Department of Defense
Fiscal Year (FY) 2011 President's Budget

February 2010

Defense Information Systems Agency

Justification Book

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

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Table of Contents

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Defense-Wide
FY 2011 President's Budget
Exhibit R-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request
Summary
(Dollars in Thousands)

20 Jan 2010

Summary Recap of Budget Activities	FY 2009 (Base & OCO)	FY 2010 Base & OCO Enacted	FY 2010 Supplemental Request	FY 2010 Total	FY 2011 Base	FY 2011 OCO	FY 2011 Total Request
System Development and Demonstration (SDD)	103,548	32,869		32,869	67,206		67,206
Operational Systems Development	203,654	198,523		198,523	182,405	23,125	205,530
Total Research, Development, Test & Eval, DW	307,202	231,392		231,392	249,611	23,125	272,736
Summary Recap of FYDP Programs							
General Purpose Forces	74,465	74,473		74,473	74,023		74,023
Intelligence and Communications	204,296	142,088		142,088	126,224	23,125	149,349
Research and Development	28,441	14,831		14,831	49,364		49,364
Total Research, Development, Test & Eval, DW	307,202	231,392		231,392	249,611	23,125	272,736

Defense-Wide
FY 2011 President's Budget
Exhibit R-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request
Summary
(Dollars in Thousands)

20 Jan 2010

Summary Recap of Defensewide	FY 2009 (Base & OCO)	FY 2010 Base & OCO Enacted	FY 2010 Supplemental Request	FY 2010 Total	FY 2011 Base	FY 2011 OCO	FY 2011 Total Request
Defense Information Systems Agency	307,202	231,392		231,392	249,611	23,125	272,736
Total Research, Development, Test & Evaluation	307,202	231,392		231,392	249,611	23,125	272,736

Defense-Wide
FY 2011 President's Budget
Exhibit R-1 FY 2011 Base and Overseas Contingency Operations (OCO) Request
(Dollars in Thousands)

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

Date: 20 Jan 2010

Line No	Program Element Number	Item	Act	FY 2009 (Base & OCO)	FY 2010 Base & OCO Enacted	FY 2010 Supplemental Request	FY 2010 Total	FY 2011 Base	FY 2011 OCO	FY 2011 Total Request	Sec
118	0604764K	Advanced IT Services Joint Program Office (AITS-JPO)	05	28,441	14,831		14,831	49,364		49,364	U
128	0303141K	Global Combat Support System	05	17,946	18,038		18,038	17,842		17,842	U
129	0303158K	Joint Command and Control Program (JC2)	05	57,161							U
		System Development and Demonstration		103,548	32,869		32,869	67,206		67,206	
186	0208045K	C4I Interoperability	07	74,465	74,473		74,473	74,023		74,023	U
188	0301144K	Joint/Allied Coalition Information Sharing	07	15,723	10,722		10,722	9,379		9,379	U
195	0302016K	National Military Command System-Wide Support	07	613	546		546	467		467	U
196	0302019K	Defense Info Infrastructure Engineering and Integration	07	16,002	16,435		16,435	16,629		16,629	U
197	0303126K	Long-Haul Communications - DCS	07	8,108	9,157		9,157	9,130	23,125	32,255	U
198	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	9,615	9,789		9,789	9,529		9,529	U
204	0303148K	DISA Mission Support Operations	07	2,252	1,200		1,200				U
206	0303150K	Global Command and Control System	07	34,213	37,161		37,161	26,247		26,247	U
207	0303153K	Defense Spectrum Organization	07	19,162	18,865		18,865	20,991		20,991	U

Defense-Wide
FY 2011 President's Budget
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(Dollars in Thousands)

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

Date: 20 Jan 2010

Line No	Program Element Number	Item	Act	FY 2009 (Base & OCO)	FY 2010 Base & OCO Enacted	FY 2010 Supplemental Request	FY 2010 Total	FY 2011 Base	FY 2011 OCO	FY 2011 Total Request	Sec
208	0303170K	Net-Centric Enterprise Services (NCES)	07	5,429	1,775		1,775	3,366		3,366	U
210	0303610K	Teleport Program	07	2,054	5,217		5,217	6,880		6,880	U
216	0305103K	Cyber Security Initiative	07	12,800	10,038		10,038	2,251		2,251	U
230	0305208K	Distributed Common Ground/Surface Systems	07	3,218	3,145		3,145	3,513		3,513	U
		Operational Systems Development		203,654	198,523		198,523	182,405	23,125	205,530	
Total Research, Development, Test & Eval, DW				307,202	231,392		231,392	249,611	23,125	272,736	

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

Budget Activity 05: Development & Demonstration (SDD)

Budget Activity 07: Operational Systems Development

Budget Activity 07: Operational Systems Development

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

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	28.441	14.831	49.364	0.000	49.364	52.605	53.741	54.818	55.130	Continuing	Continuing
T26: *Leading Edge Pilot Information Technology*	28.441	14.831	49.364	0.000	49.364	52.605	53.741	54.818	55.130	Continuing	Continuing

A. Mission Description and Budget Item Justification

The purpose of the AITS-JPO is to integrate new, mature Information Technology (IT) and advanced operational concepts into net-centric Battlespace technologies to: access and exchange critical information; exploit opportunities to enhance Current Force capabilities; and project Future Force IT requirements. AITS-JPO primarily focuses on responding to emergent warfighter requirements in an innovative and collaborative manner. The DISA Chief Technology Office (CTO) has broad responsibilities for the rapid transfer of advanced IT and Operational Concepts to the warfighter and the technical management of these efforts. The program's approach makes technology and concepts rapidly operational by funding advanced data, enterprise information, and knowledge services.

The AITS-JPO supports the warfighter at all levels from the President of the United States, Secretary of Defense, Chairman of the Joint Chiefs of Staff to the Combatant Commands and Inter-agency participants, i.e, DoD and its partners. 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 United States and coalition partner-approved cooperative activities. A representative program which recently transitioned is the Event Management Framework (EMF), which demonstrated operational value by enabling the U.S. Northern Command (USNORTHCOM) to quickly discover, access, correlate, and share information between interagency partners during a hurricane, H1N1 pandemic, 2008 Presidential Election, and 2009 Presidential Inauguration.

Program investments in advanced technology will benefit strategic and tactical users by providing them with a 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.

If the program is not funded in FY 2011, 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 adversary.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604764K: *Advance IT Services Joint Program Office*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	13.597	39.911	0.000	0.000	0.000
Current President's Budget	28.441	14.831	49.364	0.000	49.364
Total Adjustments	14.844	-25.080	49.364	0.000	49.364
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		-24.754			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	11.195	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	3.649	-0.326	49.364	0.000	49.364

Change Summary Explanation

The increase in FY 2009 reflects a-Congressional Reprogramming of $11.195 million and $3.649 below threshold reprogramming action reprogramming, to support the Vice Chairman, Joint Chief of Staff, Initiatives and Thin Client efforts. The decrease in FY 2010 reflects the Congressionally directed reduction of $24.754 million for new starts supporting Rapid Technology Insertion efforts. The decrement of $0.326 million was a result of general Congressional adjustments for Economic Assumptions and Federally Funded Research and Development Center (FFRDC) costs. The DoD did not estimate FY 2011 cost when the FY 2010 President’s Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*				PROJECT T26: *Leading Edge Pilot Information Technology*			
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
T26: *Leading Edge Pilot Information Technology*	28.441	14.831	49.364	0.000	49.364	52.605	53.741	54.818	55.130	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Leading Edge Pilot Information Technology program supports the warfighter at all levels. It provides the President of the United States, Secretary of Defense, Chairman of the Joint Chiefs of Staff, 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 not new systems; they are technologies that can be rapidly infused into existing tools. The goal is to make supporting technology for today and tomorrow a reality for the warfighter, and to achieve interoperability and integration in concert with joint, allied and coalition forces to effectively counter terrorism and enhance homeland defense and security.

The program utilizes four key mechanisms to streamline the process of fielding emergent requirements: (1) Advanced Concept Technology Demonstrations (ACTD)/ 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 Investment Fund (TIIF). 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, and DISA participates in both an operational and transitional managerial 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 TIIF concentrates on concept innovation and rapid insertion of advanced data, technology, and knowledge services in the DoD Global Information Grid.

Program investments in advanced technology will benefit strategic and tactical users by providing them with a rich, reliable, persistent collaboration and networking toolset, computing on demand, and support for virtual end-user environments and semantic search capabilities -- all of which enhance the decision-making process. Funding will support much needed innovation in the following areas:
- Acceleration of commercial Internet concepts and technology (e.g., social networking, persistent chat) that improves collaboration across the DoD and with non-DoD partners;
- Improvement of global situational awareness through a shared collaboration architecture;

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- Expansion of enterprise services to support tactical collaboration, application, data and processing services to deployed operational users;
- Development of integrated NetOps services to enable secure management of end-user capabilities and determine the health of network-based services and information sources; and
- Development of trusted access, application, data services that enable “anytime, anywhere” capabilities for individual end users.

The FY 2011 funding increase is required to perform the engineering of innovative solutions that enable the operational transformation of warfighting. We must be IT-enabled with the ability to out-think our adversary. The program will provide crucial activation and alerting so decision-makers can quickly focus on problems and deliver solutions. They will have the ability to discern situations, specify participants needed in the collaboration course of action planning, and engage in decision-making. It is critical to have an enterprise security model that allows for authentication and attribute-based access into the collaboration environments. The goal is to make supporting technology for today and tomorrow a reality for the warfighter. These capabilities cannot be delivered without the requested funding. The Leading Edge program engages in projects and innovation activities that are cross-functional and provide the best solution for global security. Objectives are to facilitate an understanding that comes with enabling of persistent connection with the web of people and organizations across DOD and Inter-Agency. The ability to activate and alert associated players to focus on problems (reactive) and drive solutions (proactive) is crucial. This funding supports IT-enabling of both information and communications technologies in order to out-think and out-decide the adversary. Persistent collaboration creates an agile and flexible knowledge-based environment. The FY 2011 funding increase also supports the DISA CTO’s mission as concept innovator and rapid enabler of advanced data, information and knowledge to quickly provide POTUS, SECDEF, CJCS, COCOMs, and other agencies with critical solutions to innovate, operationalize, and mature flexible, agile technology and concepts. Program benefits include the ability to anticipate and preempt actions, to drive and advise on the preferred course of action, and to promote information and sharing in an open environment. DISA cannot provide an IT-enabled information and communications environment with persistent collaboration capability without funding.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Command and Control (C2) and Combat Support (CS)	16.726	6.671	7.029	0.000	7.029
Command and Control (C2) and Combat Support (CS) (C2/CS) brings mechanisms that provide senior military leaders with more accurate and more real-time situational information for decision-making. Strategic and tactical users will be given a rich, reliable, persistent collaboration and networking toolsets that transition into PORs or other viable sustainment options and achieve interoperability and integration goals for working in concert with joint, allied and coalition forces, especially as relates to counter-terrorism and enhanced homeland defense and security. These endeavors will provide senior military leadership with (1) the ability to support senior-level initiatives; (2) the capability to maintain					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
global situational awareness of leading edge technologies; (3) the capability to rapidly field solutions to emerging problems; and (4) the benefit of securing a competitive edge through intellectual capital. *FY 2009 Accomplishments:* In FY 2009, focus was placed on Coalition Information Sharing and Network Infrastructure improvements that were driven by the Intelligence Community's need for larger bandwidth and storage capabilities and on strengthening the DISA/STRATCOM NETOPS capabilities. Accomplishments include transitioning of the Tactical Service Provider JCTD and the Joint Coordinated Real-Time Engagement ACTD. In FY 2009, the Vice Chairman of the Joint Chief of Staff (VCJCS) led a national military command system transformation to quickly change the business model to take advantage of 21st century technologies and leverage intellectual capital wherever it may be. Part of that effort included Joint User Messaging (JUM), an updated Machine-to-Machine (M2M) messaging functionality with web service implementation that supports multiple message brokers to support the distributed, federated, Global Information Grid. In FY 2009, Thin Client was initially funded in this program element. It was then determined that it was better suited for PE 0302019K Defense Information Infrastructure Engineering and Integration, in the year of execution. Funding provided the ability to provide course of action planning and accelerated and improved quality for decision-making of senior leaders in support of Vice-Chairman Initiatives. This includes accelerating web exposure of command and control applications, information sharing among DoD and its partners, network monitoring and instrumentation, and implementation of an attribute based access control which strengthens access into DoD applications. *FY 2010 Plans:* In FY 2010, work continues on the 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. It includes Joint User Messaging (JUM), the next generation Machine-to-Machine (M2M) messaging functionality based on industry standard specifications. JUM is an evolving industry					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
standard that provides improved messaging reliability; 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, Global Information Grid (GIG) network. The project will complete testing analyses of Limited Operational Assessments (LOA) to validate that warfighter operational capability requirements are met during each stage of development before a final Operational Assessment Report is issued and an Executive Decision Capability is delivered. *FY 2011 Base Plans:* In FY 2011, there will be a continued intense focus on the DISA CTO mission as concept innovator and rapid enabler of advanced data. These capabilities will be flexible to respond to various operational missions and events; and agile 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 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. Without funding, DISA will be unable to provide command and control innovative technology capabilities for fully-informed strategic and tactical decision-making; to the military leadership community and coalition forces; and will be unable to support rolling start JCTDs or initiatives that improve the warfighter's situation awareness and collaboration toolset. Insufficient funding will lead to a loss of access to critical information holdings and the inability to rapidly deploy enterprise mission services and system, and rapid integration of commercial technologies will be adversely affected or halted.					
Information Sharing (IS)	3.859	1.500	1.547	0.000	1.547

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Information Sharing (IS) encompasses IT support for crisis action planning tools, joint force protection, and coalition interoperability. It assists Combatant Commanders and Homeland Security Incident Managers in developing their own Courses of Action (COA) by providing them with the capability to rapidly correlate information from disparate Communities of Interest (COI). IS capabilities will cut across JCS, COCOM, Inter-Agency, Service/Agency organizations and are critical to providing an enterprise security model that allows for authentication and attribute-based access into the collaboration environments. *FY 2009 Accomplishments:* In FY 2009, the Event Management Framework (EMF) ACTD deployed on the classified and unclassified communications nets in the Defense Enterprise Computing Center (DECC), Columbus, Ohio; conducted its Operational Utility Assessment (OUA) as a trial in Coalition Warrior Interoperability Demonstration (CWID) 2009; developed enhancements to an all-COCOM capable application; and completed activities to transition EMF. The Transnational Information Sharing Cooperation (TISC), a collaborative, open source, web environment for inter-agency and external partnering in Civil-Military activities, worked on transition and sustainment planning of TISC/Scholar capabilities at a DECC and worked with commercial vendors to determine the cost of commercially hosting TISC capabilities at OSD sponsored Regional International Outreach (RIO) office. The Coalition Secure Management and Operations System (COSMOS), providing policy-based information sharing and supporting joint data exchange and assessment at the Joint Forces Command (JFCOM), completed transition. *FY 2010 Plans:* In FY 2010, funds support EMF program transition to a DECC or commercial hosting site for full operational capability; integration of Rapid Development and Sustainment of Enterprise Mission Services (RDEMS); and support of Integrated Satellite-GIG Operational Management (ISOM) and Operational 3-Dimension (OP3D) JCTDs. Funding enables DISA to provide capabilities for crisis action planning tools, joint force protection, and coalition interoperability.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011, DISA will continue to provide capabilities for crisis action planning tools, joint force protection, and coalition interoperability. The program 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, Service/Agency (S/A) organizations.					
Network Infrastructure (NI)	2.683	2.700	1.856	0.000	1.856
Network Infrastructure (NI): Network Infrastructure assists in supporting and providing PORs with agile, adaptive, and capabilities-based IT, while providing US forces with peacetime and contingency access. NI supports efforts that integrate technologies for handling very large, heterogeneous data sets, to enhance the deployed warfighter's situational awareness and information superiority and does so within a secure framework that supports both joint and multi-national operations. *FY 2009 Accomplishments:* In FY 2009, the Large Data JCTD combined remote direct memory access (RDMA) and a global file system to connect globally-distributed storage across a wide area network to provide the warfighter with access to DoD enterprise data with very low latency regardless of data size or location to enable net-centric warfighter. The LD JCTD completed transition in September 2009. *FY 2010 Plans:* In FY 2010, NI provides the information infrastructure that supports C2/CS and IS efforts. The enterprise-wide information infrastructure is enhanced with advanced capabilities that support global data access and visualization of geospatially referenced data.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011, 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. Without funding, NI will be unable to provide the information infrastructure that supports C2/CS and IS efforts.					
Network Operations (NetOps)	0.764	1.200	1.238	0.000	1.238
NetOps: NetOps provides IT solutions and advanced concepts to address warfighter capability gaps which preclude delivering the right information, to the right person, in the right place, at the right time in such a way that the information is protected from interception and exploitation and presented in a useful format. NetOps will leverage network-centric enterprise technologies and services provided by the GIG and dynamically update data/information to improve situational awareness and provide more efficient collaboration. NetOps uses different systems working together to provide alerting, visualization, and collaboration capability. *FY 2009 Accomplishments:* In FY 2009, Mission Assurance Decision Support System (MADSS) provided COCOMs a joint, globally available common operating picture of network status during missions, integrating real-time communications anomaly data feeds and providing a mission area knowledge base for rapid event analysis and course of action development. DISA provided technical support to the Naval Surface Weapons Center, Dahlgren. *FY 2010 Plans:* In FY 2010, DISA focuses efforts on Network Operations support of all of the Leading Edge IT capabilities. DISA continues to support the Naval Surface Weapons Center, Dahlgren. Funding leverages the GIG to improve situational awareness, alerting, visualization, and provide more efficient collaboration.					

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011, DISA will continue to support the Naval Surface Weapons Center (NSWC), Dahlgren. DISA will work with the Joint Staff Anti-terrorism/Force Protection community to develop concepts of operation and 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. Lack of funding will stop support for the NSWC, Dahlgren, and prevent leveraging the GIG to improve situational awareness, alerting, visualization, and more efficient collaboration.					
Technology Initiatives Investment Fund In FY 2011, DISA will begin to take the initiative in developing, rapidly prototyping, and inserting innovative technologies into key strategic and tactical venues, such as the National Military Command Center (NMCC) and COCOM Command Centers. Building on DISA's rapid technology insertion success, the VCJCS and other senior DoD leaders had tasked DISA to take on this initiative in FY 2009. A Technology Innovation Investment Fund (TIIF), governed by an executive level investment review board, will select projects that can rapidly become part of the DISA capability set. Innovation projects will be selected through an annual competitive process. Projects will be evaluated based on technical feasability, executability, and mission relevance when compared with the investment (ROI). The DISA CTO will establish a portfolio of projects that strikes a balance between efforts that address stated gaps/technology areas of interest and unanticipated high payoff concepts. High-payoff projects will be quickly transitioned to sustainment programs. The new work will include intense efforts that are game-changing (e.g., VCJCS initiatives, NMCS transformation, enterprise services, GIG 2.0/joint basing); routine tasks (e.g., information sharing pilot, DSB/National Academy of Sciences work); new policy and governance engagement (e.g., oversight of network costs and enterprise services); and tasks specific to the DISA missions.	0.000	0.000	25.669	0.000	25.669

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
We envision that additional new work will include DISA engagement on the evolving cyber initiatives, evolving coalition and information sharing, Federal information sharing and defense, and the NMCS transformation. Without funding, DISA will be unable to explore innovative technology investments for warfighting operational transformation. *FY 2009 Accomplishments:* N/A *FY 2010 Plans:* N/A *FY 2011 Base Plans:* N/A					
Program Management Support Program Management Support: Program management funds are required to provide technical architecture white papers, technical reports, architecture designs, and enterprise reports. This includes Information Assurance oversight, as well as program level acquisition planning, contract administration, and a majority of the program management and financial planning activities. *FY 2009 Accomplishments:* In FY 2009, focus was on consolidating shared services and support functions across the CTO, with development of an information assurance roadmap for future program integration activities, consolidation of transition engineering and outreach support into a single contract, combining business operations support into one contract, and developing knowledge management repositories for contracting and DISA CTO executive views.	4.409	2.760	12.025	0.000	12.025

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*	PROJECT T26: *Leading Edge Pilot Information Technology*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: In FY 2010, Program Management Support provides operational project managers with project management, financial management, and contract management assistance. Program management resources continue to support the AITS-JPO growth in the key mission areas of C2/C2, IS, NI, NetOps, and TIIF. *FY 2011 Base Plans:* In FY 2011, 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 be provided to operational project managers, including project management, financial management, 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. In addition, in FY 2011 DISA has requested a change to realign the Chief Technology Office (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 included in the budgeting of these funds in the AITS-JPO program element. The civilian pay funding will 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. Lack of program management funds will result not only in the inability of DISA 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.					
Accomplishments/Planned Programs Subtotals	28.441	14.831	49.364	0.000	49.364

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*	PROJECT T26: *Leading Edge Pilot Information Technology*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0604764K : *O&M, DW*	8.083	11.362	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

D. 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 begun reducing the number of contracts to minimize administrative overhead. Instead of three contracts for program management, business line improvement, asset management, and financial management, there will now be 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 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.

E. 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. 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

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*	PROJECT T26: *Leading Edge Pilot Information Technology*

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*	PROJECT T26: *Leading Edge Pilot Information Technology*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development & Tech Services 1	MIPR	SPAWAR SSC Charleston, SC	12.781	5.009	Dec 2009	5.000	Dec 2010	0.000		5.000	Continuing	Continuing	Continuing
Development & Tech Services 2	C/CPFF	SAIC (TO 50 & 57) Arlington, VA	24.108	0.500	Feb 2009	0.000		0.000		0.000	Continuing	Continuing	Continuing
Development & Tech Services 3	SS/FP	JACKBE JACKBE	1.857	2.211	Dec 2009	2.020	Dec 2010	0.000		2.020	Continuing	Continuing	Continuing
Development & Tech Services 4	C/CPFF	SOLERS SOLERS	5.400	0.198	May 2010	3.649	May 2011	0.000		3.649	Continuing	Continuing	Continuing
		Subtotal	44.146	7.918		10.669		0.000		10.669			

Remarks

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 Support	C/FFP	RAYTHEON RAYTHEON	2.272	2.529	Sep 2010	4.018	Sep 2011	0.000		4.018	Continuing	Continuing	Continuing
Demonstration & web support	C/FFP	HAI HAI	1.848	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
		Subtotal	4.120	2.529		4.018		0.000		4.018			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*	PROJECT T26: *Leading Edge Pilot Information Technology*	

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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		0.000		0.000			

Remarks

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 Oversight	FFRDC	MITRE MITRE	0.400	0.500	Oct 2009	1.500		0.000		1.500	Continuing	Continuing	Continuing
Information Assurance Consulting	TM	TWM TWM	0.613	0.550	Jan 2010	0.000		0.000		0.000	Continuing	Continuing	Continuing
Program Management	TM	GEMS/Keylogic GEMS/Keylogic	4.242	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*	PROJECT T26: *Leading Edge Pilot Information Technology*	

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Financial Management	TBD	GSA/Ingenium GSA/Ingenium	2.417	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Business Operations Support Services	C/CPFF	KeyLogic KeyLogic	2.720	2.720	Sep 2009	4.724	Sep 2010	0.000		4.724	Continuing	Continuing	Continuing
Various less than $1M	Various/ Various	Various Various	0.000	0.614		13.338		0.000		13.338	Continuing	Continuing	Continuing
IN HOUSE Innovation Funds Service Level Agreements with Computing Services ($1M-5M/yr)	Various/ Various	Various Various	0.000	0.000		5.400		0.000		5.400	Continuing	Continuing	Continuing
Program Management Civilian Pay	Various/ Various	Various Various	0.000	0.000		9.715		0.000		9.715	Continuing	Continuing	Continuing
		Subtotal	10.392	4.384		34.677		0.000		34.677			

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	58.658	14.831		49.364		0.000		49.364			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*	PROJECT T26: *Leading Edge Pilot Information Technology*	

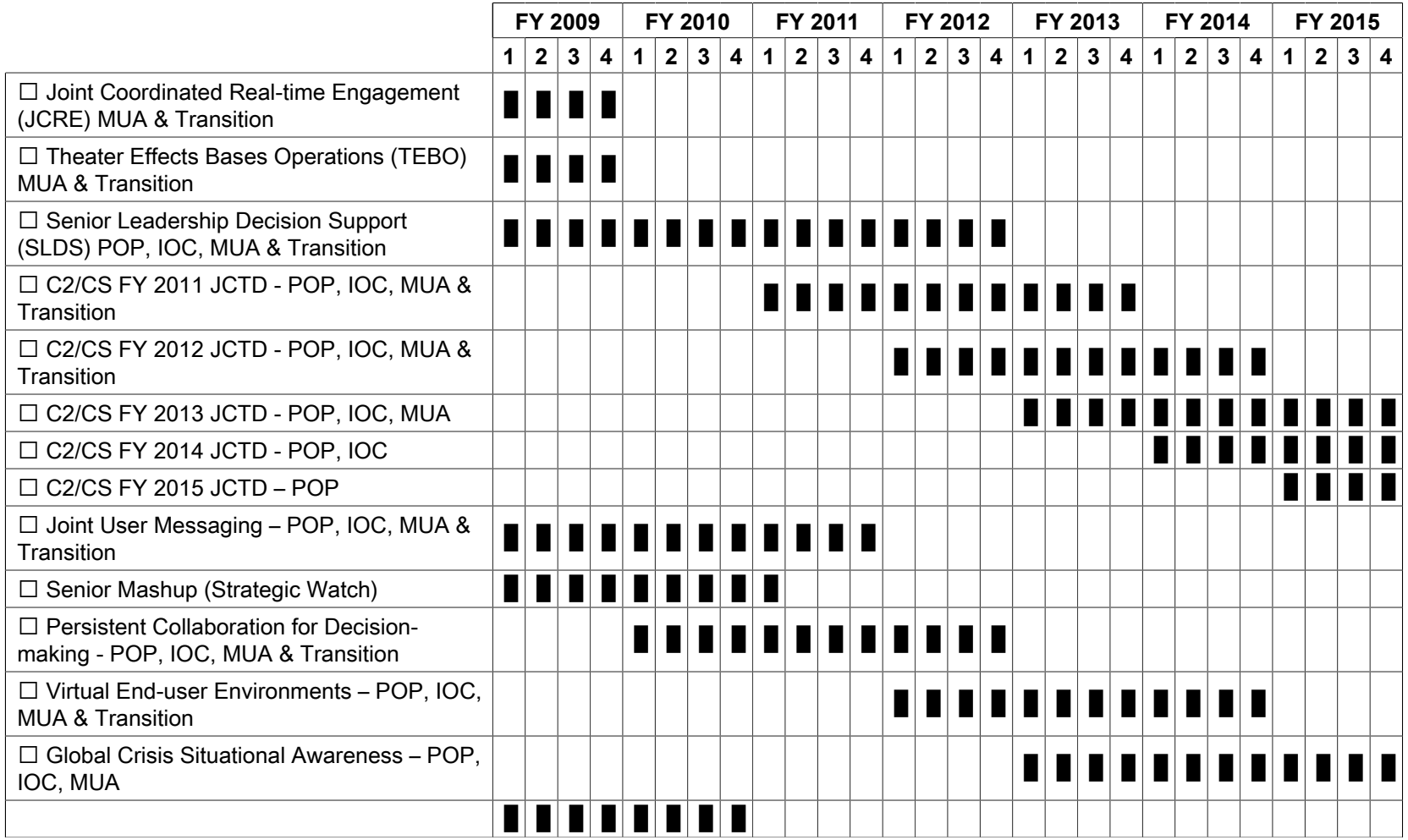

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*	PROJECT T26: *Leading Edge Pilot Information Technology*	

