directive and a Management Plan. These guidance documents outline the basic objectives, schedule, and funding for the JCTD. 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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	14.456	5.000	Dec 2010	4.300	Dec 2011	-		4.300	Continuing	Continuing	Continuing
Product Development 2	C/CPFF	SAIC (TO 50 & 57):Arlington, VA	22.143	-		-		-		-	Continuing	Continuing	Continuing
Product Development 4	SS/FP	JACKBE:JACKBE	2.045	2.022	Dec 2010	-		-		-	Continuing	Continuing	Continuing
Product Development 4	C/CPFF	SOLERS:SOLERS	2.598	3.649	May 2011	3.649	May 2012	-		3.649	Continuing	Continuing	Continuing
Subtotal			41.242	10.671		7.949		-		7.949			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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/FFP	RAYTHEON:RAYTHEON	4.501	4.018	Sep 2011	3.718	Sep 2012	-		3.718	Continuing	Continuing	Continuing
Support 2	C/T&M	TWM:TWM	1.163	-		-		-		-	Continuing	Continuing	Continuing
Support 3	C/FFP	TBD:TBD	0.150	0.731	Aug 2011	1.285	Aug 2012	-		1.285	Continuing	Continuing	Continuing
Support 4	Various	Various:Various	2.675	19.063		17.151		-		17.151	Continuing	Continuing	Continuing
Support 5	Various	Various:Various	-	-		5.200		-		5.200	Continuing	Continuing	Continuing
Subtotal			8.489	23.812		27.354		-		27.354			

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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:MITRE	0.900	1.750		1.000		-		1.000	Continuing	Continuing	Continuing
Management Services 2	C/CPFF	Keylogic:Keylogic	2.638	4.750	Sep 2010	4.580	Sep 2011	-		4.580	Continuing	Continuing	Continuing
Program Management Civilian Pay	Various	Various:Various	-	8.381		8.315		-		8.315	Continuing	Continuing	Continuing
Subtotal			3.538	14.881		13.895		-		13.895			

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
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

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	

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
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

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	
GIG Content Management POP, IOC, MUA, Transition	
GIG Risk Management POP, IOC, MUA, Transition	
GIG Net Defense POP, IOC, MUA, Transition	
GIG Services POP	
Assured Services for Decision Superiority	

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Command and Control (C2) and Combat Support (CS)				
National Senior Leadership Decision Support (NSLDS) POP, IOC, MUA & Transition	1	2010	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	2010	4	2010
Senior Mashup (Strategic Watch)	1	2010	4	2011
Persistent Collaboration for Decision-making - POP, IOC, MUA & Transition	1	2010	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	2010	4	2010
Event Management Framework (EMF)	1	2010	2	2011
IS FY 2010 JCTD - POP, IOC, MUA & Transition	1	2010	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	2010	4	2012

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Transformational Coalition Information Sharing	1	2012	4	2014
Tactical Collaboration Support	1	2014	4	2016
<i>Innovation Initiatives Investment Fund</i>				
Innovation Initiatives Framework	1	2011	4	2016
FY 2011 approved Innovation Initiatives – testing, acceptance, infusion	1	2011	4	2012
FY 2012 approved Innovation Initiatives - testing, acceptance, infusion	1	2012	4	2014
FY 2013 approved Innovation Initiatives - testing, acceptance, infusion	1	2013	4	2015
FY 2014 approved Innovation Initiatives - testing, acceptance	1	2014	4	2016
FY 2015 approved Innovation Initiatives – testing	1	2015	4	2016
FY 2016 approved Innovation Initiatives – testing	1	2016	4	2016
<i>Network Infrastructure (NI)</i>				
Intelligence Community Storage JCTD POP, IOC, MUA, Transition	1	2010	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
<i>Network Operations (NetOps)</i>				
GIG Enterprise Service Management) ESM POP, IOC, MUA, Transition	1	2010	4	2012
Mission Assurance Decision Support Systems (MADSS) POP, IOC, MUA1, MUA2, Transition	1	2010	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

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604764K: <i>Advanced IT Services Joint Program Office (AITS-JPO)</i>	PROJECT T26: <i>Leading Edge Pilot Information Technology</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
GIG Services POP	1	2015	4	2016
Assured Services for Decision Superiority	1	2011	4	2014

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>				PE 0303141K: <i>Global Combat Support System</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	16.035	17.842	19.837	-	19.837	20.473	23.379	21.495	21.497	Continuing	Continuing
CS01: <i>Global Combat Support System</i>	16.035	17.842	19.837	-	19.837	20.473	23.379	21.495	21.497	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 (SOA) to deliver joint logistics asset visibility to the warfighter. GCSS-J facilitates information interoperability across and between Combat Support and Command and Control functions. GCSS-J provides the IT capabilities required to move and sustain joint forces throughout the full spectrum of military operations. Combatant Command and Joint Task Force Commanders are the primary GCSS-J customers.

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. Without GCSS-J, the warfighter will no longer have the ability to make critical, real-time decisions and dynamic access to authoritative, comprehensive Combat Support information for situational awareness will be lost. The warfighter will not have the tools necessary to provide the right personnel, equipment, supplies, and support, to the right place, at the right time, in the right quantities across the full spectrum of military operations.

The joint logistics warfighter will be forced to return to swivel seat logistics; a return to the old model of accessing critical data from multiple stove-piped legacy system, requiring multiple user identifications and passwords. To view the battlespace, the warfighter will have to retrieve and separately compile information from the various databases – a very time consuming and inefficient task, impacting the fight. Utilizing the joint decision tools and reporting capability of GCSS-J results in the warfighter’s ability to access data from multiple sources within minutes rather than hours.

This program supports the DISA Campaign Plan on Infrastructure, Security and Applications; Integration and Production; and Customer Requirements and Enterprise Services Management.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0303141K: <i>Global Combat Support System</i>
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B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	18.038	17.842	19.981	-	19.981
Current President's Budget	16.035	17.842	19.837	-	19.837
Total Adjustments	-2.003	-	-0.144	-	-0.144
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-2.003	-	-0.144	-	-0.144

Change Summary Explanation

The decrease in FY 2010 of -\$2.003 is due to shifting of priorities to meet new Departmental goals.

The decrease in FY 2012 of -\$0.144 is due to general reduction for Economic Assumptions and a reduction of velocity for GCSS-J Increment 7 development.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0303141K: <i>Global Combat Support System</i>	PROJECT CS01: <i>Global Combat Support System</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
CS01: <i>Global Combat Support System</i>	16.035	17.842	19.837	-	19.837	20.473	23.379	21.495	21.497	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Global Combat Support System-Joint (GCSS-J), in conjunction with other Global Information Grid elements including Global Command and Control System-Joint, 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/Planned Programs (\$ in Millions)

	FY 2010	FY 2011	FY 2012
Title: Global Combat Support System-Joint	16.035	17.842	19.837
FY 2010 Accomplishments: Enhancements were made to create a more intuitive, map-based capability for status and visibility of fuels; initial munitions and intra-theater distribution capability (i.e., air, land, and sea domains); access for authoritative data sources (i.e., WebREPOL for bulk petroleum products and Fuels Enterprise Server via the Defense Energy Support Center for fuel); Munitions WatchBoards that provides the user with access to inventory/stockage objectives by commodity or site; and distribution WatchBoards that utilize mapping capability to compare on-hand and in-transit quantities with planned requirements.			
FY 2011 Plans: The focus for FY 2011 is an architectural transition and capability migration (i.e., Flex-based architecture) which affects the mapping, reporting capabilities, and Joint Engineer Planning and Execution System; enhancements to the Joint Logistics Management application (i.e., Munitions and Fuels Watchboards); and continued intra-theater distribution capability development (i.e., air, land, and sea domains), readiness (equipment availability), and prepositioned stock capabilities. GCSS-J continues to meet the functional priorities of the Combatant Command 129 Requirements as approved and prioritized by the functional sponsor, Joint Staff J4.			
FY 2012 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0303141K: <i>Global Combat Support System</i>	PROJECT CS01: <i>Global Combat Support System</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
<p>In FY 2012, GCSS-J will continue to meet the functional priorities of the Combatant Command 129 Requirements as approved and prioritized by the functional sponsor, Joint Staff J4. GCSS-J will support the continued transition to a service-oriented architecture (SOA) 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 facilitate information operability across and between Combat Support (CS) and Command and Control (C2) functions. Additionally, GCSS-J will continue to provide the IT capabilities required to move and sustain joint forces throughout the spectrum of military operations. Additionally, funding will provide support for Information Assurance Certification Authority (i.e., system release security testing, verification and validation, and produce certification and accreditation documentation); software and system testing support; operational test and evaluation; and Engineering support (i.e., assess, develop, and recommend improvements and risks associated with systems engineering processes; and recommend implementation and development, input to test, field and other activities and plans to develop key system software, data, technical architectures and strategies).</p> <p>The +\$1.995 increase will support development of ALPS v2.0 and increase the velocity of GCSS-J Increment 7 development resulting in rapidly delivering capability (e.g., fuels and munitions watchboards, intra-theatre distribution capability for land, sea, and air, and logistics planning) to the joint logistician.</p>			
Accomplishments/Planned Programs Subtotals	16.035	17.842	19.837

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• O&M, DW/PE 0303141K: O&M, <i>DW</i>	15.914	17.830	18.145	0.000	18.145	17.802	18.027	18.324	18.641	Continuing	Continuing
• Procurement, DW/PE 0303141K: <i>Procurement, DW</i>	2.865	2.803	2.955	0.000	2.955	2.963	3.065	3.111	3.113	Continuing	Continuing

D. Acquisition Strategy
 The GCSS-J Program Management Office (PMO) uses various contract types, employs large and small contractors, and is focused to achieve agency socio-economic goals and incorporate DoD acquisition reform initiatives. 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.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	PE 0303141K: <i>Global Combat Support System</i>	CS01: <i>Global Combat Support System</i>

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, it allows the contractor, the materiel developer, to produce the technical solution methodology to deliver leading edge technology to the warfighter.

E. Performance Metrics

GCSS-J develops and fields capabilities that are based upon Joint Staff validated, approved, and prioritized functional requirements derived from the approved GCSS-J Capability Development Document. All of these requirements and goals are translated into releases with specific capabilities, which have established cost, schedule, and performance parameters approved by the DISA's Component Acquisition Executive/Milestone Decision Authority.

Metrics and requirements are routinely gathered by the GCSS-J PMO. The Customer Requirements Team collaborates weekly with the functional sponsor, JS J4, to prioritize and allocate user stories (requirements) to specific release iterations. These iterations are 20-day development cycles called sprints; a release is comprised of four sprints. The PMO's Test Team collects performance data during the development test period to compare and contrast against previous baseline metrics and has found the number of defects has significantly decreased with the "build a little, test a little" approach which is integral with agile development. The metrics from the strategic server sites are collected and analyzed by the PMO to ensure that operational mission needs/requirements continue to be met and if system enhancements/capabilities are of benefit to the joint logistics warfighter. 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 (e.g., Global Force Management Data Initiative). This postures and allows GCSS-J to transition to a Service Oriented Architecture and directly supports DoD's net-centric vision of exposing and consuming web services. Performance is key in this type of environment and as GCSS-J usage increases and new capabilities are fielded, the PMO will continue to gather metrics to ensure that the system is meeting user requirements.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0303141K: <i>Global Combat Support System</i>	PROJECT CS01: <i>Global Combat Support System</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	63.575	14.654	Mar 2011	16.710	Mar 2012	-		16.710	0.000	94.939	94.939
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	11.065	1.104	Apr 2011	1.148	Apr 2012	-		1.148	0.000	13.317	13.317
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			136.109	15.758		17.858		-		17.858	0.000	169.725	169.725

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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:DIA	1.110	0.390	Oct 2011	0.428	Oct 2012	-		0.428	0.000	1.928	1.928
Test & Evaluation 4	C/CPFF	Pragmatics:Pragmatics	1.684	-		-		-		-	0.000	1.684	1.684
Test & Evaluation 5	C/CPFF	AAC, Inc.,:Vienna, VA	0.767	0.695	Jul 2011	0.790	Jul 2012	-		0.790	0.000	2.252	2.252
Test & Evaluation 6	MIPR	JITC,:Ft. Huachuca, AZ	2.805	0.743	Oct 2011	0.761	Oct 2012	-		0.761	0.000	4.309	4.309
Subtotal			10.768	1.828		1.979		-		1.979	0.000	14.575	14.575

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0303141K: <i>Global Combat Support System</i>	PROJECT CS01: <i>Global Combat Support System</i>
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	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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

Engineering Events & Milestones: Software Sys Requirements Review																													
Engineering Events & Milestones: Preliminary Design Review																													
Engineering Events & Milestones: Critical Design Review																													
Developmental Test & Evaluation																													
Contractor Integration Test																													
Accept/Security Testing																													
Operational Test & Evaluation																													
Operational Test Readiness Review																													
Fielding Decision																													
Acquisition Events – Milestone B/C: Increment 7 – MS C																													
Acquisition Events – Milestone B/C: Increment 8 – MS B																													
Acquisition Events – Milestone B/C: Increment 8 – MS C																													

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 5: <i>Development & Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0303141K: <i>Global Combat Support System</i>	PROJECT CS01: <i>Global Combat Support System</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Engineering Events & Milestones: Software Sys Requirements Review	1	2010	4	2016
Engineering Events & Milestones: Preliminary Design Review	1	2010	4	2016
Engineering Events & Milestones: Critical Design Review	1	2010	4	2016
Developmental Test & Evaluation	1	2010	4	2016
Contractor Integration Test	1	2010	4	2016
Accept/Security Testing	1	2010	4	2016
Operational Test & Evaluation	2	2010	4	2016
Operational Test Readiness Review	2	2010	4	2016
Fielding Decision	1	2010	3	2016
Acquisition Events – Milestone B/C: Increment 7 – MS C	1	2010	1	2010
Acquisition Events – Milestone B/C: Increment 8 – MS B	4	2014	4	2014
Acquisition Events – Milestone B/C: Increment 8 – MS C	3	2015	3	2015

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	74.361	74.023	72.403	-	72.403	72.153	73.584	73.855	74.270	Continuing	Continuing
T30: <i>Test and Evaluation</i>	12.679	17.307	16.540	-	16.540	15.892	14.720	14.775	14.839	Continuing	Continuing
T40: <i>Major Range Test Facility Base</i>	61.682	56.716	55.863	-	55.863	56.261	58.864	59.080	59.431	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Information Systems Agency (DISA) Major Range and Test Facility Base (MRTFB) includes over 1,298 military, civilians, and contractor personnel and nearly 379,772 square feet of Command, Control, Communications, Computing and Intelligence (C4I)/Global Information Grid (GIG) testing laboratories. DISA's MRTFB consists of the Joint Interoperability Test Command (JITC) and the Test and Evaluation Management Center (TEMC), which serve as the only joint element of the Department of Defense's (DoD's) MRTFB.

JITC is the sole interoperability certifier for all National Security System/Information Technology (NSS/IT) for DoD. Additional core missions include testing of DoD terrestrial, space, and tactical communications capabilities, supporting warfighters on technical NSS/IT 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.

TEMC supports agile acquisition and rapid fielding of DISA net-centric capabilities by improving DISA Test and Evaluation (T&E) processes and gaining efficiencies, investigating innovative methodologies and tools, and continuously enhancing the posture of the T&E infrastructure for its customers.

These efforts support the testing area of the DISA Campaign Plan.

In FY 2012, to ensure its relevancy to DoD and the warfighter community, JITC and TEMC will continue to manage and maintain its current capability base to provide efficient, responsive test, evaluation, and certification (TE&C) services, as well as continue to:

- Integrate evolving Service Oriented Architecture (SOA) and Net-Ready Key Performance Parameter (NR-KPP) concepts into DoD interoperability certification testing, enhancing JITC operationally realistic test capabilities and reducing warfighter program risk.
- Expand its test operations capability to provision, federate, and monitor TE&C environment by providing enhanced virtualization required GIG Test and Evaluation capabilities.
- Coordinate and manage functional area products required for Joint T&E of Intelligence, Warfighting, and Business capabilities supporting Joint and Combined warfighting effectiveness.
- Provide consistent, repeatable test capabilities ensuring DISA and other DoD Agency acquired capabilities are operationally effective and suitable; certifying Joint Warfighter capabilities are interoperable with the currently fielded systems.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i>	PE 0208045K: <i>C4I Interoperability</i>
BA 7: <i>Operational Systems Development</i>	

- Provide T&E guidance/oversight to DISA acquisition programs
- Operate, manage, and maintain a state-of-the-art test facility to support development and testing of DISA capabilities

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	74.473	74.023	76.989	-	76.989
Current President's Budget	74.361	74.023	72.403	-	72.403
Total Adjustments	-0.112	-	-4.586	-	-4.586
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.112	-	-4.586	-	-4.586

Change Summary Explanation

The reduction of -\$0.112 in FY 2010 is due to efficiencies achieved by delaying infrastructure replacement and improvement requirements (i.e., UPS upgrades, HVAC upgrades/replacement, and Electrical system upgrades) coupled with replacing temporary Trailer Unit structures which are approaching end of life cycle.

The reduction of -\$4.586 in FY 2012 is due to delaying infrastructure replacement and improvement requirements, general adjustments for Economic Assumptions and reduction in contractor support which is in response to the SECDEF initiative on improving DoD operations.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T30: <i>Test and Evaluation</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
T30: <i>Test and Evaluation</i>	12.679	17.307	16.540	-	16.540	15.892	14.720	14.775	14.839	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 Evaluation (OT&E) to determine the operational effectiveness and suitability of the systems acquired, assigned, or managed by the Defense Information Systems Agency (DISA), military Services, and other Agencies. As the sole joint interoperability test certification authority, JITC conducts lifecycle test, evaluation, and certification of the Department of Defense (DoD) National Security Systems/Information Technology (NSS/IT).

- Provides direct interoperability support to Combatant Commanders during exercises and contingency operations to ensure joint interoperability throughout the lifecycle of DoD NSS/IT, and ensures successful combined operations with Allies and Coalition partners. Provides the funding for direct test support to Combatant Command (COCOM) operations in theater; as well as technical 24x7x365 Warfighter Command, Control, Communications, Computing and Intelligence (C4I) Hotline support to the COCOMs and Services.
- JITC conducts five annual distributed Joint Tactical Data Link hardware-in-the-loop interoperability test events to evaluate Service and Agency warfighting capabilities. Each event includes approximately seven COCOM/Service/Agency facilities and seven participating systems, resulting in over 20 annual system/capability assessments or certifications.
- Provides for planning, conducting, analyzing and reporting for three annual DoD Interoperability Communications Exercises (DICE) which provides a distributed Joint Task Force (JTF) network to support agile, responsive, and efficient testing and rapid deployment of Joint Warfighting communications capabilities. Annual participation includes over 40 systems/capabilities and results in approximately 25 system/capability assessments or certifications and 15 support, training and technology demonstrations.
- Provides a sustaining capability to support engineering, development, and operational evaluation of DISA, Service Components, Combatant Commanders, and DoD Agencies existing and legacy IT and NSS. Develops an evaluation infrastructure for current and future IT and NSS and is used to evaluate IT and NSS being considered for fielding. Additionally, JITC 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.
- Provides support for the warfighter with enterprise messaging test & evaluation 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.
- Provides for the development, implementation, and maintenance of the Major Range and Test Facility Base's (MRTFB's) interoperability testing tools necessary 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 2010	FY 2011	FY 2012
Title: Operational Test and Evaluation	1.271	1.339	1.360

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T30: <i>Test and Evaluation</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
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FY 2010 Accomplishments:
 JITC conducted operational test and evaluations of systems acquired, assigned, or managed by DISA, military Services, and other Agencies to determine if the systems met user requirements and to support capability fielding decisions. JITC's testing has evolved to more system-of-systems testing with emphasis on evaluating mission threads to ensure the successful execution of the users' required capabilities. JITC also provided operational test and evaluation support to Combatant Commanders, Services Components, and DoD Agencies to include: the National Security Agency (NSA), the Defense Logistic Agency (DLA), and the Business Transformation Agency (BTA).

FY 2011 Plans:
 JITC will conduct operational test and evaluations of GIG-enabling capabilities and of DISA IT and NSS acquisition programs of record to determine if the systems meet user requirements and to support capability fielding decisions. JITC will also provide operational test and evaluation support to Combatant Commanders, Services Components, and DoD Agencies to include the NSA, DLA, and BTA.

The increase of +\$0.068 in funding between FY 2010 and FY 2011 is due to redistribution of civilian pay to correlate with full-time equivalent (FTE) billets and a realignment of funding between Test/Evaluation (T30 Direct) and Major Range Test Facility Base (T40 Insitutional) for increased institutional costs.

FY 2012 Plans:
 Continued efforts are focused on improving core capabilities; OT&E policy, operational evaluation, and centralized data management. OT&E policy defines processes and procedures, and provides OT&E-specific training to test action officers. Operational evaluators ensure adherence of policy to test programs, consistent development of integrated evaluation strategies and mission-based analysis structures, and application of statistical rigor to data collection and analysis. Data management provides a persistent suite of automated data management tools and support personnel to provide data collection, storage, authentication, trouble reporting, and analysis of test data. The implementations of these core capabilities will help ensure consistency and commonality across test programs, enable sharing of test results for acquisition decisions, shorten test reporting cycles, and reduce duplicative test efforts.

The increase of +\$0.021 in funding betwee FY 2011 and FY 2012 is due to economic adjustments, realignment of funds to higher agency priorities and delaying infrastructure replacement and improvement requirements.

<i>Title:</i> Joint Interoperability Testing	8.240	12.800	12.155
<i>FY 2010 Accomplishments:</i>			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T30: <i>Test and Evaluation</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
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JITC conducted four distributed Joint Tactical Data Link hardware-in-the-loop interoperability test events to evaluate Service and Agency warfighting capabilities. Each event included approximately seven COCOM/Service/Agency facilities and seven participating systems, resulting in over 20 system/capability assessments or certifications. JITC conducted or participated in over 350 test activities involving over 190 DoD systems. JITC provided test related services for over 49 Acquisition Category I (ACAT I) programs and issued over 260 interoperability testing and certification related products. In addition, JITC supported other Joint Staff initiatives, such as the review of over 170 Test Exemption, Information Support Plan (ISP), and Legacy Waiver requests. JITC processes roughly 300 Interim Certificate to Operate (ICTO) requests for the Military Communications-Electronics Board (MCEB) Interoperability Test Panel (ITP).

FY 2011 Plans:
JITC will provide test related services for ACAT I programs and issue interoperability testing and certification related products. In addition, JITC will support other Joint Staff initiatives, such as the review of Test Exemption, ISP, and Legacy Waiver requests. JITC will process ICTO requests for the MCEB ITP. Focus will be more on evaluation of systems at the enterprise level in a net-centric environment, requiring JITC to test in a distributed manner using dedicated test networks.

The increase of +\$4.560 million from FY 2010 to FY 2011 is due to redistribution of civilian pay to correlate with full-time equivalent (FTE) billets and a realignment of funding between Test/Evaluation (T30 Direct) and Major Range Test Facility Base (T40 Institutional) for increased institutional costs.