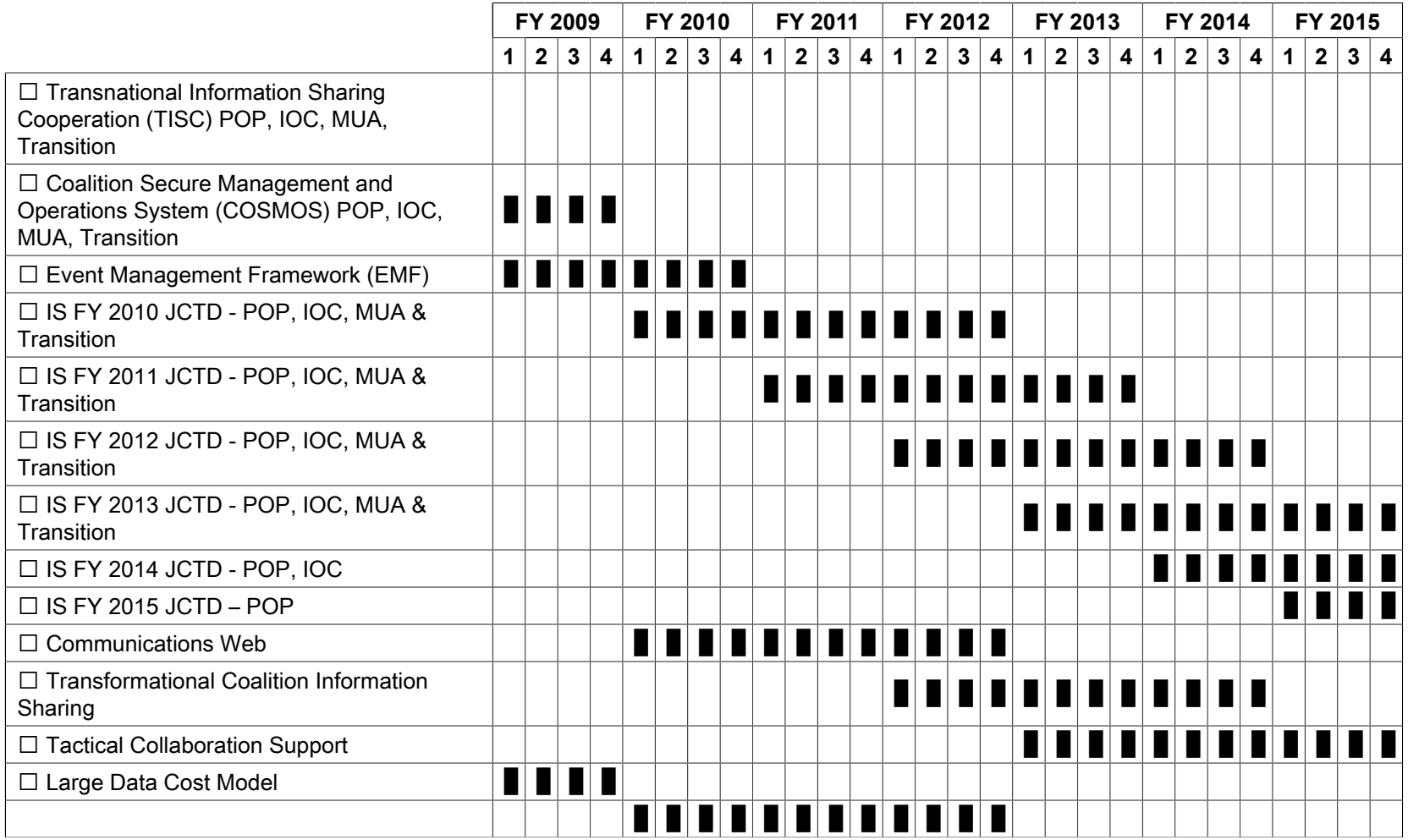

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*		PROJECT T26: *Leading Edge Pilot Information Technology*

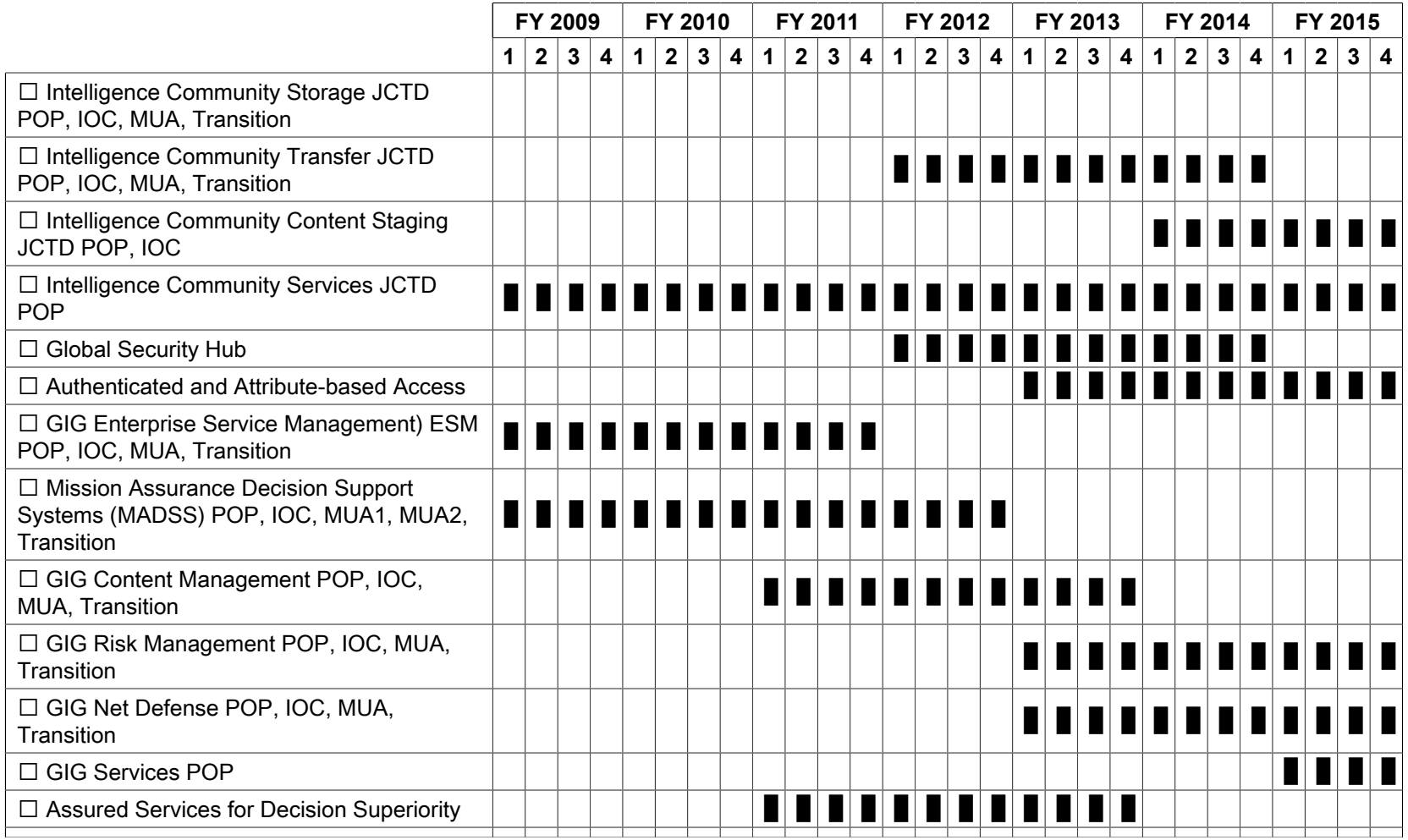

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604764K: *Advance IT Services Joint Program Office*	PROJECT T26: *Leading Edge Pilot Information Technology*	

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
☐ Innovation Initiatives Framework	■	■	■	■	■	■	■	■																				
☐ FY 2010 approved Innovation Initiatives – testing, acceptance, infusion					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■								
☐ FY 2011 approved Innovation Initiatives - testing, acceptance, infusion													■	■	■	■	■	■	■	■	■	■	■	■				
☐ FY 2012 approved Innovation Initiatives - testing, acceptance, infusion													■	■	■	■	■	■	■	■	■	■	■	■				
☐ FY 2013 approved Innovation Initiatives - testing, acceptance, infusion																	■	■	■	■	■	■	■	■	■	■	■	■
☐ FY 2014approved Innovation Initiatives - testing, acceptance																					■	■	■	■	■	■	■	■
☐ FY 2015 approved Innovation Initiatives – testing																									■	■	■	■

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604764K: *Advance IT Services Joint Program Office*	**PROJECT** T26: *Leading Edge Pilot Information Technology*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
☐ Joint Coordinated Real-time Engagement (JCRE) MUA & Transition	1	2009	4	2009
☐ Theater Effects Bases Operations (TEBO) MUA & Transition	1	2009	4	2009
☐ Senior Leadership Decision Support (SLDS) POP, IOC, MUA & Transition	1	2009	4	2012
☐ C2/CS FY 2011 JCTD - 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	2015	4	2015
☐ Joint User Messaging – POP, IOC, MUA & Transition	1	2009	4	2011
☐ Senior Mashup (Strategic Watch)	1	2009	1	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	2015
☐ Transnational Information Sharing Cooperation (TISC) POP, IOC, MUA, Transition	1	2009	4	2010
☐ Coalition Secure Management and Operations System (COSMOS) POP, IOC, MUA, Transition	1	2009	4	2009
☐ Event Management Framework (EMF)	1	2009	4	2010
☐ IS FY 2010 JCTD - POP, IOC, MUA & Transition	1	2010	4	2012
☐ IS FY 2011 JCTD - POP, IOC, MUA & Transition	1	2011	4	2013

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604764K: *Advance IT Services Joint Program Office*	**PROJECT** T26: *Leading Edge Pilot Information Technology*

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
☐ 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	2014	4	2015
☐ IS FY 2015 JCTD – POP	1	2015	4	2015
☐ Communications Web	1	2010	4	2012
☐ Transformational Coalition Information Sharing	1	2012	4	2014
☐ Tactical Collaboration Support	1	2013	4	2015
☐ Large Data Cost Model	1	2009	4	2009
☐ 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	2009	4	2015
☐ Global Security Hub	1	2012	4	2014
☐ Authenticated and Attribute-based Access	1	2013	4	2015
☐ GIG Enterprise Service Management) ESM POP, IOC, MUA, Transition	1	2009	4	2011
☐ Mission Assurance Decision Support Systems (MADSS) POP, IOC, MUA1, MUA2, Transition	1	2009	4	2012
☐ GIG Content Management POP, IOC, MUA, Transition	1	2011	4	2013
☐ GIG Risk Management POP, IOC, MUA, Transition	1	2013	4	2015
☐ GIG Net Defense POP, IOC, MUA, Transition	1	2013	4	2015
☐ GIG Services POP	1	2015	4	2015

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604764K: *Advance IT Services Joint Program Office*	**PROJECT** T26: *Leading Edge Pilot Information Technology*

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
☐ Assured Services for Decision Superiority	1	2011	4	2013
☐ Innovation Initiatives Framework	1	2009	4	2010
☐ FY 2010 approved Innovation Initiatives – testing, acceptance, infusion	1	2010	4	2013
☐ FY 2011 approved Innovation Initiatives - testing, acceptance, infusion	1	2012	4	2014
☐ 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 2014approved Innovation Initiatives - testing, acceptance	1	2014	4	2015
☐ FY 2015 approved Innovation Initiatives – testing	1	2015	4	2015

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0303141K: *Global Combat Support System*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	17.946	18.038	17.842	0.000	17.842	19.981	20.044	20.753	21.063	Continuing	Continuing
CS01: *Global Combat Support System*	17.946	18.038	17.842	0.000	17.842	19.981	20.044	20.753	21.063	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Global Combat Support System (GCSS) is an information technology (IT) application that continues to evolve to a service oriented architecture delivering asset visibility to the joint logistics warfighters. These warfighters are the planners, executers, and controllers of the core logistics capabilites, and facilitates information interoperability across and between Combat Support and Command and Control functions. In conjunction with other Global Information Grid elements including Global Command and Control System-Joint, Defense Information Systems Network, Computing Services, and Combatant Commands/Services/Agencies information architectures, GCSS provides the IT capabilities (i.e., WatchBoards, Joint Decision Support Tools, and mapping capabilities) to ensure forces are physically available and properly equipped to move and sustain joint forces throughout the spectrum of military operations.

The Combatant Command and Joint Task Force Commanders and their staffs are the primary GCSS customers. GCSS enables the joint logistics warfighter 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.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0303141K: *Global Combat Support System*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	18.370	18.431	0.000	0.000	0.000
Current President's Budget	17.946	18.038	17.842	0.000	17.842
Total Adjustments	-0.424	-0.393	17.842	0.000	17.842
• Congressional General Reductions		-0.393			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-0.424	0.000	17.842	0.000	17.842

Change Summary Explanation

The decrease in FY 2010 is due to distributed congressional adjustments and results in a reduction in the scope of development, integration, testing and analysis of data, at the current velocity which in turn results in reduction of functionality to the warfighter and scaling back on training. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303141K: *Global Combat Support System*	PROJECT CS01: *Global Combat Support System*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
CS01: *Global Combat Support System*	17.946	18.038	17.842	0.000	17.842	19.981	20.044	20.753	21.063	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Global Combat Support System (GCSS) 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, provides the IT capabilities required to move and sustain joint forces throughout the full spectrum of military operations. GCSS significantly increases access to information stored in disparate databases via a single sign on, web portal application, using a Secret Internet Protocol Router Network Public Key Infrastructure certificate. The GCSS infrastructure provides secure web-access, discrete user account administration, data mediation, and enterprise management features that facilitate delivery of capabilities to meet the vision of a net-centric architecture, as well as the integration of information across combat support functional areas. GCSS uses web-based technology to meet the tenets of Joint Publication 4-0, Joint Logistics; GCSS provides the IT capability to plan, execute, and control joint logistics operations. GCSS provides visibility of critical commodities to the joint logistician on-hand, in-transit and in-storage to sustain the force.

Without GCSS, the warfigher 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 IDs 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. Utilizing the joint decision tools and reporting capability of GCSS results in the warfighter's ability to access data from multiple sources within minutes rather than hours.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
GCSS	17.946	18.038	17.842	0.000	17.842

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303141K: *Global Combat Support System*	PROJECT CS01: *Global Combat Support System*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Increment 7 transitioned from a "block" development approach of delivering capability every 18 months to an agile development methodology of delivering critical capability at least annually, if not more often. The GCSS security framework provided an account request and provisioning capability which supported single sign-on access for Deployment and Distribution applications; the CENTCOM "Fuels WatchBoard" provided status and visibility of fuels in the joint operational area; and provided additional Palanterra mapping layers and Google Earth mapping capability to support a Logistics Operational Picture. *FY 2010 Plans:* Developing enhanced intuitive, map-based capabilities for status and visibility of fuels, munitions, and distribution; 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 provide 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 Base Plans:* Initial capabilities will focus on readiness (equipment availability) and prepositioned stock (the early delivery of combat power to a theater of operations where additional equipment such as tanks and artillery are pre-positioned). GCSS will continue to meet additional functional priorities of the Combatant Command 129 Requirements (i.e., Joint Supply Chain Operations, Joint Operational Engineering, Joint Logistics Services, Joint Health Services Support, and Joint Operational Contracting) as validated by the functional sponsor, Joint Staff J4.					
Accomplishments/Planned Programs Subtotals	17.946	18.038	17.842	0.000	17.842

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303141K: *Global Combat Support System*	PROJECT CS01: *Global Combat Support System*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0303141K: *O&M, DW*	16.406	16.172	17.830		17.830	18.278	18.302	18.883	19.197	Continuing	Continuing
• Procurement, DW/PE 0303141K: *Procurement, DW*	2.980	2.804	2.803		2.803	3.002	3.010	3.112	3.158	Continuing	Continuing

D. Acquisition Strategy

The GCSS 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 Program Management Office (PMO) maximizes the use of performance-based contracts and requires contractors to establish and manage specific earned value data to mitigate risk and monitor deviations from cost, schedule, and performance objectives. The PMO evaluates performance by conducting thorough Post-award Contract Reviews, monthly Contract Performance Reviews, and bi-monthly In-Process Reviews.

The PMO uses a Statement of Objectives (SOO) for development efforts rather than the traditional Statement of Work, as it provides potential offerors the flexibility to develop cost-effective solutions and the opportunity to propose innovative alternatives to meet GCSS 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 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 PMO. The Customer Requirements Team collaborates weekly with the functional sponsor to prioritize and allocate user stories (i.e., requirements) to specific iterations. The PMO's Test Team collects performance data during the development test period to compare and contrast against previous baseline metrics. The metrics from the strategic server sites are analyzed by the PMO to ensure that operational mission threads continue to be met and if system enhancement/capabilities are of benefit to the user. Future capabilities include tools that allow GCSS to refine and enhance the type of performance metrics that can be gathered and analyzed. This becomes increasingly important as GCSS continues to integrate additional data sources and external applications. This postures and allows GCSS 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 usage increases and new capabilities are fielded, the PMO will continue to gather metrics to ensure that the system is meeting user requirements.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303141K: *Global Combat Support System*	PROJECT CS01: *Global Combat Support System*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	TM	ENTERWORKS Sterling, VA	8.745	0.000		0.000		0.000		0.000	0	8.745	8.745
Product Development 2	TM	WFI (DSI) Manassas, VA	4.125	0.000		0.000		0.000		0.000	0	4.125	4.125
Product Development 3	C/Various	NGMS Herndon, VA	48.808	0.000		0.000		0.000		0.000	0	48.808	48.808
Product Development 4	TM	SAIC Falls Church, VA	19.064	0.000		0.000		0.000		0.000	0	19.064	19.064
Product Development 5	C/CPFF	NGIT Reston, VA	21.669	0.000		0.000		0.000		0.000	0	21.669	21.669
Product Development 6	C/Various	UNISYS Falls Church, VA	9.994	1.115	Feb 2010	1.115	Feb 2011	0.000		1.115	0	12.224	12.224
Product Development 7	MIPR	FGM Reston, VA	5.482	0.000		0.000		0.000		0.000	0	5.482	5.482
Product Development 8	C/FFP	Merlin McLean, VA	1.664	0.000		0.000		0.000		0.000	0	1.664	1.664
Product Development 9	MIPR	JDTC Ft. Eustis, VA	2.223	0.300	Nov 2009	0.300	Nov 2010	0.000		0.300	0	2.823	2.823
Product Development 10	MIPR	CSC Norfolk, VA	0.300	0.000		0.000		0.000		0.000	0	0.300	0.300
Product Development 11	C/Various	TBD TBD	0.000	13.859	Jan 2009	13.476	Jan 2010	0.000		13.476	0	27.335	27.335
		Subtotal	122.074	15.274		14.891		0.000		14.891	0.000	152.239	152.239

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303141K: *Global Combat Support System*	PROJECT CS01: *Global Combat Support System*	

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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		0.000		0.000			

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 1	C/CPFF	COMTEK Sterling, VA	3.902	0.000	Mar 2010	0.000		0.000		0.000	0	3.902	3.902
Test and Evaluation 2	MIPR	SSO Montgomery	0.500	0.000	Oct 2009	0.000		0.000		0.000	0	0.500	0.500
Test and Evaluation 3	MIPR	DIA DIA	0.736	0.338	Oct 2009	0.340	Oct 2010	0.000		0.340	0	1.414	1.414
Test and Evaluation 4	C/CPFF	Pragmatics Pragmatics	1.194	0.000		0.000		0.000		0.000	0	1.194	1.194
Test and Evaluation 5	C/CPFF	AAC, Inc. Vienna, VA	0.490	1.209	Jul 2010	1.379	Jul 2010	0.000		1.379	0	3.078	3.078
Test and Evaluation 6	MIPR	JITC Ft. Huachuca	1.962	0.710	Nov 2009	0.710	Jan 2010	0.000		0.710	0	3.382	3.382
		Subtotal	8.784	2.257		2.429		0.000		2.429	0.000	13.470	13.470

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303141K: *Global Combat Support System*	PROJECT CS01: *Global Combat Support System*

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services 1	FFRDC	MITRE Vienna, VA	16.238	0.507	Nov 2009	0.522	Nov 2010	0.000		0.522	0	17.267	17.267
Management Services 2	C/CPFF	UMD, Eastern Shore Princess Anne, MD	1.021	0.000		0.000		0.000		0.000	0	1.021	1.021
Management Services 3	MIPR	IDA Alexandria, VA	0.749	0.000		0.000		0.000		0.000	0	0.749	0.749
Management Services 4	MIPR	JFCOM Norfolk, VA	0.100	0.000		0.000		0.000		0.000	0	0.100	0.100
		Subtotal	18.108	0.507		0.522		0.000		0.522	0.000	19.137	19.137

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	148.966	18.038		17.842		0.000		17.842	0.000	184.846	184.846

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303141K: *Global Combat Support System*	PROJECT CS01: *Global Combat Support System*

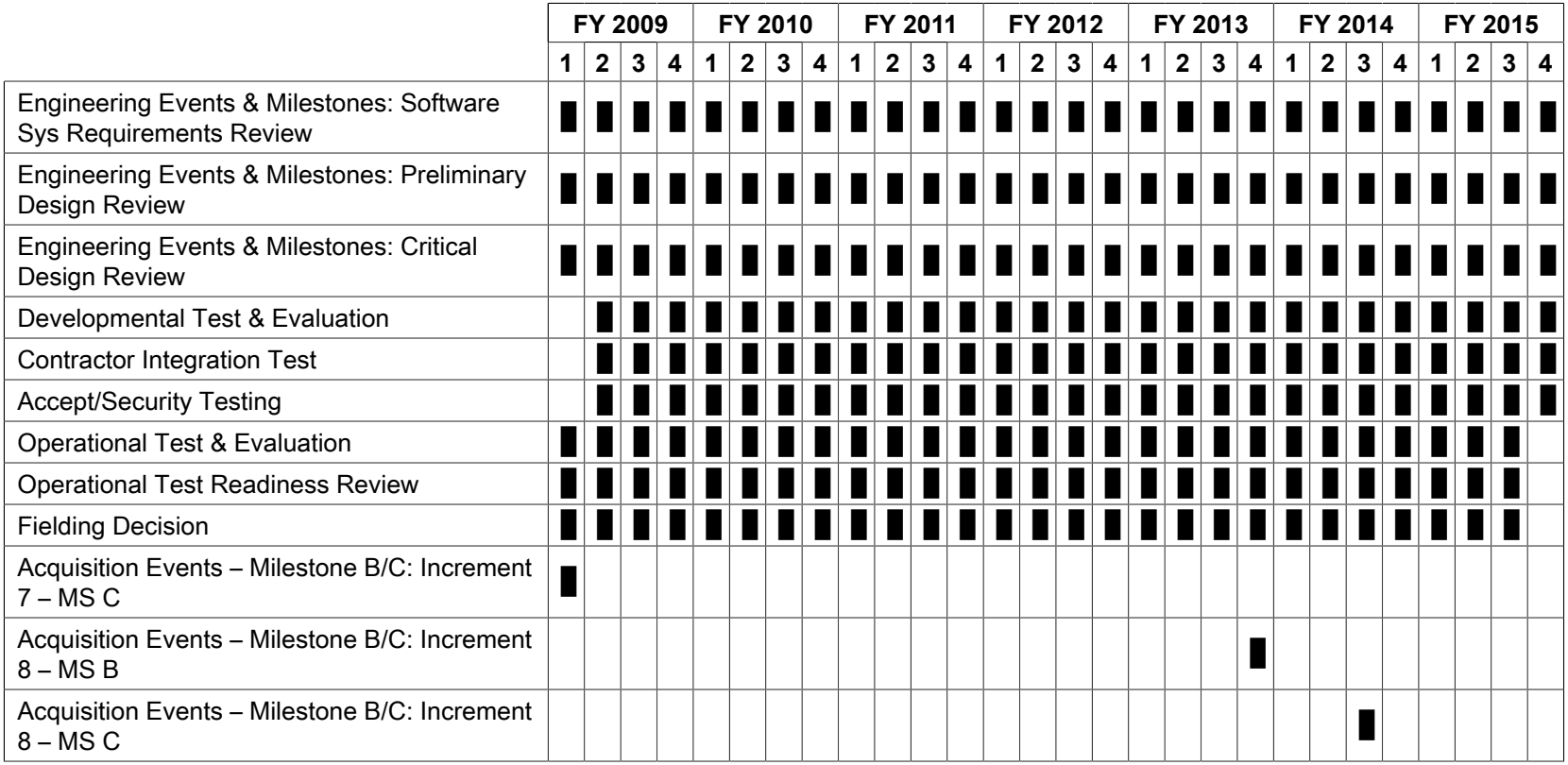

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0303141K: *Global Combat Support System*	**PROJECT** CS01: *Global Combat Support System*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Engineering Events & Milestones: Software Sys Requirements Review	1	2009	4	2015
Engineering Events & Milestones: Preliminary Design Review	1	2009	4	2015
Engineering Events & Milestones: Critical Design Review	1	2009	4	2015
Developmental Test & Evaluation	2	2009	4	2015
Contractor Integration Test	2	2009	4	2015
Accept/Security Testing	2	2009	4	2015
Operational Test & Evaluation	1	2009	3	2015
Operational Test Readiness Review	1	2009	3	2015
Fielding Decision	1	2009	3	2015
Acquisition Events – Milestone B/C: Increment 7 – MS C	1	2009	1	2009
Acquisition Events – Milestone B/C: Increment 8 – MS B	4	2013	4	2013
Acquisition Events – Milestone B/C: Increment 8 – MS C	3	2014	3	2014

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	57.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
JC01: *Joint Command and Control*	57.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Net-Enabled Command Capability (NECC) was the DoD's command and control capability focused on providing the warfighter with the data and information needed to make timely, effective and informed decisions. The Department cancelled the Net-Enabled Command Capability (NECC) because it was at significant risk of not being able to deliver capabilities to meet validated warfighter requirements and was not able to meet its Initial Operational Capability within schedule.

FY 2009 funds supported program development, testing, production, and activities to prepare for delivery, fielding and operations all aimed at conducting a September 2009 End-to-End (E2E) integration test event. These activities were specifically designed to improve the cost estimating process by gathering data on capability development activities, and the tasking to demonstrate technology maturity.

FY 2010 funds are reduced from $49.047 million to $0.000 million based on congressional direction in the FY 2010 National Defense Authorization Act (NDAA) that the Department merge the NECC and GCCS. As a result of the NDAA, the Department will terminate the NECC program in FY 2010 and move funding to PE 0303150K for the sustainment and synchronization of Global Command and Control Systems – Joint.

FY 2011 funds are reduced from $163.001 million to $0.000 million based on congressional direction in the FY 2010 NDAA that the Department merge the NECC and GCCS. As a result of the NDAA, the Department will terminate the NECC program in FY 2010 and move funding to PE 0303150K for the sustainment and synchronization of Global Command and Control Systems – Joint.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0303158K: *Joint Command and Control Program (JC2)*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	57.161	49.047	0.000	0.000	0.000
Current President's Budget	57.161	0.000	0.000	0.000	0.000
Total Adjustments	0.000	-49.047	0.000	0.000	0.000
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		-49.047			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	0.000	0.000	0.000

Change Summary Explanation

The Department cancelled the Net-Enabled Command Capability (NECC) because it was at significant risk of not being able to deliver capabilities to meet validated warfighter requirements and was not able to meet its Initial Operational Capability within schedule. Instead, the Department will focus the Department's Joint Command and Control (C2) research and development efforts on consolidating the systems and technologies of the NECC program into the Global Command and Control System (GCCS) Family of Systems. The approach will be an incremental, spiral approach to modernizing the GCCS Family of Systems, deploying modular, operationally useful, and tested capabilities while moving towards a net-centric, web-based, standards-based service oriented architecture. Additional plans will be prepared for review at the Materiel Development Decision supporting sustainment of the current Global Command and Control System (GCCS) Family of Systems (FoS) and achievement of an improved joint C2 capability.
The DoD did not estimate FY 2011 cost when the FY 2010 President’s Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
JC01: *Joint Command and Control*	57.161	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Net-Enabled Command Capability (NECC) was the DoD's command and control capability focused on providing the warfighter with the data and information needed to make timely, effective and informed decisions. The Department cancelled the Net-Enabled Command Capability (NECC) because it was at significant risk of not being able to deliver capabilities to meet validated warfighter requirements and was not able to meet its Initial Operational Capability within schedule. Instead, the Department will focus the Department's Joint Command and Control (C2) research and development efforts on consolidating the systems and technologies of the NECC program into the Global Command and Control System (GCCS) Family of Systems (FoS). The approach will be an incremental, spiral approach to modernizing the GCCS FoS, deploying modular, operationally useful, and tested capabilities while moving towards a net-centric, web-based, standards-based service oriented architecture. The NECC system was envisioned as the DoD's principal command and control capability providing the warfighter with the data and information needed to make timely, effective and informed decisions - designed to provide the DoD with next-generation C2 capabilities using a Service Oriented Architecture (SOA) on the Global Information Grid (GIG). NECC was initially established to draw from the command and control (C2) community to evolve current and provide new C2 capabilities into a fully integrated, interoperable, collaborative Joint solution.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
NECC	57.161	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: Funds supported program development, testing, production, and activities in preparation for delivery, fielding and operations aimed at conducting a September 2009 End-to-End (E2E) integration test event. These activities were specifically designed to improve cost estimation and demonstrate technological maturity. NECC developed and tested 14 interim releases of capability modules (CMs). The CMs demonstrated a Joint Mission Thread (JMT) provided by JFCOM in coordination with the					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Military Services. This Joint Personnel Recovery contained the Operational Sponsor's highest priority capability needs for Shared Situational Awareness. *FY 2010 Plans:* FY 2010 funds are reduced from $49.047 million to $0.000 million based on congressional direction in the FY 2010 National Defense Authorization Act (NDAA) that the Department merge the NECC and GCCS. As a result of the NDAA, the Department will terminate the NECC program in FY 2010 and move funding to PE 0303150K for the sustainment and synchronization of Global Command and Control Systems – Joint. *FY 2011 Base Plans:* In accordance with the Department's 2 November 2009 NECC cancellation decision, and to ensure sustainment and synchronization of C2 program activities, funding is transferred to the GCCS-J program.					
Accomplishments/Planned Programs Subtotals	57.161	0.000	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0303158K: *O&M, DW*	14.833	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• Procurement, DW/PE 0303158K: *Procurement, DW*	3.988	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

D. Acquisition Strategy

NECC acquired CMs, services, and materials from various full and open, competitively awarded performance-based and performance-driven outcome contracts. NECC used indefinite-delivery-indefinite-quantity (IDIQ) contracts to develop CMs; the NECC Joint Program Management Office (JPMO), acting as NECC systems integrator, had the flexibility to award multiple Task Orders (TOs) under these vehicles. The program leveraged various types of existing and logical follow-on contracts

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*

associated with the Global Command and Control System Family of System (GCCS FoS) programs and general purpose IDIQs. NECC also acquired services and materials through full and open competitively awarded contract. NECC used Federally Funded Research and Development Centers (FFRDC), Systems Engineering and Technical Assistance (SETA) and small business procurement opportunities. NECC accessed services and material through other Government Agencies/ Services. NECC plans identified components, including modules and other technologies and developing commercial capabilities that can be implemented in the GCCS FoS or address gaps in required capabilities not currently resident in the GCCS FoS.

E. Performance Metrics

In FY 2009, NECC collected metrics and Earned Value (EV) information, per the program's Cost Control Plan (CCP). The information was collected for the development of the 14 CMs and will be used to inform the future cost estimates for C2 capabilities. In FY 2010, data collection will continue for the capabilities being developed under the GCCS-J program.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
DISN LES / BN12 and ACTD Lab	MIPR	DISA DISA	0.904	0.000		0.000		0.000		0.000	0	0.904	0.904
Net Enabled Command Capability (NECC) Federated Development Certification (FDC) and Capability Provisioning Activities (CPA)	TBD/CPFF	FGM Reston, VA	3.470	0.000		0.000		0.000		0.000	0	3.470	3.470
Integration & Tech Piloting	TBD/CPFF	SAIC McLean, VA	6.963	0.000		0.000		0.000		0.000	0	6.963	6.963
ASAP ACTD	MIPR	Air Force Air Force	0.350	0.000		0.000		0.000		0.000	0	0.350	0.350
AEC	MIPR	Army Army	0.225	0.000		0.000		0.000		0.000	0	0.225	0.225
Certification Agents	MIPR	DISA DISA	0.000	0.000		0.000		0.000		0.000	0	0	0
Prototyping	MIPR	CPMO's CPMO's	3.260	0.000		0.000		0.000		0.000	0	3.260	3.260
		Subtotal	15.172	0.000		0.000		0.000		0.000	0.000	15.172	15.172

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*	

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Piloting / Test and Evaluation (T&E) Support Contract	TBD/CPFF	SYZYGY San Diego, CA	5.417	0.000		0.000		0.000		0.000	0	5.417	5.417
Piloting / T&E Support Contract	TBD/CPFF	TBD TBD	0.000	0.000		0.000		0.000		0.000	0	0	0
Piloting/CPAS	MIPR	SSC San Diego, CA	0.636	0.000		0.000		0.000		0.000	0	0.636	0.636
Operational Test Agency (OTA) Support Joint Interoperability Testing Center (JITC)	MIPR	DISA DISA	2.219	0.000		0.000		0.000		0.000	0	2.219	2.219
OTA Support Operational Test and Evaluation Force (OPTEVFOR)	MIPR	Navy Navy	0.712	0.000		0.000		0.000		0.000	0	0.712	0.712
OTA Support - Army Test and Evaluation Center (ATEC)	MIPR	Army Army	2.010	0.000		0.000		0.000		0.000	0	2.010	2.010
OTA Support - Marine Corps Test and Evaluation Activity (MCOTEA)	MIPR	Marine Corps Marine Corps	0.597	0.000		0.000		0.000		0.000	0	0.597	0.597
OTA Support - Air Force Operational Test and Evaluation Center (AFOTEC)	MIPR	Air Force Air Force	0.889	0.000		0.000		0.000		0.000	0	0.889	0.889
	FFRDC	MITRE	11.782	0.000		0.000		0.000		0.000	0	11.782	11.782

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*	

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Transformational Command and Control (TC2)		Reston, VA											
Information Assurance (IA) Technical Support	MIPR	SSC Charleston, SC	5.907	0.000		0.000		0.000		0.000	0	5.907	5.907
Systems Engineering Support	MIPR	SSC San Diego, CA	6.456	0.000		0.000		0.000		0.000	0	6.456	6.456
Architecture and Design	TBD/FFP	S&T Assoc Arlington, VA	17.374	0.000		0.000		0.000		0.000	0	17.374	17.374
Systems Engineering Integration Support 1	TBD/CPFF	SAIC McLean, VA	7.003	0.000		0.000		0.000		0.000	0	7.003	7.003
Systems Engineering Integration Support 2	TBD/CPFF	TBD TBD	0.000	0.000		0.000		0.000		0.000	0	0	0
Capability Modules (CMs)	MIPR	CPMO's CPMO's	36.404	0.000		0.000		0.000		0.000	0	36.404	36.404
Logistical Support Development 1	MIPR	SAIC McLean, VA	2.692	0.000		0.000		0.000		0.000	0	2.692	2.692
Logistical Support Development 2	MIPR	TBD TBD	0.000	0.000		0.000		0.000		0.000	0	0	0
Tier 1 Help Desk	MIPR	SSC Charleston, SC	1.046	0.000		0.000		0.000		0.000	0	1.046	1.046
Tier 2 FDCE Help Desk	MIPR	SSC Charleston, SC	0.305	0.000		0.000		0.000		0.000	0	0.305	0.305
Tier 2/3 Help Desk (Allocated to CPMO's)	MIPR	CPMO's CPMO's	0.000	0.000		0.000		0.000		0.000	0	0	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Training Enterprise Node	MIPR	Naval Research Lab (NRL) / SSC San Diego, CA	0.750	0.000		0.000		0.000		0.000	0	0.750	0.750
Joint Technical Operations Control Capability (JTOCC) Operations	MIPR	SSC Charleston, SC	2.660	0.000		0.000		0.000		0.000	0	2.660	2.660
Technical Operations Support	MIPR	SSC San Diego, CA	0.430	0.000		0.000		0.000		0.000	0	0.430	0.430
Piloting Framework and other Operational support	MIPR	SAIC McLean, VA	1.235	0.000		0.000		0.000		0.000	0	1.235	1.235
Electronic Performance Support System (e.g. DMI) Environment	MIPR	NRL NRL	0.950	0.000		0.000		0.000		0.000	0	0.950	0.950
Joint Training Integration Support	MIPR	SSC San Diego, CA	0.175	0.000		0.000		0.000		0.000	0	0.175	0.175
FDCE Development Nodes for CPMO's	MIPR	CPMO's CPMO's	0.781	0.000		0.000		0.000		0.000	0	0.781	0.781
I&TP Technical IPA	TBD/TBD	UMES Princess Anne, MD	0.402	0.000		0.000		0.000		0.000	0	0.402	0.402
CTF Support	MIPR	NSMA NSMA	0.160	0.000		0.000		0.000		0.000	0	0.160	0.160
FDCE / T&E / OILS / IA / I&TP Support	TBD/CPFF	SAIC McLean, VA	5.443	0.000		0.000		0.000		0.000	0	5.443	5.443

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
DAA Support	MIPR	STRATCOM STRATCOM	0.210	0.000		0.000		0.000		0.000	0	0.210	0.210
Command and Control (C2) Catalog Support	MIPR	BIT Falls Church, VA	0.754	0.000		0.000		0.000		0.000	0	0.754	0.754
		Subtotal	115.399	0.000		0.000		0.000		0.000	0.000	115.399	115.399

Remarks

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
PEO C2C Operations	TBD/TBD	Various Various	8.931	0.000		0.000		0.000		0.000	0	8.931	8.931
DISA CPMO Management Operations	TBD/TBD	Various Various	8.035	0.000		0.000		0.000		0.000	0	8.035	8.035
JPMO Management Operations	MIPR	SSC San Diego, CA	1.846	0.000		0.000		0.000		0.000	0	1.846	1.846
NECC Program Control (PC) Financial Management Support 1	TBD/FFP	GS5 Dumfries, VA	3.791	0.000		0.000		0.000		0.000	0	3.791	3.791
	TBD/FFP	LS3 Columbia, MD	0.800	0.000		0.000		0.000		0.000	0	0.800	0.800

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*	

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
NECC Program Control (PC) Financial Management Support 2													
NECC PC Acquisition Support 1	TM	BIT Falls Church, VA	3.988	0.000		0.000		0.000		0.000	0	3.988	3.988
NECC PC Acquisition Support 2	TBD/FFP	BIT Falls Church, VA	0.551	0.000		0.000		0.000		0.000	0	0.551	0.551
BEA Licenses	TBD/FFP	Merlin International Vienna, VA	2.785	0.000		0.000		0.000		0.000	0	2.785	2.785
System Documenation	MIPR	SSC San Diego, CA	0.803	0.000		0.000		0.000		0.000	0	0.803	0.803
Federated Development and Certification Environment Engineering Design, Development, and Operations	TBD/CPFF	FGM Reston, VA	2.632	0.000		0.000		0.000		0.000	0	2.632	2.632
FDCE Engineering Design, Development, and Operations	TBD/CPFF	FGM Reston, VA	1.807	0.000		0.000		0.000		0.000	0	1.807	1.807
FDCE Hardware	TBD/FFP	Various Various	0.285	0.000		0.000		0.000		0.000	0	0.285	0.285
FDCE Cots Software Tools	TBD/FFP	Various Various	1.302	0.000		0.000		0.000		0.000	0	1.302	1.302
		Subtotal	37.556	0.000		0.000		0.000		0.000	0.000	37.556	37.556

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*	

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Remarks													

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	168.127	0.000		0.000		0.000		0.000	0.000	168.127	168.127

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0303158K: *Joint Command and Control Program (JC2)*	PROJECT JC01: *Joint Command and Control*	

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
System Engineering	■	■	■	■																								
Establish Federated Development Certification Environment	■	■	■	■																								
Tech Risk Reduction/Piloting	■	■	■	■																								
Piloting Integration	■	■	■	■																								
Define/Design/Dev Capability Modules	■	■	■	■																								

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0303158K: *Joint Command and Control Program (JC2)*	**PROJECT** JC01: *Joint Command and Control*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
System Engineering	1	2009	4	2009
Establish Federated Development Certification Environment	1	2009	4	2009
Tech Risk Reduction/Piloting	1	2009	4	2009
Piloting Integration	1	2009	4	2009
Define/Design/Dev Capability Modules	1	2009	4	2009

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	74.465	74.473	74.023	0.000	74.023	76.989	76.870	78.815	79.652	Continuing	Continuing
T30: *Test and Evaluation*	13.732	20.507	17.307	0.000	17.307	16.837	14.990	15.705	16.103	Continuing	Continuing
T40: *Major Range Test Facility Base*	60.733	53.966	56.716	0.000	56.716	60.152	61.880	63.110	63.549	Continuing	Continuing

A. Mission Description and Budget Item Justification

Supports the Defense Information Systems Agency Major Range and Test Facility Base (MRTFB), which includes the Joint Interoperability Test Command (JITC) and the Test Evaluation Management Center (TEMC). JITC is the sole interoperability test and evaluation (T&E) certifier for all Department of Defense (DoD) National Security Systems/Information Technology (NSS/IT) acquisitions. Additional core missions include supporting warfighters on technical NSS/IT issues, supporting the Department's NSS/IT joint capabilities acquisition process, and assisting Combatant Command-to-Coalition partner interoperability. JITC is the only Joint Operational Test Agency (OTA) for the Department. The MRTFB includes over 1,369 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.

In FY 2011, to ensure its relevancy to DoD and the warfighter community, the program will continue to manage and maintain its current capability base and continue to:
- Integrate evolving Service Oriented Architecture (SOA) and Net-Ready Key Performance Parameter (NR-KPP) concepts into DoD interoperability certification testing. This will enhance realistic operational test capabilities and reduce warfighter program risk.
- Expand test operations capability to provision, federate, and monitor required GIG T&E capabilities.
- Coordinate and manage functional area products required for Joint T&E of National Intelligence, Warfighting, and Business capabilities supporting Joint and Combined warfighting effectiveness.
- Provide consistent, repeatable test capabilities to make certain DoD-acquired NSS/IT capabilities are operationally effective and suitable; and, to certify joint warfighter capabilities are compatible with current fielded systems.

Lack of funding will delay or eliminate fielding of joint warfighting capabilities, increasing risk to programs and the warfighter. Test expertise, laboratory facilities, and proven methodologies will be reduced or eliminated, forcing Military Services and Defense Agencies to operate independently and use systems with critical operational issues. This would reduce or severely impact joint warfighting capabilities and the Department's ability to meet mission requirements and achieve information superiority.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0208045K: *C4I Interoperability*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	76.019	74.786	0.000	0.000	0.000
Current President's Budget	74.465	74.473	74.023	0.000	74.023
Total Adjustments	-1.554	-0.313	74.023	0.000	74.023
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		-0.313			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-2.051	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.497	0.000	74.023	0.000	74.023

Change Summary Explanation

FY 2009: The decrement of -$2.051 million was available for reprogramming due to the deferment of a planned facility move from leased spaces to permanent spaces at JITC MRTFB, Ft. Huachuca. Approximately $0.497 million was realigned to support mission testing requirements. FY 2010: The reduction of -$0.313 is due to revised economic assumptions. FY 2011: The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T30: *Test and Evaluation*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
T30: *Test and Evaluation*	13.732	20.507	17.307	0.000	17.307	16.837	14.990	15.705	16.103	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Joint Interoperability Test Command (JITC) provides direct interoperability support to Combatant Commanders (COCOMs) during exercises and contingency operations to ensure joint interoperability of the Department of Defense (DoD) National Security Systems/Information Technology (NSS/IT), and ensures successful combined operations with Allies and Coalition partners. JITC, as the only DoD 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 DISA, military Services, and other Agencies. JITC provides direct test support to COCOM operations in theater; as well as technical 24x7x365 Warfighter Command, Control, Communications, Computing and Intelligence (C4I) Hotline support. In support of this mission, JITC:

- Conducts annual distributed Joint Tactical Data Link (JTDL) hardware-in-the-loop (HWITL) interoperability test events to evaluate COCOM/Service/Agency warfighting capabilities and participating systems.
- Provides for planning, conducting, analyzing, and reporting of tri-annual DoD Interoperability Communications Exercises (DICE). This distributed Joint Task Force (JTF) network supports agile, responsive, and efficient testing and rapid deployment of Joint Warfighting communications capabilities.
- Provides a sustaining capability to support engineering, development, and operational evaluation of existing and legacy IT and NSS for DISA, Service Components, COCOMS, and DoD Agencies.
- Supports testing of the DoD Global Information Grid (GIG)-enabling programs and ensures that these capabilities are available to the DoD community to verify their own net-centric C4I warfighting capabilities.
- Provides enterprise messaging test and evaluation of Navy strategic systems by verifying the ability of systems to interoperate in a joint environment.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Operational Test and Evaluation	1.305	2.000	1.339	0.000	1.339

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T30: *Test and Evaluation*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: JITC conducted 13 operational test events to determine operational effectiveness and suitability of IT/NSS systems including: Global Command and Control System-Joint (GCCS-J), Global Combat Support System-Joint (GCSS-J), Teleport Systems, Public Key Infrastructure (PKI), Network Centric Enterprise Services (NCES), and Teleport. Testing was conducted to help ensure that system operational requirements were met in an operational environment with real users. This information was used to support capability fielding decisions and reduce risks to the warfighters. *FY 2010 Plans:* In FY 2010, the Command will continue to operationally test systems acquired, assigned, or managed by DISA, military Services, and other Agencies as detailed above. As systems become less "stove-piped," the focus of JITC's testing in FY 2010 is evolving to more system-of-systems testing with emphasis on evaluating mission threads to ensure the successful execution of the users' required capabilities. The variance of $0.695 million between FY 2009 to FY 2010 reflects a redistribution of civilian pay and realignment of funding between Test/Evaluation (T30-direct) and Major Range Test Facility Base (T40-institutional) to reflect actual execution of resources. *FY 2011 Base 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 National Security Agency (NSA), the Defense Logistic Agency (DLA), and the Business Transformation Agency (BTA). The decrease of -$0.661 million from FY 2010 to FY 2011 reflects a redistribution of civilian pay to correlate with FTE billets and a realignment of funding between Test/Evaluation (T30-direct) and Major Range Test Facility Base (T40-institutional) for increased institutional costs.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T30: *Test and Evaluation*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
If funding is reduced, implementation of testing capabilities to address emerging DoD test and evaluation acquisition reform initiatives and policies and continued development of integrated developmental test/operational test Joint testing strategies and capabilities for IT and NSS will not be accomplished.					
Joint Interoperability Testing	9.165	13.537	12.800	0.000	12.800
FY 2009 Accomplishments: FY 2009 Accomplishments: JITC supported three DICE events, with participation of over 60 systems/capabilities resulting in approximately 30 system/capability assessments or certifications. JITC also supported five Tactical Digital Information Link (TADIL) events with numerous DoD systems, two Combined Interoperability Tests (CIT), two North Atlantic Treaty Organization (NATO) HWITL interoperability tests, and 16 Navy Tactical and Legacy messaging system tests. In addition, JITC provided on-site exercise support for six events, operated a 24/7 hotline center, published a quarterly lessons learned report, and provided CIT support to Combatant Commanders. *FY 2010 Plans:* In FY 2010, the Command is continuing to provide interoperability testing and certification services for the DoD's programs. As interoperability receives more attention, JITC will have to support a greater number of programs that need interoperability testing and certification. Further, the complexity of the systems and the current thought process for assessment at the system-of-systems level requires that JITC dedicate a greater portion of its resources to the establishment of a new methodology and associated test support practices and tools for assessment at the enterprise level. The variance of $4.372 million between FY 2009 to FY 2010 reflects a redistribution of civilian pay and realignment of funding between Test/Evaluation (T30-direct) and Major Range Test Facility Base (T40-institutional) to reflect actual execution of resources.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T30: *Test and Evaluation*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: JITC will provide similar support provided in FY 2009 and FY 2010. The focus will be more on the evaluation of systems at the enterprise level in a net-centric environment. This will require JITC to test in a distributed manner using dedicated test networks. The decrease of -$0.737 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 increased institutional costs. If funding is reduced, the Military Services and Defense Agencies will operate independently and fail to achieve Joint Interoperable C4I warfighter capability requirements. Warfighters will be forced to utilize systems that have critical operational issues, potentially reducing or eliminating their ability to communicate effectively and perform assigned missions.					
Support to Warfighter *FY 2009 Accomplishments:* JITC responded to nearly 330 hotline calls for support from across the DoD, other federal agencies and the commercial sector. JITC supported 14 Command and Control Interoperability Boards (CCIBs), one COCOM sponsored exercise, two contingency operations, two CITs, and provided two on-site liaison officers who supported four COCOMs. *FY 2010 Plans:* JITC is providing direct interoperability support to Combatant Commanders during exercises and contingency operations to ensure joint interoperability throughout the lifecycle of DoD NSS/IT, and successful combined operations with Allies and Coalition partners. JITC is providing direct test support to COCOM operations in theater; as well as technical 24x7x365 C4I Hotline support to the COCOMs and Services. The variance of $1.708 million between FY 2009 to FY 2010 reflects a	3.262	4.970	3.168	0.000	3.168

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T30: *Test and Evaluation*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
redistribution of civilian pay and realignment of funding between Test/Evaluation (T30-direct) and Major Range Test Facility Base (T40-institutional) to reflect actual execution of resources. *FY 2011 Base Plans:* JITC will provide direct support to the COCOMs, Services and DoD Agencies by providing onsite support to Combatant Commanders for exercises and contingency operations to document, review and analyze information technology architectures, conduct interoperability assessments, identify and resolve technical issues, identify uncertified and/or untested interfaces, and determine compliance with validated Warfighter procedures; provide DoD with solutions to problems raised in hotline calls; and publish Lessons Learned Reports. JITC will also support Coalition exercises; tactical data link testing; and provide CCIB support, Coalition Network migration, and United States/Coalition communications equipment testing to ensure successful combined operations with our Allies and Coalition partners. The decrease of -$1.802 million from FY 2010 to FY 2011 reflects a redistribution of civilian pay to correlate with FTE billets and a realignment of funding between Test/Evaluation (T30-direct) and Major Range Test Facility Base (T40-institutional) for increased institutional costs. If funding is reduced, warfighting operation will be at a great risk for failure due to a lack of interoperable systems required for mission success. Coalition coordination efforts will also be negatively impacted due to JITC's inability to provide interoperability support during CCIB, Interoperability Management Board (IMB), and CIT initiatives. As JITC's interaction with the COCOMs is reduced, so is JITC's ability to stay abreast of the warfighter's latest operational network modifications; tactics, techniques, and procedures (TTPs); and operational requirements necessary in developing and maintaining an operationally realistic network environment for testing. Additionally, JITC would no longer serve as the warfighter's advocate by expressing their requirements and issues back to the appropriate Program Manager, Service proponent, Capability Portfolio Manager, or Joint Staff element to ensure those concerns are addressed in future system development efforts.					
Accomplishments/Planned Programs Subtotals	13.732	20.507	17.307	0.000	17.307

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T30: *Test and Evaluation*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0208045K: *O&M, DW*	0.019	4.258	2.980		2.980	2.745	2.437	2.550	2.621	Continuing	Continuing

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

JITC will continue to track performance through measures of workload such as the number of: exercises supported; test-related documents produced and delivered; hotline requests; interoperability networking, communication, and general COCOM-related information technology issues identified and resolved; JITC personnel deployments; tests conducted; projects supported; and interoperability certifications issued.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T30: *Test and Evaluation*	

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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/ Various	N/A N/A	0.000	12.709	Jan 2009	10.913	Jan 2010	0.000		10.913	Continuing	Continuing	Continuing
		Subtotal	0.000	12.709		10.913		0.000		10.913			

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	TM	NGMS Ft. Hua, AZ	26.036	3.143	Oct 2009	2.621	Oct 2010	0.000		2.621	Continuing	Continuing	Continuing
Engineering/ Technical Services 2	TM	Interop Ft. Hua, AZ	28.612	2.738	Oct 2009	2.302	Oct 2010	0.000		2.302	Continuing	Continuing	Continuing
Engineering/ Technical Services 3	TM	NGIT Ft. Hua, AZ	19.963	1.917	Oct 2009	1.471	Oct 2010	0.000		1.471	Continuing	Continuing	Continuing
		Subtotal	74.611	7.798		6.394		0.000		6.394			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T30: *Test and Evaluation*	

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	74.611	20.507		17.307		0.000		17.307			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T30: *Test and Evaluation*	

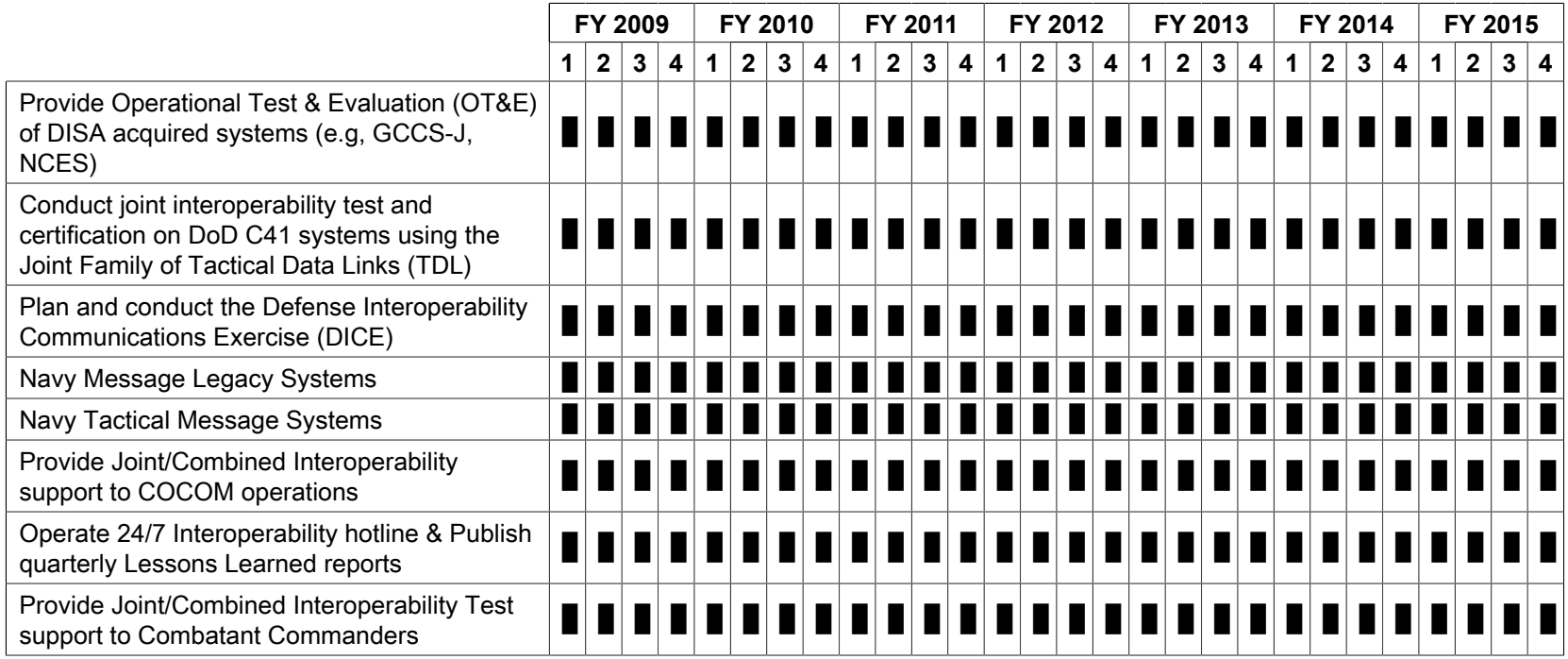

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0208045K: *C4I Interoperability*	**PROJECT** T30: *Test and Evaluation*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Provide Operational Test & Evaluation (OT&E) of DISA acquired systems (e.g, GCCS-J, NCES)	1	2009	4	2015
Conduct joint interoperability test and certification on DoD C41 systems using the Joint Family of Tactical Data Links (TDL)	1	2009	4	2015
Plan and conduct the Defense Interoperability Communications Exercise (DICE)	1	2009	4	2015
Navy Message Legacy Systems	1	2009	4	2015
Navy Tactical Message Systems	1	2009	4	2015
Provide Joint/Combined Interoperability support to COCOM operations	1	2009	4	2015
Operate 24/7 Interoperability hotline & Publish quarterly Lessons Learned reports	1	2009	4	2015
Provide Joint/Combined Interoperability Test support to Combatant Commanders	1	2009	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T40: *Major Range Test Facility Base*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
T40: *Major Range Test Facility Base*	60.733	53.966	56.716	0.000	56.716	60.152	61.880	63.110	63.549	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Provides institutional funds for the Defense Information Systems Agency (DISA) Major Range and Test Facility Base (MRTFB) in accordance with Section 196 of Title 10, United States Code. This provides the Department's only National Security System/Information Technology (NSS/IT) and MRTFB capability, and as an MRTFB is considered a national asset.