FY 2012 Plans:
JITC will conduct or participate in test activities involving a wide range of DoD systems. JITC will provide test related services for ACAT I programs and issue interoperability testing and certification related products. In addition, JITC will support other Joint Staff initiatives, such as the review of Test Exemption, ISP, and Legacy Waiver requests. JITC will process requests for ICTO for the MCEB ITP. Success Metrics: Percentage of test events that are completed with a reduced cycle time while meeting technical rigor requirements. Percentage of positive responses from customers in terms of cost, schedule, performance.

The decrease of -\$0.645 in funding between FY 2011 and FY 2012 is due to economic adjustments, contractor cost savings, realignment of funds to higher agency priorities and delaying infrastructure replacement and improvement requirements.

Title: Support to Warfighter	3.168	3.168	3.025
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FY 2010 Accomplishments:

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T30: <i>Test and Evaluation</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
<p>Provided direct interoperability support to Combatant Commanders during exercises and contingency operations to ensure joint interoperability of DoD NSS/IT and successful combined operations with Allies and Coalition partners. Provided DoD with solutions to problems raised in hotline calls and publish monthly lessons learned reports.</p> <p>FY 2011 Plans: JITC will continue to respond to Hotline calls from across the DoD and other federal agencies, support Command and Control Interoperability Board (CCIB), COCOM sponsored exercises, contingency operations, CITs, NATO tactical data link tests, and provide on-site liaison officer support to the COCOMs. In addition, JITC will participate in Afghanistan Mission Network (AMN) development, Coalition Network migration, and United States/Coalition communications equipment testing to ensure successful combined operations with our Allies and Coalition partners. Success Metrics: Percentage of resolved Hotline calls that meet the Warfighters' technical and timeliness requirements.</p> <p>FY 2012 Plans: JITC will continue to respond to Hotline calls from across the DoD and other federal agencies, supported CCIBs, COCOM sponsored exercises, contingency operations, CITs, NATO tactical data link tests, and provided on-site liaison officer support to the COCOMs. In addition, JITC will participate in AMN development, Coalition Network migration, and United States/Coalition communications equipment testing to ensure successful combined operations with our Allies and Coalition partners. Success Metrics: Percentage of resolved Hotline calls that meet the Warfighters' technical and timeliness requirements.</p> <p>The decrease of -\$0.143 in funding between FY 2011 and FY 2012 is due to economic adjustments, contractor cost savings, realignment of funds to higher agency priorities and delaying infrastructure replacement and improvement requirements.</p>			
Accomplishments/Planned Programs Subtotals	12.679	17.307	16.540

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. For FY 2010, JITC responded to nearly 250 Hotline calls from across the DoD, other federal agencies and the 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

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0208045K: <i>C4I Interoperability</i>	T30: <i>Test and Evaluation</i>

participation included over 40 systems/capabilities and resulted in approximately 25 system/capability assessments or certifications and 15 support, training and technology demonstrations. JITC supported over 350 test activities involving over 190 DoD systems and 49 ACAT I programs. JITC issued over 260 interoperability testing and certification related products. In addition, JITC supported other Joint Staff initiatives, such as the review of over 170 Test Exemption, ISP, and Legacy Waiver requests. JITC also processed approximately 300 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 while meeting technical rigor requirements; percentage of resolved Hotline calls that meet the Warfighters' technical and timeliness requirements; and percentage of positive responses from customers in terms of cost, schedule, and performance.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T30: <i>Test and Evaluation</i>
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Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	29.565	3.706	Oct 2010	-		-		-	0.000	33.271	33.271
Test and Evaluation	C/T&M	Interop Joint Venture:Ft. Huachuca, AZ	34.535	6.219	Oct 2010	-		-		-	0.000	40.754	40.754
Test and Evaluation	C/T&M	Northrup Grumman Information Technology:Ft. Huachuca, AZ	22.113	2.258	Oct 2010	-		-		-	0.000	24.371	24.371
Test and Evaluation	TBD	TBD:TBD	-	-			Oct 2011	12.150		-		12.150	Continuing
Subtotal			86.213	12.183				12.150		-		12.150	

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	8.905	5.124		4.390		-		4.390	Continuing	Continuing	Continuing
Subtotal			8.905	5.124		4.390		-		4.390			

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			95.118	17.307		16.540		-		16.540			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T30: <i>Test and Evaluation</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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	[REDACTED]																											
Conduct joint interoperability test and certification on DoD C4I systems using the Joint Family of Tactical Data Links (TDL)	[REDACTED]																											
Plan and conduct the Defense Interoperability Communications Exercise (DICE)	[REDACTED]																											
Navy Message Legacy Systems	[REDACTED]																											
Navy Tactical Message Systems	[REDACTED]																											
Operate 24/7 Interoperability Hotline & Publish quarterly Lessons Learned reports	[REDACTED]																											
Provide Joint/Combined Interoperability Test support to Combatant Commanders	[REDACTED]																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T30: <i>Test and Evaluation</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Provide Operational Test & Evaluation (OT&E) of DISA acquired systems	1	2010	4	2016
Conduct joint interoperability test and certification on DoD C41 systems using the Joint Family of Tactical Data Links (TDL)	1	2010	4	2016
Plan and conduct the Defense Interoperability Communications Exercise (DICE)	1	2010	4	2016
Navy Message Legacy Systems	1	2010	4	2016
Navy Tactical Message Systems	1	2010	4	2016
Operate 24/7 Interoperability Hotline & Publish quarterly Lessons Learned reports	1	2010	4	2016
Provide Joint/Combined Interoperability Test support to Combatant Commanders	1	2010	4	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T40: <i>Major Range Test Facility Base</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
T40: <i>Major Range Test Facility Base</i>	61.682	56.716	55.863	-	55.863	56.261	58.864	59.080	59.431	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Provides institutional funds for the Defense Information Systems Agency's (DISA's) Joint Interoperability Test Command (JITC) and the Test and Evaluation Management Center (TEMC). These organizations serve as the only joint element of the Department of Defense's (DoD's) Major Range and Test Facility Base (MRTFB), which provides the policy and responsibilities for the management and operation of DoD MRTFB activities.

- Fully enables JITC mission capability, thus making DISA capable of executing its National Security System/ Information Technology (NSS/IT) interoperability test and evaluation (T&E) mission mandated in the Chairman of the Joint Chief of Staff Instruction (CJCSI) 6212 and DoD policies which establish procedures for JITC system interoperability test certification and prescribe DoD policy and responsibilities for interoperability and supportability of NSS/IT.
- 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 NSS/IT acquisitions (e.g., Net-centric core services, Net Centric Enterprise Services (NCES), Global Command and Control System (GCCS), Global Combat Support System (GCSS), etc.) as well as Joint Tactical Data Links (TDL), command and control, global, terrestrial, satellite and tactical communications systems. Supports DISA's Office of the Secretary of Defense (OSD) mandated mission to serve as an MRTFB by providing NSS/IT T&E infrastructure responsible for maintenance and upgrades. The environments and test tool enhancements allow testing efforts to keep pace with the rapid change in technology. All upgrades improve the testing methodologies and timelines for of all DoD and DISA NSS/IT acquisitions that require Joint interoperability assessments and certification in accordance with DoD's policy for developing, evaluating and providing interoperability and supportability certification of NSS/IT.
- From an NSS/IT perspective, DISA acquisition and the T&E support coupled with infrastructure of the Global Information Grid serve as the DoD's corollary information technology capability. Without this project, the Services and Agencies will be forced to operate and evaluate their own service products independent from one another and/or from an overarching Joint infrastructure which will inhibit their ability to fulfill their Joint interoperable C4I warfighting mission.
- 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 DISA MRTFB to continue to implement Net Readiness Capabilities Resources (NRCR), which will 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.
- Enables continued 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.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T40: <i>Major Range Test Facility Base</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
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<p>Title: Interoperability Test Support</p> <p>FY 2010 Accomplishments: Funded the DISA MRTFB institutional efforts associated with operating the Joint Interoperability Test Command (JITC) at Indian Head, MD, Fort Huachuca, AZ and the TEMC at Arlington, VA, including base and test operations and maintenance, multi-purpose testbed infrastructures and labs, civilian pay, contract management, communications and automation support, and development of T&E standards, policies, and procedures. Initiated TestForge.mil to improve DoD Test, Evaluation and Certification (TE&C) readiness for acquisition of IT systems. Provided Communication Security (COMSEC) service to 89 systems, and technical control services to 76 systems. Improved the information and knowledge management operations and tools, revitalized testbeds and labs, established a Net Ready-Key Performance Parameter (NR-KPP) helpdesk, developed and enhanced Information Assurance (IA) systems, provided operational test/developmental test and net-centric (NC) instrumentation support, and developed IA Unified Capabilities Requirements (UCRs).</p> <p>FY 2011 Plans: Funds will be used for 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 global testing; 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 will allow 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). Identify and acquire a power management system to support the Federal Data Center Consolidation Initiative (FDCCI) causing a 20 percent non-peak hour power reduction. These initiatives will not only improve the infrastructure, but help the Command gain efficiencies through the use of virtual and federated concepts to provide optimal flexibility in a dynamic IT laboratory environment.</p> <p>The decrease of -\$4.966 million from FY 2010 to FY 2011 reflects a redistribution of civilian pay to correlate with full-time equivalent (FTE) billets and a realignment of funding between Test/Evaluation (T30 Direct) and Major Range Test Facility Base (T40 Institutional) for decreased institutional costs.</p> <p>FY 2012 Plans: Continue to 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 maintenance of virtual communications capability and enhanced laboratory upgrades. Develop, implement, and maintain the MRTFB's enterprise</p>	61.682	56.716	55.863
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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T40: <i>Major Range Test Facility Base</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
testing tools necessary to provide DoD with a Center of Excellence for testing of net-centric systems in a realistic operational environment. Enhance laboratory and testing software to keep pace with the rapid changes in technology.			
The decrease of -\$0.853 million from FY 2011 to FY 2012 reflects a reduction for general adjustments for Economic Assumptions and reduction in contractor support which is in response to the SECDEF initiative on improving DoD operations.			
Accomplishments/Planned Programs Subtotals	61.682	56.716	55.863

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

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• PE:0208045K: <i>Operation & Maintenance, Defense-Wide</i>	9.994	10.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.417	20.417

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

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 1,298 military, civilians, and contractor personnel, and nearly 379,772 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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T40: <i>Major Range Test Facility Base</i>
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Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	50.619	13.308	Oct 2010	-		-		-	Continuing	Continuing	63.927
Test and Evaluation	C/T&M	Interop Joint Venture:Ft. Huachuca, AZ	72.774	14.369	Oct 2010	-		-		-	Continuing	Continuing	87.255
Test and Evaluation	C/T&M	Northrup Grumman Information Technology:Ft. Huachuca, AZ	38.052	6.277	Oct 2010	-		-		-	Continuing	Continuing	44.329
Test and Evaluation	TBD	TBD:TBD	-	-		34.160	Oct 2011	-		34.160	Continuing	Continuing	Continuing
Subtotal			161.445	33.954		34.160		-		34.160			

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	21.629	22.762		21.703		-		21.703	Continuing	Continuing	Continuing
Subtotal			21.629	22.762		21.703		-		21.703			

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			183.074	56.716		55.863		-		55.863			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T40: <i>Major Range Test Facility Base</i>
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FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
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

Develop and Implement Interoperability test systems to support warfighters	
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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0208045K: <i>C4I Interoperability</i>	PROJECT T40: <i>Major Range Test Facility Base</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Develop and Implement Interoperability test systems to support warfighters	1	2010	4	2016

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>			PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>								
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	10.713	9.379	7.093	-	7.093	6.159	8.147	5.535	5.544	Continuing	Continuing
NND: <i>Multinational Information sharing</i>	10.713	9.379	7.093	-	7.093	6.159	8.147	5.535	5.544	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. The final component of the MNIS program, CENTRIXS Cross Enclave Requirement (CCER), in its objective state will move from the initial, converged enclave architecture serving 15% of the Communities of Interest (COI) with three basic services to 40+ COIs (virtually 100% of known requirements) with a full complement of collaboration tools supporting coordinated action and full situational awareness. If FY 2012 funding is reduced, it will delay the attainment of information exchange between multiple coalition networks, further extend a current capability shortfall in transferring secure information in a trusted way between members of separate coalition forces, delay attainment of objective CENTRIXS operational capability and necessitate additional funding to support the legacy CENTRIXS networks.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	10.722	9.379	5.355	-	5.355
Current President's Budget	10.713	9.379	7.093	-	7.093
Total Adjustments	-0.009	-	1.738	-	1.738
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.009	-	1.738	-	1.738

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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

R-1 ITEM NOMENCLATURE
PE 0301144K: *Joint/Allied Coalition Information Sharing*

Change Summary Explanation

Funding decrease in FY 2010 of $-\$0.009$ is the result of shifting of priorities to meet new Department goals.

Funding increase in FY 2012 of $+\$1.738$ is the net result of a $+\$2.100$ to support Unclassified Information Sharing (UIS). The UIS capability will use existing systems to meet the combatant commands requirement for tools and technology to facilitate collaboration with non-traditional partners for humanitarian missions. The reduction of $-\$0.362$ is due to Economic Assumptions and a reduction of the testing baseline for CENTRIXS, CCER and CFBLNet. As planned, CCER Phase 2 will complete IOC in FY11 which will significantly reduce its testing requirements in FY12.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
NND: <i>Multinational Information sharing</i>	10.713	9.379	7.093	-	7.093	6.159	8.147	5.535	5.544	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Multinational Information Sharing (MNIS) Program is a portfolio of three 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 CENTRIXS Combined Enclave Requirement (CCER) is a Preplanned Product Improvement (P3I) to CENTRIXS that will provide basic COI information exchange services (e.g., email, chat, file sharing) between multiple secret coalition networks/COIs. Operational and functional requirements were defined and documented by the Joint Staff J6 and approved by the Net-Centric Functional Capabilities Board (NC FCB). 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. CCER is envisioned as a bridge to objective MNIS capability.

-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. GRIFFIN/ICI/Pegasus has a strategic focus and is member nation centric. The name GRIFFIN/ICI changed to Pegasus in June 2010.

-Third and final, the principal enabler for improving information sharing capabilities at all operational levels. 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.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>
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In FY 2012, funding will be used to continue the evolution of the CCER by increasing the number of Communities of Interest (COIs) and adding new services to meet Joint Staff (JS) validated requirements. FY 2012 efforts will also leverage proven technologies and enterprise-grade capabilities (developed in FY 2010 and FY 2011) to move toward CCER Phase II enterprise services to provide cross-COI information exchange between multiple secret coalition networks. In addition, funding will be used for testing/assessment of CCER Phase II capability and will support certification and accreditation of the CCER Phase II solution. Failure to provide FY 2012 funding to support CCER Phase II solution will delay the attainment of information exchange between multiple coalition networks and will further extend a current capability shortfall in transferring secure information in a trusted way between members of separate coalition forces.

In addition, FY 2012 funds will be used to accomplish the necessary security, interoperability and certification testing of new Joint Staff-validated CENTRIXS capabilities for the non-CCER CENTRIXS networks that DISA supports (e.g., providing non-maritime, off-island/off-peninsula centralized services for the CENTRIXS Four Eyes, CENTRIXS-International Security Assistance Force (ISAF), CENTRIXS-Japan and CENTRIXS-Korea networks). This effort is driven by validated coalition information sharing requirements from the Joint Staff's MNIS Current Operational Systems Requirements Management Process. Failure to provide FY 2012 funding in support of CENTRIXS and P3I testing will delay attainment of objective CENTRIXS operational capability and necessitate additional funding to support the legacy CENTRIXS networks.

In FY 2012, funding will be used to finalize Pegasus FY 2010 and FY 2011 efforts to implement several new information sharing capabilities with the CCEB member Nations further promoting and enhancing the timely exchange of strategic and theater level information with our closest Allies. Funding will resource the final testing, certification and accreditation needed to complete Pegasus's implementation of a U.S. to United Kingdom (U.K.) chat system which will facilitate instant collaboration between U.S. strategic and tactical units and their counterparts in the U.K. Additionally, Pegasus will finalize an analysis of requirements, development and development testing for the implementation of a U.S. to United Kingdom (U.K.) chat system that will facilitate instant collaboration between U.S. strategic and tactical units and their counterparts in the U.K. FY 2012 requirements will finalize operational tests and accreditation for Pegasus implementation of chat between the U.S. Secret Internet Protocol Router Network (SIPRNet) and the North Atlantic Air Defense (NORAD) classified network to greatly enhance timely information sharing by adding to the existing email with attachments capability. Failure to fund planned Pegasus initiatives will result in the current restrictive information sharing methods among the 5 Eyes coalition nations, which are expensive to maintain as-is, and will delay continuance of needed technical refresh of operational Pegasus subsystems, further limiting Pegasus's ability to meet strategic planning and operational needs.

In FY 2012, CFBLNet will continue to support coalition information sharing technology initiatives for both the operational and the intelligence communities. CFBLNet initiatives will help evaluate combined/coalition command and control, operational, and intelligence interoperability shortfalls; initiatives conducted to improve information exchange capabilities; document and report the assessment; and share "lessons learned" with the Combatant Commands in support of operational networks. Failure to fund CFBLNet's basic planning and engineering staff will reduce the potential benefits to be gained from all coalition initiatives in this environment.

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Multinational Information Sharing	10.713	9.379	7.093	-	7.093
FY 2010 Accomplishments: CCER/CENTRIXS					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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- CENTRIXS completed interoperability testing for ISAF Capability
 - CCER achieved Initial Operating Capability (IOC) for CCER Phase I capabilities to provide baseline COI services of CCER for six COIs
 - Completed Economic Analysis (EA) and Return On Investment (ROI) studies for CCER Phase II
 - Stood up CCER Computer Network Defense (CND) Services Provider Security Operations Cell (SOC) to ensure the efficiency and quality of CCER IT security

Griffin/ICI/Pegasus
 - Completed interoperability and integration testing, requirements to achieve IOC for ICI Phase I capability to provide a major upgrade to the US-AUS Pegasus bilateral domain, replacing the current costly Cross Domain Guards with a Commercial-Off-The-Shelf Email Security Appliance.
 - Extended Chat Services between United Kingdom and United States

CFBLNet
 - Conducted USJFCOM-led EMPIRE CHALLENGE 10 Exercise to support Intelligence, Surveillance, and Reconnaissance, missile defense, and NATO force interoperability testing

FY 2011 Plans:
 CCER/CENTRIXS
 - Beginning incremental additions of COIs and enterprise services
 - Completing research, development and requirements analysis to produce an acquisition Strategy for CCER Phase II
 - Completing Request for Proposal (RFP) for CCER Phase II solution
 - Initiating Source Selection Evaluation Board (SSEB)
 - Completing testing, certification and accreditation for CCER CND infrastructure upgrades

Griffin/ICI/Pegasus
 - Supporting testing, certification and accreditation of Web Services for all CCEB Nations
 - Extending file publishing to 2 CCEB Nations
 - Extending Chat Services between United States and remaining CCEB Nations
 - Converging CENTRIXS Coalition Four Eyes into the ICI with initial email and web services capabilities amongst national desktops

CFBLNet

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>- Conducting USJFCOM-led CWID 11 Exercises/EMPIRE CHALLENGE 11/12 Exercises to support Intelligence, Surveillance, and Reconnaissance, missile defense, and NATO force interoperability testing</p> <p>- Continuing to evaluate emerging capabilities and technologies supportive of coalition information sharing needs</p> <p>Less funding (-\$1.334 million) is required from FY 2010 to FY 2011 to perform integration testing. In 3Q FY 2010 CCER Phase I achieved IOC and began initial stages of Operation and Maintenance phase for six COIs.</p> <p><i>FY 2012 Base Plans:</i> CCER/CENTRIXS</p> <ul style="list-style-type: none"> - Complete incremental additions of COIs and enterprise services - - Complete joint inter-operability and integration testing for CCER Phase II <p>Griffin/ICI/Pegasus</p> <ul style="list-style-type: none"> - Support testing, certification and accreditation of Web Services for all CCEB Nations - Complete file publishing to all CCEB Nations <p>CFBLNet</p> <ul style="list-style-type: none"> - Conduct USJFCOM-led EMPIRE CHALLENGE 11/12 Exercises to support Intelligence, Surveillance, and Reconnaissance, missile defense, and NATO force interoperability testing - Continue to evaluate emerging capabilities and technologies supportive of coalition information sharing needs <p>Less funding (-\$2.286 million) is required from FY 2011 to FY 2012 to perform CCER RDT&E efforts. By FY 2012 CCER Phase I will be in full sustainment.</p>					
Accomplishments/Planned Programs Subtotals	10.713	9.379	7.093	-	7.093

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• O&M, DW/0301144K: O&M, DW	39.437	42.087	48.196	1.500	49.696	51.436	51.526	57.376	57.823	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>
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C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• Proc, DW/0301144K: <i>Proc, DW</i>	7.681	6.180	3.497	0.000	3.497	5.496	6.383	2.547	2.548	Continuing	Continuing

D. Acquisition Strategy

Performance-based contracts are used exclusively 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 attempt

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

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>
<p>Measure: -Security</p> <p>Performance Metric: -Audit log must capture 99.99% of any unauthorized user activity.</p> <p>Methodology: -Assessment Plan -Conduct audit log reviews in conjunction -FSO penetration tests.</p> <p>Measure: -Reliability</p> <p>Performance Metric: -98.9% availability of the DISA-managed infrastructure. -Mean time to restore functionality <30 minutes.</p> <p>Methodology: -Assessment Plan -Audit logs and Monitoring</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Cross Domain Chat - develop & tech svcs	C/CPFF	Harris, :Alexandria, VA	11.907	1.467	Feb 2011	1.100	Feb 2012	-		1.100	Continuing	Continuing	Continuing
Cross Domain Solutions – operational capabilities support	C/CPFF	HAI/ Raytheon,:Arlington, VA	7.682	3.461	Feb 2011	0.388	Feb 2012	-		0.388	Continuing	Continuing	Continuing
Subtotal			19.589	4.928		1.488		-		1.488			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
CLASSIFIED	MIPR	:-	9.069	-		-		-		-	Continuing	Continuing	Continuing
Federally Funded Research Develop Center (FFRDC)	C/CPFF	MITRE, :Arlington, VA	4.761	1.100	Oct 2010	2.338	Oct 2011	-		2.338	Continuing	Continuing	Continuing
Program support	C/CPFF	Ingenium, Upper Marlboro, MD / SAIC, WDC:-	1.522	-		-		-		-	Continuing	Continuing	Continuing
Engineering Support	C/CPFF	Raytheon, :Arlington, VA	5.046	1.351	Feb 2010	1.341	Feb 2011	-		1.341	Continuing	Continuing	Continuing
DoD Services	MIPR	Various:Various	1.171	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			21.569	2.451		3.679		-		3.679			

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Coalition Lab T&E, IAVA STIG	MIPR	JITC:JITC	5.911	2.000	Oct 2010	1.926	Oct 2011	-		1.926	Continuing	Continuing	Continuing
Subtotal			5.911	2.000		1.926		-		1.926			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>
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	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	47.069	9.379	7.093	-	7.093			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>
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	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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																												
Capability																												
CCER																												
JITC Testing Security/C&A																												
CFBLNet																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0301144K: <i>Joint/Allied Coalition Information Sharing</i>	PROJECT NND: <i>Multinational Information sharing</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>MULTINATIONAL INFORMATION SHARING (MNIS) – Current Systems</i>				
Capability	1	2010	4	2016
CCER	1	2010	4	2011
JITC Testing Security/C&A	1	2010	4	2016
CFBLNet	2	2010	4	2015

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302016K: <i>National Military Command System-Wide Support</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	0.526	0.467	0.481	-	0.481	0.494	0.512	0.520	0.520	Continuing	Continuing
S32: <i>NMCS Command Center Engineering</i>	0.526	0.467	0.481	-	0.481	0.494	0.512	0.520	0.520	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 NMCS components and facilities satisfy operational requirements including emergency messaging, situational awareness, crisis action, and information management.