In support of this mission, the MRTFB:

• Enables direct test support to all Department of Defense (DoD) major NSS/IT acquisitions by providing:

o Necessary test capabilities and facilities infrastructure.

o Process tracking and reporting systems.

o Environment and test tool enhancements, which:

☐ Improve testing methodologies, operational timelines, and operational test realism.

☐ Allow testing efforts to keep pace with technology.

• Provides a single DoD test environment for Services and Agencies to evaluate their NSS/IT capabilities.

o Prevents duplication of capabilities.

o Precludes each Service from having to maintain a stove-piped, Service-unique capability.

o Provides an overarching Joint infrastructure approach to enhance the DoD ability to fulfill Joint Interoperable Command, Control, Communications, Computing and Intelligence (C4I) warfighting mission.

o Provides a Joint Test and Evaluation network by converging current test networks that meet the entire spectrum of DoD acquisition process life cycle needs.

• Enables DISA's MRTFB to continue to implement Net Readiness Capabilities Resources (NRCR) to conduct agile, on-demand test services for the Department by providing:

o The DoD with a lifecycle support capability for DoD's tactical and strategic networks and their interfaces.

o Communications and test environments for current and future Converged Real-time Internet Protocol (IP) services for net-centric systems.

• Includes working with industry consortiums on best practices, investing in process based modeling and simulation, and evolving standards-based frameworks to support testing and analysis as a service. Also includes evolving and virtualizing the laboratories to meet future technology changes and enhancements in hardware and testing software with an emphasis on unified capabilities requirements (UCR), and service oriented architectures (SOA) enabled net-centric capabilities.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T40: *Major Range Test Facility Base*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Interoperability Test Support	60.733	53.966	56.716	0.000	56.716

FY 2009 Accomplishments:

Funded the DISA MRTFB institutional efforts associated with operating the Joint Interoperability Test Command (JITC) at Indian Head, MD, and Fort Huachuca, AZ and the Test and Evaluation Management Center (TEMC) at Falls Church, 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. In addition, funding was used for net readiness T&E, multi-functional lab capabilities, Information Assurance (IA), data management/simulation, and formalized process improvement via Lean Six Sigma implementation. The Command was also very successful in establishing the infrastructure to assess the net-centric systems at the enterprise level. These assessments included acquiring the Enterprise Service Management tools and expertise for a demanding test and evaluation area.

FY 2010 Plans:

In addition to the MRTFB institutional efforts detailed above, funds will be used to improve information and knowledge management operations and tools, revitalize testbeds and labs, establish a Net Ready-Key Performance Parameter (NR-KPP) helpdesk, develop and enhance IA systems, provide operational test/developmental test and net-centric/Service Oriented Architecture (NC/SOA) instrumentation support, and develop IA UCRs. The variance of -$6.767 million between FY 2009 to FY 2010 reflects a redistribution of civilian pay and realignment of funding between Test/Evaluation (T30-direct) and Major Range Test Facility Base (T40-institutional) to reflect actual execution of resources.

FY 2011 Base Plans:

Funds will be used for DISA MRTFB institutional efforts, as well as the construction of virtual communications capabilities; enhanced laboratory upgrades; and development, implementation,

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T40: *Major Range Test Facility Base*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
and maintenance of 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. The 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). 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. The increase of $2.750 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 increased institutional costs. If funding is reduced, test expertise, laboratory facilities, instrumentation, and automated analysis capabilities for the only DoD Agency authorized to certify joint interoperability will be eliminated. These capabilities would need to be replicated within the Services to ensure that the DoD fields interoperable joint warfighting capabilities to meet mission requirements; creating duplication, inefficiencies, and increased costs. The Military Services and Defense Agencies would operate independently and fail to achieve Joint Interoperable warfighting capability requirements. Without this testing support, at a minimum, deployment cycles would be delayed and/or eliminated, systems could be deployed with potentially critical operational issues, reducing or eliminating the warfighter's ability to communicate effectively or accomplish missions. The loss of any one of these capabilities would be to the detriment of the DoD. The costs to replicate these capabilities could not be afforded, increasing risk to the warfighter and our Nation's ability to achieve information superiority.					
Accomplishments/Planned Programs Subtotals	60.733	53.966	56.716	0.000	56.716

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T40: *Major Range Test Facility Base*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0208045K: *O&M, DW*	11.520	9.994	10.423		10.423	10.282	10.314	10.559	10.691	Continuing	Continuing

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

This project provides the laboratories, test environment, and expertise to support:
- Over 240 test activities involving over 150 DoD systems.
- Testing of approximately 30 ACAT I programs.
- Over 300 interoperability testing and certification related products.
- Roughly 400 Interim Certificate to Operate (ICTO) requests.
- Review of over 100 Test Exemption, Information Support Plan (ISP), and Legacy Waiver requests.
- Nearly 379,772 square feet of C4I/GIG testing laboratories.

Information Technology (IT) plays a significant role in DoD's infrastructure, with emphasis on interoperability by the Office of the Secretary of Defense and Services, JITC expects mission testing to increase. The number of IT systems listed in the DoD Information Technology Portfolio Repository (DITPR) increased by 17% from FY 2008 to FY 2009.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T40: *Major Range Test Facility Base*

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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/ Various	N/A N/A	0.000	29.796	Jan 2009	30.853	Jan 2010	0.000		30.853	Continuing	Continuing	Continuing
		Subtotal	0.000	29.796		30.853		0.000		30.853			

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	TM	NGMS Ft. Hua, AZ	37.945	8.702	Oct 2009	9.311	Oct 2010	0.000		9.311	Continuing	Continuing	Continuing
Engineering/ Technical Services 2	TM	Interop Ft. Hua, AZ	59.201	10.393	Oct 2009	11.121	Oct 2010	0.000		11.121	Continuing	Continuing	Continuing
Engineering/ Technical Services 3	TM	NGIT Ft. Hua, AZ	32.074	5.075	Oct 2009	5.431	Oct 2010	0.000		5.431	Continuing	Continuing	Continuing
Engineering/ Technical Services 4	TBD/TBD	TBD TBD	0.000	0.000		0.000	Oct 2010	0.000		0.000	Continuing	Continuing	Continuing
		Subtotal	129.220	24.170		25.863		0.000		25.863			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T40: *Major Range Test Facility Base*	

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	129.220	53.966		56.716		0.000		56.716			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0208045K: *C4I Interoperability*	PROJECT T40: *Major Range Test Facility Base*

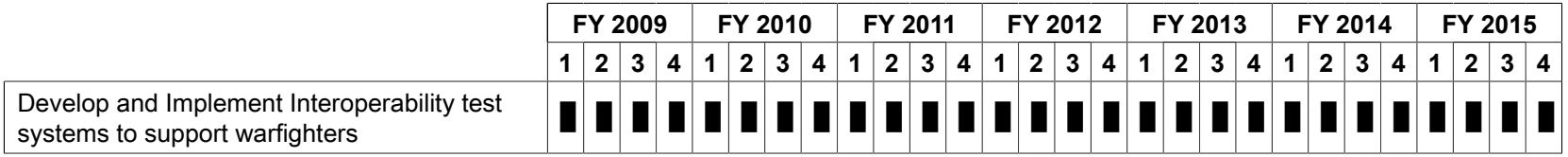

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0208045K: *C4I Interoperability*	**PROJECT** T40: *Major Range Test Facility Base*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Develop and Implement Interoperability test systems to support warfighters	1	2009	4	2015

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
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*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	15.723	10.722	9.379	0.000	9.379	5.355	5.171	5.305	4.619	Continuing	Continuing
NND: *Multinational Information Sharing*	15.723	10.722	9.379	0.000	9.379	5.355	5.171	5.305	4.619	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Multinational Information Sharing (MNIS) Program is a portfolio of three coalition information sharing capabilities: Combined Enterprise Regional Information Exchange System (CENTRIXS), GRIFFIN and Combined Federated Battle Laboratory Network (CFBLNet). MNIS is designed to enable and improve sharing of operational and intelligence information among U.S. forces and our multinational partners. CENTRIXS supports intelligence and classified operations and information exchange and sharing at the Secret Releasable (REL) level. GRIFFIN 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 Cross Domain Solutions (CDS) that enable information sharing to facilitate situational awareness and operational planning/execution. CFBLNet 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 U.S. counterparts at the Combatant Command (COCOM) and Agency levels.

In FY 2011, RDT&E funding will support the continued evolution of the CENTRIXS Cross Enclave Requirement (CCER) and achieve its objective end state satisfying COCOM coalition information sharing requirements for timeliness and agility while reducing infrastructure footprint and sustainment costs. FY 2011 funding will be essential to achieve the CCER objective as a global Secret Releasable environment, centrally managed, delivering enterprise services and access to centrally stored data to authorized coalition users. In its objective state, CCER will move from the initial, virtually converged FY 2010 enclave architecture to a single architecture relying on data labeling and tagging technologies to ensure data storage protection and separation.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
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*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	19.021	10.767	0.000	0.000	0.000
Current President's Budget	15.723	10.722	9.379	0.000	9.379
Total Adjustments	-3.298	-0.045	9.379	0.000	9.379
• Congressional General Reductions		-0.045			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-3.298	0.000	9.379	0.000	9.379

Change Summary Explanation

FY 2009 adjustment of $3.298 million reflects a below threshold reprogramming action to meet mission critical requirements within the Agency. FY 2010 adjustment of -$0.045 million reflects a Congressional reduction due to Economic Assumptions cited in Section 8097. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
NND: *Multinational Information Sharing*	15.723	10.722	9.379	0.000	9.379	5.355	5.171	5.305	4.619	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: Combined Enterprise Regional Information Exchange System (CENTRIXS), Griffin, and the Combined Federated Battle Laboratory Network (CFBLNet).

• CENTRIXS supports the warfighter with multiple, stand alone networks serving various Communities of Interest (COI) in ongoing multinational operations. The CENTRIXS Cross Enclave Requirement (CCER) is an enhancement to CENTRIXS that is intended to converge the current multiple secret coalition networks into a single environment, thereby enhancing information sharing while reducing required footprint (fewer desktops, servers, etc.) and ongoing sustainment costs. In FY 2011, Research, Development, Test & Evaluation (RDT&E) funds will be used to complete all necessary test, evaluation, and security accreditation of CCER enabling achievement of full Authority to Operate and commensurate Full Operational Capability (FOC). RDT&E funding will also accomplish the necessary security, interoperability and certification testing of new Joint Staff-validated CENTRIXS capabilities for the non-CCER CENTRIXS networks 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 2011 RDT&E funding in support of CENTRIXS and its modifications will delay attainment of objective CENTRIXS operational capability and necessitate additional O&M funding to support the legacy CENTRIXS networks. FY 2009 funding established a CCER product assessment test bed which supported extensive market research and commercial security appliances evaluation using the CFBLNet-hosted Coalition Warrior Interoperability Demonstration (CWID). Funding also supported a successful US Pacific Command-hosted user evaluation of a potential integrated solution for CCER. FY 2010 funding will support the necessary system integration and testing for the CCER Initial Operational Capability as well as support necessary for integration of additional (final operational) capabilities into CCER based on Joint Staff requirements.

• Griffin interconnects the national Command and Control (C2) systems of our most trusted English-speaking Allies – Australia, Canada, New Zealand, United Kingdom and the United States using Cross Domain Solutions (CDS) to enable information sharing to facilitate situational awareness and strategic planning/operational execution. In FY 2011, Griffin will expand chat service facilitating instant collaboration between U.S. strategic, operational, and tactical units and their counterparts in the U.K. and other Allied nations. This capability will extend forward into Afghanistan. Additionally, Griffin will be completing the transition from high assurance, guard-based interfaces to Commercial Off-the-Shelf (COTS) security appliances thereby enabling the rapid introduction of a richer set of required information sharing services among its most trusted partners than the current guarding solutions can support. This effort will also allow the convergence of the CENTRIXS Four Eyes C2 system

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*

into this environment. The end state will permit swift and timely collaboration from existing national desktops thereby reducing infrastructure costs. Failure to fund planned Griffin initiatives will result in the continuation of a limited coalition information sharing capability amongst our most trusted Allies and perpetuate the existing, costly high assurance guard architecture further limiting Griffin's ability to meet strategic planning and operational needs. In FY 2009, RDTE funding supported the necessary security test and evaluation of Griffin nodes installed at Defense Enterprise Computing Centers (DECC) in Ohio and Hawaii as well as the integration, test, and accreditation of a new US Joint Forces Command-sponsored cross domain chat capability. FY 2010 funding will enable final test and accreditation of this chat capability preparing it for operational deployment in the DECCs as well as in the United Kingdom and Bahrain. Funding will also support integration and test of web service and file publishing capabilities suitable for the Griffin environment.

• CFBLNet provides a controlled Research, Development, Trials and Assessment (RDT&A) coalition information sharing "sandbox" to evaluate new technologies and to develop tactics, techniques and procedures to facilitate the transition of promising technologies and capabilities into operational multinational information sharing systems. CFBLNet will continue to support coalition information sharing technology initiatives for the operational (Coalition Warrior Interoperability Demonstration (CWID)), intelligence (Empire Challenge, Conducted Six Geospatial-Intelligence Multi-Domain Intelligence, Surveillance, and Reconnaissance (ISR) Net-centric Initiatives (GEMINI), and MNIS acquisition communities. CCER will use CFBLNet to conduct evaluations of cross enclave collaboration and identity management solutions. Additionally, CFBLNet will use FY 2011 funding to add organic chat service capability to further enhance timely conduct of the CWID and Empire Challenge initiatives and to promote rapid exchange of information and lessons learned during the conduct of the various initiatives amongst participating U.S. and partner nations. CFBLNet initiatives will help evaluate combined/coalition command and control, operational, and intelligence interoperability shortfalls through initiatives conducted to improve information exchange capabilities. "Lessons learned" will be used by the Combatant Commands in support of operational networks. Failure to fund CFBLNet's basic planning and engineering staff will severely limit its ability to support CWID and Empire Challenge and reduce the potential benefits to be gained from all coalition initiatives in this environment. In FY 2009 the CFBLNet infrastructure supported CWID and Empire Challenge demonstrations benefiting the warfighting and intelligence community assessments of new products and technologies as well as offering an effective test environment for Ballistic Missile Defense experimentation and various Allied demonstrations. FY 2010 funding will support the recurring test initiative security assessments and CFBLNet system design modifications necessary to support approved initiatives in that year.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MNIS	15.723	10.722	9.379	0.000	9.379
FY 2009 Accomplishments: FY 2009 Accomplishments: ($15.723 million) CCER/CENTRIXS					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
• CCER Technical Advisory Group (CTAG) established and provided support on program technical direction • Completed market research on promising COTS solutions to enable cost and schedule development for this alternative • Conducted successful US Pacific Command pilot evaluating an Intelligence Community solution for cross COI information exchange, informs the recommended solution to achieve CCER IOC in 2010 • System Technology Evolution Plan (STEP) Analysis v1.0 and final review completed CFBLNet • Added National Geospatial-Intelligence Agency and U.S. Joint Forces Command (USJFCOM) to customer base • Conducted six exercises for GEMINI 2009 supporting Humanitarian Assistance/Disaster Relief (HADR), Department of Homeland Security (DHS) 2010 Winter Olympics, Digital Kill Chain (DKC), and tracking (NATO Standardization Agreement (STANAG) 4676 effort) Griffin • Initiated DECC centralization of Griffin Node in Columbus, with COOP service in DECC-PAC • Started the deployment of hardware that will improve information exchange capabilities among highly trusted nations by directly interconnecting national C2 systems without using Cross Domain Solutions. *FY 2010 Plans:* FY 2010 ($10.722 million) The decrease in overall program-required funding from FY 2009 is attributable to the fact that CENTRIXS and Griffin will enter the sustainment phase with diminished requirement for RDTE funding, CCER/CENTRIXS • Engineer and perform acceptance testing on the Virtual Private Network (VPN) at DECC-PAC infrastructure for CCER • Achieve CCER IOC with six COIs and email w/attachments, file sharing/file transfer, and chat building on the successful US PACOM 2009 pilot effort					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
• Complete research and evaluation of emerging CCER-suitable COTS products for collaboration, rapid information exchange, and information assurance • Complete test and evaluation of additional, Joint Staff specified capabilities such as cross enclave Voice over Internet Protocol (VoIP) and Defense Connect Online for fielding within CCER FY 2010 CFBLNet • Conduct USJFCOM-led CWID 2010 Exercises / EMPIRE CHALLENGE 2010 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 Griffin • Conduct test, evaluation, and certification necessary to provide Web Services for all CCEB Nations • Conduct test, evaluation, and assessment of file publishing technologies • Conduct test, evaluation, and assessment of Chat Services products • Evaluate guard replacement technologies *FY 2011 Base Plans:* FY 2011 Plans: ($9.379 million) The decrease in required RDT&E is attributable to the fact that CCER achieves FOC near the end of the fiscal year and no longer requires significant RDT&E for additional capabilities. CCER/CENTRIXS • Engineer and install redundant Virtual Private Network (VPN) hub and management capability at DECC-Columbus for CCER to meet system availability requirements • Design and implement an automated, cross enclave-capable identity and access management system for coalition information sharing systems including CCER.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
• Complete security testing/evaluation and user acceptance testing for CCER phased expansion including new, Joint-Staff-specified information sharing requirements and expanded Communities of Interest. CFBLNet • Conduct USJFCOM-led CWID 2011 Exercises / EMPIRE CHALLENGE 2011 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 Griffin • Continue to evolve Web Services capabilities for all CCEB Nations including necessity for recurring test and security certification efforts • Complete test, evaluation, and certification necessary to extend file publishing technologies identified in 2010 to all CCEB Nations • Complete test, evaluation, and certification necessary to extend Chat Services to all CCEB Nations based on 2010 investigations and assessments					
Accomplishments/Planned Programs Subtotals	15.723	10.722	9.379	0.000	9.379

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0301144K: *O&M, DW*	43.782	38.974	42.087		42.087	39.374	48.181	49.548	53.490	Continuing	Continuing
	4.600	10.944	6.180		6.180	3.552	5.583	6.481	2.585	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Procurement, DW/PE 0301144K: *Procurement, DW*											

D. Acquisition Strategy

MNIS uses the expertise of contractors that can satisfy cost, schedule and performance objectives. Performance-based contracts are used exclusively for this support issued under competitively awarded contracts. MNIS maximizes the use of competitive awards and requires contractors to establish and manage specific earned value data. The MNIS strategy mitigates risk by requiring Contract Performance Reviews (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance. The MNIS Acquisition Strategy is structured to retain contractors capable of satisfying cost, schedule, and performance objectives.

E. Performance Metrics

Cost & Schedule Management – MNIS utilizes earned value management to manage technical cost and schedule requirements. 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. Performance is evaluated by conducting contractor performance reviews as well as weekly critical path reviews of the MNIS release schedules to ensure tasks are on track and to mitigate risk across the entire lifecycle.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 – development & tech services	C/CPFF	Harris Alexandria, VA	9.646	2.261	Feb 2010	1.467	Feb 2011	0.000		1.467	Continuing	Continuing	13.374
Cross Domain Solutions – operational capabilities support	C/CPFF	HAI/Raytheon Arlington, VA	4.295	3.390	Feb 2010	3.461	Feb 2011	0.000		3.461	Continuing	Continuing	11.146
		Subtotal	13.941	5.651		4.928		0.000		4.928			24.520

Remarks

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	0.000		0.000		0.000		0.000	0	9.069	9.069
Federally Funded Research Develop Center (FFRDC)	C/CPFF	Mitre Arlington, VA	3.664	1.100	Oct 2009	1.100	Oct 2010	0.000		1.100	Continuing	Continuing	5.864
Program support	C/CPFF	Ingenium / SAIC Ingenium, Upper Marlboro, MD / SAIC, WDC	0.846	0.685	Sep 2009	0.000	May 2010	0.000		0.000	Continuing	Continuing	1.531

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*	

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 Support	C/CPFF	Raytheon Arlington, VA	3.698	1.351	May 2009	1.351	Feb 2011	0.000		1.351	Continuing	Continuing	6.400
DoD Services	MIPR	Various Various	0.000	0.000	Jan 2011	0.000	Jan 2011	0.000		0.000	0	0	1.710
		Subtotal	17.277	3.136		2.451		0.000		2.451	0.000	9.069	24.574

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	3.976	1.935	Oct 2009	2.000	Oct 2010	0.000		2.000	Continuing	Continuing	7.911
		Subtotal	3.976	1.935		2.000		0.000		2.000			7.911

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	35.194	10.722		9.379		0.000		9.379	0.000	9.069	57.005

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*	

	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Remarks								

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
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*	PROJECT NND: *Multinational Information Sharing*	

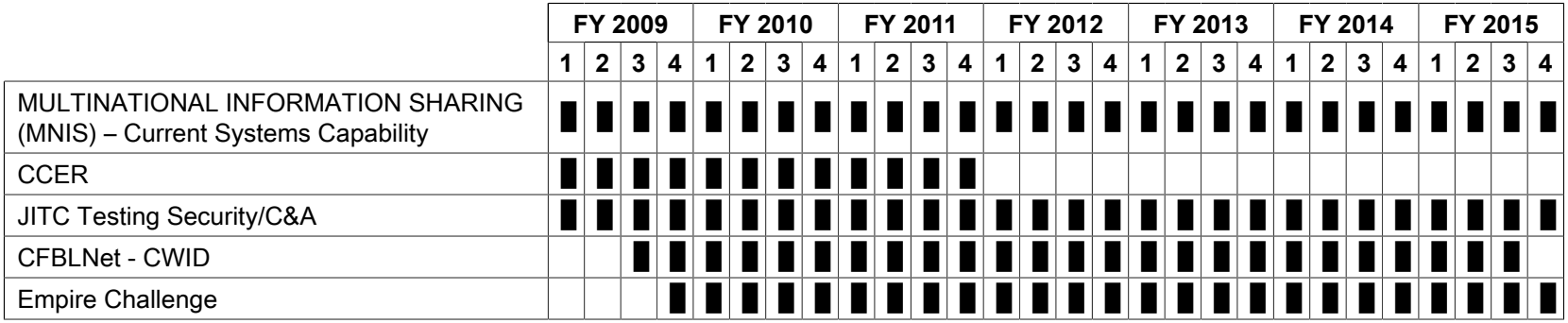

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0301144K: *Joint/Allied Coalition Information Sharing*	**PROJECT** NND: *Multinational Information Sharing*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
MULTINATIONAL INFORMATION SHARING (MNIS) – Current Systems Capability	1	2009	4	2015
CCER	1	2009	4	2011
JITC Testing Security/C&A	1	2009	4	2015
CFBLNet - CWID	3	2009	3	2015
Empire Challenge	4	2009	4	2015

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302016K: *National Military Command System-Wide Support*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	0.613	0.546	0.467	0.000	0.467	0.512	0.512	0.530	0.538	Continuing	Continuing
S32: *NMCS Command Center Engineering*	0.613	0.546	0.467	0.000	0.467	0.512	0.512	0.530	0.538	Continuing	Continuing

A. Mission Description and Budget Item Justification

The National Military Command System-Wide Support (NMCS) provides the President of the United States, the Office of the Secretary of Defense, the Office of the Chairman of the Joint Chiefs of Staff, senior executive leaders, National Military Command Centers (NMCCs), and the Executive Travel Fleet with the ability to execute Command and Control (C2) over all U.S. military forces, ensure continuous availability of emergency messaging, maintain situational and operational awareness as well as crisis action and operational capabilities.

DISA's NMCS Engineering program provides overall configuration management of NMCS assets and guides the future evolution of the multiple systems in the NMCS while continuing to meet national security needs. Elimination of the NMCS Engineering program would seriously degrade the government's ability to respond to the full spectrum of contingency operations ranging from local events (e.g., natural disasters) to global and/or nuclear war.

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.613	0.548	0.000	0.000	0.000
Current President's Budget	0.613	0.546	0.467	0.000	0.467
Total Adjustments	0.000	-0.002	0.467	0.000	0.467
• Congressional General Reductions		-0.002			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	0.467	0.000	0.467

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302016K: *National Military Command System-Wide Support*

Change Summary Explanation

The decrease of $0.002 million in FY 2010 reflects Congressional adjustments for Economic Assumptions. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302016K: *National Military Command System-Wide Support*	PROJECT S32: *NMCS Command Center Engineering*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
S32: *NMCS Command Center Engineering*	0.613	0.546	0.467	0.000	0.467	0.512	0.512	0.530	0.538	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The NMCS (National Military Command System) is the primary mechanism for gathering and disseminating information between DoD deployed forces and the senior government national security decision-makers. As such, its efficient operation is vitally important to the government's ability to respond to all contingencies ranging from local events (e.g., natural disasters, terrorism, etc.) to global and/or nuclear war. The NMCS Command Center Engineering program ensures that the NMCS is modernized to provide optimal performance to meet any and all crisis situations.

DISA's NMCS Command Center Engineering program provides innovative and cost-effective engineering solutions to ensure that the NMCS components and facilities provide the Joint Staff with the necessary emergency messaging, situational awareness, crisis action, and operational capabilities linkages between senior executive leaders and the Combatant Commands. NMCS engineering provides overall configuration management of NMCS assets and guides the future evolution of the many systems in the NMCS while continuing to meet national security needs. NMCS engineering projects support DISA's mission of providing responsive, timely, and accurate information to the warfighter. The program provides concept development, requirements definition and calibration, technical specifications, proofs-of-concept, testing, rapid prototyping, technology insertions, systems engineering and integration, and technical assessments.

If funding is reduced to the NMCS Command Center 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 VJCS Initiatives to develop and implement net-centric, web-based, tools/applications to improve NMCS information sharing and knowledge management would be seriously degraded.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
NMCS Systems Engineering	0.613	0.546	0.467	0.000	0.467

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302016K: *National Military Command System-Wide Support*	**PROJECT** S32: *NMCS Command Center Engineering*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: The FY 2009 funding ($0.613 million) resulted in NMCS command centers gaining the ability to monitor air traffic within the National Capital Region as a vital contribution to the Noble Eagle mission; via the NMCS Reference Guide (NRG), provided NMCS Program Managers (PMs)/Subject Matter Experts (SMEs) the ability to maintain program information (technical, engineering, programmatic) currency (in real-time) significantly improving the rapid dissemination of accurate information to the entire NMCS community; ensured 23 NMCS systems requiring High Altitude Electromagnetic Pulse (HEMP) hardening were adequately protected; ensured NMCS networks/communications were maintained at peak efficiency (99.9999% reliability). *FY 2010 Plans:* The FY 2010 funding ($0.546 million) will result in NMCS command centers having the ability to monitor air traffic across the entire North American continent as a vital contribution to the Noble Eagle mission; populating the NRG with program information (technical, engineering, programmatic) currency (in real-time) significantly improving the rapid dissemination of accurate information to the entire NMCS community; modernizing the crypto-logic architectures used in NMCS systems per NSA direction. *FY 2011 Base Plans:* The FY 2011 funding ($0.467 million) will result in improved NMCS/Defense National Leadership Command Capability (DNLCC) integration fostering more efficient and reliable command and control systems and communications networks enabling a more robust, responsive, scalable architecture of mobile and fixed NMCS nodes capable of meeting emerging national command and control requirements; improved missile warning capabilities via the implementation of the Space Digital Network (SDIN) as the replacement for the Missile Warning System (MWS); enhanced and more responsive decision-making capability through the improved fusion of operational data and intelligence enabled by the implementation of the alternate NMCC Joint Operations and Intelligence Center (NJOIC).					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302016K: *National Military Command System-Wide Support*	**PROJECT** S32: *NMCS Command Center Engineering*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals	0.613	0.546	0.467	0.000	0.467

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0302016K: *O&M, DW*	30.864	32.782	32.390		32.390	33.568	34.967	35.868	36.168	Continuing	Continuing

D. Acquisition Strategy

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

E. 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 2009, nine major projects were completed. All nine projects met operational/functional requirements and were accepted by their respective NMCS customers. All nine projects were completed within allocated costs/resources. Seven of the nine projects were completed within the original schedule; completion of the other two were delayed by vendor components not being ready/delivered on-time, however both were completed within the adjusted schedule.

For FY 2010 and FY2011, these same performance metrics will be tracked.

Metric Title FY 2009 Target FY 2009 Accomplishment FY 2010 Target FY 2011 target
Project Met Rqmts 100% 100% 100% 100%
Project Completed within cost allocation 100% 100% 100% 100%
Project Completed within original schedule 100% 78% 100% 100%
Project Completed within adjusted schedule 100% 100% 100% 100%

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302016K: *National Military Command System-Wide Support*	PROJECT S32: *NMCS Command Center Engineering*

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering/ Tech Services	C/CPFF	Raytheon E-Sys Arlington, VA	3.266	0.546	Nov 2009	0.467	Nov 2010	0.000		0.467	Continuing	Continuing	4.325
		Subtotal	3.266	0.546		0.467		0.000		0.467			4.325

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	3.266	0.546		0.467		0.000		0.467			4.325

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302016K: *National Military Command System-Wide Support*	PROJECT S32: *NMCS Command Center Engineering*	

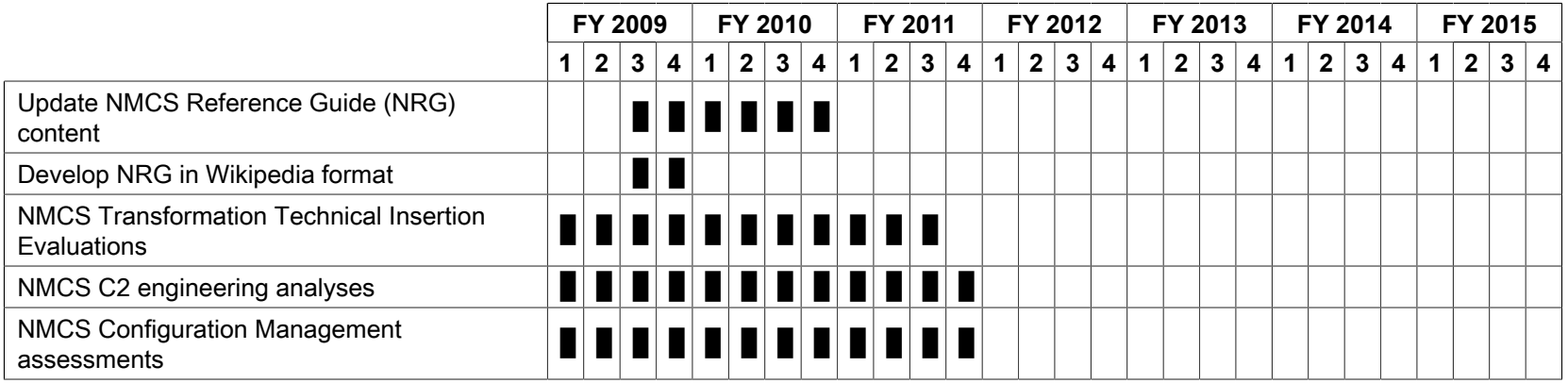

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302016K: *National Military Command System-Wide Support*	**PROJECT** S32: *NMCS Command Center Engineering*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Update NMCS Reference Guide (NRG) content	3	2009	4	2010
Develop NRG in Wikipedia format	3	2009	4	2009
NMCS Transformation Technical Insertion Evaluations	1	2009	3	2011
NMCS C2 engineering analyses	1	2009	4	2011
NMCS Configuration Management assessments	1	2009	4	2011

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	16.002	16.435	16.629	0.000	16.629	9.102	8.913	9.221	9.345	Continuing	Continuing
E65: *Modeling and Simulation*	6.395	7.163	8.526	0.000	8.526	6.048	6.114	6.318	6.397	Continuing	Continuing
KCD: *UHF SATCOM Integrated Waveform*	6.986	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
T62: *GIG Systems Engineering and Support*	2.621	9.272	8.103	0.000	8.103	3.054	2.799	2.903	2.948	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 Global Information Grid (GIG) products, services, and capabilities to the warfighter through the establishment of DISA technology positions, strategies, frameworks, and roadmaps, as well as technology development and insertion into DISA programs of record while also influencing Service/Agency program technology investments. The CTO provides the venue for technology assessment and insertion in DISA (and DoD) resulting in more efficient and effective technology investments and ultimately improved global, net-centric operations. This effort will support end-to-end reviews of all solutions, programs, and services to ensure all are consistent with GIG architecture and standards. This program supports definition of various aspects of evolving the GIG, including developing system architecture constructs for the GIG and components, providing engineering guidance for component evolution, including incorporation of new technology from industry. The program provides direct support to Military Services, COCOMS, OSD, and the Joint Staff as well as the DoD business and acquisition communities and the intelligence community. 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 DISN (DISA Network Services), Program Executive Office-Mission Assurance (PEO-MA), Joint Task Force-Global Network Operations (JTF-GNO), Enterprise Wide Systems Engineering (EWSE), Joint Communications Simulation System (JCSS) availability to all DoD, and continual taskings from other DISA programs/projects such as Net-Centric Enterprise Services (NCES), Thin Client, Centrixs Cross Enclave Requirement (CCER) (PEO-C2C), etc., for the special skills Modeling and Simulation offers. 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 Command and Control (C2) systems at the tactical edge. The Ultra High Frequency (UHF) satellite communications (SATCOM) system provides the US Department of Defense (DoD) and other US Government departments and agencies critical beyond line-of-sight communications for tactical and special forces operations. UHF SATCOM is currently the only

military system that enables users to operate communications on-the-move and under all weather conditions and cover. Demand-Assigned Multiple Access Compatible (DAMA-C) UHF SATCOM is an essential capability supporting combat search and rescue missions, and other safety-of-life operations. It will provide significantly improved sharing of legacy UHF satellite resources for tens of thousands of disadvantaged user terminals, mainly handhelds deployed as survival radios, or as support to Special Operations Forces. Any loss of funding for development of DAMA-C capability would negatively impact the US Government's ability to save lives, to share scarce satellite resources, and to increase the utility of many already fielded radios.

Lack of funding will result in extra costs (inefficient capacity planning) to the DISN; decreased DISN performance; termination of the standard DoD-wide JCSS modeling tool for Joint Tactical communications; inability to model the impact of new network technologies and the projected impact/performance/scalability of new net-centric applications. IEP risk of not funding years 2 and 3 is that DoD would continue to have a limited ability to ensure data throughout DoD is visible, available, and usable when needed and hinders any accelerated decision cycles. Not creating the IEP/ Joint- Interoperable Systems Management and Requirements Transformation (J-iSMART) Portfolio cohesive decision-support environment that clearly depicts the relationships between warfighter needs and a common data collection strategy increases the difficulty in establishing a DoD-wide basis for achieving Tactical Data Link (TDL) interoperability and data sharing in a net-centric environment. If CTO is not funded the DoD will lose this crucial capability to the warfighter that ensures engineering rigor, technical soundness, and alignment with GIG architectural constructs in the products, services, and capabilities delivered to the Services, COCOMS, OSD, Joint Staff as well as the DoD business and acquisition communities and the intelligence community.

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	15.852	17.655	0.000	0.000	0.000
Current President's Budget	16.002	16.435	16.629	0.000	16.629
Total Adjustments	0.150	-1.220	16.629	0.000	16.629
• Congressional General Reductions		-1.220			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.150	0.000	16.629	0.000	16.629

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*

Change Summary Explanation

The increase of $0.150 million in FY 2009 supported Enterprise Wide Systems Engineering (EWSE) IPTs to resolve near term technical interoperability issues affecting the GIG. The adjustments of -$1.146 million and -$0.074 million in FY 2010 are due to Congressional taxes for Federally Funded Research Development Center (FFRDC) related costs and Economic Assumptions, respectively. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*				PROJECT E65: *Modeling and Simulation*			
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
E65: *Modeling and Simulation*	6.395	7.163	8.526	0.000	8.526	6.048	6.114	6.318	6.397	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 across-theater information awareness for Combatant Commands through application solutions for integrated networks, to include DoD's missions in Iraq and Afghanistan and the Defense Information Systems Network (DISN), by: (1) supporting the development and implementation of GIG 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 JMTs 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

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*

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 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 via Net-centric capabilities is called Joint Capabilities and Limitations.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Modeling and Simulation	6.395	7.163	8.526	0.000	8.526
FY 2009 Accomplishments: Funded Enterprise Wide Systems Engineering (EWSE) IPTs to resolve near term technical interoperability issues affecting the GIG. Developed GIG technical implementation guidance, High Assurance Internet Protocol Encryption (HAIPE) Peer Discovery interoperability reference architecture and developed recommendations for implementing encryption of unclassified traffic at different network layers. • 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.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
• 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. • Baselining of the allied and coalition partners Combined Cross Enclave Requirements (CCER) communications in Southwest Asia (SWA). • HAIPE - Border Gateway Protocol Peer Discovery analyses. The Interoperability Enhancement Process executed Stage 1 initiation – Data Acquisition/Discovery. Minimum data requirements established. Data collection efforts initiated for development of the data forms in order to exchange data. FY 2009 data exercise conducted defined specific collection of units and data items. Benefit of FY 2009 efforts: established flow of authoritative, actionable information from the tactical community and evaluation of the operational utility of the information. Benchmarked the level of effort required to maintain the data flow and assess what infrastructure is required to improve the information flow. *FY 2010 Plans:* Funds EWSE efforts to resolve near term (1 to 3 years) high-priority technical issues impacting operational capabilities affecting GIG end-to-end (E2E) performance. Produce a consolidated/unified E2E Service Oriented Architecture (SOA) for the GIG core infrastructure services, GIG enterprise level technical guidance for NetOps data interoperability, and perform modeling and simulation of E2E application performance of enterprise services such as NCES in different tactical network/transport environments. This project supports DoD Programs of Record, JTF-GNO, OASD NII/DoD CIO, JCS/J6 and DoD Components. The cost per project/effort is $0.675 million. Modeling and Simulation funding supports continued, enhanced, modeling capabilities that will provide:					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
• 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. • Enterprise Wise Systems Engineering (EWSE) modeling support. The Interoperability Enhancement Process conducts a proof of concept for IEP capability at a selected Joint Exercise. Conduct initial Joint Mission Area / Military Utility Assessment. Submit Issue Paper for IEP institutionalization in May of FY 2010. Support Net Centric and C2 Capability Portfolio Managers with Joint Mission Area interoperability assessments. Five Link 16 Platforms from each Service with documented bit-level implementation data: APIS / PIDD / PRDD. Map Joint- Interoperable Systems Management and Requirements Transformation (J-iSMART) program capabilities to JCIDS Documentation, (e.g. Information Support Plan (ISP), System View (SV-11) and Net-Ready Key Performance Parameters (NR-KPPs). Define and outline integration requirements with Joint Caps & Lims. Develop a Security Classification Policy Letter and staff a DODI IEP/Joint-iSMART Security Classification Directive. *FY 2011 Base Plans:* 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.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Modeling and simulation funding will provide continued, enhanced, modeling capabilities that will provide: • 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 NS. • New/enhanced modeling tools to provide inputs to network planning in support of UCR and end-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. Increased funding in FY 2011 will permit broader revision/addition to modeling tools and techniques to more comprehensively represent the future worldwide DISN of IP convergence and widespread HAIPE deployments, to include lessons learned from pilot Real Time Services deployments in FY10. DISN modeling must support meeting the performance and reliability requirements of voice, video, data and virtually dedicated services to the users in an IP-converged architecture. Lack of funding in FY 2011 would cause DoD to continue to have a limited ability to ensure data throughout DoD is visible, available, and usable when needed and hinders any accelerated decision cycles. Not creating the IEP/Joint iSMART Portfolio cohesive decision-support environment that clearly depicts the relationships between warfighter needs and a common data collection strategy increases the difficulty in establishing a DoD wide basis for achieving Tactical Data Link (TDL) interoperability and data sharing in a net-centric environment. Limited funding would add extra costs (inefficient capacity planning) to the DISN; decrease DISN performance; terminate the standard DoD-wide Joint Communications Simulation Support (JCSS) modeling tool for Joint Tactical					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Communications Planning; and create an inability to model the impact of new network technologies and the projected impact/performance/scalability of new net-centric applications.					
Accomplishments/Planned Programs Subtotals	6.395	7.163	8.526	0.000	8.526

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0302019K: *O&M, DW*	18.154	19.348	16.868		16.868	18.047	20.513	20.937	21.190	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, Northrop Grumman, 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, dominantly 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, and 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) considered as well, dependent upon the task.

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

E. Performance Metrics

Modeling and Simulation measures its performance by determining the successful execution of processes, sub-processes, and procedures conducted by individual action officers, and from customer feedback. Individual action officers measure technical performance by constantly validating customer requirements, continuously monitoring the fidelity of the model and improving it as needed, and iteratively assessing the correctness of simulation results. Reviews with the customer on each

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*

significant analysis/modeling result, as well as close interaction throughout each task, assess with surety that the product has met customer expectations and is truly useful to them in their decisions and planning.

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. iSmart tracking matrix measures data reuse, and data validation process with feedback loops to validate data based upon JITC testing results.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Communication Simulation Systems	SS/FFP	OPNET Tech, Inc. Bethesda, MD	1.262	0.880	Aug 2010	0.880	Aug 2011	0.000		0.880	Continuing	Continuing	3.800
IP Traffic Navigator	C/CPFF	APPTIS Chantilly, VA	0.514	0.303	Jan 2010	0.320	Jan 2011	0.000		0.320	Continuing	Continuing	0.873
Modeling and Simulation Tools	SS/FFP	Noblis Falls Church, VA	0.632	0.340	Jan 2010	0.340	Jan 2011	0.000		0.340	Continuing	Continuing	0.980
JCSS	C/FFP	Booz Allen & Hamilton McLean, VA	1.092	0.000		0.000		0.000		0.000	Continuing	Continuing	1.092
Enterprise Wide Systems Engineering (EWSE) 1	C/FFP	Northrop Grumman Fairfax, VA	1.784	0.000		0.000		0.000		0.000	Continuing	Continuing	1.784
Enterprise Wide Systems Engineering (EWSE) 2	C/FFP	NRL Washington, DC	0.100	0.000		0.000		0.000		0.000	Continuing	Continuing	0.100
Enterprise Wide Systems Engineering (EWSE) 3	C/CPFF	TBD TBD	0.161	0.000		0.000		0.000		0.000	Continuing	Continuing	0.161
Enterprise Wide Systems Engineering (EWSE) 4	C/FFP	TBD TBD	0.000	1.100	Dec 2009	1.100	Dec 2010	0.000		1.100	Continuing	Continuing	3.300
Enterprise Wide Systems Engineering (EWSE) 5	C/CPFF	TBD TBD	0.000	0.426	Dec 2009	0.500	Dec 2010	0.000		0.500	Continuing	Continuing	0.500
	C/CPFF	TBD	0.000	1.670	Mar 2010	1.439	Mar 2011	0.000		1.439	Continuing	Continuing	3.147

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Enterprise Wide Systems Engineering (EWSE) 6		TBD											
Enterprise Wide Systems Engineering (EWSE) 7	MIPR	Defense & Military Agencies Defense & Military Agencies	1.420	2.044	Dec 2009	3.547	Dec 2010	0.000		3.547	Continuing	Continuing	7.011
		Subtotal	6.965	6.763		8.126		0.000		8.126			22.748

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Net-centric Applications	SS/CPFF	Comptel Arlington, VA	1.272	0.400	Jan 2010	0.400	Jan 2011	0.000		0.400	Continuing	Continuing	1.200
		Subtotal	1.272	0.400		0.400		0.000		0.400			1.200

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*	

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	8.237	7.163		8.526		0.000		8.526			23.948

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT E65: *Modeling and Simulation*	

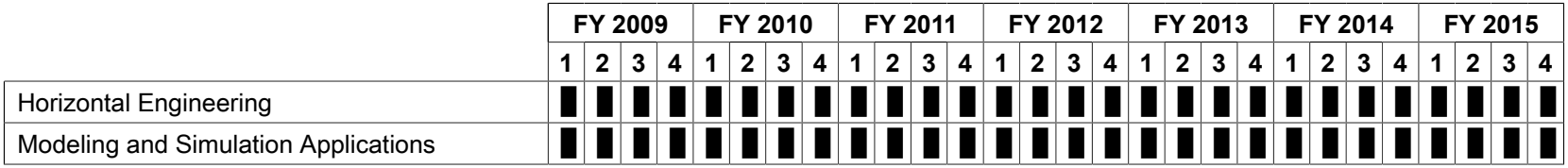

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	**PROJECT** E65: *Modeling and Simulation*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Horizontal Engineering	1	2009	4	2015
Modeling and Simulation Applications	1	2009	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT KCD: *UHF SATCOM Integrated Waveform*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
KCD: *UHF SATCOM Integrated Waveform*	6.986	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Ultra High Frequency (UHF) satellite communications (SATCOM) system provides the US Department of Defense (DoD) and other US Government departments and agencies critical beyond line-of-sight communications for tactical and special forces operations. UHF SATCOM is currently the only military system that enables users to operate communications on-the-move and under all weather conditions and cover. The present UHF SATCOM constellation is aging, and remains extremely oversubscribed. The replacement system, the Mobile User Objective System (MUOS) initial operational capability (IOC) is well behind in schedule, and will not provide final operational capability (FOC) until approximately 2015. The MUOS deployment is also contingent on the Joint Tactical Radio System (JTRS) terminals being fielded across all services. Even after MUOS and JTRS are fully deployed, the need and demand for legacy UHF SATCOM will remain. DISA developed the Integrated Waveform (IW) as an improvement on the present UHF SATCOM waveforms. The IW implementation will more than double the UHF SATCOM capacity in accesses and data throughput. The majority of fielded UHF SATCOM terminals are software programmable and can be upgraded to IW by updating the software in the field. The Commander of US Central Command (CENTCOM) reports that for the present military operations in Iraq and Afghanistan, CENTCOM was provided additional UHF SATCOM channels from the USPACOM and USEUCOM apportionments. But even with these additional channels, existing UHF SATCOM bandwidth resources are not sufficient to meet CENTCOM needs.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
UHF SATCOM Integrated Waveform	6.986	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: Continued development of IW initial capabilities in PRC-117F, PSC-5C/D, ARC-231, MD-1324A, and RT1828 radios for IW users.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT KCD: *UHF SATCOM Integrated Waveform*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: No funding in FY 2010 *FY 2011 Base Plans:* No funding in FY 2011					
Accomplishments/Planned Programs Subtotals	6.986	0.000	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

Based on current military operations, Joint Staff and STRATCOM evaluated and recommended which fielded terminals should be IW upgraded. The Net-Centric Functional Capabilities Board endorsed the recommendations and DISA took the lead for the software development for six families of deployed UHF SATCOM terminals. The terminal list includes: the PRC-117F developed by Harris Corporation; the PSC-5C, PSC-5D and ARC-231 developed by Raytheon Corporation; and the MD-1324 and RT-1828 developed by ViaSat Corporation. In addition, the software of the channel Control Terminal (CT) and the Satellite Access Control (SAC) system developed by ViaSat Corporation will be fielded to support IW. Fixed price contracts have been awarded for IW software development for the selected UHF SATCOM terminals. The software will be certified for waveform compliance and interoperability and then fielded. Software installation and operating instructions will be developed to assist the UHF SATCOM users with the software upgrades and operation of the terminals.

E. Performance Metrics

The system engineering for the IW waveform improvement for the initial IW capability is complete and published in the latest revisions of information technology standards for UHF SATCOM. Integrated Waveform demonstrations using UHF SATCOM terminals have proven the performance improvement of IW, in terms of link margin, voice quality and capacity. The performance of the terminal software developed by the various vendors will be measured against the IW standards interoperability and performance requirements. Standards compliance and interoperability testing will be performed by the Joint Interoperability Test Command (JITC) on each and every terminal type upgraded to IW. Currently, all terminals with the exception of the MD1324 and RT1828 have completed initial capability testing at JITC. In addition, the following metrics have been implemented:

1. Planned versus actual schedule (difference in days) for major milestones/deliverables.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	**PROJECT** KCD: *UHF SATCOM Integrated Waveform*

2. Number of planned versus actual funds spent.
3. Adherence of contractor deliverables to SOW specifications.
4. Compliance with Performance Plans contained in contracted efforts.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT KCD: *UHF SATCOM Integrated Waveform*

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Integrated Waveform software development for deployed legacy terminals 1	C/FFP	Harris Corp Rochester,NY	14.817	0.000		0.000		0.000		0.000	Continuing	Continuing	17.817
Integrated Waveform software development for deployed legacy terminals 2	C/FFP	Raytheon Corp Ft.Wayne, IN	12.674	0.000		0.000		0.000		0.000	Continuing	Continuing	12.674
Integrated Waveform software development for deployed legacy terminals 3	C/FFP	ViaSat Corp Carlsbad, CA	1.547	0.000		0.000		0.000		0.000	Continuing	Continuing	4.547
Channel Controller (CC) Software development	C/FFP	ViaSat Corp Carlsbad, CA	9.318	0.000		0.000		0.000		0.000	Continuing	Continuing	9.318
CC terminal Software development	C/FFP	Gen. Dynamics Scottsdale, AZ	1.824	0.000		0.000		0.000		0.000	Continuing	Continuing	1.824
Integrated Broadcast Service Software development	C/FFP	Xenotran Linthicum Heights, MD	4.604	0.000		0.000		0.000		0.000	Continuing	Continuing	4.604
		Subtotal	44.784	0.000		0.000		0.000		0.000			50.784

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT KCD: *UHF SATCOM Integrated Waveform*	

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 & Help Desk Support	C/FFP	Able Comm. Sterling, VA	9.524	0.000		0.000		0.000		0.000	Continuing	Continuing	10.017
Fielding	C/FFP	Able Comm. Sterling, VA	0.746	0.000		0.000		0.000		0.000	Continuing	Continuing	0.746
		Subtotal	10.270	0.000		0.000		0.000		0.000			10.763

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Terminal certification testing	Various/ Various	JITC Various Contracts JITC Various Contracts	3.792	0.000		0.000		0.000		0.000	Continuing	Continuing	4.285
		Subtotal	3.792	0.000		0.000		0.000		0.000			4.285

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT KCD: *UHF SATCOM Integrated Waveform*	

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	58.846	0.000		0.000		0.000		0.000			65.832

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT KCD: *UHF SATCOM Integrated Waveform*

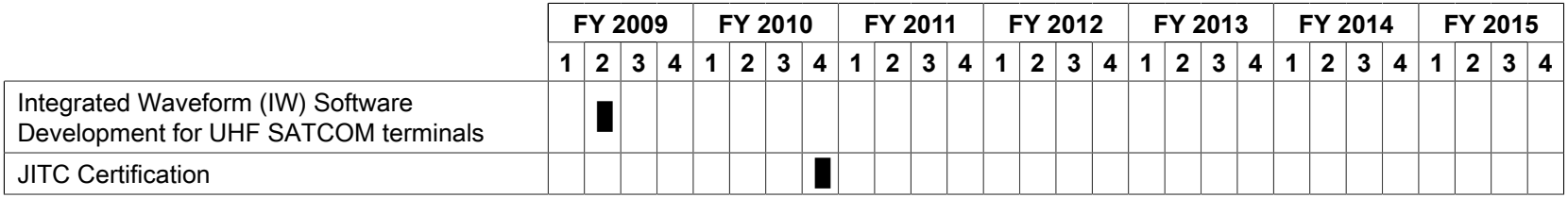

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	**PROJECT** KCD: *UHF SATCOM Integrated Waveform*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Integrated Waveform (IW) Software Development for UHF SATCOM terminals	2	2009	2	2009
JITC Certification	4	2010	4	2010

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT T62: *GIG Systems Engineering and Support*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
T62: *GIG Systems Engineering and Support*	2.621	9.272	8.103	0.000	8.103	3.054	2.799	2.903	2.948	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The DISA Chief Technology Officer (CTO) provides 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. CTO core 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. This program provides direct support to Military 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 Military Services, COCOMS, OSD, and the Joint Staff as well as the DoD business and acquisition communities and the IC.

Demand-Assigned Multiple Access Compatible (DAMA-C) 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 Ultra High Frequency satellite resources for tens of thousands of disadvantaged user terminals, mainly handhelds deployed as survival radios, or as support to Special Operations Forces. DAMA-C will operate within existing DAMA systems using legacy UHF Satellite Communications; DAMA provides better access to legacy UHF SATCOM by allowing sharing of channels, but handheld radios do not have the power or security features needed to enter current DAMA systems. DAMA-C creates subsystems within DAMA for handhelds. Development of a DAMA-C standard and infrastructure for IOC will cost $11.7 million, including assessment and/or certification by both JITC and NSA, and including commencement of fielding. FY 2010 ($7.7 million) funding will support completion of engineering and development of the DAMA-C Military Standard specification; and for design, hardware fabrication and software generation for the DAMA-C controller infrastructure and terminals for IOC. FY 2011 ($4 million) funding will support completion of IOC development, assessment/certification, fielding of infrastructure.

B. Accomplishments/Planned Program ($ in Millions)

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	**PROJECT** T62: *GIG Systems Engineering and Support*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Subtotal	2.621	9.272	8.103	0.000	8.103

FY 2009 Accomplishments:

FY 2009 funding of $2.621 million continued CTO core engineering and technical support for Technology Readiness Assessments of several key DISA programs of record; GIG FDCE/ FORGE.mil foundational efforts; cloud computing concept development, refinement and technology demonstrations; demonstration of broadcast-to-desktop video services in support of DISN Video Services (DVS) using non-traditional fielded technology; the development of the DISA and (proposed) DOD Wireless Strategy and Roadmap; 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.

FY 2010 Plans:

FY 2010 funding of $9.272 million continues CTO core support of Technology Readiness Assessments of several key DISA programs of record; cloud computing architecting and capability/ service modeling; and establishment of CTO Technology Management Framework to include a technology “Watch-List”, outreach, and focused investigation efforts of commercial and government sponsored product/service developments, to include technical assessments, for the possible inclusion of these capabilities into the next generation GIG to improve information sharing, information security, and network performance. In addition, continue support of the Thin-Client Joint Staff pilot and development of a complete systems analysis and model for extending Thin-Client to the enterprise (i.e. entire Joint Staff all COOCOMs). The increased funding of $6.651 million in FY 2010 completes engineering and development of DAMA-C Military Standard specification; and for design, hardware fabrication and software generation for the DAMA-C controller infrastructure and terminals for IOC. The DAMA-C waveform will support survival radios such as the Combat Survivor Evader Locator (CSEL) radio system, used exclusively as an emergency radio by downed pilots. Other handheld radios are also used by downed aircrews and for other survival applications, by special rescue teams and in other special circumstances, normally deep beyond enemy lines. DAMA-C will be deployed on tens of thousands of such software-defined handheld radios.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT T62: *GIG Systems Engineering and Support*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 funding of $8.103 million continues CTO core engineering and technical support for Technology Readiness Assessments of key DISA programs of record; stand-up of a inter-community (DoD and IC) cloud computing proof-of-concept resource and service capability; and refinement of methods and processes behind the CTO Technology Management Framework reflecting lessons-learned and customer/peer feedback as well as continued outreach and investigation of commercial and government sponsored products and services for possible inclusion into next generation GIG. More specifically, $1.5 million in FY 2011 will support the Joint Staff Thin Client Pilot capability to include Defense Enterprise Computing Center (DECC) hosting. In addition, it will support development and validation testing of the enterprise target and transition architectures, to include technology gap analysis and investigation into the incorporation of NCES common service offerings such as People Discovery, Service Security, and Enterprise Service Management. $4.0 million in FY 2011 will complete IOC development, assessment and/or certification, and to begin fielding of DAMA-C infrastructure for IOC. If funding is reduced for this program, the DoD will lose the crucial capability to the warfighter that ensures engineering rigor, technical soundness, and alignment with GIG architectural constructs in the products, services, and capabilities delivered to the Services, COCOMS, OSD, Joint Staff as well as the DoD business and acquisition communities and the intelligence community. The additional impacts of not funding this effort include: not satisfying VCJCS Thin Client transformation requirement to DISA or the vision for DoD Net-centricity; and the missed opportunities for DISA to deliver on its strategic vision, share critical data in order to improve the time it takes between making decision and the execution of the decision, and to accelerate delivery of new software and cloud computing services.					
Accomplishments/Planned Programs Subtotals	2.621	9.272	8.103	0.000	8.103

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT T62: *GIG Systems Engineering and Support*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0302019K : *O&M, DW*	0.691	0.726	2.168		2.168	2.233	2.472	2.236	2.279	Continuing	Continuing

D. Acquisition Strategy

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), Net-Enabled Command Capability (NECC), 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. These projects provide 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 an MLS Thin Client solution developed by AFRL 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 will provide support to DISA in its mission of providing end-to-end systems engineering for the DoD for GIG Enterprise Services. MITRE will ensure that system integration and implementation is coordinated with other major C2 systems via its support to other C2 System Program Executive Offices. DAMA-C engineering support is being provided by Defense Microelectronics Activity (DMEA).