This funding is vital to the NMCS engineering program in supporting the government's ability to safeguard national security and respond to contingencies globally and/or nuclear war. NMCS Engineering will focus 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 will continue to maintain the NMCS Reference Guide (NRG) required by DoDD S-5100.44 and develop engineering and test plans for the installation of hardware and software systems utilized within the NMCS. If funding is reduced to the NMCS engineering program, it would adversely affect the government's ability to respond to the full spectrum of contingency operations and safeguard our national security. As NMCS systems reach the end of their life-cycles, there would be insufficient funding to support the engineering of system upgrades/replacements. Support to the Joint Staff initiatives to develop and implement net-centric, web-based, tools/applications to improve NMCS information sharing and knowledge management would be seriously degraded. This effort supports the national leadership and nuclear command and control portion of the DISA Campaign Plan.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0302016K: <i>National Military Command System-Wide Support</i>

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	0.546	0.467	0.512	-	0.512
Current President's Budget	0.526	0.467	0.481	-	0.481
Total Adjustments	-0.020	-	-0.031	-	-0.031
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	-0.020	-	-0.031	-	-0.031

Change Summary Explanation

The FY 2010 adjustment of -\$0.020 million is due to shifting of priorities to meet new Departmental goals.

The FY 2012 adjustment of -\$0.031 million is due to shifting of priorities to meet new Departmental goals.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
Title: NMCS Systems Engineering	0.526	0.467	0.481
FY 2010 Accomplishments: The FY 2010 funding resulted in the completion of payload stressed operational test and voice quality testing for the wideband global SATCOM - Flight #3, the installation and test of new Milstar/NPES circuits at Site-R, and the installation and test of new fiber and circuits at Sites-C/4. Also, 80% of the NMCS Reference Guide was completed, providing real-time access to detailed descriptions and programmatic data for NMCS systems and facilities.			
FY 2011 Plans: The installation and testing of (a) new radios and antennas for the UEN system at Site R; (b) BCS-F at the NMCC, alternate NMCC at Site-R, and the Office of the Secretary of Defense, Communications. The NMCS Reference Guide will be completed. The FY 2011 decrease is due to reduced engineering studies to support the National Military Command Center (NMCC).			
FY 2012 Plans: Upgrade to the Super High Frequency communications network and a technical evaluation of options for implementing NC2 over IP. The FY 2012 increase will provide increased implementation support for the NMCC.			
Accomplishments/Planned Programs Subtotals	0.526	0.467	0.481

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302016K: <i>National Military Command System-Wide Support</i>
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D. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• O&M, DW/PE 0302016K: O&M, DW	30.578	32.390	33.772	0.000	33.772	34.051	35.379	35.731	35.869	Continuing	Continuing

E. Acquisition Strategy

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

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 2010, twelve major projects were completed. All twelve projects met operational/functional requirements and were accepted by their respective NMCS customers. All twelve projects were completed within allocated costs/resources. Eleven of the twelve projects were completed within the original schedule; completion of the other project was delayed due to a government site not being ready to install/test a new NMCS system per the original schedule; this installation/test was completed within the adjusted schedule.

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302016K: <i>National Military Command System-Wide Support</i>	PROJECT S32: <i>NMCS Command Center Engineering</i>
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	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Completion of the NMCS Reference Guide				■																								
Maintenance/Update of NMCS Reference Guide (ongoing real-time)			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
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/NPES circuits at NMCC Site R							■																					
Inspection/Maintenance of HEMP sites in the NCR		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302016K: <i>National Military Command System-Wide Support</i>	PROJECT S32: <i>NMCS Command Center Engineering</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Completion of the NMCS Reference Guide	1	2011	1	2011
Maintenance/Update of NMCS Reference Guide (ongoing real-time)	3	2010	4	2016
Completion of UEN Upgrade	1	2011	1	2011
Installation of Battle Control System-Fixed in the NCR	2	2011	2	2011
Completion of Study: NC2 over IP	4	2012	4	2012
Completion of SHF Upgrade	1	2012	1	2012
Installation of new MILSTAR/NPES circuits at NMCC Site R	3	2011	3	2011
Inspection/Maintenance of HEMP sites in the NCR	2	2010	4	2016

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	28.188	16.629	8.366	-	8.366	8.354	8.658	8.787	8.791	Continuing	Continuing
E65: <i>Modeling and Simulation</i>	18.071	8.526	5.446	-	5.446	5.448	5.914	6.004	5.917	Continuing	Continuing
T62: <i>GIG Systems Engineering and Support</i>	10.117	8.103	2.920	-	2.920	2.906	2.744	2.783	2.874	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 Assistant Secretary of Defense-Networks and Information Integration (ASD-NII) 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 which 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. Continuous direct beneficiaries of these capabilities include ASD NII, 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 2012 funding will provide modeling capabilities that will provide DISN Internet Protocol (IP) and Transport Capacity Planning models, to include FY 2012 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.

The Interoperability Enhancement Process (IEP) supports the resolution of Tactical Data Enterprise Services (TDES) through implementation of issues resolution, the development of 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. Demand-Assigned Multiple Access Compatible (DAMA-C) Ultra High Frequency Satellite Communications (UHF SATCOM) is an essential capability supporting combat search and rescue missions, and other safety-of-life operations. The DAMA-C program will provide significantly improved sharing of legacy UHF satellite resources for tens of thousands of disadvantaged user terminals.

The Enterprise Wide Systems Engineering (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 build to that is often unavailable. Through the EWSE program,

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i>	PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>
BA 7: <i>Operational Systems Development</i>	

no single entity will resolve technical, policy, programmatic issues in a time manner on proposed end-to-end solutions. Without enterprise requirements definition, 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 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	16.435	16.629	9.102	-	9.102
Current President's Budget	28.188	16.629	8.366	-	8.366
Total Adjustments	11.753	-	-0.736	-	-0.736
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	11.753	-	-0.736	-	-0.736

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: E65: *Modeling and Simulation*

 Congressional Add: *Cyber Security*

	FY 2010	FY 2011
	10.000	-
Congressional Add Subtotals for Project: E65	10.000	-
Congressional Add Totals for all Projects	10.000	-

Change Summary Explanation

The increase of +\$11.753 in FY 2010 is due to the following: technical performance analysis assessments, systems architecture development, integration management and technical strategies +\$.845M, Design Reference Work +\$.557M, UHF-Integrated Waveform +\$.351M, and a one-time Congressional-Add for Cyber Security (for the implementation of a cyber accelerator business model) +\$10M.

The decrease of -\$0.736 in FY2012 is attributable to the completion of the Interoperability Enhancement Process.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT E65: <i>Modeling and Simulation</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
<i>E65: Modeling and Simulation</i>	18.071	8.526	5.446	-	5.446	5.448	5.914	6.004	5.917	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, to include: application assessments, contingency planning, network capacity planning and diagnostics, and systems-level modeling and simulation. Modeling and Simulation develops cross-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 Enterprise Wide Systems Engineering (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 are to provide DoD decision makers, from the OSD level to the warfighter, 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 provide improved performance and cost-avoidance in the selected transitions and network deployments; improved network performance and efficient topology changes via accurate capacity design, as facilitated by insightful traffic analyses; improved performance of applications for DoD and the warfighter; efficient means of troubleshooting and enterprise applications redesign; and reduced risk in the program products provided to the warfighter.

The Interoperability Enhancement Process (IEP) supports the resolution of 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 realization and maintenance of interoperable Net-Centric weapons, sensors, and C2 systems at the tactical edge. The IEP will utilize a jointly defined and developed interoperability tool set to determine the TDES interoperability capabilities of systems. Interoperability shortfalls (gaps) will be identified for each system. The gaps will be based on weapon, sensor or C2 system demonstrated information exchange capabilities analyzed with respect to the current policies, doctrines, architectures, operational concepts, concepts of employment, standards, roadmap(s), and the Joint Mission Threats (JTM)s 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 (future) systems, the IEP will be conducted prior to Milestone "C" of the platform. DISA will support this process via: 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 employment of net-

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT E65: <i>Modeling and Simulation</i>
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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.

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

	FY 2010	FY 2011	FY 2012
<p>Title: Modeling and Simulation</p> <p>FY 2010 Accomplishments: Funded Enterprise Wide Systems Engineering (EWSE) Integrated Project Teams (IPT)s to resolve near term technical interoperability issues affecting the GIG. Conducted a study of the feasibility of inter-domain routing protocols for MANET networks and IP multicast protocols and analyzed issues affecting the GIG multicast architecture when using IP multicast protocols in the GIG tactical environment. Developed a high-level architecture for the federation of GIG Service Oriented Architecture (SOA) systems. Conducted a study and developed the technical framework and guidance for the Joint Tactical Service development and delivery.</p> <ul style="list-style-type: none"> • Modeling and Simulation produced: Strategic DISN IP and Transport Asynchronous Transfer Module (ATM) elimination and Technology Refresh models for the Pacific and CONUS theaters. A DISN goal is to eliminate the ATM layer of the current network, for both cost-efficiencies and to achieve IP convergence. • Strategic IP modeling and analysis for NIPRNET Hardening Initiatives, which greatly strengthens the NIPRNET Information Assurance (IA) defenses in exchanges with the Internet. Modeling and analysis helps ensure no unintended impacts on performance for the users by the new insertions into the network, as well as the expected impact on Internet exchanges. • DoD Internet usage and growth projection models and analyses for capacity planning and information assurance initiatives. • Software release for Joint Communication Simulation Support (JCSS); JCSS training class for users of JCSS software; JCSS User Conference for discussion of new requirements and developments among the widespread community of users. • Defense Switched Network (DSN) performance reporting and outage scenario assessments. • Baselineing of the allied and coalition partners Combined Cross Enclave Requirements (CCER) communications in Southwest Asia (SWA). • HAIPE - Border Gateway Protocol Peer Discovery analyses. <p>FY 2011 Plans: Fund EWSE efforts to resolve near term (1 to 3 years) high-priority technical issues impacting operational capabilities affecting GIG end-to-end performance. Define a standard set of Virtual Private Network (VPN) services for the GIG community and Community of Interest (COI) data sharing capabilities and develop an end-to-end VPN architecture using Multi-Protocol Label Switching (MPLS) and industry open standard VPN technologies. Continue to develop GIG Technical Profiles (GTP) for GIG enterprise services. Work with key stakeholders (STRATCOM, JFCOM, DoD Components) to develop the Joint Training and Experimentation Network (JTEN) and the future GIG air-borne layer tactical network architecture to support effective joint war fighting missions. Develop a policy-based information sharing architecture to support dynamic information sharing and</p>	8.071	8.526	5.446

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT E65: <i>Modeling and Simulation</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
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<p>dissemination capabilities across multiple domains of different security classifications. Develop a global access architecture to support enterprise users within DoD, based on recent development of global authentication and access control guidelines. This project supports DoD Programs of Record, JTF-GNO, OASD NII/DoD CIO, JCS/J6, STRATCOM and DoD Components. The cost per project/effort is \$0.675 million.</p> <p>Modeling and Simulation funding supports continued, enhanced, modeling capabilities that will provide:</p> <ul style="list-style-type: none"> • DISN IP and Transport Capacity Planning models for FY 2011 - CONUS, SWA, EUROPE, and PACIFIC theaters, to support decision-making on DISN changes to meet evolving user requirements. • JCSS software release, with integration of new communication device models; model development guide; training of new users. • DoD Internet usage and growth projection models and analyses for capacity planning and information assurance initiatives, for DISA Director, JTF-GNO, and Network Services (NS) decisions. • New/enhanced modeling tools to provide inputs to network planning in support of UCR goals of the evolving DISN, with focus on the transition of DSN from its current circuit-switched technology to an IP service. • Continued IP modeling and analyses for new/augmented NIPRNET Hardening Initiatives. • Performance measurements and analyses to guide Thin Client and DCO program decisions. • EWSE modeling support. <p>FY 2012 Plans:</p> <p>Funds will provide continual 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), NetOps and Enterprise Services.</p> <p>Modeling and simulation funding will provide continued, enhanced, modeling capabilities that will provide:</p> <ul style="list-style-type: none"> • DISN IP and Transport Capacity Planning models, to include addressing FY 2012 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, JTF-GNO, and Network Services. • New/enhanced modeling tools to provide inputs to network planning in support of UCR and end-to-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. • Modeling support for customer needs in DISA program/project decisions and planning. 			
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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT E65: <i>Modeling and Simulation</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
The decrease in total funding shown between FY 2011 and FY 2012 is due to the expected closeout of the Interoperability Enhancement Process (IEP) project in FY 2011.			
Accomplishments/Planned Programs Subtotals	8.071	8.526	5.446

	FY 2010	FY 2011
Congressional Add: Cyber Security	10.000	-
FY 2010 Accomplishments: Provided funding for the implementation of a cyber accelerator business model. It also provided funding for research and demonstration projects where innovative and high-pay off commercial technologies, such as security services, are identified, quickly developed and effectively applied to national cybersecurity requirements.		
Congressional Adds Subtotals	10.000	-

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

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• PE 0302019K: <i>Operation & Maintenance, Defense-Wide</i>	72.407	69.826	69.207	0.000	69.207	72.463	72.459	73.647	74.664	Continuing	Continuing

D. Acquisition Strategy

The GIG EWSE project uses a number of contractors for technical IPT support, and piloting and validation support with SRA, Booz Allen Hamilton, Netconn, Lockheed Martin and Raytheon being 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.

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 via Military Inter-departmental Purchase Requests (MIPR) with associated Service Level Agreements to Air Force and Navy IAW the execution of IEP Management Plan.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT E65: <i>Modeling and Simulation</i>

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 (metrics) 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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	SS/FFP	OPNET Tech, Inc.:Bethesda, MD	2.142	0.880	Aug 2011	1.262	Aug 2012	-		1.262	Continuing	Continuing	3.800
Product Development	C/CPFF	APPTIS:Chantilly, VA	0.817	0.320	Jan 2011	0.336	Jan 2012	-		0.336	Continuing	Continuing	0.873
Product Development	SS/FFP	Noblis:Falls Church, VA	0.972	0.340	Jan 2011	-		-		-	Continuing	Continuing	0.980
Product Development	C/FFP	Booz Allen, Hamilton:McLean, VA	1.092	-		1.092	Dec 2011	-		1.092	Continuing	Continuing	1.092
Product Development	C/FFP	NRL:Washington, DC	0.100	-		-		-		-	Continuing	Continuing	0.100
Product Development	C/CPFF	TBD:TBD	0.161	-		1.006	Mar 2012	-		1.006	Continuing	Continuing	0.161
Product Development	C/FFP	To be determined:To be determined	1.100	1.100	Dec 2010	0.500	Dec 2011	-		0.500	Continuing	Continuing	3.300
Product Development	C/CPFF	Unknown:Unknown	0.426	0.500	Dec 2010	0.500	Dec 2011	-		0.500	Continuing	Continuing	0.500
Product Development	C/CPFF	Not known:Not known	1.670	1.439	Mar 2011	0.750	Mar 2012	-		0.750	Continuing	Continuing	3.147
Product Development	MIPR	Various:Various	3.464	3.547	Dec 2010	-		-		-	Continuing	Continuing	7.011
Enterprise Wide Systems Engineering	C/FFP	Northrop Grumman:Fairfax, VA	1.784	-		-		-		-	Continuing	Continuing	1.784
Clear Sky Pilot	C/CPFF	AFRL Terremark:TBD	3.000	-		-		-		-	Continuing	Continuing	3.000
Narus	C/CPFF	AFRL:TBD	1.450	-		-		-		-	Continuing	Continuing	1.450
Cyber Accelerator	C/CPFF	DTIC:TBD	2.800	-		-		-		-	Continuing	Continuing	2.800
Commercial Integration Demonstration	C/CPFF	DTIC:TBD	2.750	-		-		-		-	Continuing	Continuing	2.750
Subtotal			23.728	8.126		5.446		-		5.446			32.748

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	SS/CPFF	Comptel:Arlington, VA	1.672	0.400	Jan 2011	-		-		-	Continuing	Continuing	1.200
Subtotal			1.672	0.400		-		-		-			1.200

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT E65: <i>Modeling and Simulation</i>
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	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	25.400	8.526	5.446	-	5.446			33.948

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT E65: <i>Modeling and Simulation</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
<i>Horizontal Engineering</i>																												
Horizontal Engineering																												
<i>Modeling and Simulation Applications</i>																												
Modeling and Simulation Applications																												
<i>Clear Sky Pilot</i>																												
Clear Sky Pilot																												
<i>Narus Project</i>																												
Narus Project																												
<i>Cyber Accelerator</i>																												
Cyber Accelerator																												
<i>Commercial Integration Demonstration</i>																												
Commercial Integration Demonstration																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT E65: <i>Modeling and Simulation</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Horizontal Engineering</i>				
Horizontal Engineering	1	2010	4	2016
<i>Modeling and Simulation Applications</i>				
Modeling and Simulation Applications	1	2010	4	2016
<i>Clear Sky Pilot</i>				
Clear Sky Pilot	4	2010	2	2011
<i>Narus Project</i>				
Narus Project	4	2010	4	2011
<i>Cyber Accelerator</i>				
Cyber Accelerator	1	2011	2	2011
<i>Commercial Integration Demonstration</i>				
Commercial Integration Demonstration	1	2011	4	2011

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>				PROJECT T62: <i>GIG Systems Engineering and Support</i>			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
T62: <i>GIG Systems Engineering and Support</i>	10.117	8.103	2.920	-	2.920	2.906	2.744	2.783	2.874	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Chief Technology Officer (CTO) supports efforts that will strengthen the delivery of critical Global Information Grid (GIG) products, services, and capabilities to the warfighter through the establishment of DISA Technology Management Framework which 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.

- Capability 1 supports end-to-end reviews of all solutions, programs, and services 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. The end result is more efficient and effective technology investments and ultimately improved global, net-centric operations which are delivered via 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 intelligence community.

- Capability 2 supports various aspects of evolving the GIG, including developing enterprise system architecture constructs for the GIG and components, providing engineering guidance for component evolution, including incorporation of 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, security, architectures, and application frameworks. This involves the identification and recommendation of innovative engineering techniques, technologies and products 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, but is available to individuals having special access to program details.

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

	FY 2010	FY 2011	FY 2012
Title: Global Information Grid (GIG) Systems Engineering and Support	10.117	8.103	2.920
FY 2010 Accomplishments: FY 2010 funding of \$2.718 million developed the definition and initial phases of the Technology Management Framework (TMF); continued support of the Technology Readiness Assessments for several key DISA programs of record; continued support for the enterprise Thin-Client pilot and development of a complete enterprise systems architecture, which identified technology gaps and			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT T62: <i>GIG Systems Engineering and Support</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
<p>coordinated mitigation strategies with the NCES program and other enterprise service efforts for providing mobile-mission, mobile warrior enterprise user services.</p> <p>The remaining FY 2010 funding performed classified work.</p> <p>FY 2011 Plans: FY 2011 funding of \$4.121 million will be used to continue evolve the Technology Management Framework and continue support of the Technology Readiness Assessments, an essential capability supporting several key DISA programs of record; continued engineering support for initial increment of an enterprise-capable Thin-Client service leveraging technology gap mitigations in identity management, SIPRNet CAC, and soft-client technologies with a hand-off of services to a program of record. The Enterprise Architecture definition effort will continue to evolve with increased emphasis on transitional issues such as application virtualization, application and network performance tuning, Defense Enterprise Computing Center (DECC) hosting optimization to include cloud computing techniques; and focused technology investigation into several commercial product assessments for the possible inclusion of these capabilities into the next generation GIG to improve information sharing, information security, and network performance.</p> <p>The balance of the funding performed classified work.</p> <p>FY 2012 Plans: FY 2012 funding of \$2.920 million will be used to refine several major elements of the Technology Management Framework and continue support of the Technology Readiness Assessments, an essential capability supporting several key DISA programs of record; the Strategic Technology Plan will be 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 will continue 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.</p> <p>The decrease of -\$1.201 between FY 2011 and FY 2012 is due to the completion of DAMA-C and support for the thin client.</p>			
Accomplishments/Planned Programs Subtotals	10.117	8.103	2.920

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT T62: <i>GIG Systems Engineering and Support</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• O&M, DW/PE 0302019K: <i>Operation & Maintenance, Defense-Wide</i>	72.407	69.826	69.207	0.000	69.207	72.463	72.459	73.647	74.664	Continuing	Continuing

D. Acquisition Strategy

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

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 (APES), 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) in support of thin client VCJCS initiatives. This effort will provide support to DISA and Joint Staff in its mission of providing a Multi-Level Service (MLS) Thin Client solution developed for the DoD for GIG Enterprise Services. The Enterprise Thin Client MLS solution will transition into programs of record, to be delivered in the DISA Computing Services Cloud. Through this project MITRE will support the definition and implementation of various aspects involving the GIG. MITRE (FFRDC) will provide support to DISA in its mission of providing end-to-end systems engineering for the DoD for GIG Enterprise Services. MITRE (FFRDC) will ensure that system integration and implementation is coordinated with other major C2 systems via 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.

Program Management Support: In FY 2010, shared services and support functions were consolidated across the CTO. An information assurance roadmap for future program integration activities was developed, contracting requirements were consolidated into fewer contract vehicles, and knowledge management repositories were

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	T62: <i>GIG Systems Engineering and Support</i>

refined for contracting and DISA executive views. Additionally DISA requested a change to realign the CTO civilian pay funding from O&M to RDT&E, to support those personnel engaged in non-headquarters RDT&E activities. The whole of the CTO organization is now included in the budgeting of these funds.

In FY 2011, Program Management Support provides managers with project management, financial management, contract management assistance, information assurance technical expertise, knowledge management, outreach, and transition engineering. Program management resources continue 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, 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. If FY 2012 funding is reduced for this mission set, critical information, GIG 2.0/Web 3.0, and enterprise missions services supporting DoD and the VCJCS information sharing vision will be delayed or halted; and DISA will not be able to provide DoD and its partners with the innovative technologies that can make a difference in the new era of warfighting by enabling the operational transformation of warfighting. DoD must be IT-enabled with the ability to out-think our adversaries.

Lack of program management funds will result not only in the inability of CTO to complete the technological and operational objectives, but also hinder the ability to provide management oversight, and to respond quickly to data calls from a single knowledge base.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT T62: <i>GIG Systems Engineering and Support</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	21.336	1.650	Oct 2010	1.725	Oct 2010	-		1.725	Continuing	Continuing	19.270
Industry Tech Res	FFRDC	Gartner:Various	0.051	0.120	Oct 2010	0.120	Oct 2012	-		0.120	Continuing	Continuing	0.171
GIG Technical Insertion Engineering	C/FFP	SRA, Inc.:Fairfax, VA	1.211	-		-		-		-	Continuing	Continuing	2.472
Product Development	C/FFP	Raytheon:Various	0.787	0.510	Oct 2010	0.616	Oct 2010	-		0.616	Continuing	Continuing	0.788
DAMA-C	MIPR	Defense Micro-electronics Activity:Various	7.700	3.982	Mar 2011	-		-		-	0.000	11.682	11.682
Thin Engineering Support	MIPR	Air Force Research Lab:Various	-	1.500	Sep 2011	-		-		-	0.000	1.500	1.500
Engineering Technical Services	Various	Various:Various	0.750	0.341	Oct 2009	0.459	Oct 2012	-		0.459	Continuing	Continuing	
Subtotal			31.835	8.103		2.920		-		2.920			
Project Cost Totals			31.835	8.103		2.920		-		2.920			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT T62: <i>GIG Systems Engineering and Support</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Engineering Support (Raytheon)																												
Engineering Support (Raytheon)	[REDACTED]																											
Industry Technical Research																												
Industry Technical Research	[REDACTED]																											
Technical Direction Agent (TDA)																												
Technical Direction Agent (TDA)	[REDACTED]																											
Thin Client Engineering Support																												
Thin Client Engineering Support																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0302019K: <i>Defense Info. Infrastructure Engineering and Integration</i>	PROJECT T62: <i>GIG Systems Engineering and Support</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Engineering Support (Raytheon)</i>				
Engineering Support (Raytheon)	1	2010	4	2012
<i>Industry Technical Research</i>				
Industry Technical Research	1	2010	4	2012
<i>Technical Direction Agent (TDA)</i>				
Technical Direction Agent (TDA)	1	2010	4	2012
<i>Thin Client Engineering Support</i>				
Thin Client Engineering Support	1	2011	2	2011

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	42.772	32.255	11.324	10.500	21.824	25.890	21.470	11.906	10.907	Continuing	Continuing
PC01: <i>Presidential and National Voice Conferencing</i>	1.643	1.910	4.345	-	4.345	18.626	13.954	4.267	3.267	Continuing	Continuing
T82: <i>DISN Systems Engineering Support</i>	41.129	30.345	6.979	10.500	17.479	7.264	7.516	7.639	7.640	Continuing	Continuing

Note

*The FY 2012 total includes a request \$10.500 million in OCO funding.

**The FY 2011 total includes a request \$23.125 million in OCO funding.

***DoD submitted a JUON Prior Approval Reprogramming for \$32.500 million of FY 2010 RDT&E in support of the DTCS effort.

A. Mission Description and Budget Item Justification

The Defense Information Systems Network (DISN) is the Department's consolidated worldwide telecommunications capability that provides secure, end-to-end information transport for Department of Defense (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 Government leadership including the President, Secretary of Defense, Services, COCOMs, subordinate organizations (military and civilian) and allies. DRSN will also support 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: The RDT&E effort includes 1) engineering for Internet Protocol (IP) and Optical transport capabilities to ensure the essential operations of a robust and secure DISN, 2) 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 3) the peripheral and component design in support of the DRSN to sustain continued highly classified, critical senior leadership communications capabilities.

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 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.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i>	PE 0303126K: <i>Long-Haul Communications - DCS</i>
BA 7: <i>Operational Systems Development</i>	

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 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	9.157	32.255	8.452	-	8.452
Current President's Budget	42.772	32.255	11.324	10.500	21.824
Total Adjustments	33.615	-	2.872	10.500	13.372
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	32.500	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	1.115	-	2.872	10.500	13.372

Change Summary Explanation

The increase of \$+33.615 in FY 2010 is due to a +\$32.500M JUON Congressional prior approval OCO reprogramming for the Distributed Tactical Communications System (DTCS); +\$1.505M below threshold priority reprogramming to provide funding for the Integrated SATCOM Operations Management (ISOM) JCTD to pay a portion of the consortium funding for the policy based network management tool; -\$.206M funding reduction of software engineering and design for new DISN Element Technologies ; the requirement was deferred to FY 2011; -\$.337M reduction from contract efficiencies from classified voice Engineering Change Proposals; +\$.458M Classified Voice DSS-2A switch development and -\$.305M reduction PNVC/NEADN due to contract efficiencies.

The FY 2012 base funding increase of +\$2.872 is due to increased funding for PNVC Broadband Interface Group (BIG) contract.

The increase for FY 2012 OCO funding of +\$10.500 is to support the demand for an additional 3,000 to 5,000 devices requested by CENTCOM.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT PC01: <i>Presidential and National Voice Conferencing</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
PC01: <i>Presidential and National Voice Conferencing</i>	1.643	1.910	4.345	-	4.345	18.626	13.954	4.267	3.267	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. Specifically, the project funding supports the acquisition activities for the PNVC baseband equipment, including critical and essential 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.

Distributed Tactical Communications System (DTCS) 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 supports 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 supports 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 are 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 on improving CENTCOM Joint Urgent Operational Needs CC-0368 requirements. Improvements to DTCS are improved architecture that enables self management and monitoring, alternate supplier development, interoperability interfaces, and internet protocol infrastructure.

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: National Emergency Action Decision Network (NEADN)	1.643	1.910	4.345	-	4.345
Description: NEADN/PNVC Systems Engineering - Conducts analyses for continuity of NEADN voice conferencing for national/military leaders through the PNVC deployment. Continue engineering, technical					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT PC01: <i>Presidential and National Voice Conferencing</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
analysis, development and coordination to ensure terminal, baseband, and satellite synchronization for voice conferencing amongst senior leaders.					
<p><i>FY 2010 Accomplishments:</i> In FY 2010 funding was used to update the PNVC Capabilities Production Document and define the Concept of Operations (CONOPs) for PNVC to fully utilize the enhanced capabilities provided by the system. Funding also initiated the development of MSD-III and other Defense Red Switch Network (DRSN) interface equipment, which will continue into FY 2011. In addition, funding was used to begin preparations for the PNVC Baseband Interface Group (BIG) development contract including refreshing the equipment specifications.</p> <p><i>FY 2011 Plans:</i> In FY 2011, development contract preparations for BIG continue with an anticipated contract award in FY 2012. Funding also continues developing the MSD-III PNVC/DRSN interface equipment.</p> <p><i>FY 2012 Base Plans:</i> The funding available will support the continued intent for a BIG contract award. Additionally, DRSN equipment will undergo development testing and evaluation.</p>					
Accomplishments/Planned Programs Subtotals	1.643	1.910	4.345	-	4.345

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	<u>Cost To Complete</u>	<u>Total Cost</u>
• O&M, DW/PE 0303126K: <i>Operation & Maintenance, Defense-Wide</i>	119.006	104.396	109.561	56.100	165.661	119.500	123.430	126.590	117.961	Continuing	Continuing
• Procurement, DW/PE 0303126K: <i>Procurement, Defense-Wide</i>	91.661	86.206	500.932	0.000	500.932	115.376	122.657	100.240	91.379	Continuing	Continuing

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

The program is leveraging the Naval Surface Warfare Center contracts used for the prototype efforts and JUON CC-0278. This includes a contract to Iridium Communications Inc. as the sole provider for the satellite constellation. Program Executive Office Satellite Communications Teleport & Services (PEO-STC) plans to

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0303126K: <i>Long-Haul Communications - DCS</i>	PC01: <i>Presidential and National Voice Conferencing</i>

implement a DISA contract in FY 2011 that will allow flexibility for continued development and provide long term support for this system. DISA Component Acquisition Executive and PEO-STS conduct program reviews to ensure compliance with Federal and Defense Acquisition Regulations.

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.

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

- FY 2010 Upgraded and tested satellite software that provides improved performance.
- FY 2010 Fielded a user management software that allows warfighters to program their own devices
- FY 2010 Field the Command and Control Handset
- FY 2010 Integrate DTCS into tactical vehicles to include variants of the MRAP
- FY 2011 Provide a range extension from 100 miles @ 95% availability to 250 miles @ 95% availability
- 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

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT PC01: <i>Presidential and National Voice Conferencing</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	C/CPFF	Booz Allen Hamilton:McLean, VA	-	-		0.437	Nov 2011	-		0.437	Continuing	Continuing	N/A
Systems Engineering	FFRDC	Mitre:McLean, VA	0.123	0.100	Nov 2010	0.250	Nov 2011	-		0.250	Continuing	Continuing	N/A
BIG Development Preparation	MIPR	NSA:Various	0.180	-		0.100	Feb 2012	-		0.100	Continuing	Continuing	N/A
MSD-III Development	C/T&M	Raytheon:Largo, FL	1.240	1.660	Jan 2011	3.258	Nov 2011	-		3.258	Continuing	Continuing	N/A
Management Services	FFRDC	Aerospace Corporation:Falls Church, VA	0.100	0.150	Nov 2010	0.300	Nov 2011	-		0.300	Continuing	Continuing	
Subtotal			1.643	1.910		4.345		-		4.345			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	0.000

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Certification Testing	MIPR	JITC:Various	-	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			-	-		-		-		-			

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency							DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>			R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>			PROJECT PC01: <i>Presidential and National Voice Conferencing</i>			
	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals	1.643	1.910	4.345	-	4.345				

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT PC01: <i>Presidential and National Voice Conferencing</i>
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	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Acquisition Documentation for PNVC																												
Acquisition Documentation for PNVC																												
Command and Control Secure Handset																												
Command and Control Secure Handset																												
Increased Push to talk time to .7 seconds																												
Improved Network Architecture																												
PNVC Capabilities Production Doc																												
PNVC Capabilities Production Doc																												
PNVC CONOPS																												
PNVC CONOPS																												
PNVC Development Contract Preps																												
PNVC Development Contract Preps																												
PNVC/DRSN Interface Equip Dev																												
PNVC/DRSN Interface Equip Dev																												
PNVC/DRSN Spec Dev																												
PNVC/DRSN Spec Dev																												
Special Users Requirements Doc																												
Special Users Requirements Doc																												
Systems Engineering for NEADN/PNVC																												
Systems Engineering for NEADN/PNVC																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT PC01: <i>Presidential and National Voice Conferencing</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Acquisition Documentation for PNVC</i>				
Acquisition Documentation for PNVC	1	2010	2	2012
<i>Command and Control Secure Handset</i>				
Command and Control Secure Handset	2	2010	1	2012
Increased Push to talk time to .7 seconds	4	2010	3	2012
Improved Network Architecture	4	2010	3	2012
<i>PNVC Capabilities Production Doc</i>				
PNVC Capabilities Production Doc	3	2010	3	2011
<i>PNVC CONOPS</i>				
PNVC CONOPS	4	2010	2	2011
<i>PNVC Development Contract Preps</i>				
PNVC Development Contract Preps	1	2010	4	2011
<i>PNVC/DRSN Interface Equip Dev</i>				
PNVC/DRSN Interface Equip Dev	4	2010	3	2014
<i>PNVC/DRSN Spec Dev</i>				
PNVC/DRSN Spec Dev	1	2010	2	2011
<i>Special Users Requirements Doc</i>				
Special Users Requirements Doc	1	2010	1	2010
<i>Systems Engineering for NEADN/PNVC</i>				
Systems Engineering for NEADN/PNVC	1	2010	4	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
T82: <i>DISN Systems Engineering Support</i>	41.129	30.345	6.979	10.500	17.479	7.264	7.516	7.639	7.640	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Internet Protocol (IP) & 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. This allows DISN to 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: Must meet a number of military unique 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 supportability of the system.

Distributed Tactical Communications System (DTCS) 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 supports 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 supports 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 are 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 on improving CENTCOM Joint Urgent Operational Needs CC-0368 requirements. Improvements to DTCS are improved architecture that enables self management and monitoring, alternate supplier development, interoperability interfaces, and internet protocol infrastructure.

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: IP & Optical Transport (a component of Tech Refresh)	4.160	3.912	3.715	-	3.715

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p><i>FY 2010 Accomplishments:</i> Continued on schedule and within cost, progress on Phase III of the DSS-2A Switch modification for the DRSN. Phase III is the completion phase of the DSS-2A development project.</p> <p><i>FY 2011 Plans:</i> FY 2011 Tech Refresh (TR) funding supports the delivery of the Phase III system for testing and accreditation of the DSS-2A Switch, with continued project cleanup and testing support. Final result will be a complete large capacity secure voice switch capable of replacing the large obsolete SDS-1 switches. In FY 2011, funds will be used to develop engineering alternatives and acquire test equipment to facilitate the TR of the current Optical CORE originally designed and procured in FY 2003-2005. Based on industry, the accepted life cycle of Optical Network (OTN) equipment is about 8-10 years; DISN must identify alternatives and plans for replacing the existing optical core. The DISN transport layer will have to accommodate the next-generation 40/100G capable system as early as 2013 in CONUS and 2014 in Europe. To support this lifecycle replacement, DISN will engineer and begin testing of new 40/100G optical equipment to meet network requirements. The SONET/SDH layer is also expected to be replaced with a packet-based, Layer 2 technology such as Connection-Oriented Ethernet Switch. If not fully funded, the DISN capabilities essential to the warfighter will reach end of life without an identified and tested replacement capability.</p> <p><i>FY 2012 Base Plans:</i> The FY 2012 DISN TR funds will continue the assessment of engineering technologies in order to select transport and IP equipment to facilitate implementation the optical platforms and IP equipment and associated network management layers. Engineering assessment and testing is required to ensure that the replacement equipment will support all current and projected DoD performance and mission requirements, in order to address phased deployment of the optical core capabilities as early as FY 2013. FY 2012 funding has been reduced by (\$.219M) for directed reductions in service support contracts, FY 2010 under execution and non-pay, non-fuel revised rates. If not fully funded, the DISN capabilities essential to the warfighter will reach end of life without an identified and tested replacement capability.</p>					
<p><i>Title:</i> Elements Management System (a component of DISN OSS)</p> <p><i>FY 2010 Accomplishments:</i> In FY 2010, the funding provided the capability of standardized data sharing interfaces for network management data and the implementation of a shared data model on service oriented architecture for all EMS applications. Accomplishments included a single database consisting of all circuit data for all technologies for the first time</p>	2.816	1.317	1.336	-	1.336

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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in DISA history. In addition there was a one time below threshold priority reprogramming of +\$1.500 for the Integrated SATCOM Operations Management(ISOM) policy based network management tool.

FY 2011 Plans:
In FY 2011, the funding will continue to provide a standardized capability for all data sharing interfaces for network management data and the implementation of a shared data model on service oriented architecture for all EMS applications. Specific activities for FY 2011 include the development of additional “out-of-the-box” data translations as well as additional data protocols for pulling data to and pushing data from the Common Communications Vehicles (CCV) in the production environment.

Funding this initiative will result in decommissioning of stove-pipe network management systems which will decrease costs and the time required to exchange data among systems. Failure to fully fund will severely restrict the integration of network management, data interface and mediation integration through the CCV which is critical to the operational awareness and viability of the DISN.

Information Sharing Services for Voice - In FY 2011, funding for this requirement supports data sharing of systems providing management of DISN voice services. The capability includes the development of data standards, data sharing interfaces, web services for legacy voice and Real Time Services (RTS) network management systems. Funding will decrease response time to problems and provisioning of voice services.

Network Management Solutions for New DISN Technologies – In FY 2011, this capability is fundamental in providing network management support for new DISN catalogue services. FY 2011 activities include research on network management solutions for Secure Voice over IP and RTS technologies. Providing network management in parallel with the deployment of new DISN services and technologies is vital to supporting network operations and the changing missions of the warfighter.

FY 2012 Base Plans:
In FY 2012, the funding will focus on network management integration of RTS and future DISN services. FY 2012 funding has been reduced by (\$.079M) for directed reductions in service support contracts, FY 2010 under execution and non-pay, non-fuel revised rates.

Data Integration for RTS - For RTS, emphasis will include a standardized capability for all data sharing interfaces for network management data and the implementation of a shared data model on service oriented architecture.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>This effort supports the information sharing and network operations objectives of a unified view and situational awareness through a common user interface for obtaining information about the DISN, specifically related to DISN RTS.</p> <p>Network Management Solutions for New DISN Technologies – It is critical to provide network management support for future DISN catalogue services requirements. FY 2012 activities include research on network management solutions for Secure Voice over IP and RTS technologies. Providing network management in parallel with the deployment of new DISN services and technologies is vital to supporting network operations and the changing missions of the warfighter.</p>					
<p>Title: Peripheral and Component Design (formerly Engineering Change Proposals (ECP) DRSN Components)</p> <p>FY 2010 Accomplishments: Began a two year effort to develop and produce a replacement for the Secure Telephone Equipment-Remote (STE-R) based Channel Encryption Unit (CEU) to support future gateways for STEs and secure wireless devices using the Secure Communications Interoperability Protocol (SCIP).</p> <p>FY 2011 Plans: FY 2011 funding for DRSN component refresh will continue development and production of the replacement for the STE-R based CEU, and develop specifications and Engineering Change Proposals (ECP) for replacement of the Dual Narrowband Interface (DNI) card used in the DSS-2A switch. It is anticipated that current parts will be obsolete and the user interface software on the Command Center Consoles will require update. If not funded, the effort to replace the DNI card will be halted and the efforts to deal with obsolete parts and aging software will not go forward. This will adversely affect the mid and long term viability of the DRSN and other systems (EPC/SECN) that use these switch systems. To the extent that funding is reduced, these efforts will take longer to complete and development costs are likely to increase as work would be stretched out over a longer period.</p> <p>FY 2012 Base Plans: FY 2012 funding will continue the DNI replacement development effort and the Console User Interface update effort initiated in FY 2011. Due to the level of funding, it is expected that these efforts will occur over several years. Depending on final costs and funding availability, an ECP for refresh of other components or peripheral that have obsolete parts or EOL software issues would be initiated. Decreases or lack of funding would</p>	1.653	1.991	1.928	-	1.928

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
necessitate stretching out or stopping these refresh efforts, which would adversely affect the sustainability of the secure voice systems.					
Title: Distributed Tactical Communications System	32.500	23.125	-	10.500	10.500
FY 2010 Accomplishments: N/A					
FY 2011 Plans: Planned improvements to JUON CC-0368 requirements include software updates to the gateway infrastructure and user management tools, fielding of the command and control handset. Prototype and design of the secure command and control handset, interoperability improvements and integration into tactical vehicles are planned.					
FY 2012 Base Plans: NA - these are OCO funds.					
FY 2012 OCO Plans: Phase 3 implementation and completion of JUON CC-0368. This will include the fielding of the secure command and control handset, web compatible architecture that will expand network management functionality, and increase response time for push-to-talk from ~ 2 seconds to ~ .7 seconds.					
Accomplishments/Planned Programs Subtotals	41.129	30.345	6.979	10.500	17.479

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• O&M/PE0303126K: <i>Operation & Maintenance, Defense-Wide</i>	119.006	104.396	109.561	56.100	165.661	119.500	12.430	126.590	117.961	Continuing	Continuing
• Procurement/PE0303126K: <i>Procurement, Defense-Wide</i>	91.661	86.206	500.932	0.000	500.932	115.376	122.657	100.240	91.379	Continuing	Continuing

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.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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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.