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 each project's purpose and projected outcome, consistent with DISA mission objectives, POR technology requirements and gaps, and CTO technology themes. For more traditional projects like Thin Client and cloud computing, 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. Each project will incorporate internal processes to enhance financial reporting and track contractor spending. Monthly reports provide timely information on contractor expenditures. The Program will utilize several web-based financial management tools to obtain budget and execution information and also evaluate additional internal measures, including timeliness of equipment purchases, travel, and demonstration support to assess if each requirement effectively meets overall mission requirements. For efforts funded under technology innovation that are designed to facilitate bringing critical, mid-term, and longer-term high-potential over-the-horizon technology into programs supporting the Agency mission and ultimately the warfighter, CTO will align with best commercial and government laboratory practices regarding idea maturation and eventual product development and deployment, with several projects failing but others maturing and providing the "game-changing" capabilities only available through true technology innovation. Regularly scheduled In-progress Program Reviews (IPRs) meetings to monitor status of engineering projects/tasks. Each current project/task is evaluated

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT T62: *GIG Systems Engineering and Support*

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT T62: *GIG Systems Engineering and Support*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering / Tech Serives	FFRDC	MITRE McLean, VA	19.764	1.032	Oct 2009	1.632		0.000		1.632	Continuing	Continuing	22.428
GIG-Technical Insertion Engineering	C/FFP	SRA, Inc. Fairfax, VA	1.211	0.410	Oct 2009	0.851	Oct 2010	0.000		0.851	Continuing	Continuing	2.472
Engineering / Tech Serives	MIPR	Defense Microelectronics Activity N/A	0.000	7.700	Mar 2010	4.000	Mar 2011	0.000		4.000	0	11.700	11.700
Engineering Support for Thin Client	MIPR	Air Force Research Laboratory Air Force Research Laboratory	0.000	0.000		1.500	Sep 2011	0.000		1.500	0	1.500	1.500
		Subtotal	20.975	9.142		7.983		0.000		7.983	0.000	13.200	38.100

Remarks

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Industrial Tech Research	MIPR	DISA Computing Service	0.051	0.130	Oct 2009	0.120	Oct 2010	0.000		0.120	Continuing	Continuing	0.428

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT T62: *GIG Systems Engineering and Support*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		(CSD)											
		Subtotal	0.051	0.130		0.120		0.000		0.120			0.428

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	21.026	9.272		8.103		0.000		8.103	0.000	13.200	38.528

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	PROJECT T62: *GIG Systems Engineering and Support*	

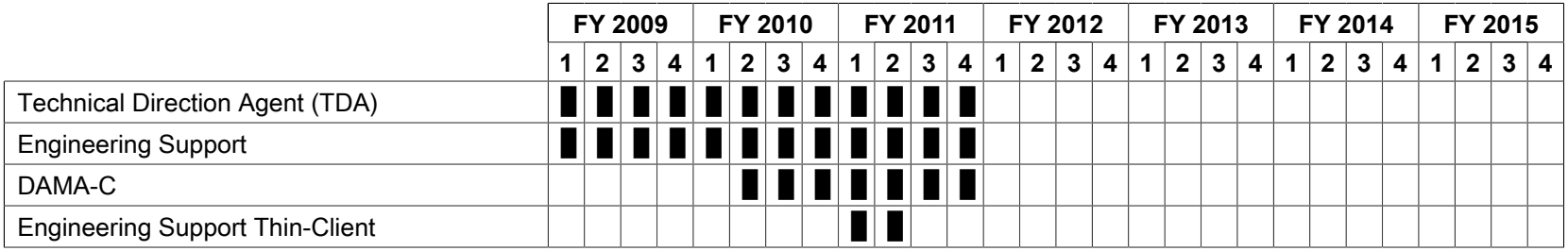

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	**PROJECT** T62: *GIG Systems Engineering and Support*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Technical Direction Agent (TDA)	1	2009	4	2011
Engineering Support	1	2009	4	2011
DAMA-C	2	2010	4	2011
Engineering Support Thin-Client	1	2011	2	2011

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	8.108	9.157	9.130	23.125	32.255	8.452	8.482	8.763	8.896	Continuing	Continuing
T82: *DISN Systems Engineering Support*	5.537	7.209	7.220	23.125	30.345	7.494	7.527	7.780	7.900	Continuing	Continuing
PC01: *Presidential and National Voice Conferencing*	2.571	1.948	1.910	0.000	1.910	0.958	0.955	0.983	0.996	Continuing	Continuing

Note

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

**DoD has 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 System Network (DISN) is the Department of Defense (DoD) consolidated worldwide telecommunications capability providing secure, end-to-end information transport for DoD operations, providing the warfighters and the Combatant Commanders (COCOMs) with a robust Command, Control, Communications, Computers, and Intelligence (C4I) infrastructure to support DoD mission and business requirements.

DISN Operational Support Systems: The DISN Operational Support Systems (OSS) provides the Information Technology (IT) components that instrument and automate the Operations, Administration, Maintenance, and Provisioning (OAM&P) functions for the DISN. OSS funds the engineering and integration efforts needed to integrate the management of network components into a single DISN-wide view for DISN managers and operators. This facilitates more responsiveness to users' provisioning requirements, quicker detection of and response to problems and outages, network tuning for more efficiency and performance, and more cost-effective management. As the DISN undergoes continuous technology refreshment, management capabilities of new components must be integrated into the OSS. The OSS incorporates a Service Oriented Architecture and is adhering to industry standards and best practices. DISA works actively with the Military Services to ensure that the DISN OSS and the Services' tactical networks share information and provide an end-to-end view for network operators.

DISN Systems Engineering Support: Funding supports systems engineering for technology refreshment of the Defense Red Switch Network (DRSN). This includes, (a) complete development of a modified version of the DSS-2A switch as a replacement for large capacity SDS-1 Red Switches that are at End-of-Life (EOL), and (b) to develop replacements for components and peripherals of the Red Switch to keep the entire DRSN system sustainable. The products developed and accredited as a result of this effort will be purchased and fielded by the Military Services and other authorized users of the network.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*

*Distributed Tactical Communications System (DTCS):
The **DTCS is a new variation of the Iridium Satellite Phone commercial offering used by the warfighter under the Enhanced Mobile Satellite Service (EMSS). 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 are required with software modifications to allow Iridium satellites to "relay" information between the satellites. A separate Network Management capability is required since the new service cannot leverage current the standard commercial Iridium Network Manager. Funding provides engineering, development and testing resources to transition the Naval Surface Weapons Center's (NSWC) Technology Prototype to a fully fielded operational capability.

NEADN/PNVC: 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.

If funding is not provided, the DISN will not be able to support the new and changing missions of the warfighter, technology refreshment efforts, and changing technology. Lack of sufficient funding will significantly impact the implementation of an enhanced, survivable voice conferencing capability to the President and other decision makers.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long Haul Communications*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	8.485	9.406	0.000	0.000	0.000
Current President's Budget	8.108	9.157	9.130	23.125	32.255
Total Adjustments	-0.377	-0.249	9.130	23.125	32.255
• Congressional General Reductions		-0.249			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-0.377	0.000	9.130	23.125	32.255

Change Summary Explanation

The FY 2009 reduction of -$0.377 million due to below budgeted execution of DISN systems Engineering Support on the DSS-2A Switch. The FY 2010 reduction of -$0.249 million is a result of Congressional taxes for FFRDC related costs and Economic Assumptions. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
T82: *DISN Systems Engineering Support*	5.537	7.209	7.220	23.125	30.345	7.494	7.527	7.780	7.900	Continuing	Continuing
Quantity of RDT&E Articles											

Note

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

**DoD has 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

Funds systems engineering of Operations Support Systems (OSS), which are comprised of the system management, network management, and element management systems. The OSS provides service support systems and network operations of the DISN and other entities. Specifically, this funding provides system engineering for the Data Mediation, Information Sharing Services for Voice, and Network Management Solutions for New DISN Element Technologies.

Provides systems engineering for Voice over Secure Internet Protocol (VoSIP) Real Time Services (RTS) for the DISN-wide network element management of day-to-day operations of the DoD and serves as the core DoD wartime communications for the President and Secretary of Defense, the Joint Chiefs of Staff (JCS), the Combatant Commands, and other critical users. Provides the engineering to consolidate operational communications networks into DISN and supports the convergence of Service and Agency network services (i.e. telephony, video, etc) into the Global Information Grid (GIG). Also funds system engineering evaluations and development of critical features for Secure VoIP RTS that is beyond the features of commercial VoIP offerings. VoSIP provides SECRET high secure voice service to over 90,000 DoD users at approximately 100 user enclaves worldwide. Expanded capabilities provide greater user productivity. The active directory service will improve and speed up the ability to locate users across the network. VoSIP system engineering is not funded beyond FY 2009.

Funds software development and system integration and testing for technology refreshment of the current DSS-2A Secure Voice Switch technology, with improvements to increase the capacity of the switch so that it can be used to replace the large SDS-1 model switches in the Defense Red Switch Network (DRSN) which are at end-of-life and must be replaced. There are no other viable alternatives that provide multi-level security, quality of service, assured service, conferencing and conference management, plus radio/satellite interfaces available in the near or mid-term. This funding provides incremental multi-year efforts to scale up the existing DSS-2A switch capacity so that the Services and Agencies can purchase and install the modified switch to replace their obsolete SDS-1 switches. The DSS-2A modification effort completes in FY 2011.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*

Funds the Engineering Change Proposal (ECP) process for other DRSN peripherals such as remote phone distribution multiplexers, telephones and STE's and Milstar systems interfaces. Secure Voice Switches must meet a number of military unique requirements for multilevel security, extensive conferencing and conference management capabilities and features, and gateway functions that are not available in commercial products. Because of 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 that are necessary to ensure the continued supportability of the system. Substitution of a commercial product is impractical due to requirements for interoperability and security. The cost of modifying another vendor's commercial product has been examined and would be prohibitive and no commercial vendor has expressed interest, especially considering the limited market. Starting in FY 2010, system engineering for DRSN shifts to funding and executing ECP to update switch components and peripherals to replace obsolete parts and ensure continued logistics supportability.

The DTCS funding will provide engineering, development, and testing resources to transition the Naval Surface Weapons Center's (NSWC) Technology Prototype to a fully fielded operational capability. The Prototype Service and 100 handsets are already fielded as part of the NSWC Pilot effort. Follow-on Research and Development (R&D) efforts include additional handset procurement of 2 handset variants (Command and Control and Secret Command and Control), Network Management System, User Control Interface, and Satellite Software Modifications. Life-Cycle support issues will be addressed through the Defense Working Capital Fund.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
OSS Activity	0.945	1.490	1.317	0.000	1.317
FY 2009 Accomplishments: Single Sign-On Solution – In FY 2009, funding procured professional services for the Single Sign-on Solution, supporting a single point of entry to the Operations Support Systems (OSS) Central, the main operator interface into the DISN OSS. The OSS Central provides a unified information portal as a single point of access for obtaining information about the DISN. Web Based Mediation – In FY 2009, funding provided systems research, evaluation, test, and development of a web-based mediation/administration Common Communications Vehicle (CCV). The CCV provides functionality to move the data mapping and configuration activities from software development to application configuration, allowing Tier III sustainment personnel to make faster					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
changes to the data mediation system in support of changing requirements. The completion of the CCV marks the end of Phase I of the data mediation phase. *FY 2010 Plans:* In FY 2010, the funding will provide the capability of standardization for all data sharing interfaces for network management data and the implementation of a shared data model on service oriented architecture for all OSS applications. The objective of this effort is to support the information sharing objectives of the DoD. In addition, this provides a unified view and situational awareness through a common user interface for obtaining information about the DISN. Specific activities for FY 2010 include completion of Phase II of the data mediation project, which entails operationalizing the data mediator tool and enabling it to deploy mediations to the Common Communications Vehicle (CCV). *FY 2011 Base Plans:* In FY 2011, the funding will 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 Operations System Supports (OSS) applications. 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. 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 CCV in the production environment. This funding is critical in providing the integration of OSS systems through the CCV. The CCV provides network management data interface and mediation capabilities among OSS systems utilized by DISN network operators and customers. This function is critical to ensure the operational awareness and viability of the DISN. Funding this initiative will result in decommissioning of stove-pipe network management systems which will decrease costs and time caused effects required to exchange data among systems.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
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. These capabilities are critical to integrate the data for these services into the DISN OSS. This supports network operations with a unified view of the network management and situation awareness of DISN voice services along with the timely provisioning of these services to DISN customer. 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. Because the DISN is evolving, the Operations System Supports (OSS) must integrate network management of new technologies and services. FY 2010 and FY 2011 activities include research on network management solutions for Secure Voice over IP and Real Time Services (RTS) technologies. Providing network management in parallel with the deployment of new DISN services and technologies is vital to supporting network operations and ultimately DISN customers. Funding is required to support the new and changing missions of the warfighter, technology refreshment efforts, changing technology and industry standards.					
VoSIP *FY 2009 Accomplishments:* System Engineering for Voice over Secure IP (VoSIP) – In FY 2009, DISA initiated a project to develop an active directory capability for use throughout the VoSIP user community. The project is expected to deliver a vendor neutral interface control document, one test and two operational installations of the directory service in support of the over 90,000 users of the service.	0.615	0.000	0.000	0.000	0.000
Tech Refresh (DSS-2A)	3.977	3.729	3.912	0.000	3.912

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Systems Engineering for DSS-2A Modification for large switch replacement – FY 2009 continued development of hardware and software as part of the multi-year effort. Completion of Phase I productized the modified chassis with fiber optic ports, revised the Bus Controller and new Matrix Daughter cards, and enabled implementation of the expanded capacity capability. Completed software development and integration as defined in Phase II of the project, which delivered a two chassis switch configuration to the government for testing at the Joint Interoperability Test Command (JITC). Continued development work on Phase III of the project including detailed functional and software specification, and beginning phases of software development. *FY 2010 Plans:* FY 2010 funding continues work on the Phase III component of the effort including system integration, software modification, system testing and information assurance validation and accreditation of a modified version of the existing DSS-2A secure voice switch, as part of the effort leading to delivery or a prototype system for government testing and accreditation. This modification is required because the legacy switch is at end-of-life and is not expected to be logistically supportable past FY 2010. In addition, this modified version will support up to three times the capacity of the current DSS-2A model, with all the same military unique features and capabilities. *FY 2011 Base Plans:* FY 2011 funding supports the delivery of the Phase III system for testing and accreditation, with continued project cleanup and testing support. Completion of phase III will be a complete large capacity secure voice switch capable of replacing the large obsolete SDS-1 switches currently in use in the DRSN and the White House Communications Agency controlled Secure voice network. Once developed and accredited, the Services and Defense agencies will procure and install the switches. If not funded, critical testing and accreditation activities would be affected which could negatively impact the viability of the entire multiyear effort.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
ECP DRSN Components	0.000	1.990	1.991	0.000	1.991
FY 2010 Plans: FY 2010 initiates a regular process to re-engineer and redesign the Defense Red Switch Network (DRSN) switch components and peripherals to address electronic component obsolete parts, issues and maintain the viability of the Defense Red Switch Network (DRSN) switch system. Several Engineering Change Proposals (ECPs) per year will be funded for development and testing of redesigned and replacement parts in order to maintain the logistics supportability of the entire system. FY 2010 will concentrate on the ECP for the switch processor carrier board. This will replace the current processor card which has an announced end of life cycle. The replacement will use the existing matrix daughter card without modification and be backward compatible. *FY 2011 Base Plans:* FY 2011 funding will continue the regular process to re-engineer and redesign DRSN components and peripherals and is expected to include ECPs for the Command Center Console and one switch interface card or phone. If not funded, the DRSN will be unable to re-engineer components and peripherals to eliminate obsolete components that would result in degraded performance and negatively impacting the sustainability of the installed systems.					
DTCS	0.000	0.000	0.000	23.125	23.125
*Distributed Tactical Communications System (**DTCS) supports the warfighter by enabling faster mobile satellite phone services. The enhanced capability requires Satellite Software modifications, new handsets, and a separate Network Management System. *FY 2011 Base Plans:* N/A					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: Pending approval of the FY 2010 Joint Urgent Operational Needs (JUON) Reprogramming Action, the program will begin delivery of CC-0278 capability to Central Command (CENTCOM) Joint Urgent Operational Needs (JUON); USFOR-A request for 4,215 units; Field Application and Network Management tools; Handset modification for Command and Control (C2) functionality; extended range, multi-beam capability; and integrate for tactical vehicle use. In FY 2011, the program will complete delivery of CC-0278 capability to CENTCOM JUON; complete Field Application and Network Management tools; and Handset modification C2 functionality. The warfighter will benefit from the push-to-talk, network communications beyond the line-of-sight, on-the-move command and control functionality. The additional handsets with the added capability will have increased range, multi-beam network management capability, and enhanced handset display and data.					
Accomplishments/Planned Programs Subtotals	5.537	7.209	7.220	23.125	30.345

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0303126K: *O&M, DW*	106.728	102.396	104.396		104.396	105.946	118.807	122.510	125.530	Continuing	Continuing
• Procurement, DW/PE 0303126K: *Procurement, DW*	94.784	90.311	86.206		86.206	86.254	86.597	89.596	90.860	Continuing	Continuing

D. Acquisition Strategy

Products acquired for OSS requirements are professional services, network management software, supporting hardware, and development tools. Professional services will be procured through existing contracts available to DISA such as DISN Global Services (DGS) and DNMSS-G (and replacement vehicles), are either time

and materials (T&M), or firm fixed price (FFP). 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.

The DSS-2A large switch modification and DRSN components will use an existing Air Force contract with the DSS-2A manufacturer to perform the development and modification work, system integration and testing support.

The DTCS effort will be initiated within 96 hours of receipt of funding. Meetings will be held at NSWC between all government and contractor teams to baseline the system, adjudicate risk, and develop common system expectations. A Preliminary Design Review (PDR) will be held 30 days after award of the R&D effort. PDR will result in a freeze of all requirements. A Critical Design Review (CDR) will be held 60 days after the PDR. CDR will result in a freeze of the total DTCS system. CDR also begins the Government Configuration Management process for change control and risk management. A planned 4-hour review will be held monthly to assess all open actions and oversee all program actions.

E. Performance Metrics

1. Planned versus actual schedule (difference in days) for major milestones/deliverables.
2. Number of planned versus actual funds spent.
3. Adherence of contractor deliverables to SOW specifications.
4. Compliance with Performance Surveillance Plans contained in contracted efforts.

	FY 2009	FY 2010	FY 2011	
Development of OSS Central		Execute funds within	Execute Funds within	
(Completion planned FY 2011)		5%of Planned	5% of Planned	
Data Mediation - Phase I	Plan Met			
Data Mediation - Phase II			Execute funds within	Execute Funds within
(Completion planned FY 2010)			5% of Planned	5% of Planned
Network Mgt Solution – VoIP		Execute funds within	Execute Funds within	
(Completion planned FY 2011)	5% of Planned	5% of Planned		
Network Mgt Solution – RTS		Execute funds within	Execute Funds within	
(Completion planned FY 2011)	5% of Planned	5% of Planned		
Specific DRSN VoSIP Metrics :				
Delivery and successful award of contract			100% Planned	100% Planned
DSS-2A and DRSN Components :				
Delivery and successful award of contract			100% Planned	100% Planned

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long Haul Communications*	**PROJECT** T82: *DISN Systems Engineering Support*

On Time, within cost estimate delivery	95%	95%
DTCS Effort:		
Deliver C2S Handset for Operational Testing		Execute funds within
(Completion planned FY 2011)		5% of Planned
Procure Initial Radio Order		Execute funds within
(Completion planned FY 2011)		5% of Planned
Net Manager Phase 2 Capability		Execute funds within
(Completion planned FY 2011)		5% of Planned
Production capability		Execute funds within
(Completion planned FY 2011)		5% of Planned

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Single Sign-on	TM	SAIC DISA	1.397	0.000		0.000		0.000		0.000	0	1.397	Continuing
Web-Based Mediation	TM	Apptis DISA	0.432	0.460	Jan 2010	0.420	Jan 2011	0.000		0.420	0	1.312	Continuing
Information Sharing Services for Voice	TM	Apptis DISA	0.000	0.529	Jan 2010	0.359	Jan 2011	0.000		0.359	0	0.888	Continuing
Network Management Solutions for New DISN Element Technologies	TM	SAIC DISA	0.180	0.501	Mar 2010	0.569	Mar 2011	0.000		0.569	0	1.250	Continuing
Systems Engineering for VoSIP	Various/ CPFF	Various Performers Various	1.218	0.000		0.000		0.000		0.000	0	1.218	Continuing
Systems Engineering for DRSN Components & Peripherals	TM	Raytheon FL	0.000	1.990	Nov 2009	1.991	Nov 2010	0.000		1.991	Continuing	Continuing	Continuing
Systems Engineering for DSS-2A Secure Voice Switch Replacement	TM	Raytheon FL	11.551	3.729	Nov 2009	3.881	Oct 2010	0.000		3.881	Continuing	Continuing	Continuing
Distributed Tactical Communications System (DTCS)	MIPR	Naval Surface Warfare Center VA	0.000	0.000		0.000		13.125	Oct 2010	13.125	Continuing	Continuing	13.125
		Subtotal	14.778	7.209		7.220		13.125		20.345	0.000	6.065	13.125

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
*Distributed Tactical Communications System (**DTCS)	MIPR	JITC Ft. Huachuca, AZ	0.000	0.000		0.000		10.000	Oct 2010	10.000	Continuing	Continuing	10.000
		Subtotal	0.000	0.000		0.000		10.000		10.000			10.000

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	14.778	7.209		7.220		23.125		30.345	0.000	6.065	23.125

Remarks

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

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

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*	

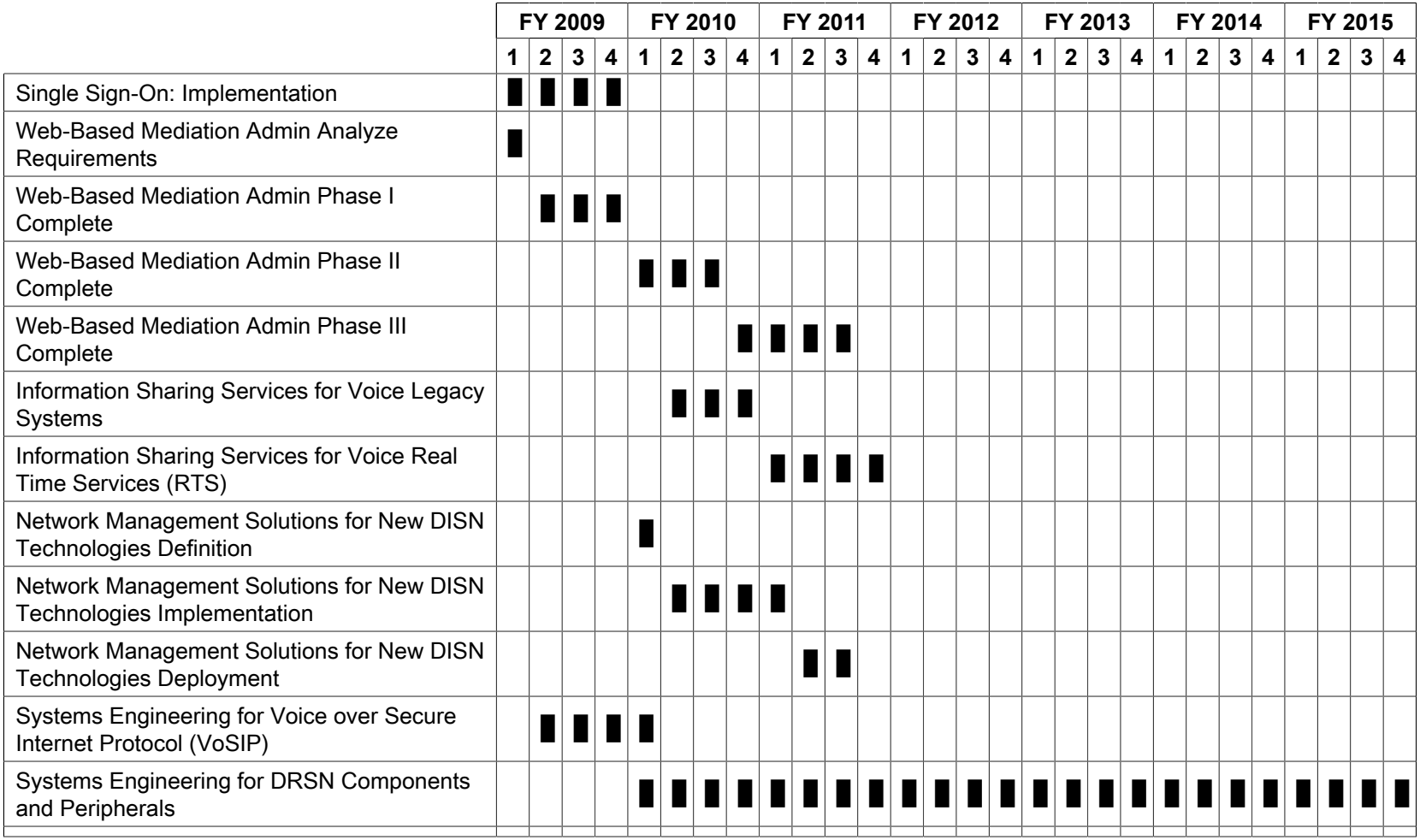

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT T82: *DISN Systems Engineering Support*

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
Systems Engineering for DSS-2A Secure Voice Switch Replacement	■	■	■	■	■	■	■	■	■	■	■																	

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long Haul Communications*	**PROJECT** T82: *DISN Systems Engineering Support*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Single Sign-On: Implementation	1	2009	4	2009
Web-Based Mediation Admin Analyze Requirements	1	2009	1	2009
Web-Based Mediation Admin Phase I Complete	2	2009	4	2009
Web-Based Mediation Admin Phase II Complete	1	2010	3	2010
Web-Based Mediation Admin Phase III Complete	4	2010	3	2011
Information Sharing Services for Voice Legacy Systems	2	2010	4	2010
Information Sharing Services for Voice Real Time Services (RTS)	1	2011	4	2011
Network Management Solutions for New DISN Technologies Definition	1	2010	1	2010
Network Management Solutions for New DISN Technologies Implementation	2	2010	1	2011
Network Management Solutions for New DISN Technologies Deployment	2	2011	3	2011
Systems Engineering for Voice over Secure Internet Protocol (VoSIP)	2	2009	1	2010
Systems Engineering for DRSN Components and Peripherals	1	2010	4	2015
Systems Engineering for DSS-2A Secure Voice Switch Replacement	1	2009	3	2011