E. Performance Metrics

FY 2010	FY 2011	FY 2010			
Execute within	Execute within	Execute within			
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 2010 Upgraded and tested satellite software that provides improved performance.
- FY 2010 Fielded a user management software that allows warfighters to program their own devices
- FY 2010 Field the Command and Control Handset
- FY 2010 Integrate DTCS into tactical vehicles to include variants of the MRAP
- FY 2011 Provide a range extension from 100 miles @ 95% availability to 250 miles @ 95% availability
- 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

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	1.738	1.991	Dec 2010	1.928	Feb 2011	-		1.928	Continuing	Continuing	Continuing
Systems Engineering for DSS-2A Secure Voice Switch Replacement	Various	Raytheon:Florida	19.440	2.000	Jan 2011	-		-		-	Continuing	Continuing	Continuing
Systems Engineering for IP and Optical Technology Refresh	Various	DITCO:Various	-	1.912	Jan 2011	3.715	Feb 2011	-		3.715	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	1.400	0.728	Jun 2011	0.546		-		0.546	Continuing	Continuing	Continuing
Engineering & Technical Services for Network Mgmt Solutions for New DISN Element Technologies	C/T&M	SAIC:VA	0.206	0.589	Feb 2011	0.790		-		0.790	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	5.400	6.185	Sep 2008	-		1.050		1.050	Continuing	Continuing	Continuing
Gateway Improvement	SS/CPFF	Iridium:McLean, VA	5.500	4.310	Sep 2008	-		3.755		3.755	Continuing	Continuing	Continuing
Field Application Tool	MIPR	NSWC:Dahlgren	2.900	2.115	Mar 2010	-		1.620		1.620	Continuing	Continuing	Continuing
DTCS Handset	SS/CPFF	Iridium:McLean, VA	4.250	1.450	Sep 2008	-		0.150		0.150	Continuing	Continuing	Continuing
Command and Control Handset	SS/CPFF	Iridium:McLean, VA	4.870	1.880	Sep 2008	-		0.525		0.525	Continuing	Continuing	Continuing
Alt. Supplier Development	MIPR	NSWC:Dahlgren, VA	2.000	0.900	Mar 2010	-		0.550		0.550	Continuing	Continuing	Continuing
Radio Only Interface	MIPR	NSWC:Dahlgren, VA	0.980	1.200	Mar 2010	-		0.345		0.345	Continuing	Continuing	Continuing
Remote Control Unit	SS/CPFF	Iridium:McLean, VA	1.200	0.900	Sep 2009	-		-		-	Continuing	Continuing	Continuing
Type 1 Security	SS/CPFF	Iridium:McLean, VA	4.300	1.800	Sep 2008	-		0.355		0.355	Continuing	Continuing	Continuing
Vehicle Integration	MIPR	NSWC:Dahlgren, VA	1.100	1.155	Mar 2010	-		0.930		0.930	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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			59.067	29.115		6.979		9.280		16.259			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	0.000

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Certification Testing	MIPR	JITC:Various	-	1.230	Nov 2010	-		1.220	Nov 2011	1.220	Continuing	Continuing	Continuing
Subtotal			-	1.230		-		1.220		1.220			

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	0.000

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			59.067	30.345		6.979		10.500		17.479			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
<i>Data Integration for Real Time Services</i>																												
Data Integration for Real Time Services																												
<i>User Management Tool/Field Application Tool</i>																												
Command and Control Handset																												
<i>Tactical Vehicle Integration</i>																												
Tactical Vehicle Integration																												
<i>Systems Engineering for DSS-2A Secure Voice Switch Replacement</i>																												
Systems Engineering for DSS-2A Secure Voice Switch Replacement																												
<i>Systems Engineering for DRSN Components and Peripherals</i>																												
Systems Engineering for DRSN Components and Peripherals																												
<i>Satellite Software Upgrade</i>																												
Satellite Software Upgrade																												
<i>Range Extension</i>																												
Range Extension																												
Increase number of networks to 16K																												
<i>Network Management Solutions for New DISN Technologies</i>																												
Network Management Solutions for New DISN Technologies																												
<i>Information Sharing Services for Voice</i>																												
Legacy Systems																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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

Real Time Services (RTS)	[REDACTED]																											
Web-Based Mediation Admin	[REDACTED]																											
Web-Based Mediation Admin	[REDACTED]																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303126K: <i>Long-Haul Communications - DCS</i>	PROJECT T82: <i>DISN Systems Engineering Support</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Data Integration for Real Time Services</i>				
Data Integration for Real Time Services	1	2012	4	2012
<i>User Management Tool/Field Application Tool</i>				
Command and Control Handset	1	2010	4	2011
<i>Tactical Vehicle Integration</i>				
Tactical Vehicle Integration	2	2010	4	2011
<i>Systems Engineering for DSS-2A Secure Voice Switch Replacement</i>				
Systems Engineering for DSS-2A Secure Voice Switch Replacement	1	2010	3	2011
<i>Systems Engineering for DRSN Components and Peripherals</i>				
Systems Engineering for DRSN Components and Peripherals	4	2010	4	2016
<i>Satellite Software Upgrade</i>				
Satellite Software Upgrade	1	2010	2	2011
<i>Range Extension</i>				
Range Extension	3	2010	2	2011
Increase number of networks to 16K	3	2010	1	2011
<i>Network Management Solutions for New DISN Technologies</i>				
Network Management Solutions for New DISN Technologies	1	2011	4	2012
<i>Information Sharing Services for Voice</i>				
Legacy Systems	2	2010	4	2010
Real Time Services (RTS)	1	2011	4	2011
<i>Web-Based Mediation Admin</i>				
Web-Based Mediation Admin	1	2010	3	2011

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	10.588	9.529	12.514	-	12.514	12.799	13.150	13.307	13.304	Continuing	Continuing
T64: <i>Special Projects</i>	4.880	4.795	5.170	-	5.170	5.119	5.301	5.382	5.380	Continuing	Continuing
T70: <i>Strategic C3 Support</i>	5.708	4.734	7.344	-	7.344	7.680	7.849	7.925	7.924	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. Supporting 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. This capability provides the ability for our national leadership to ensure 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. This effort supports national leadership and nuclear command and control in the DISA Campaign Plan.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	9.789	9.529	9.996	-	9.996
Current President's Budget	10.588	9.529	12.514	-	12.514
Total Adjustments	0.799	-	2.518	-	2.518
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	0.799	-	2.518	-	2.518

Change Summary Explanation

The FY 2010 increase of +\$0.799 is due to additional NC3 assessment support for the Joint Staff and development of the NC3 future architecture.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>
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The FY 2012 increase of +\$2.518 provides critical operational support capabilities to the President, Vice President, Senior Staff, and for Defense National Leadership Command Capability (DNLCC) system engineering effort.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>	PROJECT T64: <i>Special Projects</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
T64: <i>Special Projects</i>	4.880	4.795	5.170	-	5.170	5.119	5.301	5.382	5.380	Continuing	Continuing
Quantity of RDT&E 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, but is available to individuals having special access to program details.

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

	FY 2010	FY 2011	FY 2012
Title: Special Projects	4.880	4.795	5.170
FY 2010 Accomplishments: Classified.			
FY 2011 Plans: Classified.			
FY 2012 Plans: Classified.			
Accomplishments/Planned Programs Subtotals	4.880	4.795	5.170

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

N/A

D. Acquisition Strategy

Classified.

E. Performance Metrics

Classified.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>	PROJECT T64: <i>Special Projects</i>
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Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	39.944	4.795	Dec 2010	5.170	Dec 2012	-		5.170	Continuing	Continuing	Continuing	
Subtotal			39.944	4.795		5.170		-		5.170				
Project Cost Totals			39.944	4.795		5.170		-		5.170				

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>	PROJECT T70: <i>Strategic C3 Support</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
T70: <i>Strategic C3 Support</i>	5.708	4.734	7.344	-	7.344	7.680	7.849	7.925	7.924	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project supports the mission of the Nuclear Command Control and Communications (C3) Systems Engineer to the Joint Staff and provides Executive Leadership and C3 support for the Office of the Assistant Secretary of Defense (OASD), Networks and Information Integration (NII). 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.

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

	FY 2010	FY 2011	FY 2012
Title: Systems Analysis	1.051	0.678	2.360
FY 2010 Accomplishments: Funding provided contract support to complete the annual update to the Nuclear C3 System Program Tracking Report, updates to the NC3 Architecture Diagrams and NC3 Scenarios document, and development and engineering of the future NC3 architecture.			
FY 2011 Plans: Funding providing contracts for further 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 provide contracts to update the Program Tracking Report, NC3 Architecture Diagrams and NC3 Scenarios document; update the NC3 Thin-line Architecture, and produce the NC3 Electronic Warfare Assessment report. Additionally, funding will support engineering, documenting, and assessing the current NC3 architectures and vulnerabilities; and updating the NC3 future architecture; develop NC3 roadmap; and engineer communication and technology improvements for the NC3 system.			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency		DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>	PROJECT T70: <i>Strategic C3 Support</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011	FY 2012
The increase between FY 2011 and FY 2012 of +\$1.682 is due to an increase in systems analysis and expansion of the future Nuclear C3 architecture in support of the evolution of the Defense and National Leadership Command Capability (DNLCC).				
<p>Title: Operational Assessments</p> <p>FY 2010 Accomplishments: Funding supported planning, conduct and analysis of NC3 operational assessments.</p> <p>FY 2011 Plans: Funding providing continued planning and conduct of recurring NC3 operational assessments.</p> <p>FY 2012 Plans: Funding is required to continue planning, executing, analyzing and reporting on annually recurring operational assessments of the NC3 system.</p> <p>The increase between FY 2011 and FY 2012 of +\$0.914 is due to an increase in scope of Nuclear C3 operational assessments provided to the Joint Staff.</p>		2.550	2.383	3.297
<p>Title: Systems Engineering</p> <p>FY 2010 Accomplishments: Funding provided contract support to expand and enhance the architecture decision support tool to assist OSD/NII, and to provide engineering support for aircraft communications integration efforts.</p> <p>FY 2011 Plans: Funding providing for continued development and evolution of the decision support tool, and additional engineering support for airborne systems and command centers.</p> <p>FY 2012 Plans: Funding is required for expanding the architecture decision support capability, modeling and simulation support for the SLC3S, and continued engineering for airborne command centers and other aircraft.</p> <p>The increase between FY 2011 and FY 2012 of +\$0.014 is due to an increase for additional support to airborne systems and command centers.</p>		2.107	1.673	1.687
Accomplishments/Planned Programs Subtotals		5.708	4.734	7.344

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>	PROJECT T70: <i>Strategic C3 Support</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• O&M, DW/PE 0303131K: O&M, DW	9.712	6.815	11.567	0.000	11.567	11.677	11.957	12.227	12.498	Continuing	Continuing

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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>	PROJECT T70: <i>Strategic C3 Support</i>
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Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	4.321	0.678	Feb 2011	2.333	Feb 2012	-		2.333	Continuing	Continuing	Continuing
Systems Engineering 2	C/CPAF	Raytheon Company :Arlington, VA	14.496	2.383	Feb 2011	3.315	Feb 2012	-		3.315	Continuing	Continuing	Continuing
Systems Engineering 3	C/CPFF	Pragmatics:McLean, VA	5.500	0.968	Nov 2010	0.981	Nov 2012	-		0.981	Continuing	Continuing	Continuing
Systems Engineering 4	C/T&M	Raytheon Company:Arlington, VA	2.107	0.420	Nov 2010	0.426	Nov 2012	-		0.426	Continuing	Continuing	Continuing
Systems Engineering 5	C/CPFF	Booz, Allen & Hamilton:Falls Church, VA	3.988	0.285	Nov 2010	0.289	Nov 2012	-		0.289	Continuing	Continuing	Continuing
Subtotal			30.412	4.734		7.344		-		7.344			
Project Cost Totals			30.412	4.734		7.344		-		7.344			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>	PROJECT T70: <i>Strategic C3 Support</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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																												
Plans and Procedures																												
Operational Assessment																												
Staff Assistance Visits																												
Aircraft/Command Center Engineering																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303131K: <i>Minimum Essential Emergency Communications Network (MEECN)</i>	PROJECT T70: <i>Strategic C3 Support</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
NC3 Program Tracking Report	2	2010	3	2012
Systems Analysis Documents	2	2010	4	2012
Plans and Procedures	1	2010	3	2012
Operational Assessment	1	2010	4	2012
Staff Assistance Visits	3	2010	4	2012
Aircraft/Command Center Engineering	1	2010	4	2012

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				PE 0303140K: <i>Information Systems Security Program</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	-	-	5.500	-	5.500	-	-	-	-	Continuing	Continuing
IA3: <i>Information Systems Security Program</i>	-	-	5.500	-	5.500	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

To limit DOD exposure to Insider SIPRNET data exfiltration threats, the Department must both deter bad behavior by increasing accountability and enforcement, and, implement barriers to data theft while preserving required ease of information sharing amongst authorized users. To accomplish this goal, DISA must accelerate implementation and fielding of three capability sets:

- The ability to control and monitor pre-provisioned user access in a manner that cannot be repudiated (e.g. using CAC-enabled PKE Authentication) mitigates insider exfiltration threat by limiting data access and enabling enforcement and accountability
- The ability to control and monitor user access based on known attributes about a user such as their organizational affiliation or roles within that organization (i.e. "Attribute Based Access Control" (ABAC)) provides the ability to share information on an ad-hoc basis amongst "unintended, but authorized users" while still limiting data access and enabling enforcement
- The ability to enable, monitor and control the authorized transfer of information between SIPRNET and other DOD Networks as required via a globally available and operationally effective cross domain enterprise service solutions

Of the three above listed capabilities, DISA has Identified five enhancements to existing programs to accomplish these capabilities. Two of the enhancements, Host Based Security System (HBSS) Audit Extraction Module (AEM) and Cross Domain Enterprise Services (CDES), require further test and evaluation. All testing is anticipated to be completed in FY12.

The FY 2012 \$5.500 million will fund the testing and evaluation of enhancements on two programs, HBSS AEM and CDES.

HBSS AEM (\$3.0M): Funds are required for the testing portion of HBSS AEM. DISA will implement a HBSS AEM to gather data associated with end-user behavior as part of the overall insider threat analysis effort. The Audit Extraction Module is a tool used to extract and centralize audit log events from HBSS equipped computers in near real-time. The centralized server will sit in the DoD Net Defense Community Data Center enabling monitoring by a variety of specialists. The audit events will be those relevant to insider misbehavior as well as cyber attacks so receiving these alerts in a timely manner will provide the needed alerting of a potential attack in progress.

CDES (\$2.5M): Funds will be used to test and evaluate the CDES. As part of the DoD enterprise cross domain service effort, DISA will create a cross domain enabled enterprise email solution to reduce the requirement to use removable media on SIPRNET, increase DoD's ability to and to greatly improve DoD's ability to monitor cross domain information movement and the people who do this. Creating regionally deployed instances of email cross-domain capabilities will also yield benefits of infrastructure consolidation. Specifically, this solution will provide a two-way e-mail delivery across classification boundaries and amongst and between communities of interest.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303140K: <i>Information Systems Security Program</i>
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B. Program Change Summary (\$ in Millions)	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	-	5.500	-	5.500
Total Adjustments	-	-	5.500	-	5.500
• Congressional General Reductions					
• Congressional Directed Reductions					
• Congressional Rescissions	-	-			
• Congressional Adds					
• Congressional Directed Transfers					
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	5.500	-	5.500

Change Summary Explanation

The increase in funding for FY 2012 is due to the DoD's response to recent global events which involved the unauthorized release of classified information.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303140K: <i>Information Systems Security Program</i>	PROJECT IA3: <i>Information Systems Security Program</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
IA3: <i>Information Systems Security Program</i>	-	-	5.500	-	5.500	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

To limit DOD exposure to Insider SIPRNET data exfiltration threats, the Department must both deter bad behavior by increasing accountability and enforcement, and, implement barriers to data theft while preserving required ease of information sharing amongst authorized users. To accomplish this goal, DISA must accelerate implementation and fielding of three capability sets:

- The ability to control and monitor pre-provisioned user access in a manner that cannot be repudiated (e.g. using CAC-enabled PKE Authentication) mitigates insider exfiltration threat by limiting data access and enabling enforcement and accountability
- The ability to control and monitor user access based on known attributes about a user such as their organizational affiliation or roles within that organization (i.e. "Attribute Based Access Control" (ABAC)) provides the ability to share information on an ad-hoc basis amongst "unintended, but authorized users" while still limiting data access and enabling enforcement
- The ability to enable, monitor and control the authorized transfer of information between SIPRNET and other DOD Networks as required via a globally available and operationally effective cross domain enterprise service solutions

Of the three above listed capabilities, DISA has Identified five enhancements to existing programs to accomplish these capabilities. Two of the enhancements, Host Based Security System (HBSS) Audit Extraction Module (AEM) and Cross Domain Enterprise Services (CDES), require further test and evaluation. All testing is anticipated to be completed in FY12.

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

	FY 2010	FY 2011	FY 2012
Title: Information Systems Security Program	-	-	5.500
FY 2010 Accomplishments: N/A			
FY 2011 Plans: N/A			
FY 2012 Plans: The FY 2012 increase of \$5.500 million will fund the testing and evaluation of enhancements on two programs, HBSS AEM and CDES.			

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303140K: <i>Information Systems Security Program</i>	PROJECT IA3: <i>Information Systems Security Program</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
<p>HBSS AEM (\$3.0M): Funds are required for the testing portion of HBSS AEM. DISA will implement a HBSS AEM to gather data associated with end-user behavior as part of the overall insider threat analysis effort. The Audit Extraction Module is a tool used to extract and centralize audit log events from HBSS equipped computers in near real-time. The centralized server will sit in the DoD Net Defense Community Data Center enabling monitoring by a variety of specialists. The audit events will be those relevant to insider misbehavior as well as cyber attacks so receiving these alerts in a timely manner will provide the needed alerting of a potential attack in progress.</p> <p>CDES (\$2.5M): Funds will be used to test and evaluate the CDES. As part of the DoD enterprise cross domain service effort, DISA will create a cross domain enabled enterprise email solution to reduce the requirement to use removable media on SIPRNET, increase DoD's ability to and to greatly improve DoD's ability to monitor cross domain information movement and the people who do this. Creating regionally deployed instances of email cross-domain capabilities will also yield benefits of infrastructure consolidation. Specifically, this solution will provide a two-way e-mail delivery across classification boundaries and amongst and between communities of interest.</p>			
Accomplishments/Planned Programs Subtotals	-	-	5.500

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• O&M, DW/PE 0303140K: : O&M, DW	246.678	251.173	173.974	0.000	173.974	169.934	176.193	165.355	167.461	Continuing	Continuing
• Procurement, DW/PE 0303140K: : Procurement, DW	10.402	14.625	19.952	0.000	19.952	12.545	13.509	13.947	13.959	Continuing	Continuing

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303140K: <i>Information Systems Security Program</i>	PROJECT IA3: <i>Information Systems Security Program</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		-		-	0.000	0.000	0.000

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test and Evaluation	TBD	TBD:TBD	-	-		5.500		-		5.500	Continuing	Continuing	Continuing
Subtotal			-	-		5.500		-		5.500			

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	-		5.500		-		5.500			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303140K: <i>Information Systems Security Program</i>	PROJECT IA3: <i>Information Systems Security Program</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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

Information Systems Security Program																												
Host Based Security System (HBSS) Audit Extraction Module (AEM)																												
Cross Domain Enterprise Services (CDES)																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303140K: <i>Information Systems Security Program</i>	PROJECT IA3: <i>Information Systems Security Program</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Information Systems Security Program</i>				
Host Based Security System (HBSS) Audit Extraction Module (AEM)	1	2012	4	2012
Cross Domain Enterprise Services (CDES)	1	2012	4	2012

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>			PE 0303148K: <i>DISA Mission Support Operations</i>								
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	1.150	-	-	-	-	-	-	-	-	Continuing	Continuing
DE01: <i>Defense Enterprise Accounting & Management System</i>	1.150	-	-	-	-	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The DISA Mission Support Operations provides funding to identify and develop information technology capabilities that support the business missions of the agency. Specifically, to fulfill the financial management information needs of the Chief Financial Executive/Comptroller (CFE) ensuring that agency decision makers have accurate, timely, reliable, and useful financial information needed to make sound business decisions.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	1.200	-	-	-	-
Current President's Budget	1.150	-	-	-	-
Total Adjustments	-0.050	-	-	-	-
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	-0.050	-		-	-

Change Summary Explanation

The \$-0.050 in FY 2010 was reduced due to reduction in contract costs.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303148K: <i>DISA Mission Support Operations</i>	PROJECT DE01: <i>Defense Enterprise Accounting & Management System</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
DE01: <i>Defense Enterprise Accounting & Management System</i>	1.150	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The DISA Mission Support Operations provides funding to identify and develop information technology capabilities that support the business missions of the agency. Specifically, to fulfill the financial management information needs of the Chief Financial Executive/Comptroller (CFE) ensuring that agency decision makers have accurate, timely, reliable, and useful financial information needed to make sound business decisions.

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

	FY 2010	FY 2011	FY 2012
Title: DISA Mission Support Operations	1.150	-	-
FY 2010 Accomplishments: FY 2010 funding was used to support the DISA instantiation of the Defense Agency Initiative (DAI) - referred to as the DISA Standard Finance and Accounting System (DSFAS). DAI is an approved Defense Business Systems Management Council (DBSMC) initiative to transform Department of Defense Civilian Agency financial management systems in an effort to achieve auditable financial data. This effort seeks not to update existing legacy systems, but to provide an implementation of integrated financial management capabilities that will subsume many systems and standardize business processes. DAI/DSFAS will transform the budget, finance, and accounting operations of the Defense Agencies to achieve accurate and reliable financial information in support of financial accountability and effective and efficient decision making. The system, once implemented will provide a real time web-based system of integrated business processes that can be used by Defense Agency financial managers, auditors, and the Defense Finance and Accounting Service (DFAS) to make sound business decisions to support the warfighter. The system will also address and correct various financial management material weaknesses and deficiencies noted within DISA. DAI will serve as a single accounting system that supports both the Defense Working Capital Fund (DWCF) and General Fund (GF) operations of DISA.			
FY 2011 Plans: Not applicable as RDT&E funding is not required beyond FY 2010.			
FY 2012 Plans: Not applicable as RDT&E funding is not required beyond FY 2010.			
Accomplishments/Planned Programs Subtotals	1.150	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303148K: <i>DISA Mission Support Operations</i>	PROJECT DE01: <i>Defense Enterprise Accounting & Management System</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• O&M, DW/0303148K: <i>Operation & Maintenance, Defense-Wide</i>	40.904	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

D. Acquisition Strategy

N/A.

E. Performance Metrics

N/A.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				PE 0303150K: <i>Global Command and Control System</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	37.112	26.247	54.739	2.000	56.739	44.762	10.494	9.677	9.757	Continuing	Continuing
CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>	37.112	26.247	54.739	2.000	56.739	44.762	10.494	9.677	9.757	Continuing	Continuing
CC02: <i>Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)</i>	-	-	-	-	-	-	-	-	-	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 (formerly known as Adaptive Planning and Execution (APEX) 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 an integrating framework intended to provide the warfighter a fully interoperable objective adaptive planning and execution system solution.

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

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i>	PE 0303150K: <i>Global Command and Control System</i>
BA 7: <i>Operational Systems Development</i>	

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 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).

The Collaborative Force Analysis Sustainment and Transportation (CFAST) portal was the primary adaptive planning operational prototype capability. Due to operational issues, CFAST was cancelled on 30 June 2009. The DoD examined various strategies for providing a replacement adaptive planning capability. Adaptive Planning and Execution (APEX, which later became JPES (see above)) is the DoD's replacement methodology for constructing timely and agile war plans that achieve national security objectives. APEX is a suite of software tools that provides Adaptive Planning (AP) capabilities to include: campaign planning, forecast predictions, information management, and rapid execution. Currently the Department of Defense has several operational capabilities and systems that provide functionality to support the APEX business process.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	37.161	26.247	26.980	-	26.980
Current President's Budget	37.112	26.247	54.739	2.000	56.739
Total Adjustments	-0.049	-	27.759	2.000	29.759
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.049	-	27.759	2.000	29.759

Change Summary Explanation

The FY 2010 decrease in funding of -\$0.049 is due to the shifting of priorities to meet new Departmental goals.

The FY 2012 base increase of +\$27.759 provides funding to support four requirements: Technical refresh of the GCCS-J system due to Commercial off the Shelf (COTS) and Hardward (HW) being obsolete. This is an issue because of the longer life cycle required with the termination of the NECC program. Family of Systems (FoS) interoperability between GCCS-J and the Service GCCS systems and external applications necessary to provide the Joint Operator with relevant and timely data. Accelerated development of the JPES applications to support critical adaptive planning activities. Implementation of GFM DI data within the GCCS-J system to support current operational needs to access and view enhanced tracks and data.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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*

The FY 2012 includes a \$2.000 million request to fund OCO requirements.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303150K: <i>Global Command and Control System</i>	PROJECT CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>	37.112	26.247	54.739	2.000	56.739	44.762	10.494	9.677	9.757	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 (formerly known as Adaptive Planning and Execution (APEX)). 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), is focused on adaptive planning capabilities, and is an integrating framework intended to provide the warfighter a fully interoperable objective adaptive planning and execution system solution.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303150K: <i>Global Command and Control System</i>	PROJECT CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>
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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).