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT PC01: *Presidential and National Voice Conferencing*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
PC01: *Presidential and National Voice Conferencing*	2.571	1.948	1.910	0.000	1.910	0.958	0.955	0.983	0.996	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, and 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. Lack of sufficient funding will significantly impact the implementation of an enhanced, survivable voice conferencing capability to the President and other decision makers.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
NEADN/PNVC Systems Engineering	2.571	1.948	1.910	0.000	1.910
NEADN/PNVC Systems Engineering - Conduct analyses for continuity of NEADN voice conferencing for national/military leaders through the PNVC deployment. Continue engineering, technical analysis, development and coordination to ensure terminal, baseband, and satellite synchronization for voice conferencing amongst senior leaders. *FY 2009 Accomplishments:* In FY 2009 funding was used to complete engineering analyses that supported the technical specifications of the Defense Red Switch Network (DRSN) interface equipment; efforts to scope					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT PC01: *Presidential and National Voice Conferencing*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
equipment changes required to interface the PNVC baseband equipment with the AEHF GEMS terminal; the development of a requirements document for special users; and the transition of survivable networks to a Net-Centric environment. *FY 2010 Plans:* In FY 2010 funding will be 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 will initiate the development of MSD-III and other DRSN interface equipment, which continues into FY 2011. Funding will be used to begin preparations for PNVC Baseband Interface Group (BIG) development contract including refreshing the equipment specifications. *FY 2011 Base Plans:* In FY 2011, development contract preparations will continue towards the goal of a contract award in 1Q FY 2012. Funding will be used to conduct development testing and evaluation of the MSD-III PNVC/DRSN interface equipment.					
Accomplishments/Planned Programs Subtotals	2.571	1.948	1.910	0.000	1.910

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0303126K: *O&M, DW*	106.728	102.396	104.396		104.396	105.946	118.807	122.510	125.530	Continuing	Continuing
• Procurement, DW/PE 0303126K: *Procurement, DW*	94.784	90.311	86.206		86.206	86.254	86.597	89.596	90.860	Continuing	Continuing

D. Acquisition Strategy

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

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT PC01: *Presidential and National Voice Conferencing*

E. Performance Metrics

PNVC project metrics track the development of various documents: Project Management Plan (PMP), Concept of Operations (CONOPS), System Engineering Plan (SEP), 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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT PC01: *Presidential and National Voice Conferencing*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering for NEADN/PNVC	FFRDC	Aerospace Corp Falls Church, VA	0.765	0.400	Nov 2009	0.378	Mar 2010	0.000		0.378	0	1.543	N/A
Systems Engineering for NEADN/PNVC 2	Various/ CPFF	Booz Allen Hamilton McLean, VA	2.314	0.500	Mar 2010	0.600	Dec 2010	0.000		0.600	0	3.414	N/A
Systems Engineering for NEADN/PNVC 3	Various	Various Various	1.974	1.048		0.932		0.000		0.932	0	3.954	N/A
		Subtotal	5.053	1.948		1.910		0.000		1.910	0.000	8.911	

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	5.053	1.948		1.910		0.000		1.910	0.000	8.911	

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long Haul Communications*	PROJECT PC01: *Presidential and National Voice Conferencing*	

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
Systems Engineering for NEADN/PNVC	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
GEMS Eng Study	■	■	■	■																								
Conference Management Study			■	■																								
PNVC CONOPS					■	■	■	■																				
PNVC Baseband Interface Group (BIG) Specification Refresh						■	■	■																				
PNVC Capabilities Production Doc					■	■	■																					
PNVC/DRSN Interface Spec Dev			■	■	■																							
PNVC/DRSN Interface Equip Dev						■	■	■	■	■	■	■																
PNVC Net-centricity analysis				■	■	■	■																					
Special Users Requirements Doc				■	■																							
PNVC Development Contract Preps					■	■	■	■	■	■	■	■																

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long Haul Communications*	**PROJECT** PC01: *Presidential and National Voice Conferencing*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Systems Engineering for NEADN/PNVC	1	2009	4	2015
GEMS Eng Study	1	2009	4	2009
Conference Management Study	3	2009	4	2009
PNVC CONOPS	1	2010	4	2010
PNVC Baseband Interface Group (BIG) Specification Refresh	2	2010	4	2010
PNVC Capabilities Production Doc	1	2010	3	2010
PNVC/DRSN Interface Spec Dev	3	2009	1	2010
PNVC/DRSN Interface Equip Dev	2	2010	4	2011
PNVC Net-centricity analysis	4	2009	3	2010
Special Users Requirements Doc	4	2009	1	2010
PNVC Development Contract Preps	1	2010	4	2011

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	9.615	9.789	9.529	0.000	9.529	9.996	9.998	10.351	10.506	Continuing	Continuing
T64: *Special Projects*	4.963	4.945	4.795	0.000	4.795	5.242	5.213	5.401	5.477	Continuing	Continuing
T70: *Strategic C3 Support*	4.652	4.844	4.734	0.000	4.734	4.754	4.785	4.950	5.029	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 and 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.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	9.659	9.830	0.000	0.000	0.000
Current President's Budget	9.615	9.789	9.529	0.000	9.529
Total Adjustments	-0.044	-0.041	9.529	0.000	9.529
• Congressional General Reductions		-0.041			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-0.044	0.000	9.529	0.000	9.529

Change Summary Explanation

In FY 2009, less funding (-$0.044 million) was required to provide contract support to expand the development of an architecture decision support tool to assist OSD/NII in making better informed investment and budget decisions. The FY 2010 adjustments reflect of -$0.041 million due to a Congressional reduction for Economic Assumptions. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	PROJECT T64: *Special Projects*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
T64: *Special Projects*	4.963	4.945	4.795	0.000	4.795	5.242	5.213	5.401	5.477	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 Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Special Projects T64	4.963	4.945	4.795	0.000	4.795
Classified. *FY 2009 Accomplishments:* Classified. *FY 2010 Plans:* Classified. *FY 2011 Base Plans:* Classified.					
Accomplishments/Planned Programs Subtotals	4.963	4.945	4.795	0.000	4.795

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	**PROJECT** T64: *Special Projects*

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

Classified.

E. Performance Metrics

Classified.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	PROJECT T64: *Special Projects*

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 and Integration	C/CPFF	Verizon Arlington, VA	34.999	4.945	Dec 2009	4.795	Dec 2010	0.000		4.795	Continuing	Continuing	Continuing
		Subtotal	34.999	4.945		4.795		0.000		4.795			

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	34.999	4.945		4.795		0.000		4.795			

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	PROJECT T70: *Strategic C3 Support*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
T70: *Strategic C3 Support*	4.652	4.844	4.734	0.000	4.734	4.754	4.785	4.950	5.029	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 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 Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Systems Analysis	0.590	0.658	0.678	0.000	0.678
FY 2009 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 updates to the NC3 Scenarios document. Funding also supported development and engineering of the future NC3 architecture.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	PROJECT T70: *Strategic C3 Support*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Funding will provide 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 2011 Base 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 updating the NC3 future architecture; and engineering, documenting, and assessing the nuclear and senior leadership C3 system architectures and vulnerabilities.					
Operational Assessments *FY 2009 Accomplishments:* Funding provided contracts to plan and conduct recurring Strategic Operational Assessments of the NC3 system. *FY 2010 Plans:* Funding is required for contract support to plan, conduct and analyze results of recurring Strategic Operational Assessments. *FY 2011 Base Plans:* Funding is required for annual operational reports and assessment plans associated with planning, executing, analyzing and reporting on worldwide operational assessments of the NC3 system.	2.277	2.276	2.351	0.000	2.351
Systems Engineering	1.785	1.910	1.705	0.000	1.705

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	PROJECT T70: *Strategic C3 Support*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Funding provided contract support to expand the development of an architecture decision support tool to assist OSD/NII in making better informed investment and budget decisions, a baseline assessment of airborne communications for the Senior Leadership C3 System (SLC3S), and overarching systems engineering support to the Air Force for the National Airborne Operations Center and other aircraft. *FY 2010 Plans:* Funding will provide for continued development and evolution of the decision support tool by certifying and accrediting the tool to operate on a classified network, and additional engineering support for airborne systems and command centers. *FY 2011 Base Plans:* Funding will expand the architecture decision support capability by adding more mission areas, more agencies and components; modeling and simulation support for the SLC3S; and continued engineering for airborne command centers and other aircraft.					
Accomplishments/Planned Programs Subtotals	4.652	4.844	4.734	0.000	4.734

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0303131K: *O&M, DW*	8.981	5.571	4.851		4.851	4.949	5.027	5.189	5.300	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.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	PROJECT T70: *Strategic C3 Support*

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	PROJECT T70: *Strategic C3 Support*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	TBD/CPAF	Science Applications Int'l. Corporation McLean, VA	3.663	0.658	Feb 2010	0.678	Feb 2011	0.000		0.678	Continuing	Continuing	5.048
Systems Engineering 2	TBD/CPAF	Raytheon Company Arlington, VA	11.380	2.276	Feb 2010	2.351	Feb 2011	0.000		2.351	Continuing	Continuing	16.052
Systems Engineering 3	TBD/CPFF	Booz Allen & Hamilton Falls Church, VA	3.538	0.450	Nov 2009	0.285	Nov 2010	0.000		0.285	Continuing	Continuing	4.273
Systems Engineering 4	TM	Raytheon Company Arlington, VA	1.688	0.460	Feb 2010	0.420	Feb 2011	0.000		0.420	Continuing	Continuing	2.618
Systems Engineering 5	TBD/CPFF	SRA Int'l Fairfax, VA	4.500	1.000	Oct 2009	1.000	Oct 2010	0.000		1.000	Continuing	Continuing	5.500
		Subtotal	24.769	4.844		4.734		0.000		4.734			33.491

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	24.769	4.844		4.734		0.000		4.734			33.491

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	**PROJECT** T70: *Strategic C3 Support*

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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 Review Report		■	■	■	■	■	■	■	■	■	■																	
Systems Analysis Documents		■	■	■	■	■	■	■	■	■	■	■																
Plans and Procedures	■	■	■	■	■	■	■	■	■	■	■																	
Operational Assessment	■	■	■	■	■	■	■	■	■	■	■	■																
Staff Assistance Visits			■	■	■	■	■	■	■	■	■	■																
Aircraft/Command Center Engineering	■	■	■	■	■	■	■	■	■	■	■	■																

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303131K: *Minimum Essential Emergency Communications Network (MEECN)*	**PROJECT** T70: *Strategic C3 Support*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
NC3 Review Report	2	2009	3	2011
Systems Analysis Documents	2	2009	4	2011
Plans and Procedures	1	2009	3	2011
Operational Assessment	1	2009	4	2011
Staff Assistance Visits	3	2009	4	2011
Aircraft/Command Center Engineering	1	2009	4	2011

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303148K: *DISA Mission Support Operations*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	2.252	1.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
DE01: *Defense Enterprise Accounting & Management System*	2.252	1.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element provides funding to identify and develop information technology capabilities that support the business missions of the agency. Specifically, funds will be used to fulfill the financial management information needs of the Chief Financial Executive/Comptroller (CFE) thereby ensuring that agency decision makers have accurate, timely, reliable, and useful financial information needed to make sound business decisions.

Funding supports DISA's instantiation of the Defense Agency Initiative (DAI) - referred to as the DISA Standard Finance and Accounting System (DSFAS). This effort, led by the Business Transformation Agency (BTA), is an Enterprise Resource Planning capability that will subsume many systems, standardize business processes across the Department of Defense (and DISA), and supports the requirement to achieve auditable financial data.

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	2.175	1.205	0.000	0.000	0.000
Current President's Budget	2.252	1.200	0.000	0.000	0.000
Total Adjustments	0.077	-0.005	0.000	0.000	0.000
• Congressional General Reductions		-0.005			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.077	0.000	0.000	0.000	0.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303148K: *DISA Mission Support Operations*

Change Summary Explanation

The FY 2009 funding adjustments of $0.077 million reflects an increase in contract support costs related to the development of DSFAS. The FY 2010 funding was decreased by $0.005 million due to Congressional reductions for Economic Assumptions.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303148K: *DISA Mission Support Operations*	PROJECT DE01: *Defense Enterprise Accounting & Management System*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
DE01: *Defense Enterprise Accounting & Management System*	2.252	1.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

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. Once implemented, the system will provide integrated business processes in a real-time, web-based format that can be used by DISA and 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 mitigate or minimize possible financial management material weaknesses and deficiencies. DAI will serve as a single accounting system that supports both the Defense Working Capital Fund (DWCF) and General Fund (GF) operations of DISA and is slated to begin deployment in FY 2010.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
DSFAS	2.252	1.200	0.000	0.000	0.000
FY 2009 Accomplishments: ($2.252 million) Funds procured contract services to augment the government team to ensure DISA's general fund requirements were identified, tracked, and "solutioned" (or included for "solutioning") in DAI; documented DISA scenarios for each process area; cleansed general fund accounting data and prepared it for conversion; and identified and dispositioned the systems migrating to or interfacing with DAI in the system transition plan.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303148K: *DISA Mission Support Operations*	PROJECT DE01: *Defense Enterprise Accounting & Management System*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: ($1.200 million) Funds will continue to provide support as stated above and conduct testing, certification, interface development, and system upgrades across the DSFAS architecture. DSFAS will deploy and replace DISA's current general fund accounting system capabilities by October 2010. *FY 2011 Base Plans:* This effort is not funded in FY 2011.					
Accomplishments/Planned Programs Subtotals	2.252	1.200	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/0303148K: *O&M, DW*	4.017	2.229	0.987		0.987	0.815	0.400	0.400	0.400	Continuing	Continuing

D. Acquisition Strategy

Integration support services for DSFAS are provided via contract. Insufficient in-house government capability exists, and it is not practical to develop the expertise necessary to perform these services, which are not recurring in nature. Full and open competition was used for the acquisition of the current contract with Deloitte and Touche, Inc.

E. Performance Metrics

DSFAS will be measured by how successfully it reduces the number of financial audit findings with the end result of obtaining a clean audit opinion. DSFAS will also be measured by how well it supports the DISA Scorecard Strategy to provide greater transparency, quality, and timeliness of financial information.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303148K: *DISA Mission Support Operations*	PROJECT DE01: *Defense Enterprise Accounting & Management System*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Interface Development	TM	Deloitte & Touche LLC Arlington, VA	2.292	1.200	Jan 2010	0.000		0.000		0.000	0.00	3.492	3.492
		Subtotal	2.292	1.200		0.000		0.000		0.000	0.000	3.492	3.492

Remarks

DISA is currently collaborating with the DoD Business Transformation Agency as they have control of the schedule for the Defense Agency Initiative (DAI).

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	2.292	1.200		0.000		0.000		0.000	0.000	3.492	3.492

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303148K: *DISA Mission Support Operations*	PROJECT DE01: *Defense Enterprise Accounting & Management System*	

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
Interface Development				▮	▮	▮	▮	▮																				

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303148K: *DISA Mission Support Operations*	**PROJECT** DE01: *Defense Enterprise Accounting & Management System*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Interface Development	4	2009	4	2010

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
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*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	34.213	37.161	26.247	0.000	26.247	26.980	27.648	8.551	8.045	Continuing	Continuing
CC01: *Global Command and Control System-Joint (GCCS-J)*	28.112	29.361	26.247	0.000	26.247	26.980	27.648	8.551	8.045	Continuing	Continuing
CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*	6.101	7.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

☐Global Command and Control System – Joint (GCCS-J) is a part of the GCCS Family of Systems (FoS). In response to Congressional direction (Section 247 of Fiscal Year 2010 National Defense Authorization Act (NDAA)), GCCS FoS will form the basis for the evolution of new command and control capabilities within the Department of Defense (DoD). While sustaining and synchronizing currently fielded systems, Defense Information Systems Agency (DISA) will modernize and enhance current capabilities to support both the DoD Components and Joint warfighter as a part of a synchronized, orchestrated DoD-wide effort that will transition the current GCCS FoS into a more agile, net-centric, services-oriented environment. The GCCS FoS will adopt and adapt to the on-going changes in the information technology acquisition process, as described in the March 2009 Report of the Defense Science Board Task Force on DoD Policies and Procedures for the Acquisition of Information Technology (and as referenced in Section 804 of Fiscal Year 2010 NDAA), and be designed to include (a) early and continual involvement of the user; (b) multiple, rapidly executed increments or releases of capability; (c) early, successive prototyping to support an evolutionary approach; and (d) a modular, open-systems approach. As part of these changes, the GCCS FoS will take advantage of streamlined processes within the requirements community, such as the “IT Box”. GCCS-J will continue to provide critical command and control (C2) capability to the Commander-in-Chief, Secretary of Defense, National Military Command Center, Combatant Commands (COCOMs), Joint Force Commanders, and Service Component Commanders including superior battlespace awareness, which provides an integrated, near real-time picture of the battlespace necessary to conduct joint and multinational operations. GCCS-J continues to enhance information superiority and supports the operational concepts of full-dimensional protection and precision engagement. The Overseas Contingency Operations - GCCS-J Integrated Imagery and Intelligence (I3) provides software modifications to the GCCS-J I3/Common Operating Picture (COP) baseline in direct support of United States Central Command (USCENTCOM) War funding requirements. These software modifications require extensive coding and testing in order to effect their implementation. The requested Research, Development, Test and Evaluation (RDT&E) funding is critical to support DoD Transformation efforts in the area of Strategic and Operational Command and Control. If funding is not received, GCCS-J will not be able to leverage the investments the Department has made in a variety of programs and initiatives to bring them together in the context of a service oriented architecture. Insufficient funding hinders the ability to develop and field operational fixes, upgrades and modernization that could lead to system degradation and obsolescence.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
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*

Adaptive Planning and Execution (APEX) is the DoD's replacement methodology for the adaptive planning capability previously provided by the Collaborative Force Analysis Sustainment and Transportation (CFAST) portal, constructing timely and agile war plans that achieve national security objectives.

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	35.917	26.511	0.000	0.000	0.000
Current President's Budget	34.213	37.161	26.247	0.000	26.247
Total Adjustments	-1.704	10.650	26.247	0.000	26.247
• Congressional General Reductions		-0.350			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		11.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-1.704	0.000	26.247	0.000	26.247

Change Summary Explanation

Due to significant program delays, the Senate Armed Services Committee redirected funding towards PE 0303150K Global Command and Control System (GCCS-J) to enhance the Department's existing command control capability (NDAA Act for Fiscal Year 2010, Senate Armed Services Committee Report 111–35, July 2, 2009). The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*				PROJECT CC01: *Global Command and Control System-Joint (GCCS-J)*			
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
CC01: *Global Command and Control System-Joint (GCCS-J)*	28.112	29.361	26.247	0.000	26.247	26.980	27.648	8.551	8.045	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

☐Global Command and Control System – Joint (GCCS-J) is the DoD Joint Command and Control (C2) system of record that provides information integration and decision-support capabilities that enable the exercise of authority and direction over assigned and attached forces, operating in a net-centric, collaborative information environment.

As part of the GCCS Family of Systems (FoS), GCCS-J will migrate to a more sophisticated “n-tier” architecture supporting dynamic infrastructure resources, thin browser-based clients, and net-centric enterprise services. N-tier architecture is a way of organizing and decomposing system components into multiple logical tiers with each tier of this architecture, and the components of which it is comprised, focusing on a broad aspect of the system (e.g. presentation logic, business logic, data services). Web standard-based, or other types of services are used to enable communication between components in the various tiers as well as external service consumers. This capability, when fully implemented, brings tremendous robustness and agility that cannot be matched by client/server or monolithic architectures. When implemented on a standards-based Commercial Off The Shelf (COTS) software, it provides scalability and prevents the Program Management Office (PMO) from getting “locked in” to a particular vendor. This system organization is key to enabling GCCS-J deployments that support enterprise-wide user communities. High priority services identified for early inclusion are identity management via Public Key Infrastructure (PKI), directory services, portal framework, and publish and subscribe capability. These services provide a stronger security mechanism than user name and password approach. To achieve these services, GCCS-J will fully implement a new interface capability using XML to provide the flexibility to support independent version changes and improved availability to enterprise data. In FY 2011, funding will be transferred from the Net-Enabled Command Capability (NECC) to GCCS-J to meet the DISA priority and commitment to fully fund development activities required to provide a robust and secure GCCS-J system to the users, to include Global and the Joint Operations Planning and Execution System (JOPES). Updates to GCCS-J will be done on a limited basis to allow access to next generation services or capabilities made available during this time period. Funding will also provide for the evolution of new command and control capabilities within the Department of Defense (DoD). While sustaining and synchronizing currently fielded systems, DISA will modernize and enhance current capabilities to support both the DoD Components (e.g., Service, Combat Support Agency) and Joint warfighter as part of a synchronized, orchestrated DoD-wide effort that will transition the current GCCS FoS into a more agile, net-centric, services-oriented environment. The GCCS FoS will adopt and adapt to the on-going changes in the information technology acquisition process, as described in the March 2009 Report of the Defense Science Board Task Force on DoD Policies and Procedures for the Acquisition of Information Technology (and as referenced in Section 804 of Fiscal Year 2010 NDAA), and be designed to include (a) early and continual involvement of the user; (b) multiple, rapidly executed increments or releases of capability; (c) early, successive prototyping

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC01: *Global Command and Control System-Joint (GCCS-J)*

to support an evolutionary approach; and (D) a modular, open-systems approach. As part of these changes, the GCCS FoS will take advantage of streamlined processes within the requirements community, such as the "IT Box".

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Development and Strategic Planning	21.865	21.425	20.998	0.000	20.998

FY 2009 Accomplishments:

In FY 2009 GCCS-J completed the development and testing of the final Block V version releases, the last full acquisition block for the program prior to the system moving into sustainment (FY 2010-FY 2015). These releases addressed high priority requirements, and implemented enhancements to fielded capabilities in support of the following mission areas: Intelligence; Situational Awareness; Readiness; and Force Planning, Employment, Protection, and Deployment. Some of the high priority requirements include functional enhancements for COP and Integrated Imagery and Intelligence (I3), infrastructure and security upgrades, and Government Service Problem Report fixes to the GCCS-J fielded system; and the GCCS-J FoS Alert Infrastructure (GFAI) alerting services. GCCS-J completed final development and testing of GCCS-J 4.2 Spiral Releases (Global 4.2, SORTS 4.2, JOPES 4.2) addressing operational requirements and net-centric architecture implementation

FY 2010 Plans:

The majority of FY 2010 RDT&E funding funds the development and testing of the GCCS-J applications against BEA 10 and JAVA 1.6 to address COTS obsolescence for the current versions used in GCCS-J. This migration will keep the GCCS-J suites more secure and sustainable at the operating sites by keeping the operating systems current and utilizing the latest version of COTS software. Funding is also being used to address critical emerging needs based on use of GCCS-J in current operations.

FY 2011 Base Plans:

GCCS-J will include development efforts to resolve and implement fixes for critical GSPR and Information Assurance Vulnerability Alerts (IAVA) in addition to critical or emerging user needs. The PMO will use funding to complete upgrades to the infrastructure required due to COTS obsolescence.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC01: *Global Command and Control System-Joint (GCCS-J)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Additionally, funding will focus on providing support for synchronization efforts between GCCS-J and the FoS to ensure interfaces continue to function between systems. Updates to GCCS-J will also be done on a limited basis to allow access to next generation services or capabilities made available during this time period. Remaining FY 2011 RDT&E funding will be used to modernize and develop the Department's next generation Joint Command and Control program evolving from the GCCS-J and Family of Systems (FoS) and incorporating the most advanced agile technologies and capabilities. To modernize the system, GCCS-J and the FoS will leverage the investments the Department has made in a variety of programs and initiatives and bring them together in the context of a Service Oriented Architecture. As the architecture evolves, improvements will be made to decouple interfaces and migrate existing functional capabilities to the enterprise. If GCCS-J does not receive RDT&E funding in FY 2011, GCCS-J will not maintain synchronization with other efforts in the GCCS Family of Systems.					
Integration and Test (I&T)	6.247	5.186	5.249	0.000	5.249
GCCS-J's incremental, spiral Integration & Test (I&T) approach permits an earlier start of integration testing since all new segments will not be available at the beginning of testing. This risk reduction strategy allows testing in smaller, more manageable increments, while still enforcing a level of Block V testing commensurate to the operational and technical complexity of each release. In accordance with Department guidelines and determined through an initial risk assessment conducted by the GCCS-J Program Management Office (PMO), GCCS-J spiral releases will be relatively low risk with minimal potential to impact other system applications and disrupt the basic system's ability to support the mission. *FY 2009 Accomplishments:* GCCS-J's incremental, spiral Integration & Test (I&T) approach permitted an earlier start of integration testing since all new segments were not available at the beginning of testing. This risk reduction strategy allowed testing in smaller, more manageable increments, while still enforcing a level of Block					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC01: *Global Command and Control System-Joint (GCCS-J)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
V testing commensurate to the operational and technical complexity of each release. In accordance with Department guidelines and determined through an initial risk assessment conducted by the GCCS-J Program Management Office (PMO), GCCS-J spiral releases were relatively low risk with minimal potential to impact other system applications and disrupt the basic system's ability to support the mission. *FY 2010 Plans:* GCCS-J will continue to employ the same incremental, spiral I&T approach in the post Block V testing of the sustainment and synchronization efforts. *FY 2011 Base Plans:* GCCS-J will continue to employ the same incremental, spiral I&T approach in the post Block V testing of the sustainment and synchronization efforts.					
The Overseas Contingency Operations GCCS-J Integrated Imagery and Intelligence (I3) funding provides for software modifications to the GCCS-J I3/Common Operational Picture (COP) baseline in direct support of USCENTCOM War funding requirements. These software modifications require extensive coding and testing in order to effect their implementation. Specifically: (a) improve Visualization client interface for both Analyst Workshop (AWS) and AWS Web ($1.500 million); (b) process and display additional Unmanned Aerial Video (UAV) formats ($0.500 million); and (c) provide access and display of additional Open Source Intelligence data ($0.750 million). *FY 2010 Plans:* The Overseas Contingency Operations - GCCS-J Integrated Imagery and Intelligence (I3) funding provides for software modifications to the GCCS-J I3/COP baseline in direct support of USCENTCOM War funding requirements. These software modifications require extensive coding and testing in order to effect their implementation. Specifically: (a) improve Visualization client interface for both Analyst	0.000	2.750	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC01: *Global Command and Control System-Joint (GCCS-J)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Workshop (AWS) and AWS Web ($1.500 million); (b) process and display additional Unmanned Aerial Video (UAV) formats ($0.500 million); and (c) provide access and display of additional Open Source Intelligence data ($0.750 million).					
Accomplishments/Planned Programs Subtotals	28.112	29.361	26.247	0.000	26.247

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0303150K: *O&M, DW*	86.161	76.127	92.239		92.239	94.332	92.918	109.611	109.611	Continuing	Continuing
• Procurement,DW/PE 0303150K: *Procurement,DW*	9.041	7.021	5.275		5.275	5.333	5.513	3.827	3.334	Continuing	Continuing

D. Acquisition Strategy

GCCS-J development, integration, and migration efforts 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. The GCCS-J Acquisition Strategy is structured to retain contractors capable of satisfying cost, schedule, and performance objectives. The Program Management Office (PMO) contract awards incorporate provisions requiring contractors to establish and manage specific earned value data. The PMO's strategy mitigates risk by requiring monthly Contract Performance Reviews (CPRs) and utilizes award fee contracts where appropriate to incentivize performance.

E. Performance Metrics

Capabilities Provided: GCCS-J assesses performance using the sustainment and synchronization activities in FY 2010. Each activity addresses outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities. These enhancements may modify existing GCCS-J 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.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150K: *Global Command and Control System*	**PROJECT** CC01: *Global Command and Control System-Joint (GCCS-J)*

Cost & Schedule Management: The GCCS-J program employs a tailored subset of earned value concepts that fit within ANSI/EIA 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.