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>Title: Development and Strategic Planning</p> <p>FY 2010 Accomplishments: In FY 2010 GCCS-J completed the development and testing of the GCCS-J applications against various commercial off the shelf (COTS) products to include BEA, Oracle and Firefox to address obsolescence for the current versions used in GCCS-J. This migration keeps the GCCS-J suites secure and sustainable at the operating sites by keeping the operating systems current and utilizing the latest version of COTS software. Funding was also used to address critical emerging needs and fixes based on use of GCCS-J in current operations.</p> <p>JPES funds were used to begin the initial development of the Rapid Time-Phased Force and Deployment Data (TPFDD) Builder (RTB) and the JPES Information Technology Framework (JFW) efforts. When fielded, RTB will provide planners with a tool to rapidly create and edit a TPFDD for execution in JOPES. JFW will provide a common infrastructure for all JPES applications that supports common security services (PKI-enabled) and the exposure of planning data through data object services.</p> <p>In FY 2010, DISA led the Joint Architecture Core Team (ACT) which established the Joint C2 Architecture v1.0 as the starting point for the DoD's common objective Joint C2 architecture. The ACT developed drafts of v2.0 of the architecture and staffed v2.0 for review by the Services. The ACT established a process and initial products for the transition architecture and architecture compliance criteria to monitor the progress of development toward the objective architecture. DISA co-chaired the Enterprise Authoritative Data Source (ADS) working group (WG)</p>	37.112	12.556	19.423	2.000	21.423

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303150K: <i>Global Command and Control System</i>	PROJECT CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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<p>and identified the services/schedule/registration process for entry of ADSs into the registry. As part of this effort the ACT provided technical input for the development of C2 Core and various DoD data working groups.</p> <p>FY 2011 Plans: GCCS-J plans include test efforts to resolve and implement fixes for critical Global System Problem Reports (GSPR), Information Assurance Vulnerability Alerts (IAVA), critical or emerging user needs and infrastructure upgrades required due to COTS obsolescence. Remaining FY 2011 RDT&E funding will be used to continue developing the Department’s Joint C2 program evolving from the GCCS-J and FoS. The FY 2011 initiatives include: the Cross Domain Services (CDS), Joint C2 Common User Interface (JCU), and Enterprise Common Operational Picture (ECOP). As the architecture evolves, improvements are made to decouple interfaces and migrate existing functional capabilities to the enterprise level.</p> <p>FY 2012 Base Plans: In FY 2012, plans include complete 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.</p> <p>The increase of funding between FY 2011 and FY 2012 of +\$6.867 will support technical refresh of the GCCS-J system; FoS interoperability between GCCS-J and the Service GCCS systems and external applications; and implementation of GFM DI data within the GCCS-J system to support current operational needs to access and view enhanced tracks and data.</p> <p>FY 2012 OCO Plans: FY 2012 funding will be used for coalition Command and Control (C2) interoperability requirements, including synchronizing Friendly Force Tracking (FFT) data between forward and primary sites, adding Weapon Fire Simulator (WFS) for geographic annotation and visualization, and using biometrics information to complete</p>					
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303150K: <i>Global Command and Control System</i>	PROJECT CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
battlespace picture. If funds are not provided, there will be delays to the synchronization and migration to coalition C2 capabilities.					
<p>Title: Joint Planning and Execution Services (JPES)</p> <p>FY 2011 Plans: JPES funding will be used to continue development of the RTB and JFW efforts. RTB will focus on developing a net-centric service that assists the Combatant Commanders, their Service Components and DoD joint activities in day-to-day operations, crisis action planning and contingency planning. JFW also focuses on permissions management and the creation of a data virtualization layer for JOPES and selected other JPES applications. Additionally, the Integrated Gaming System (IGS) application is being enhanced to provide a web-based Course of Action (COA) development and modeling & simulation capability (M&S) enabling better analysis and increased planning fidelity.</p> <p>In FY 2011, the ACT will initiate the architecture compliance assessment of C2 capabilities and data services for FY 2011 C2 development initiatives for FY 2012 development plans. The ACT will also develop a progress report for C2 development towards the objective architecture.</p> <p>FY 2012 Base Plans: In FY 2012, transition of JCRM into DISA from JFCOM plus development, testing and release of enhancements identified by the Adaptive Planning community. Accelerated development of the Integrated Gaming System (IGS), Rapid TPFDD Builder (RTB), JPES Framework (JFW).</p> <p>The increase of funding between FY 2011 and FY 2012 for +\$21.625 is associated with increased acceleration of development activities for the JPES applications, in addition to development, implementation and testing of the GFM DI implementation against GCCS-J and an overall increase in testing support required for GCCS-J. There is a longer than anticipated life cycle for GCCS-J due to the termination of NECC. Funding will support additional development of capabilities to the JCRM tool once it transitions to DISA/JPES; to support the accelerated development of the Integrated Gaming System (IGS); to support the accelerated development of the Rapid TPFDD Builder (RTB); to support the development of Joint Force Projection (JFP); to support the accelerated development of the JPES Framework (JFW).</p>	-	13.691	35.316	-	35.316
Accomplishments/Planned Programs Subtotals	37.112	26.247	54.739	2.000	56.739

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303150K: <i>Global Command and Control System</i>	PROJECT CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>
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C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2010	FY 2011	FY 2012			FY 2013	FY 2014	FY 2015	FY 2016	Cost To	
			Base	OCO	Total					Complete	Total Cost
• PE 0303150K: <i>Operation & Maintenance, Defense-Wide</i>	82.433	92.239	105.059	21.335	126.394	90.704	109.420	113.752	114.581	Continuing	Continuing
• Procurement, DW/PE 0303150K: <i>Procurement, Defense-Wide</i>	8.324	5.275	5.324	0.000	5.324	5.502	3.819	3.327	3.327	Continuing	Continuing

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

DISA assesses performance using the sustainment and synchronization activities in FY 2010 – FY12. 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.

Portfolio Activities' FY 2010 (Results) FY 2011 (Estimated) FY 2012 (Estimated)

Effectively communicate with external command and control systems 5 Global releases, 2 JOPES releases and 2 JOPES updates, and 3 SORTS updates successfully completed testing with a 100% of all critical current and new system interfaces. 100% successful test of new critical system interfaces, as well as continued 100% successful test of critical current system interfaces. 100% successful test of new critical system interfaces, as well as continued 100% successful test of critical current system interfaces.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0303150K: <i>Global Command and Control System</i>	CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>

Fuse select C2 capabilities into a comprehensive, interoperable system eliminating the need for inflexible, duplicative, stovepipe C2 systems Global v4.2 will be fielded at 54 sites, 53 of which were critical. GCCS-J to continue planned migration to Net-centric Joint C2 capabilities with the initial transition from use of local Global enclaves to the implementation of ECOP at the Defense Enterprise Computing Centers (DECC). GCCS-J to continue planned migration to Net-centric Joint C2 capabilities with the transition from use of local Global enclaves to the implementation of ECOP at the Defense Enterprise Computing Centers (DECC).

Portfolio Activities' FY 2010 (Results) FY 2011 (Estimated) FY 2012 (Estimated)

The availability of the Strategic Server Enclaves enable enhanced capabilities to the user community JOPES v4.2.0.1 included JSUB and JSUB Database (JSUBDB) which allowed external systems to receive JOPES updates as they occurred. Using the JSUB web graphical user interface (GUI), an external system can specify what content will be received. The system will receive the specified data changes as a stream of messages containing data exchange (DEX) documents. A release of emerging warfighter requirements to Strategic Server Enclaves in FY 2011. A release of emerging warfighter requirements to Strategic Server Enclaves in FY 2012.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303150K: <i>Global Command and Control System</i>	PROJECT CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			Target Value of Contract
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	
Product Development 1	C/CPFF	NGMS:Reston, VA	14.834	-		2.155	Nov 2011	-		2.155	Continuing	Continuing	16.989
Product Development 2	FFRDC	MITRE:McLean, VA	6.769	0.149	Mar 2011	0.159	Mar 2012	-		0.159	Continuing	Continuing	6.928
Product Development 3	SS/FFP	Dynamic Systems:Los Angeles, CA	3.189	-		-		-		-	Continuing	Continuing	3.189
Product Development 4	C/CPFF	Pragmatics:McLean, VA	27.239	-		1.500	Mar 2012	-		1.500	Continuing	Continuing	28.739
I3 Engineering Services & SW Development	C/TBD	NGIT:Various	0.811	-		1.000	Oct 2011	-		1.000	Continuing	Continuing	1.811
Product Development 6	C/CPIF	BAH:McLean, VA	3.369	-		-		-		-	Continuing	Continuing	3.369
Product Development 7	TBD	JPES Framework:Various	0.781	3.597	Aug 2011	6.018	Oct 2011	-		6.018	Continuing	Continuing	Continuing
Product Development 8	TBD	RTB Development:Various	-	4.976	Jul 2011	12.807	Jan 2012	-		12.807	Continuing	Continuing	Continuing
Product Development 9	TBD	IGS Development:Various	-	5.118	Nov 2011	11.948	Jan 2012	-		11.948	Continuing	Continuing	Continuing
Product Development 10	TBD	SAIC:Falls Church, VA	1.429	1.381	Dec 2010	2.016	Dec 2011	-		2.016	Continuing	Continuing	Continuing
Product Development 11	MIPR	SSC:San Diego, CA	6.911	0.442	Jan 2011	0.432	Jan 2012	-		0.432	Continuing	Continuing	Continuing
Product Development 12	C/CPFF	NGMS:Reston, VA	51.705	1.647	Aug 2010	2.049	Oct 2011	2.000	Oct 2011	4.049	Continuing	Continuing	Continuing
Product Development 13	MIPR	NGIT:Various	1.772	-		-		-		-	Continuing	Continuing	1.772
Product Development 14	C/CPFF	NGMS:Reston, VA	62.191	-		-		-		-	Continuing	Continuing	62.191
Product Development 15	C/CPIF	Booz Allen Hamilton:McLean, VA	3.283	-		-		-		-	Continuing	Continuing	3.283
Product Development 16	C/CPFF	Booz Allen Hamilton:Various	0.431	-		-		-		-	Continuing	Continuing	0.431
Product Development 17	C/CPAF	Booz Allen Hamilton:Falls Church, VA	1.229	-		-		-		-	Continuing	Continuing	1.229
Product Development 18	C/CPAF	AB Floyd:Alexandria, VA	12.477	-		-		-		-	Continuing	Continuing	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

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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	MIPR	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	-		-		-		-	Continuing	Continuing	5.270
Product Development 25	MIPR	Dept of Energy, Army Research Lab, PD Intelligence Fusion, GSA/FAS:Various	5.710	-		-		-		-	Continuing	Continuing	5.710
Product Development 26	C/CPAF	Tactical 3-D COP:Various	3.200	-		-		-		-	Continuing	Continuing	3.200
Product Development 27	SS/FFP	JITC:Various	20.400	-		-		-		-	Continuing	Continuing	20.400
Product Development 28	TBD	TBD - JCRM:TBD	-	-		2.500	Dec 2011	-		2.500	Continuing	Continuing	2.500
Subtotal			260.348	17.310		42.584		2.000		44.584			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	0.458	0.269		0.276		-		0.276	Continuing	Continuing	Continuing
Support 2	TBD	JC2 Common Interface:Various	-	1.774	Sep 2010	1.834	Sep 2011	-		1.834	Continuing	Continuing	Continuing
Support Costs - Engineering Support 3	FFRDC	MITRE:Various	0.754	-		-		-		-	Continuing	Continuing	Continuing
Support Costs - Engineering Support 4	C/CPFF	Pragmatics:McLean, VA	0.724	-		1.000	Nov 2011	-		1.000	Continuing	Continuing	Continuing
Support Costs - Engineering Support 5	C/CPFF	IPA:College Park, MD	0.283	-		-		-		-	Continuing	Continuing	Continuing
Support Cost 6	C/FFP	STA :Falls Church, VA	0.562	0.780	Mar 2011	0.780	Jan 2012	-		0.780	Continuing	Continuing	Continuing
Support Cost 7	TBD	Pragmatics:McLean, VA	0.064	-		-		-		-	Continuing	Continuing	0.064

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			2.845	2.823		3.890		-		3.890			

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test & Evaluation 1	C/TBD	SAIC:Falls Church, VA	0.744	-		-		-		-	Continuing	Continuing	0.744
Test & Evaluation 2	MIPR	JITC:Ft. Huachuca, AZ	17.841	2.583	Oct 2010	3.655	Oct 2011	-		3.655	Continuing	Continuing	38.485
Test & Evaluation 3	MIPR	DIA:Various	6.559	0.295	Feb 2010	0.370	Feb 2011	-		0.370	Continuing	Continuing	Continuing
Test & Evaluation 4	MIPR	DAA:Various	1.114	0.112	Apr 2010	1.116	Apr 2011	-		1.116	Continuing	Continuing	Continuing
Test & Evaluation 5	C/CPFF	SAIC:Falls Church, VA	9.681	-		-		-		-	Continuing	Continuing	9.681
Test & Evaluation 6	C/CPAF	SAIC:Falls Church, VA	23.133	-		-		-		-	Continuing	Continuing	23.133
Test & Evaluation 7	C/CPFF	Pragmatics:McLean, VA	0.308	-		-		-		-	Continuing	Continuing	0.308
Test & Evaluation 8	MIPR	JITC:Various	0.005	-		-		-		-	Continuing	Continuing	0.005
Test & Evaluation 9	MIPR	JITC:Various	0.133	-		-		-		-	Continuing	Continuing	0.133
Test & Evaluation 10	MIPR	DISA FSO:Various	0.277	-		-		-		-	Continuing	Continuing	0.277
Test & Evaluation 11	MIPR	TEMC Test Support:Various	0.229	-		-		-		-	Continuing	Continuing	0.229
Test & Evaluation 12	MIPR	DISA TEMC:Falls Church, VA	0.315	0.328	Jan 2011	0.328	Jan 2012	-		0.328	Continuing	Continuing	Continuing
Test & Evaluation 13	MIPR	STRATCOM:Offut, NE	0.385	0.385	Jan 2011	0.385	Jan 2012	-		0.385	Continuing	Continuing	Continuing
Test & Evaluation 14	MIPR	DISA FSO:Falls Church, VA	0.400	0.400	Jan 2011	0.400	Jan 2012	-		0.400	Continuing	Continuing	Continuing
Test & Evaluation 15	TBD	TQI :Falls Church, VA	-	0.849	Oct 2010	0.849	Jan 2012	-		0.849	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	-		-		-		-	Continuing	Continuing	0.436
Subtotal			62.054	4.952		7.103		-		7.103			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency									DATE: February 2011		
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Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	0.250	1.162	Dec 2010	1.162	Dec 2011	-		1.162	Continuing	Continuing	Continuing
Subtotal			0.250	1.162		1.162		-		1.162			
Project Cost Totals				325.497	26.247		54.739		2.000		56.739		

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
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	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Development and Strategic Planning	[REDACTED]																											
Integration and Test	[REDACTED]																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303150K: <i>Global Command and Control System</i>	PROJECT CC01: <i>Global Command and Control System-Joint (GCCS-J)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Development and Strategic Planning	1	2010	4	2016
Integration and Test	1	2010	4	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
CC02: <i>Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)</i>	-	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Collaborative Force Analysis Sustainment and Transportation (CFAST) portal was the primary adaptive planning operational prototype capability. Due to operational issues, CFAST was cancelled on 30 June 2009. The DoD examined various strategies for providing a replacement adaptive planning capability. Adaptive Planning and Execution (APEX) is the DoD's replacement methodology for constructing timely and agile war plans that achieve national security objectives. APEX is a suite of software tools that provides Adaptive Planning (AP) capabilities to include: campaign planning, forecast predictions, information management, and rapid execution. Currently the Department of Defense has several operational capabilities and systems that provide functionality to support the APEX business process.

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

N/A

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	MIPR	SPAWAR:San Diego, CA	27.512	-		-		-		-	Continuing	Continuing	27.512
Subtotal			27.512	-		-		-		-			27.512

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	MIPR	SPAWAR:San Diego, CA	2.259	-		-		-		-	Continuing	Continuing	2.259
Subtotal			2.259	-		-		-		-			2.259

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			29.771	-		-		-		-			29.771

Remarks

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>			PE 0303153K: <i>Defense Spectrum Organization</i>								
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	18.579	20.991	29.154	-	29.154	24.037	17.809	17.915	17.874	Continuing	Continuing
JS1: <i>Joint Spectrum Center</i>	18.579	20.991	29.154	-	29.154	24.037	17.809	17.915	17.874	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. This effort supports the Spectrum portion of the DISA Campaign Plan.

This program element is under Budget Activity 07 because it supports operational systems development.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	18.865	20.991	23.679	-	23.679
Current President's Budget	18.579	20.991	29.154	-	29.154
Total Adjustments	-0.286	-	5.475	-	5.475
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.286	-	5.475	-	5.475

Change Summary Explanation

The reduction in FY 2010 of -\$0.286 is due to realized savings within the E3 program (-\$0.74K) and the GEMSIS program (-\$0.212K).

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0303153K: <i>Defense Spectrum Organization</i>

The increase in FY 2012 funding of +\$5.475 is the net result of an increase for GEMSIS of +\$6.403 which will provide the technology research for a near real-time update capability and help avoid cases of spectrum "fratricide" where different operational users are interfering with each other's signals. And a decrease of -\$0.928 offset the increase and is the result of general adjustments for Economic Assumptions and a shifting of priorities to meet new Departmental goals.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
JS1: <i>Joint Spectrum Center</i>	18.579	20.991	29.154	-	29.154	24.037	17.809	17.915	17.874	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.

The FY 2012 increase of \$8.163 million is due to implementation of the Global Electromagnetic Spectrum Information System (GEMSIS) Increment 2 (+\$6.4M). Increment 2 will provide for much more dynamic management of spectrum assets in operational theaters and enable Commanders at all levels to make better decision on the deployment of spectrum assets. The JSC Data and Data Software (JDADS) program increases in FY2012 (+\$1.0M) to support deployment and software enhancement of Spectrum XXI On-line (SXXIO) which provides a set of enhanced frequency nomination and assignment algorithms that affords the opportunity to make more spectrally efficient frequency assignments. The Emerging Spectrum Technology (EST) program increases in FY2012 (+\$0.8M) in support of the Department's increased need for dynamic spectrum access (DSA) capable systems. Exploiting DSA capable technologies will allow the DoD to expand spectrum sharing and to access under-utilized spectrum as recommended by the President's wireless broadband memorandum.

In FY 2010, in response to urgent requests from USCENTCOM, DSO realigned resources within this program element to begin development of a SCOP prototype capability. The prototype will be evaluated by spectrum operational users in COCOMs and MILDEPs to refine requirements and to demonstrate the ability to display multiple sets of data, each organized by frequency.

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: JSC Data and Data Software (formally called Spectrum Knowledge Resources)	6.828	6.953	7.952	-	7.952
Description: The JSC Data and Data Software (JDADS) program supports development of spectrum modeling and simulation capabilities, spectrum database development, and spectrum data transformation and					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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<p>standardization. This program provides 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 conduct Electromagnetic Environmental Effects (E3) evaluations and spectrum supportability risk assessments.</p> <p><i>FY 2010 Accomplishments:</i> FY 2010 software development initiatives eliminated the need for the majority of the current suite of data mapping tools. DSO developed enhanced tools that will enable analysts and engineers to conduct thorough, valid, and cost effective E3 evaluations and spectrum supportability risk assessments. The tools range from shared common services registered with Net-Centric Enterprise Services (NCES) and accessible by other authorized services (such as an electromagnetic propagation service subscribed to by communication planning services), to an orchestrated set of web services that provide capabilities to conduct E3 assessments for a specific platform or installation. The capabilities developed replace and enhance the existing Joint E3 Evaluation Tool (JEET), which was a stand alone tool distributed by CD-ROM. JDADS database was also expanded to include all known United States and coalition communications and electronic equipment in the Afghanistan theater. DSO provided SPECTRUM XXI software updates. SPECTRUM XXI provides the warfighter the capability to deconflict spectrum dependent devices, facilitates the spectrum management workflow and business process, and provides a common spectrum use database for the warfighter.</p> <p><i>FY 2011 Plans:</i> In FY 2011, a version of Joint Data Access Web Server (JDAWS) will be developed and will improve data sharing with NATO. This effort also implements interface enhancements to accommodate evolving DoD and NATO spectrum data standard changes. FY 2011 efforts also include the development and initial deployment of the SPECTRUM XXI Online (SXXI-O) infrastructure to spectrum managers in the Military Departments (MILDEPs) and COCOMs. SXXI-O capabilities provide a set of enhanced frequency nomination and assignment algorithms and associated default data that affords the opportunity to make more spectrally efficient assignments while precluding co-channel and adjacent signal interference.</p> <p><i>FY 2012 Base Plans:</i> JDADS FY 2012 resources will migrate capabilities to new hardware and operating environments and will implement the evolving DoD and NATO spectrum data standard in all aspects of the JDADS program. Additional background environment data sources will be developed and the program will implement enhanced monitoring transactions with Military Departments' (MILDEPs) systems. All developed capabilities will be</p>					
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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
documented and tested by subject matter users before being hosted at a Defense Enterprise Computing Center(DECC) site. SXXI-O will continue to be enhanced and deployed to spectrum managers in MILDEPs and Combatant Commands (COCOMS).					
<p>Title: DoD E3 Program</p> <p>Description: The DoD Electromagnetic Environmental Effects (E3) Program supports the Joint Capabilities Integration and Development System (JCIDS) process and the DoD acquisition process to ensure that E3 control and Spectrum Supportability (SS) are incorporated into the development, testing, and procurement of information technology and National Security Systems. The E3 Program also supports the development of the Joint Ordnance E3 Risk Assessment Database (JOERAD) and Hazards of Electromagnetic Radiation to Ordnance (HERO) electromagnetic environmental effects (EME) surveys in support of the COCOMS and Joint Task Forces (JTF). JOERAD develops algorithms and provides analytical capabilities to perform real-time risk assessments to evaluate platform/system safety and identify equipment limitations in the operational EM environment. JOERAD enables operators to make critical decisions about the hazards associated with the use of ordnance within complex EM environments.</p> <p>FY 2010 Accomplishments: DSO continued to provide HERO Impact Assessments, forward deployed EME surveys, and JOERAD shipboard installations. DSO also delivered JOERAD version 9.5 and initiated conversion of JOERAD to a network-connected capability, JOERAD version 10.0. JOERAD 10.0 will provide an automated data update capability for users that are connected to the SIPRNET and data updates will be delivered in the DoD approved spectrum standard data format. Network certifications for JOERAD for Army and Air Force networks were completed. DSO completed over 400 critical research/analysis efforts supporting DoD acquisitions.</p> <p>FY 2011 Plans: FY 2011 resources continue the conversion of JOERAD to a network-connected capability, JOERAD 10.0, incorporating data improvements. Three shipboard installations, training and validation of CONUS based emitter complement for JOERAD will also be completed in FY 2011 along with HERO Impact Assessments and forward deployed EME surveys. DSO will continue development of approximately 400 critical research/analysis efforts supporting DoD acquisitions.</p> <p>FY 2012 Base Plans: FY 2012 resources will complete development of JOERAD 10.0 and complete development of an improved ordnance safety database. JOERAD 10.0 will undergo testing and begin deployment and training. DSO will</p>	3.068	3.107	3.200	-	3.200

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>conduct CONUS base emitter surveys for ordnance safety database validation. DSO will develop enhanced Ordnance radio frequency (RF) safety requirements for DoD. DSO will continue development of approximately 400 critical research/analysis efforts supporting DoD acquisitions.</p> <p>Title: Emerging Spectrum Technologies (EST)</p> <p>Description: DSO has the responsibility to investigate emerging spectrum related technologies and evaluate their applicability to improve future warfighter EM spectrum utilization through technological innovation. The goal of the EST program is to identify the opportunities and risks associated with emerging spectrum-related technologies in the early stages of the technology development, influence and lead technology development in order to maximize DoD spectrum utilization, and ensure that spectrum policies incorporate optimal technology to meet DoD mission requirements.</p> <p>Within EST there has been an increased focus on Dynamic Spectrum Access (DSA). DSA is realized through wireless networking architectures and technologies that enable wireless devices to dynamically adapt their spectrum access according to criteria such as policy constraints, spectrum availability, propagation environment, and application performance requirements.</p> <p>FY 2010 Accomplishments: FY 2010 funds completed research in “hidden node” challenges associated with the spectrum sensing function of DSA and the scalability of ad-hoc DSA-enabled networks. DSA efforts also focused on research and development of a framework to support deployment of DSA-enabled systems. Research into a federated architecture for DSA radios was initiated. The Spectrum Scorecard was modified to address sensor and electronic warfare spectrum dependent systems.</p> <p>FY 2011 Plans: FY 2011 funds focus DSA research on spectrum sharing techniques and interference mitigation approaches in general, and specific to advanced radar systems. DSA research efforts initiated in FY 2010 will be completed. DSO will develop a framework and technical parameters to demonstrate the effective coexistence of DSA enabled radios with legacy systems. DSO will also develop extensions to evolving DoD and NATO spectrum data standards allowing for control of DSA capable systems.</p> <p>FY 2012 Base Plans: In FY 2012, DSO, in coordination and collaboration with the MILDEPs and the National Telecommunications and Information Administration (NTIA), will initiate development of the revised spectrum certification process</p>	3.433	3.715	4.474	-	4.474

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>for dynamic spectrum access (DSA) capable systems, including procedures for demonstrating the ability to effectively coexist with legacy systems. DSO will expand the coordination between the various entities developing tools for spectrum and network management to ensure that capabilities needed to effectively manage DSA enabled systems are available within those tools. DSO will research utilizing advanced situational-aware technologies to enable expanded spectrum sharing with commercial systems to mitigate potential impacts from the national broadband expansion, and unlock under-utilized spectrum as recommended in the President's wireless broadband memo. DSO will continue to track emerging technologies and will publish two Technology Tracking Reports describing spectrum technology implications to DoD.</p> <p>Title: Spectrum Data Sharing Capability</p> <p>Description: FY 2011 funds will initiate an authoritative data source for the Department's spectrum management (SM) information and an automated spectrum data capture and quality control process. The spectrum data enhancement will develop the data sharing solution to US Central Command's (USCENTCOM) Joint Urgent Operational Need (JUON) 06-53745201-00, Radio Frequency Spectrum Management. This enhancement will: provide accurate data for automated Counter Radio Electronic Warfare (CREW) deconfliction and spectrum inventory calculation; enable automated data capture; automate data access capabilities; provide business process engines of oversight and quality control; and enable interoperability with NATO.</p> <p>FY 2010 Accomplishments: N/A.</p> <p>FY 2011 Plans: FY 2011 resources will enhance the Spectrum Data Capture tool, Stepstone, to include upgrade to the evolving DoD and NATO spectrum data standard and will establish a transactional data repository for equipment parameters. A statistical assessment capability will be prototyped for the Data Quality Assessments (DQA) capability. Development will begin on federation of E-Space data assets and federation of emerging Global Force Management with common query and service interface capabilities. An Attribute Based Access Control (ABAC) capability will also be acquired in FY 2011.</p> <p>FY 2012 Base Plans: FY 2012 funds will transition Stepstone version 3.0 to the capability to be hosted on the SIPRNET at a DECC site, and the Joint Spectrum Data Repository (JSDR) Service Interface (SI) will be updated to import data directly from Stepstone to the JSDR. Business process management work flow will be integrated to manage and track Stepstone records. Under the DQA effort, the FY 2011 prototype statistical assessment capability will be</p>	-	4.500	5.500	-	5.500

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
expanded and a prototype assessment capability will be developed along with supporting Service Interface for Stepstone. A data default Service Interface will be developed for SXXI-O. Under the ABAC effort, a prototype implementation of the spectrum ABAC will be developed and applied to Stepstone and JSDR to augment the current AKO Single Sign On (SSO) method and provide role based access. A prototype ABAC attribute database and maintenance capabilities will be developed. All developed capabilities will be tested by subject matter users before being hosted at a DECC site.					
<p>Title: Global Electromagnetic Spectrum Information System (GEMSIS)</p> <p>FY 2010 Accomplishments: In FY 2010, GEMSIS achieved Milestone C and Fielding Decision for the Coalition Joint Spectrum Management Planning Tool (CJMSPT) Joint Capability Technology Demonstration (JCTD) approved capabilities and began transition of CJMSPT into GEMSIS Increment 1. DSO began design and development of an on-line training program structure for GEMSIS Increments. DSO developed, tested, and deployed Host Nation Spectrum Worldwide Database Online (HNSWDO) version 3.1.3, which improved system effectiveness and usability by resolving latency issues. The GEMSIS Catalog of Services architecture design was finalized and the initial catalog piloted and demonstrated to the user community.</p> <p>FY 2011 Plans: In FY 2011, DSO finalizes the GEMSIS Catalog of Services architecture and infrastructure standards and will prepare for Milestone B or C for GEMSIS Increment 2. DSO will develop, test, and deploy HNSWDO version 3.1.5 which will allow transition of HNSWDO to a DECC. DSO will develop, test, and deploy CJMSPT version 2.1.2, which expands the software capabilities for broader COCOM applicability.</p> <p>FY 2012 Base Plans: In FY 2012, Defense Spectrum Organization will implement Increment 2 to transition, modify, integrate, test and then field a much more real-time spectrum management tool to DoD operational users. Increment 2 will provide for much more dynamic management of spectrum assets in operational theaters and enable Commanders at all levels to make better decision on the deployment of spectrum assets.</p>	4.250	1.716	7.528	-	7.528
<p>Title: Spectrum Common Operating Picture (SCOP)</p> <p>Description: Spectrum Common Operating Picture (SCOP) will provide an automated end-to-end capability to pull together all of the spectrum and other related data sets currently used to support spectrum planning and operations, and layer this data to provide a clear visualization of the spectrum environment, similar to</p>	1.000	1.000	0.500	-	0.500

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>how a Geographic Information System (GIS) layers geospatial and related data. There is no comprehensive automated tool or service available today that allows decision makers to set priorities with the benefit of a common display of timely and relevant spectrum information. The proposed capability would provide operational and tactical planners and commanders in the field with a comprehensive layered picture of spectrum use through a Service Oriented Architecture-based web service tied to a GIS driven by robust, accurate information. Current manual and time intensive data gathering, correlation and visualization methods are not responsive to operational requirements and place undue risk to warfighters and mission accomplishment. SCOP will substantially reduce analysis and presentation time, from weeks/days to minutes/seconds. That situational awareness will enable real time decisions based on the area of operation and mission planning factors, resulting in more effective mission planning for the spectrum management community as well as for operations planners, electronic warfare planners, and intelligence collection.</p> <p><i>FY 2010 Accomplishments:</i> In FY 2010, in response to urgent requests from USCENTCOM, DSO realigned resources within this program element to begin development of a SCOP prototype capability. The prototype will be evaluated by spectrum operational users in COCOMs and MILDEPs to refine requirements and to demonstrate the ability to display multiple sets of data, each organized by frequency.</p> <p><i>FY 2011 Plans:</i> FY 2011 resources will complete software development efforts that will enhance the SCOP prototype into an operational capability and complete development of the visualization engine and web application. Funds will also support testing and initial training.</p> <p><i>FY 2012 Base Plans:</i> In 2012, DSO will deploy the Initial Operational Capability (IOC) version of SCOP to DoD's spectrum operational community. Additional software development will begin enhancements required to achieve the Full Operational Capability (FOC) version of SCOP.</p>					
Accomplishments/Planned Programs Subtotals	18.579	20.991	29.154	-	29.154

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u> <u>Base</u>	<u>FY 2012</u> <u>OCO</u>	<u>FY 2012</u> <u>Total</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• O&M, DW/PE 0303153K: O&M, DW	28.273	32.404	41.379	0.200	41.579	42.879	44.457	45.299	45.859	Continuing	Continuing
• Procurement, DW/PE 0303153K: Procurement, DW	0.490	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.490	0.490

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

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
Technical Engineering Services 1	C/CPIF	ITT Industries, Inc:ITT Industries, Inc	60.232	19.836	Oct 2010	27.848	Oct 2011	-		27.848	Continuing	Continuing	Continuing
Technical Engineering Services 2	MIPR	Various:Various	2.171	0.334		0.345		-		0.345	Continuing	Continuing	Continuing
Subtotal			62.403	20.170		28.193		-		28.193			

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	1.052	0.160		0.300		-		0.300	Continuing	Continuing	Continuing
Subtotal			1.052	0.160		0.300		-		0.300			

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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:MITRE	4.829	0.661	Nov 2010	0.661	Nov 2011	-		0.661	Continuing	Continuing	Continuing
Subtotal			4.829	0.661		0.661		-		0.661			

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			68.284	20.991		29.154		-		29.154			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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																												
Global Electromagnetic Spectrum Information System (GEMSIS) Increment 1 Milestone C																												
GEMSIS Host Nation Spectrum Worldwide Database Online (HNSWDO) Version 3.1.5 Fielding																												
GEMSIS Coalition Joint Spectrum Management Planning Tool (CJSMP) Version 2.1.2 Deployment																												
Increment Two GEMSIS Event																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303153K: <i>Defense Spectrum Organization</i>	PROJECT JS1: <i>Joint Spectrum Center</i>
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Schedule Details

Events	Start		End	
	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	2010	4	2016
Spectrum Data Sharing Capability Deployments	4	2011	4	2016
Global Electromagnetic Spectrum Information System (GEMSIS) Increment 1 Milestone C	2	2010	2	2010
GEMSIS Host Nation Spectrum Worldwide Database Online (HNSWDO) Version 3.1.5 Fielding	4	2011	4	2011
GEMSIS Coalition Joint Spectrum Management Planning Tool (CJSMPPT) Version 2.1.2 Deployment	3	2011	4	2011
Increment Two GEMSIS Event	1	2012	4	2016

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>			PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>								
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	1.683	3.366	1.830	-	1.830	0.977	1.337	1.502	1.501	Continuing	Continuing
T57: <i>Net-Centric Enterprise Services (NCES)</i>	1.683	3.366	1.830	-	1.830	0.977	1.337	1.502	1.501	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). Further, this also supports PEO GES' efforts to complete actions and tasks assigned to PEO GES within the DISA Campaign Plan which include: "Enhance core Application Level Services", "Deliver the full suite of Net-Centric Enterprise Services (NCES) services as defined in the Capabilities Production Document (CPD)", and "Define and implement capabilities beyond the Full Operational Capability (FOC) designation". The PEO GES portfolio of services will expand to support integration of new capabilities through: transition of local services to the DoD enterprise; integration of pre-planned product improvements; the integration of new services offered by the Service Oriented Architecture Foundation; and the transition and enhancement of Strategic Knowledge Integration Web (SKIWeb) from United States Strategic Command (USSTRATCOM) to Defense Information Systems Agency (DISA) Defense Enterprise Computing Centers (DECCs).

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	1.775	3.366	1.947	-	1.947
Current President's Budget	1.683	3.366	1.830	-	1.830
Total Adjustments	-0.092	-	-0.117	-	-0.117
• Congressional General Reductions				-	
• Congressional Directed Reductions				-	
• Congressional Rescissions	-				
• Congressional Adds				-	
• Congressional Directed Transfers				-	
• Reprogrammings	-				
• SBIR/STTR Transfer	-				
• Other Adjustments	-0.092	-	-0.117	-	-0.117

Change Summary Explanation

The decrease of -\$0.092 in FY 2010 is due to reduced cost to complete Follow-on Operational Test and Evaluation (FOT&E) testing and the engineering analysis cost to demonstrate the infrastructure expansion and performance required to support the Collaboration and Content Discovery Key Performance Parameters.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>

The FY 2012 decrease of -\$0.117 is due to reduced operational testing needed for enhanced services and significant upgrades to existing services to support their integration into the PEO GES portfolio and reduced levels of testing required to complete the transition and enhancement for SKIWeb.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>	PROJECT T57: <i>Net-Centric Enterprise Services (NCES)</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
T57: <i>Net-Centric Enterprise Services (NCES)</i>	1.683	3.366	1.830	-	1.830	0.977	1.337	1.502	1.501	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, the deployment and sustainment of capabilities provided through the Vice-Chairman of the Joint Chiefs of Staff initiatives, 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 300,000 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. 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;
- 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".

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Test and Evaluation	1.683	3.366	1.830	-	1.830
FY 2010 Accomplishments:					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>	PROJECT T57: <i>Net-Centric Enterprise Services (NCES)</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>FY 2010 funds (\$1.683 million) supported a Follow-on Operational Test and Evaluation (FOT&E) conducted by the Service Operational Testing Agencies (OTAs) and Joint Interoperability Test Command (JITC) for Content Discovery, People Discovery, Service Discovery, Enterprise Service Management, and Machine-to-Machine Messaging to support the Full Deployment and Full Operational Capability decisions for the services delivered by the NCES program. Further, FY 2010 funds supported the initial concepts for the required testing and modeling and simulation needed for future collaboration integration activities. Finally, FY 2010 funds provided the initial engineering analysis to demonstrate the infrastructure expansion and performance required to support the Collaboration and Content Discovery Key Performance Parameters.</p> <p>FY 2011 Plans: FY 2011 funding (\$3.366 million) will support the transition and enhancement of SKIWeb which provides event-based information in a globally accessible, operationally relevant, near real-time capability enabling 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 is also 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 their final insertion into the PEO GES portfolio of services baseline to support Warfighter mission needs.</p> <p>The increase of \$+1.683 in funding between FY 2010 and FY 2011 is due to transitioning Strategic Knowledge Integration Web (SKIWeb) from a local service operating at United States Strategic Command (USSTRATCOM) to an enterprise service supporting an increased user community.</p> <p>FY 2012 Base Plans: FY 2012 funding (1.830 million) will support the operational testing required to complete the transition and enhancement of SKIWeb into an enterprise service. The funding will also support any operational testing required for capabilities delivered under the Vice Chairman Joint Chiefs of Staff initiative.</p> <p>Funding decrease between FY 2011 to FY 2012 (-\$1.536 million) reflects reduced levels of testing required to complete the transition and enhancement for SKIWeb. Funding shortfalls in FY 2012 will impact the final operational testing required to complete the transition and enhancement of SKIWeb from USSTRATCOM to the DISA DECCs. Lack of funding will also impair the operational testing of new, enhanced, and follow-on</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>	PROJECT T57: <i>Net-Centric Enterprise Services (NCES)</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
capabilities required to ensure they meet the requirements and operational metrics of the Warfighter prior to their full deployment.					
Accomplishments/Planned Programs Subtotals	1.683	3.366	1.830	-	1.830

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• O&M, DW/PE 0303170K: O&M, <i>DW</i>	98.129	120.293	143.539	6.400	149.939	135.838	138.958	139.403	139.964	Continuing	Continuing
• Procurement, DW/PE 0303170K: <i>Procurement, DW</i>	4.410	4.391	3.429	0.000	3.429	2.828	2.815	2.810	2.811	Continuing	Continuing

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.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>	T57: <i>Net-Centric Enterprise Services (NCES)</i>

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 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:

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>	T57: <i>Net-Centric Enterprise Services (NCES)</i>

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.

The management areas are designed to ensure that problems can be identified rapidly for resolution, while providing maximum support to the Warfighters' mission. These metrics associated with these management areas provide quantitative data that show the portfolio of services delivered by PEO-GES are secure, interoperable, and responsive to current and future Warfighter missions in a cost-effective manner. The management areas and metrics will be used to continuously evaluate the value of services to the Warfighter. They will be used to determine the right time to scale and update services to keep them relevant to the warfighter's mission. Also, when necessary, they provide the necessary artifacts to make decisions to continue, shutdown, or place in caretaker status 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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>	PROJECT T57: <i>Net-Centric Enterprise Services (NCES)</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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):MIT (CTO)	0.421	0.400	Dec 2010	-		-		-	Continuing	Continuing	0.871
Product Development 2	C/Various	TBD:TBD	0.546	-		-		-		-	Continuing	Continuing	0.586
Product Development 3	C/Various	FGM:FGM	0.173	-		-		-		-	Continuing	Continuing	0.175
Product Development 4	MIPR	NSA:NSA	0.460	0.440	Mar 2011	-	Mar 2012	-		-	Continuing	Continuing	Continuing
Product Development 5	MIPR	SPAWAR:SPAWAR	0.083	-		-		-		-	Continuing	Continuing	0.083
Product Development 6	MIPR	SKIWEB:SKIWEB	-	1.600	Mar 2011	0.889	Mar 2012	-		0.889	Continuing	Continuing	2.489
Product Development 7	C/Various	FGM:FGM	8.699	-		-		-		-	Continuing	Continuing	8.699
Product Development 8	MIPR	JEDS:JEDS	2.566	-		-		-		-	Continuing	Continuing	2.566
Product Development 9	C/Various	BAH:BAH	3.084	-		-		-		-	Continuing	Continuing	3.084
Product Development 10	C/FPIF	CSC:CSC	15.051	-		-		-		-	Continuing	Continuing	30.235
Product Development 11	C/FP	Various:Various	7.132	-		-		-		-	Continuing	Continuing	7.132
Product Development 12	C/Various	SOLERS:SOLERS	4.143	-		-		-		-	Continuing	Continuing	5.143
Product Development 13	C/CPIF	CSD:CSD	8.417	-		-		-		-	Continuing	Continuing	8.417
Product Development 14	C/FPIF	ICES:ICES	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:IBM	4.339	-		-		-		-	Continuing	Continuing	5.248
Product Development 17	C/FPIF	CARASOFT:CARASOFT	5.634	-		-		-		-	Continuing	Continuing	10.934
Product Development 18	C/FPIF	Various:Various	1.501	-		-		-		-	Continuing	Continuing	1.501
Product Development 19	MIPR	ARMY:ARMY	9.756	-		-		-		-	Continuing	Continuing	11.110
Product Development 20	C/FP	NORTHROP GRUMMAN:NORTHROP GRUMMAN	3.167	-		-		-		-	Continuing	Continuing	3.167
Subtotal			79.584	2.440		0.889		-		0.889			

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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:JITC	27.912	0.926	Jan 2011	0.941	Jan 2012	-		0.941	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>	PROJECT T57: <i>Net-Centric Enterprise Services (NCES)</i>
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Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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 2	MIPR	SPAWAR:SPAWAR	18.070	-		-		-		-	Continuing	Continuing	18.070
Test & Evaluation 3	MIPR	JFCOM:JFCOM	0.210	-		-		-		-	Continuing	Continuing	0.232
Test & Evaluation 4	C/Various	SAIC:SAIC	11.541	-		-		-		-	Continuing	Continuing	11.541
Test & Evaluation 5	MIPR	TE:TE	0.512	-		-		-		-	Continuing	Continuing	0.512
Subtotal			58.245	0.926		0.941		-		0.941			

Management Services (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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:DSA	12.351	-		-		-		-	Continuing	Continuing	12.351
Management Services 2	FFRDC	MITRE:MITRE	15.072	-		-		-		-	Continuing	Continuing	15.072
Management Services 3	C/FP	CSD:CSD	23.056	-		-		-		-	Continuing	Continuing	23.056
Management Services 4	C/CPFF	SRA:SRA	1.478	-		-		-		-	Continuing	Continuing	1.478
Management Services 5	C/Various	BAH:BAH	10.224	-		-		-		-	Continuing	Continuing	10.224
Management Services 6	C/Various	SOLERS:SOLERS	4.853	-		-		-		-	Continuing	Continuing	4.853
Management Services 7	C/CPFF	Pragmatics:Pragmatics	1.735	-		-		-		-	Continuing	Continuing	1.735
Management Services 8	C/CPFF	MMI:MMI	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 Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		234.043	3.366		1.830		-	1.830			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>	PROJECT T57: <i>Net-Centric Enterprise Services (NCES)</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Full Operational Capability				■																								
Service Oriented Architecture (SOA) Foundation Services		■																										
Service Oriented Architecture (SOA) Foundation Services Fielding Decision, Machine-to-Machine Messaging (M2M), Enterprise Service Management, People Discovery												■																
Content Discovery & Delivery (CD&D) Services Fielding Decision, Content Discovery																												
Testing FOT&E 2		■	■	■																								
Testing	■																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303170K: <i>Net-Centric Enterprise Services (NCES)</i>	PROJECT T57: <i>Net-Centric Enterprise Services (NCES)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Full Operational Capability	4	2010	4	2010
Service Oriented Architecture (SOA) Foundation Services	2	2010	2	2010
Service Oriented Architecture (SOA) Foundation Services Fielding Decision, Machine-to-Machine Messaging (M2M), Enterprise Service Management, People Discovery	4	2010	4	2010
Content Discovery & Delivery (CD&D) Services Fielding Decision, Content Discovery	4	2010	4	2010
Testing FOT&E 2	2	2010	3	2010
Testing	1	2010	4	2016

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

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

R-1 ITEM NOMENCLATURE
 PE 0303610K: *Teleport Program*

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	5.209	6.880	6.418	-	6.418	5.987	5.552	5.474	5.475	Continuing	Continuing
NS01: <i>Teleport Program</i>	5.209	6.880	6.418	-	6.418	5.987	5.552	5.474	5.475	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 identified 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 1 (FY2002-FY2010) fielded capabilities in four Full Development Decision (FDD) events. FDD 1, completed in March 2004, implemented C, X, and Ku band capability at six sites. FDD 2, completed in November 2006, 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 2 (FY2006-FY2010) added additional military Ka-band legacy capacity and implemented IP Net-Centric communications to increase capacity at the Teleport sites. A full deployment was recommended by DISA on December 23, 2010.

A Teleport Acquisition Decision Memorandum (ADM) dated March 2, 2010 approved the Material Development Decision (MDD) for the next increment of Teleport, Generation 3. The current Teleport Generation 3 Production Acquisition Program Baseline (APB) was signed September 13, 2010. The baseline is based on the three Generation 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.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i>	PE 0303610K: <i>Teleport Program</i>
BA 7: <i>Operational Systems Development</i>	

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 a voice and data communications bridge between these satellite systems and maritime, airborne, and ground mobile tactical operators.

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 also 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 only DSN users with secure 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 testing. Without the GDS capability, the need for warfighters to communicate mission or information updates rapidly with thousands of unclassified users will be jeopardized.

B. Program Change Summary (\$ in Millions)	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>
Previous President's Budget	5.217	6.880	6.824	-	6.824
Current President's Budget	5.209	6.880	6.418	-	6.418
Total Adjustments	-0.008	-	-0.406	-	-0.406
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.008	-	-0.406	-	-0.406

Change Summary Explanation

The FY 2010 reduction of -\$0.008 million is due to the shifting of priorities to meet new Departmental goals.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 0303610K: <i>Teleport Program</i>

The FY 2012 reduction of -\$0.406 million is due to planned program adjustments (-\$0.056) and shifting of priorities in support of Departmental efficiencies initiatives (-\$0.350).

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>	PROJECT NS01: <i>Teleport Program</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
NS01: <i>Teleport Program</i>	5.209	6.880	6.418	-	6.418	5.987	5.552	5.474	5.475	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

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. 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. 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 access to using the most high-speed, secure, and interoperable voice, data, and video networks. Without Phase 2, Teleport and other gateway sites will have insufficient capacity to fully utilize the advance Wideband Global SATCOM (WGS) capabilities. 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, all military forces operating with legacy radios will be unable to communicate with warfighters equipped with the MUOS capable services.

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Teleport Program	5.209	6.880	6.418	-	6.418
FY 2010 Accomplishments:					
(\$5.209) Technology Refresh and Generation 3 (\$4.909): Continued Teleport's technology refreshment schedule to upgrade net-centric baseband and IP modem software and firmware, evaluated Teleport's Management & Control strategy to enhance security, upgraded DISN service enhancements, and UHF integrated waveform upgrades. System Engineer Program Management (SEPM) efforts clearly defined the Generation 3 Phase 1 enhancement in all Statutory and Regulatory acquisition documentation required for a favorable decision that occurred in August 2010. All documentation has been staffed for signature approval within the Office Secretary of Defense (OSD). MUOS (\$0.300): Developed all program documentation requirements. Achieved Milestone B and released RFP.					
FY 2011 Plans:					
(\$6.880) Technology Refresh and Generation 3 (\$6.100): Funding will allow the program to continue a technology refreshment schedule designed to support Gens 1 and 2 fielded capabilities and complete an					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>	PROJECT NS01: <i>Teleport Program</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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evaluation of the existing Teleport Management & Control System (TMCS) which enhances security. SEPM efforts will continue 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. Additional Network Management Terminals (NMTs) will be purchased and prepared for testing at the Joint Satellite Communications Engineering Center (JSEC) in 2QFY11. In addition, preparation will begin for the installation of six Terminals at two Teleport sites. The program will prepare acquisition documentation for Gen 3 Phase 2 to refresh end-of-life Defense Satellite/Secure Communication System (DSCS) terminals with Maintenance Evaluation Teams (METs) to allow them to remain interoperable with WGS X/Ka-band users. MUOS to DISN (\$0.300): MUOS-to-Legacy will develop initial design and implementation of the MUOS to UHF system. MLGC (\$0.370): The MLGC program will continue to mature the vendor design, conduct a Management & Control maturity demonstration, and conduct Preliminary and Critical Design Reviews to demonstrate the systems' readiness for delivery. GDS Enclave (\$0.110): will initiate a design for a dynamic discovery service capability for non-secret security enclaves (Cipher Text and Plain Text addresses).

FY 2011 increase of +\$1.671 is funding for SEPM that will support Teleport technology refreshment to include JIPM, upgrades to net-centric baseband and IP modem software and firmware, continue deployment of TMCS Build 5.0 to enhance security, DISN service enhancements, and UHF integrated waveform upgrades. In FY 2011, SEPM efforts continue by providing users of the current UHF system an improved service and complete interoperability with the MUOS legacy payload to ensure a smooth transition to the next generation of mobile user equipment. The program will also continue with insertion of technology refreshment enhancements. Final tests for MUOS-DISN will be completed for initial operational capability at two sites; the third site will begin installation and test. Site preparations and installation begins for AEHF (XDR) Terminals and baseband equipment. MUOS-to-Legacy installation and test begins at the TPO test lab. And TPO installation planning begins on the fourth enhancement, WGS X/Ka Terminals.

FY 2012 Base Plans:

(\$6.418) Technology Refresh and Generation 3 (\$5.408): Funding will allow the program to continue a technology refreshment schedule designed to support Gen 1 and 2 fielded capabilities and install a refined Management & Control system. Conduct final tests for MUOS-DISN for initial operational capability at two Teleport sites. Continue site preparations and installation for AEHF (XDR) Terminals and baseband equipment. MUOS-to-Legacy installation and test begins at the TPO test lab. MUOS to DISN (\$0.400): MUOS-to-Legacy will also develop initial design and implementation of the MUOS to UHF system. MLGC (\$0.470): Funding will be used to fund program office support, support a Milestone C decision and address any technical issues

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>	PROJECT NS01: <i>Teleport Program</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
discovered during the installation and testing of the two EDMs. GDS Enclave (\$0.140): Continue to mature a dynamic discovery service capability for non-secret security enclaves (Cipher Text and Plain Text addresses). The decrease of -\$0.462 is due to a lower level of effort required to test our technical refresh/sustainment capabilities, and completion of two out of three Generations 3 Milestone C decisions by mid FY 2012.					
Accomplishments/Planned Programs Subtotals	5.209	6.880	6.418	-	6.418

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• O&M, DW/PE0303610K: <i>O&M, DW</i>	10.046	19.827	18.265	12.678	30.943	18.451	18.648	19.718	19.902	Continuing	Continuing
• Procurement, DW/PE0303610K: <i>Procurement, DW</i>	69.431	78.227	54.743	0.000	54.743	47.838	47.058	47.122	47.060	Continuing	Continuing

D. Acquisition Strategy
The Teleport Program Office (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 by the use of 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 delivery the program's capabilities to the warfighter.

E. 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.

1) Teleport has integrated Ka (8 legacy links) and IP over SATCOM capability that dynamically allocates satellite bandwidth using existing commercial-off-the-shelf (COTS) IP modems (Generation 2 Phase 1) as well as integrated open standard IP modems (Digital Video Broadcast-Satellite (2nd generation)/Return Channel via Satellite (DVB-S2/RCS) hubs. FY2010: As of 4QFY10 Gen 2 implementation is 100 percent complete; waiting final Ka terminal commissioning and all sites are

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>	PROJECT NS01: <i>Teleport Program</i>
<p>commissioned. FY2011: As of 4QFY2010, the TPO has resolved 58 percent (18 of 31) of the Transient Maintenance Items (TMI) for Generation 2. The remaining TMI are targeted for resolution by 4QFY2011. One hundred percent completion for Generation 2 upgrades is targeted for 1QFY2011. Performance metrics for Generation 3 will be established after this increment has an approved baseline in March 2011.</p> <p>2) Throughput of 500 (nominal Mbps per site) for satellite communications and 319 Mbps for DISN. Maintain load levels and quality of service for users during transition period. Perform technology refreshment of existing COTS hardware & software. FY2010: As of 4QFY10 Gen 2 implementation is 100% complete and all sites are commissioned; awaiting final Ka terminal commissioning. FY2011: One hundred percent completion for Generation 2 upgrades is targeted for 1QFY2011. Performance metrics for Generation 3 will be established after this increment has an approved baseline in the March 2011 timeframe.</p> <p>3) Access to C, X, Ku, UHF, EHF, and Ka bands. Provide sustainment/technology refresh to upgrade: (1) Net-centric baseband Performance Enhancing Proxies (2) net-centric modem software and firmware, and (3) EHF baseband hardware and software. Will complete DISN service enhancements. FY2010: As of 4QFY10 implementation is 80% complete, coverage exists where satellites are available. FY2011: Generation 2 upgrades 100% completion targeted for 1QFY2011. Performance metrics for Generation 3 will be established after this increment has an approved baseline in the March 2011 timeframe.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>	PROJECT NS01: <i>Teleport Program</i>
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Product Development (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	Various	TBD:TBD	-	-		0.110		-		0.110	Continuing	Continuing	Continuing
MUOS to DSN Engineering Technical & Design Services	Various	TBD:TBD	-	-		0.370		-		0.370	Continuing	Continuing	Continuing
Government Engineering Services	MIPR	SPAWAR Atlantic :Charleston, SC	-	0.003	Mar 2010	-		-		-	Continuing	Continuing	Continuing
Engineering Services	C/CPFF	STF LTD. :Fredericksburg, VA	-	0.297	Mar 2010	-		-		-	Continuing	Continuing	Continuing
Engineering Services	MIPR	SPAWAR Atlantic:Charleston, SC	-	-		0.300		-		0.300	Continuing	Continuing	Continuing
Subtotal			-	0.300		0.780		-		0.780			

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	30.027	3.510	Apr 2011	3.304	Apr 2012	-		3.304	Continuing	Continuing	Continuing
Program Office Support	SS/CPFF	SAIC:Falls Church, VA	0.166	0.069	Apr 2011	0.071	Apr 2012	-		0.071	Continuing	Continuing	Continuing
Program Office Support	C/CPAF	STF:Fredericksburg, VA	3.270	0.537	Sep 2010	0.553	Sep 2011	-		0.553	Continuing	Continuing	Continuing
Program Office Support	MIPR	SPAWAR:DCATS	1.221	2.464		1.710		-		1.710	Continuing	Continuing	Continuing
Subtotal			34.684	6.580		5.638		-		5.638			

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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	7.234	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			7.234	-		-		-		-			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency							DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>			R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>			PROJECT NS01: <i>Teleport Program</i>			
	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals	41.918	6.880	6.418	-	6.418				

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>	PROJECT NS01: <i>Teleport Program</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Generic Discovery Server																												
Acquisition Documentation				■																								
Key Decision Point (MS B Equivalent)					■																							
Contract Award					■																							
PDR						■																						
CDR								■																				
Software/Hardware Development									■																			
Factory Testing									■																			
Key Decision Point (MS C Equivalent)										■																		
Installation											■																	
T&E (DT/OT)												■																
Upgrades																■												
MUOS to Defense Switched Network																												
Acquisition Documentation				■																								
Key Decision Point (MS B Equivalent)					■																							
Contract Award					■																							
PDR						■																						
CDR								■																				
Software/Hardware Development									■																			
Factory Testing									■																			
Key Decision Point (MS C Equivalent)										■																		
Installation											■																	
T&E (DT/OT)												■																
Upgrades																■												

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>	PROJECT NS01: <i>Teleport Program</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
<i>MUOS to Legacy Gateway Component</i>																												
MLGC Contract award				■																								
PDR							■																					
CDR							■																					
Phase 1 Testing – Vendor Site													■															
Phase 2 Testing – First Article Testing																												
Phase 3 Operational Assessment – Northwest																												
Ms C Decision																												
<i>Teleport Program</i>																												
Generation One-IOC4 Testing	■																											
Generation One-IOC4 (Ka Integration)				■																								
Generation Two-(Net-centric Capability) DT/OT&E	■																											
Generation Two-FOC							■																					
Technology Refresh-Generation Three																												
Generation Three-MDD				■																								
Generation Three-Phase 1 MS C AEHF XDR				■																								
Generation Three-Phase 2 Milestone C WGS X/Ka																												
Generation Three-Phase 3 Milestone C MUOS – Legacy																												
Generation Three-Phase 3 FDD MUOS - Legacy																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>	PROJECT NS01: <i>Teleport Program</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Generic Discovery Server</i>				
Acquisition Documentation	1	2011	1	2011
Key Decision Point (MS B Equivalent)	2	2011	2	2011
Contract Award	2	2011	2	2011
PDR	3	2011	3	2011
CDR	1	2012	1	2012
Software/Hardware Development	3	2012	3	2012
Factory Testing	3	2012	3	2012
Key Decision Point (MS C Equivalent)	4	2012	4	2012
Installation	1	2013	1	2013
T&E (DT/OT)	2	2013	2	2013
Upgrades	1	2014	1	2014
<i>MUOS to Defense Switched Network</i>				
Acquisition Documentation	1	2011	1	2011
Key Decision Point (MS B Equivalent)	2	2011	2	2011
Contract Award	2	2011	2	2011
PDR	3	2011	3	2011
CDR	1	2012	1	2012
Software/Hardware Development	3	2012	3	2012
Factory Testing	3	2012	3	2012
Key Decision Point (MS C Equivalent)	4	2012	4	2012
Installation	1	2013	1	2013

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0303610K: <i>Teleport Program</i>	PROJECT NS01: <i>Teleport Program</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
T&E (DT/OT)	2	2013	2	2013
Upgrades	1	2014	1	2014
<i>MUOS to Legacy Gateway Component</i>				
MLGC Contract award	4	2010	4	2010
PDR	2	2011	2	2011
CDR	3	2011	3	2011
Phase 1 Testing – Vendor Site	2	2012	2	2012
Phase 2 Testing – First Article Testing	4	2012	4	2012
Phase 3 Operational Assessment – Northwest	4	2012	4	2012
Ms C Decision	2	2013	2	2013
<i>Teleport Program</i>				
Generation One-IOC4 Testing	1	2010	1	2010
Generation One-IOC4 (Ka Integration)	4	2010	4	2010
Generation Two-(Net-centric Capability) DT/OT&E	1	2010	1	2010
Generation Two-FOC	2	2011	2	2011
Technology Refresh-Generation Three	2	2010	2	2014
Generation Three-MDD	2	2010	2	2010
Generation Three-Phase 1 MS C AEHF XDR	4	2010	4	2010
Generation Three-Phase 2 Milestone C WGS X/Ka	2	2012	2	2012
Generation Three-Phase 3 Milestone C MUOS – Legacy	2	2013	2	2013
Generation Three-Phase 3 FDD MUOS - Legacy	3	2014	3	2014

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305103K: <i>Cyber Security Initiative</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	10.023	2.251	4.341	-	4.341	4.144	4.260	4.312	4.312	Continuing	Continuing
XXX: <i>Cyber Security Initiative</i>	10.023	2.251	4.341	-	4.341	4.144	4.260	4.312	4.312	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)

	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012 Base</u>	<u>FY 2012 OCO</u>	<u>FY 2012 Total</u>
Previous President's Budget	10.038	2.251	2.529	-	2.529
Current President's Budget	10.023	2.251	4.341	-	4.341
Total Adjustments	-0.015	-	1.812	-	1.812
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	-0.015	-	1.812	-	1.812

Change Summary Explanation

Classified.

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305103K: <i>Cyber Security Initiative</i>	PROJECT XXX: <i>Cyber Security Initiative</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
XXX: <i>Cyber Security Initiative</i>	10.023	2.251	4.341	-	4.341	4.144	4.260	4.312	4.312	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Classified.

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Cyber Security Initiative	10.023	2.251	4.341	-	4.341
Description: Classified.					
FY 2010 Accomplishments: Classified.					
FY 2011 Plans: Classified.					
FY 2012 Base Plans: Classified.					
FY 2012 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	10.023	2.251	4.341	-	4.341

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

N/A

D. Acquisition Strategy

Classified.

E. Performance Metrics

Classified.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface Systems</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	3.140	3.513	3.154	-	3.154	3.259	3.395	3.451	3.451	Continuing	Continuing
NF1: <i>Distributed Common Ground/Surface Systems</i>	3.140	3.513	3.154	-	3.154	3.259	3.395	3.451	3.451	Continuing	Continuing

A. Mission Description and Budget Item Justification

As the sole joint interoperability certification agent, the Joint Interoperability Test Command (JITC) established and maintains a Distributed Development and Test Enterprise (DDTE) for the Department of Defense (DoD) Distributed Common Ground/Surface System (DCGS) program, as directed by the Office of the Under Secretary of Defense (Intelligence) (OUSD(I)). JITC chairs the DCGS Test & Evaluation (T&E) Focus Team, provides test & evaluation for assessing DCGS systems, and engineers and operates the DDTE network. JITC evaluates the DCGS systems' compliance with the DCGS Enterprise Initial Capabilities Document (ICD) and elements of the Net-Ready Key Performance Parameter (NR-KPP) to assess the information needs, timelines and assurance as well as net-ready attributes required for both the technical exchange of information and the end-to-end operational effectiveness of that exchange. DCGS is an integral and critical component of the overall DoD Intelligence, Surveillance, and Reconnaissance (ISR) interoperability and data integration strategy which provides world-wide ground/surface capabilities to receive, process, exploit, and disseminate data from airborne and national reconnaissance sensors/platforms and commercial sources. The key tenets of network-centric operations and the future of DCGS operations lie in the ability for any user to discover, access, and understand the data.

The FY 2012 funding of \$3.154 million supports the DDTE, which provides the DCGS Community of Interest (COI) an operationally relevant environment by establishing and maintaining connectivity between National Agency, Coalition partners and Service facilities at unclassified, collateral, Sensitive Compartmented Information (SCI), and coalition levels. It will also support the DCGS Enterprise assessment, as directed by OUSD(I), and DCGS Governance.

This effort provides the basis for the DCGS Enterprise Assessment, allowing the OUSD (I) to determine the validity and maturity status of the DCGS Enterprise during its development. Rigorous testing and evaluation is required to ensure the DCGS Systems do not bring vulnerabilities to the networks. The DCGS Service Programs of Record end-state domain is the SIPRNet, the C2 network for the entire Department. DCGS, as a whole, is a critical element of the Defense Intelligence Information Enterprise (DI2E).

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Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface Systems</i>
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B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	3.145	3.513	3.703	-	3.703
Current President's Budget	3.140	3.513	3.154	-	3.154
Total Adjustments	-0.005	-	-0.549	-	-0.549
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.005	-	-0.549	-	-0.549

Change Summary Explanation

The -.\$0.005 reduction in FY 2010 is due to increased utilization of DCO and teleconferences in lieu of travel costs.

The -.\$0.549 reduction in FY 2012 is due to a reduction in travel costs to support the SECDEF initiative on improving DoD business operation (-\$0.392) and general adjustments for Economic Assumptions and reduction of testing events from 9 to 7 (-\$0.157).

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/ Surface Systems</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>
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COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
NF1: <i>Distributed Common Ground/ Surface Systems</i>	3.140	3.513	3.154	-	3.154	3.259	3.395	3.451	3.451	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 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.

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

	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Distributed Common Ground/Surface Systems (DCGS)	3.140	3.513	3.154	-	3.154
FY 2010 Accomplishments:					

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency	DATE: February 2011
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface Systems</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
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In FY 2010, four (4) complete Enterprise-level testing and analysis events were accomplished. One Cross-Domain DDTE solution to the SIPRNET for DCGS-A was awarded, more will be acquired in future test events to provide a more realistic test environment. Efforts continue supporting DDTE capability with the DDTE Focus Group sustaining 15 separate DDTE Nodes for the entire fiscal year. DCGS Enterprise T&E support including component and application development, standards conformance evaluation and validation, developmental (DT) and operational testing (OT), Concept of Operations (CONCOPS) activities, and interoperability certifications. Currently two (2) of the six (6) DCGS programs hold Joint Staff interoperability certifications, and JITC is hoping to increase this number pending DCGS Programs readiness. In FY 2010 JITC's Net-centric Instrumentation Lab (NIL) tracked 130,000 queries and responses flowing across five (5) sites on the DDTE network, compared to 25,000 between three (3) sites in FY 2009. Five (5) coalition partners participated in the distributed DCGS DIB testing. Also, the Enterprise and T&E Focus Teams finalized the five (5) Enterprise Focus Team Maturity Model criteria definitions and ensured the entire DCGS community under the DCGS Governance is in agreement on viable testable criteria.

FY 2011 Plans:

Continues DDTE support and enhanced functionality with ever expanding capability to include our Coalition partners through data sharing. DCGS Enterprise T&E support will include six (6) Enterprise-level test and evaluations for the DCGS PoRs, National Agencies and Coalition Partners. Continuation of 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 will validate that the five (5) Enterprise Maturity Model criteria as defined and testable across the entire DCGS Enterprise. The projected costs for FY 2011 are: Fixed Costs \$0.890 million; DDTE Capability Service Support \$1.039 million; DCGS Enterprise T&E Support \$1.584 million.

The increase of \$+0.373 in funding between FY 2010 and FY 2011 is due to expansion of test infrastructure of DDTE's instrumentation to include passive collection on the SIPR domain; and expansion of DIB federation activities to true Enterprise capabilities testing.

FY 2012 Base 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 will continue to support DDTE and enhanced functionality with increased T&E capability. Continued DDTE support and enhanced functionality with increased capability to include more Coalition partners through data sharing. DCGS Enterprise T&E

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface Systems</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
<p>support will include nine (9) Enterprise-level test and evaluations for the DCGS PoRs, National Agencies and Coalition Partners. Continuation of 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 be measured by the ever expanding Enterprise Maturity Model defined by the DCGS community in FY 2010 and FY 2011. Projected costs for FY 2012 are: Fixed Costs \$0.933 million; DDTE Capability Service Support \$1.000 million; DCGS Enterprise T&E Support \$1.221 million.</p> <p>The FY 2012 -\$0.359 million is in support of the Agency's proposed savings to support the SECDEF initiative on improving DoD business operations.</p> <p><i>FY 2012 OCO Plans:</i> N/A</p>					
Accomplishments/Planned Programs Subtotals	3.140	3.513	3.154	-	3.154

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

N/A

D. 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.

E. Performance Metrics

FY 2012 Metrics for the Test and Evaluation Focus Team will ensure DCGS Enterprise T&E support, to include nine (9) Enterprise-level tests and evaluations, for the six (6) DCGS PoRs, and five (5) actively participating Coalition Partners, and interoperability testing/certification as required. Currently, out of eight (8) DCGS base-lined PoRs' software versions systems, two (2) hold Joint Staff (JS) Interoperability (IOP) Certification under development and four (4) 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 2012's test events from 130,000 in FY 2010 to over 300,000. This effort provides the basis for the DCGS Enterprise Assessment, allowing OUSD(I) to measure the five (5) levels of maturity of the DCGS Enterprise supporting the DCGS Governance. The Test and Evaluations Focus Team will be expanding data collection instrumentation via DDTE to include all potential DCGS domains and enclaves covering the entire DI2E.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/ Surface Systems</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>
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Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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
In-House Contracts	Various	N/A:N/A	15.226	1.124	Oct 2010	0.766	Oct 2011	-		0.766	Continuing	Continuing	Continuing
Subtotal			15.226	1.124		0.766		-		0.766			

Test and Evaluation (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 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 Services 1	C/T&M	Interop:Ft. Hua, AZ	3.052	0.195	Oct 2010	-		-		-	Continuing	Continuing	Continuing
Engineering/Technical Services 2	C/T&M	NGMS:Ft. Hua, AZ	9.802	1.276	Oct 2010	-		-		-	Continuing	Continuing	Continuing
Engineering/Technical Services 3	C/T&M	NGIT:Ft. Hua, AZ	2.260	0.918	Oct 2010	-		-		-	Continuing	Continuing	Continuing
TBD	TBD	TBD:TBD	-	-		2.388	Oct 2011	-		2.388	Continuing	Continuing	Continuing
Subtotal			15.114	2.389		2.388		-		2.388			

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			30.340	3.513		3.154		-		3.154			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Information Systems Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/ Surface Systems</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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 T&E IPT	[REDACTED]																											
Connectivity to Other Testbeds & Test Event Conduct	[REDACTED]																											
Operation and Maintenance Support	[REDACTED]																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Information Systems Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305208K: <i>Distributed Common Ground/Surface Systems</i>	PROJECT NF1: <i>Distributed Common Ground/Surface Systems</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
DCGS T&E IPT	1	2010	4	2016
Connectivity to Other Testbeds & Test Event Conduct	1	2010	4	2016
Operation and Maintenance Support	1	2010	4	2016