GCCS-J FY 2009 (Results) FY 2010 (Estimated) FY 2011
(Estimated)
Effectively communicate with external command and control systems Global 4.2, JOPES 4.2, and SORTS 4.2 successfully completed testing with a 100% of all current and new system interfaces. 100% successful test of new critical system interfaces, as well as continued 100% successful test of current system interfaces. TBD
Fuse select C2 capabilities into a comprehensive, interoperable system eliminating the need for inflexible, duplicative, stovepipe C2 systems Global v4.1.1 was fielded at 36 sites, 35 of which were critical. GCCS-J post Block V will focus on planned migration to Net-centric Joint C2 capabilities in coordination with Enterprise Services (NCES). Web-enabled apps to support ubiquitous clients TBD
The availability of the GCCS-J Strategic Server Enclaves enable enhanced capabilities to the user community Global 4.1.1.1 is an emergent release to field fixes to global 4.1.1. It includes I3 and infrastructure fixes to issues identified during fielding and testing. A release of post Block V and emerging warfighter requirements to GCCS-J Strategic Server Enclaves in FY 2010. TBD

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC01: *Global Command and Control System-Joint (GCCS-J)*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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/CPAF	NGMS Reston, VA	61.279	6.029	Jun 2009	5.947	Jun 2010	0.000		5.947	Continuing	Continuing	73.255
Product Development 2	C/CPAF	NGMS Reston, VA	48.486	7.512	Jul 2009	6.298	Jul 2010	0.000		6.298	Continuing	Continuing	62.296
Product Development 3	C/CPAF	AB Floyd Alexandria, VA	12.477	0.000		0.000		0.000		0.000	0	12.477	12.477
Product Development 4	C/CPAF	Femme Comp Inc Chantilly, VA	7.249	0.000		0.000		0.000		0.000	Continuing	Continuing	7.249
Product Development 5	C/CPFF	SAIC Falls Church, VA	5.876	0.000		0.000		0.000		0.000	0	5.876	5.876
Product Development 6	C/CPFF	SAIC Falls Church, VA	8.772	0.971	Jun 2009	0.267	Jun 2010	0.000		0.267	Continuing	Continuing	10.010
Product Development 7	SS/FFP	Dynamic Systems Los Angeles	3.189	0.254	Jan 2010	0.070	Mar 2010	0.000		0.070	Continuing	Continuing	3.513
Product Development 8	C/CPFF	Pragmatics McLean, VA	26.523	1.078	Aug 2009	1.028	Aug 2010	0.000		1.028	Continuing	Continuing	28.629
Product Development 9	MIPR	Booz Allen Hamilton McLean, VA	3.394	0.000		0.000		0.000		0.000	0	3.394	3.394
Product Development 10	MIPR	JDISS Suitland, MD	6.039	0.000		0.000		0.000		0.000	0	6.039	6.039
Product Development 11	C/FFP	NGMS Reston, VA	4.790	0.000		0.000		0.000		0.000	0	4.790	4.790
Product Development 12	C/CPAF	NGMS Reston, VA	14.834	3.641	Aug 2010	2.999	Sep 2010	0.000		2.999	Continuing	Continuing	21.464

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC01: *Global Command and Control System-Joint (GCCS-J)*

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 13	MIPR	SPAWAR Charleston, SC	5.270	0.000		0.000		0.000		0.000	Continuing	Continuing	5.270
Product Development 14	FFRDC	MITRE, McLean, VA	6.015	0.372	Mar 2009	0.118	Mar 2010	0.000		0.118	Continuing	Continuing	6.505
Product Development 15	MIPR	Dept of Energy, Army Research Lab, PD Intelligence Fusion, GSA/FAS	5.710	1.116		0.306	Mar 2010	0.000		0.306	Continuing	Continuing	7.132
Product Development 16	C/CPAF	Tactical 3-D COP (T3DCOP)	3.200	0.000		0.000		0.000		0.000	0	3.200	3.200
Product Development 17	SS/FFP	Joint Info Technology Center Initiative Joint Info Technology Center Initiative	20.400	0.000		0.000		0.000		0.000	0	20.400	20.400
Product Development 18	MIPR	DIA DIA	4.716	0.439	Mar 2009	0.121	Mar 2010	0.000		0.121	Continuing	Continuing	5.276
		Subtotal	248.219	21.412		17.154		0.000		17.154	0.000	56.176	286.775

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC01: *Global Command and Control System-Joint (GCCS-J)*

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 1	C/CPAF	SAIC Church, VA	23.133	1.243	Aug 2009	2.393	Aug 2010	0.000		2.393	Continuing	Continuing	26.769
Test and Evaluation 2	MIPR	JITC Ft Huachuca, AZ	15.737	6.068	Oct 2009	5.500	Oct 2010	0.000		5.500	Continuing	Continuing	27.305
N/A	MIPR	Slidell Slidell	0.436	0.000		0.000		0.000		0.000	0	0.436	0.436
Test and Evaluation 3	MIPR	SSC San Diego, CA	6.911	0.638	Oct 2010	1.200	Oct 2011	0.000		1.200	Continuing	Continuing	7.980
		Subtotal	46.217	7.949		9.093		0.000		9.093	0.000	0.436	62.490

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	294.436	29.361		26.247		0.000		26.247	0.000	56.612	349.265

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC01: *Global Command and Control System-Joint (GCCS-J)*	

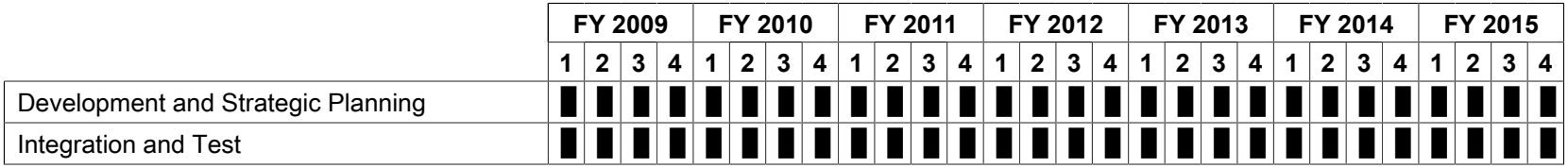

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150K: *Global Command and Control System*	**PROJECT** CC01: *Global Command and Control System-Joint (GCCS-J)*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Development and Strategic Planning	1	2009	4	2015
Integration and Test	1	2009	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*	6.101	7.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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 shut down 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.

FY 2010 RDT&E funding is being utilized to provide initial adaptive planning and execution/force projection capabilities that will be accessible in a net-centric environment and focus on providing the joint forces commander with the data and information needed to make timely, effective, and informed decisions. The APEX strategy will provide new capabilities to rapidly generate and modify a Time-Phased Force & Deployment Data (TPFFD) file required to execute a plan and automatically provide that TPFFD as a force requirements list to the Joint Capability Requirements Manager (JCRM) tool. This will provide for valid contingency sourcing as well as model and analyze specific courses of action to determine execution feasibility. Once fielded the new APEX capabilities, specifically Rapid TPFFD Builder (RTB) and Integrated Gaming System (IGS), will allow a planner to shorten the planning cycle from a two year process. IGS allows a planner to rapidly select and position forces on a map to determine best force on force scenario to win the fight. RTB will allow a planner to quickly create a TPFFD and automatically generate planning dates based on lift allocations and prioritized force movements. Funding will also develop/modernize, integrate, test, and field APEX enterprise capabilities for the warfighter on the Global Information Grid (GIG).

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Development and Strategic Planning	5.619	7.307	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150K: *Global Command and Control System*	**PROJECT** CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
APEX will produce capabilities and integrate capabilities via spiral development, allowing for the rapid introduction of net centric planning capabilities to include contingency and crisis planning and execution. The APEX capabilities will map to the business processes as identified in the AP Roadmap. *FY 2009 Accomplishments:* CFAST successfully transitioned from Oak Ridge National Laboratory to the Space and Naval Warfare Systems Center (SSC), San Diego to emerge into a net-centric enterprise service. Upon cancellation of the program in fourth quarter CFAST capabilities were converted to Adaptive Planning and Execution (APEX). *FY 2010 Plans:* Capability and Force Requirements Manipulation: Improves the Force Builder force generation tool to include Task Organization and Mass/Selective Edits for units within the Time Phased Force And Deployment Data (TPFDD) files. The improvements enable the scheduled movement of forces and supplies into an area of operations. Force Builder allows the planner to build a draft list of forces, group them into force modules and place them into a priority of movement that is honored by scheduling applications. Improvements will include a refined level of detail which provides a higher quality estimate for logistics and transportation needs and reduces the time required to build a plan. Interoperability. APEX contains unique software capabilities but relies upon data feeds from external systems. Data requirements and improvements will include Readiness data; fine grain unit information; migration to new data standards; and importing/exporting into new formats. Course of Action Development – Provides an initial capability that allows planners to simulate the scheduled TPFDD flow of forces into the area of operations and the actions required to fulfill the mission. The simulation shall include effects based operations as well as attrition warfare. The course of action will allow feedback into the planning applications in order to refine the forces required for an operation.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150K: *Global Command and Control System*	**PROJECT** CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Integration and Test	0.482	0.493	0.000	0.000	0.000

Integration and Test (I&T): APEX employs an incremental spiral I&T methodology in accordance with testing and information assurance regulations, as applicable. This risk reduction strategy allows testing in smaller, more manageable versions, while still enforcing a level of testing commensurate to the operational and technical complexity of each release. This approach permits an earlier start of integration testing as well as making capability available to users for evaluation during actual planning events. CFAST/APEX also finances independent security evaluations of CFAST/APEX versions in order to maintain the Authority To Operate (ATO) status. This approach ensures the operational suitability and effectiveness, interoperability, and security of APEX for warfighter use.

FY 2009 Accomplishments:

Integration and Test (I&T): APEX employs an incremental spiral I&T methodology in accordance with testing and information assurance regulations, as applicable. This risk reduction strategy allows testing in smaller, more manageable versions, while still enforcing a level of testing commensurate to the operational and technical complexity of each release. This approach permits an earlier start of integration testing as well as making capability available to users for evaluation during actual planning events. CFAST/APEX also finances independent security evaluations of CFAST/APEX versions in order to maintain the Authority To Operate (ATO) status. This approach ensures the operational suitability and effectiveness, interoperability, and security of APEX for warfighter use.

FY 2010 Plans:

Integration and Test (I&T): APEX employs an incremental spiral I&T methodology in accordance with testing and information assurance regulations, as applicable. This risk reduction strategy allows testing in smaller, more manageable versions, while still enforcing a level of testing commensurate to the operational and technical complexity of each release. This approach permits an earlier start of integration testing as well as making capability available to users for evaluation during actual planning events. CFAST/APEX also finances independent security evaluations of CFAST/APEX versions in

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150K: *Global Command and Control System*	**PROJECT** CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
order to maintain the Authority To Operate (ATO) status. This approach ensures the operational suitability and effectiveness, interoperability, and security of APEX for warfighter use. *FY 2011 Base Plans:* No funding is requested for FY2011 due to prioritization of APEX against the sustainment and synchronization requirements of the GCCS-J Family of Systems (FoS).					
Accomplishments/Planned Programs Subtotals	6.101	7.800	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0303150K: *O&M, DW*	8.700	8.572	0.000		0.000	0.000	0.000	0.000	0.000	0	25.552
• Procurement, DW/PE 0303150K: *Procurement, DW*	1.467	1.462	0.000		0.000	0.000	0.000	0.000	0.000	0	8.449

D. Acquisition Strategy

Joint Requirements Oversight Council (JROC) memorandum (JROCM) 102-04, Subject: Collaborative Force Analysis, Sustainment and Transportation System (CFAST) Future Development, designated U.S. Joint Forces Command (USJFCOM) as the Functional Proponent for Adaptive Planning and the Defense Information Systems Agency (DISA) as the Material Solution Provider, effective July 2004. The APEX Acquisition Strategy is structured to retain contractors capable of satisfying cost, schedule, and performance objectives. APEX utilizes Cost Reimbursable Task Orders (TO) issued under competitively awarded contracts. APEX maximizes the use of competitively awarded IDIQ contracts and requires contractors to establish and manage specific earned value data. The APEX strategy mitigates risk by requiring Contract Performance Reviews (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance.

E. Performance Metrics

Cost & Schedule Management APEX utilizes earned value management to manage technical cost and schedule requirements. 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

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150K: *Global Command and Control System*	**PROJECT** CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*

contractors to use effective internal cost and schedule management control systems. Performance is evaluated by conducting contractor performance reviews as well as weekly critical path reviews of the APEX release schedules to ensure tasks are on track and to mitigate risk across the entire lifecycle.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	20.205	7.307	Feb 2010	0.000		0.000		0.000	Continuing	Continuing	27.512
		Subtotal	20.205	7.307		0.000		0.000		0.000			27.512

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	1.766	0.493	Feb 2010	0.000		0.000		0.000	Continuing	Continuing	2.259
		Subtotal	1.766	0.493		0.000		0.000		0.000			2.259

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	21.971	7.800		0.000		0.000		0.000			29.771

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*	

	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303150K: *Global Command and Control System*	PROJECT CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*	

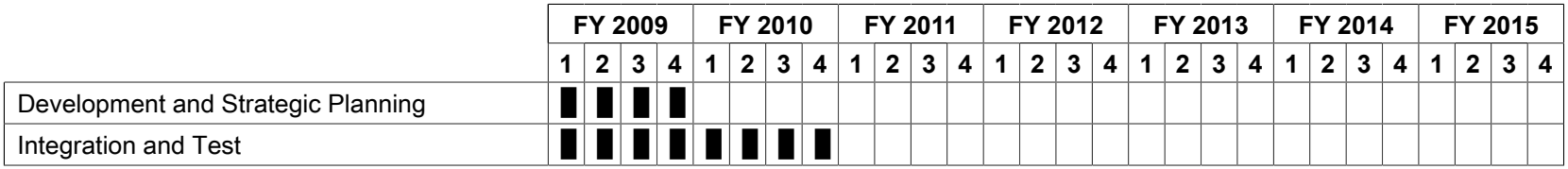

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303150K: *Global Command and Control System*	**PROJECT** CC02: *Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Development and Strategic Planning	1	2009	4	2009
Integration and Test	1	2009	4	2010

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	19.162	18.865	20.991	0.000	20.991	23.679	20.433	17.534	17.796	Continuing	Continuing
JS1: *Joint Spectrum Center*	19.162	18.865	20.991	0.000	20.991	23.679	20.433	17.534	17.796	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Spectrum Organization (DSO) is responsible for developing comprehensive and integrated spectrum planning and long-term strategies to address future needs for DoD electromagnetic (EM) spectrum access. The DSO supports DoD on national and international spectrum issues, spectrum coordination, and in the pursuit of emerging spectrum-efficient technologies in DoD acquisitions. The DSO serves as the DoD Center of Excellence for EM spectrum management, planning, policy implementation, and operational matters, and provides direct support to the Assistant Secretary of Defense for Networks and Information Integration/DoD Chief Information Office, the Chairman of the Joint Chiefs of Staff, Combatant Commands (COCOMs), Secretaries of Military Departments (MILDEPs), and Directors of Defense Agencies. The DSO was established by merging and realigning the spectrum assets and resources of DISA's Defense Spectrum Office, hereafter referred to as the Strategic Planning Office (SPO), and the Joint Spectrum Center (JSC). On 1 October 2008, the Global Electromagnetic Spectrum Information System (GEMSIS) Program Office was transferred to the DSO, thus consolidating all DISA EM spectrum activities into one organization. The title of this program element was changed from Joint Spectrum Center beginning in FY 2010 to reflect the total organization.

The Joint Spectrum Center's (JSC) mission is to enable DoD's effective use of the EM spectrum in support of national security and military objectives. The JSC is responsible for developing and maintaining DoD standard information systems that support DoD spectrum related activities and processes. The JSC is the focal point for both the DoD Electromagnetic Environmental Effects (E3) Program and the Joint-Service Interference Resolution (JSIR) Program, which provides assistance to operational units including deployable support to COCOM Joint Task Forces. The JSC mission is integral to other vital activities such as Information Operations (IO), Electronic Warfare (EW) and other special projects as directed by the Joint Staff.

The 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.

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

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303153K: *Joint Spectrum Center/JS1*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	19.267	18.944	0.000	0.000	0.000
Current President's Budget	19.162	18.865	20.991	0.000	20.991
Total Adjustments	-0.105	-0.079	20.991	0.000	20.991
• Congressional General Reductions		-0.079			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-0.105	0.000	20.991	0.000	20.991

Change Summary Explanation

In FY 2009, less funding was required to develop Joint Ordnance E3 Risk Assessment Database (JOERAD). The FY 2010 decrease of $0.079 million is a result of general Congressional adjustments for Economic Assumptions. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
JS1: *Joint Spectrum Center*	19.162	18.865	20.991	0.000	20.991	23.679	20.433	17.534	17.796	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.

The Defense Spectrum Organization's (DSO) Global Electromagnetic Spectrum Information System (GEMSIS) is a net centric capability that will provide commanders with an increased common picture of spectrum situational awareness of friendly and hostile forces while transparently deconflicting competing mission requirements for spectrum use. This capability will enable the transformation from the current preplanned and static assignment strategy into autonomous and adaptive spectrum operations.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Spectrum Knowledge Resources	10.935	7.828	7.953	0.000	7.953
The Spectrum Knowledge Resources program supports development of spectrum modeling and simulation capabilities, spectrum database development, and spectrum data transformation and 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.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: In FY 2009 the following software products were successfully developed: (1) three releases of software to build equipment record, (2) three releases of various frequency assignment data maps, (3) one release of tactical data maps, (4) two releases of various space system data maps, and (5) two releases of Joint Data Access Web Server (JDAWS). JDAWS provides direct online access to some of the JSC's primary databases. These efforts will result in significantly improved features for the warfighter including an approved DoD spectrum data standard that will provide the ability to seamlessly share spectrum data with other DoD data standard compliant organizations. During FY 2009 JSC also completed the development, testing and release of SPECTRUM XXI version 4.2.4 server and client software to the SPECTRUM XXI central server and all four regional servers. SPECTRUM XXI is the joint standard DoD spectrum management system as well as the system of choice of NATO, currently supporting their operations in Afghanistan. *FY 2010 Plans:* FY 2010 new software development initiatives currently underway are expected to eliminate the need for the majority of the current suite of data mapping tools. JSC will develop 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 a 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 will be developed to replace and enhance the existing Joint E3 Evaluation Tool (JEET), which is currently a stand alone tool of distributed via CD-ROM. DSO will provide 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. JDAWS Version 7.2 will be deployed and enhanced accessibility for the DoD acquisition community will be provided in FY 2010.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011 an additional version of JDAWS will be developed which will improve data sharing with NATO. This effort also implements interface enhancements to accommodate evolving spectrum data standard changes. FY 2011 efforts will also include the development and deployment of the SPECTRUM XXI Online (SXXI-O) infrastructure.					
Electromagnetic Environmental Effects (E3)	2.774	3.068	3.107	0.000	3.107
The 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 addressed during the development, testing and procurement of information technology and National Security Systems. These efforts support the DoD acquisition process. 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. *FY 2009 Accomplishments:* FY 2009 funding resulted in development of JOERAD v9.4.2. This tool gives the warfighter the ability to compare the maximum allowable environment (MAE) to which an ordnance item can be exposed (without creating a safety or operational reliability problem) with the output from the radio frequency (RF) emitter suites found on various operational land, sea, and air platforms. This tool automates the analysis process and assists in mission planning and impact assessments and it critical for joint operations.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010, JSC will continue to provide HERO Impact Assessments, forward deployed EME surveys, and JOERAD shipboard installations. During this period, DSO will also initiate 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. *FY 2011 Base Plans:* FY 2011 resources will continue conversion of JOERAD to a network-connected capability, JOERAD 10.0. JSC will also continue to provide HERO Impact Assessments, forward deployed EME surveys, and JOERAD shipboard installations.					
Emerging Spectrum Technology (EST) 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. 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. *FY 2009 Accomplishments:* FY 2009 funds resulted in the development of a DSA Roadmap and the DSA Technical Framework study and the DSA Spectrum Management Framework were completed. An Incumbent Systems	3.854	3.719	3.715	0.000	3.715

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

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Protection Study was initiated, and three research efforts dealing with DSA technical issues were initiated (hidden node, policy-based management, scalability). Funds supported research comparing Worldwide Interoperability for Microwave Access (WiMAX) and Long Term Evolution (LTE) broadband wireless standards, the applicability of machine intelligence in spectrum management, carrier-in-carrier bandwidth compression techniques for SATCOM, and a study on internet protocol (IP)-based networking protocols to identify which new networking protocol technologies provide the most significant savings in spectrum use. *FY 2010 Plans:* FY 2010 funds continue research of emerging spectrum-related technologies. DSA efforts are focusing on research and development of a framework to support deployment of DSA-enabled systems. These efforts include preparing recommended technology enhancements to the Defense Spectrum Management Architecture (DSMA); further research into the impact of DSA systems on the electromagnetic environment (EME); and performance of various technical assessments, including establishing the technical foundation for protecting legacy systems as DSA is implemented; and continued development of the DSA Roadmap. *FY 2011 Base Plans:* FY 2011 funds will focus research on spectrum sharing techniques and interference mitigation approaches in general, and specific to advanced radar systems. Research into DSA capabilities will continue.					
Spectrum Data Sharing Capability *FY 2009 Accomplishments:* N/A *FY 2010 Plans:* N/A	0.000	0.000	4.500	0.000	4.500

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 funds will be used to 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 CENTCOM's Joint Urgent Operational Need (JUON), Radio Frequency Spectrum Management. This enhancement will provide accurate data for automated Counter Radio Electronic Warfare (CREW) deconfliction and spectrum inventory calculation; enables automated data capture; automates data access capabilities; provides business process engines of oversight and quality control; and enables interoperability with NATO.					
Global Electromagnetic Spectrum Information System (GEMSIS)	1.599	4.250	1.716	0.000	1.716
FY 2009 Accomplishments: In FY 2009 the Program Management Office (PMO) documented a standard GEMSIS architecture framework for Increment 1 to include the Host Nation Spectrum Worldwide Database Online (HNSWDO) and Coalition Joint Spectrum Management Planning Tool (CJSMPT). GEMSIS identified CJSMPT data quality and interoperability improvements and recommendations, and began to transition CJSMPT data into the Joint Spectrum Center Data Repository. The PMO completed analysis and assessment of Certification and Accreditation areas with appropriate mitigation and corrective action for identified risks. Additional accomplishments included transitioning HNSWDO V3.1 into GEMSIS Increment 1, initiated development of HNSWDO upgrade based on customer identified requirements and began a HNSWDO Business Process Management Pilot Program. The PMO initiated efforts to improve net-centricity and spectrum data standardization for Increment 1 and began the architecture design for the GEMSIS catalogue of services.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: In FY 2010 GEMSIS transitioned CJSMPT Joint Capability Technology Demonstration (JCTD) approved capabilities into Increment 1. The PMO began design and development of an on-line training program structure for GEMSIS Increments. GEMSIS continues to develop, test, and deliver GEMSIS Increment 1 approved enhancements. The GEMSIS Catalog of Services architecture design will be finalized and the initial catalog will be piloted and demonstrated to the user community. In addition, improvements to increase net-centricity and spectrum data standardization for Increment 1 will continue, and completion of HNSWDO Business Process Management Pilot Program. *FY 2011 Base Plans:* In FY 2011 the GEMSIS PMO will finalize the GEMSIS Catalog of Services architecture and infrastructure standards to implement GEMSIS Increment 2 Analysis of Alternatives (AoA) recommendations, continue to support process improvements, upgrades, and developmental efforts to increase the capabilities and functionality of GEMSIS spectrum tools.					
Accomplishments/Planned Programs Subtotals	19.162	18.865	20.991	0.000	20.991

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• 0303153K O&M, DW/PE : *O&M, DW/PE*	41.482	31.811	32.404		32.404	34.002	35.271	36.218	36.845	Continuing	Continuing
• 0303153K Procurement, DW/PE : *Procurement, DW/PE*	0.000	0.490	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

D. Acquisition Strategy

Engineering support services for DSO are provided via 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 contracts with ITT Industries,

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*

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. Initial deployment of the Net-Centric JSC Data Repository (JDR) which will enable spectrum managers and E3 analysts to exchange spectrum information in a format consistent across NATO and CCEB counterparts for full coordination of spectrum operations and situational awareness.
2. Publish three emerging spectrum technology analyses per year
3. Implement DSA Roadmap actions/recommendations
4. Continued incorporation of JOERAD into Navy ship software inventory.
5. Continued presentation of E3 technical courses.
6. Conduct 7 -10 HERO/ EME Analyses per year.
7. Conduct analyses and make policy recommendations for spectrum sharing techniques and interference mitigation approaches for radar systems.
8. Continue GEMSIS integration, development and deployment by:

a. Implementation of the Service Oriented Architecture (SOA) for GEMSIS Increment 1.
b. Development, testing and delivery of GEMSIS Increment 1 approved enhancements in accordance with user requirements.
c. Identifying data deficiencies and characterizing the risks to the Warfighter and coordinate mitigation strategies with data owners.
d. Federating and cataloging of Services' spectrum management tools.
e. Improvements in net-centricity and spectrum data standardization for Increment 1.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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		0.000		0.000			

Remarks

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	C/CPIF	ITT Industries, Inc. ITT Industries, Inc.	42.899	17.471	Oct 2009	19.569	Oct 2010	0.000		19.569	Continuing	Continuing	Continuing
Technical Engineering Services	MIPR	Various Various	1.846	0.462	Jan 2009	0.474	Jan 2010	0.000		0.474	Continuing	Continuing	Continuing
		Subtotal	44.745	17.933		20.043		0.000		20.043			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*	

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	JTIC Ft. Hauchuca	0.792	0.077	Jan 2009	0.079	Jan 2010	0.000		0.079	Continuing	Continuing	Continuing
		Subtotal	0.792	0.077		0.079		0.000		0.079			

Remarks

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	4.168	0.855	Oct 2009	0.869	Nov 2010	0.000		0.869	Continuing	Continuing	Continuing
		Subtotal	4.168	0.855		0.869		0.000		0.869			

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	49.705	18.865		20.991		0.000		20.991			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*	

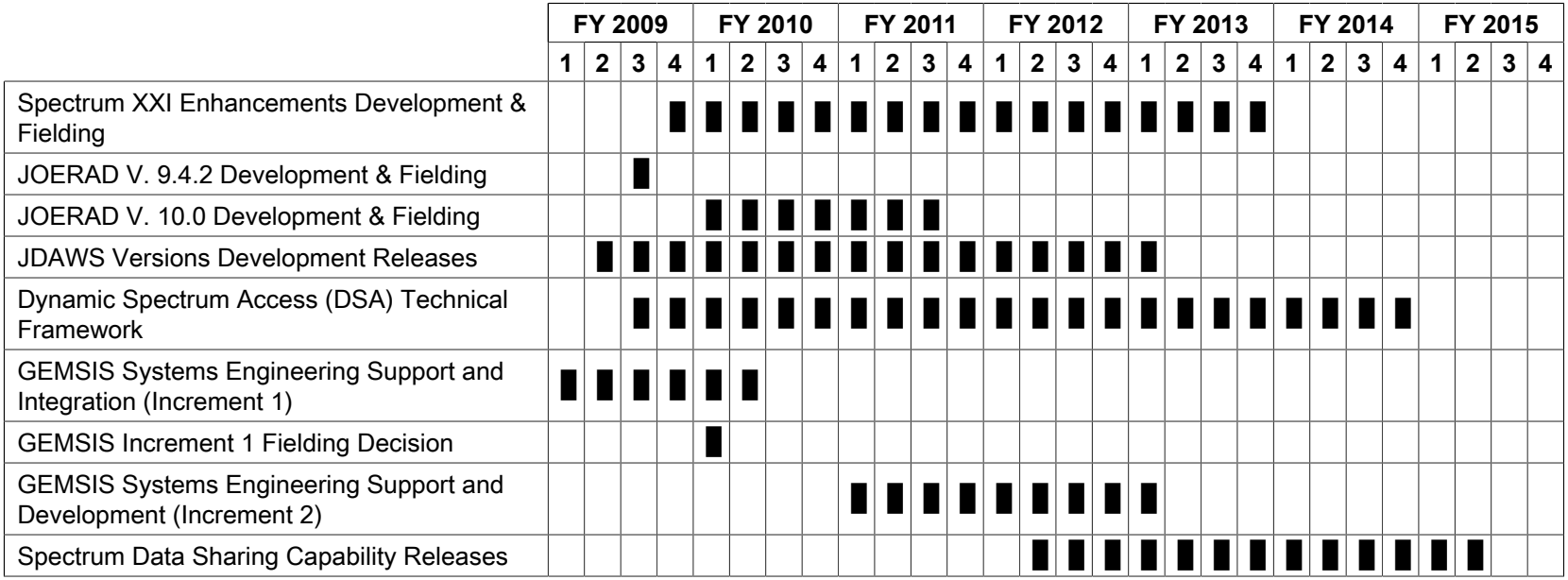

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303153K: *Joint Spectrum Center/JS1*	PROJECT JS1: *Joint Spectrum Center*

Schedule Details

	Start		End	
Event	Quarter	Year	Quarter	Year
Spectrum XXI Enhancements Development & Fielding	4	2009	4	2013
JOERAD V. 9.4.2 Development & Fielding	3	2009	3	2009
JOERAD V. 10.0 Development & Fielding	1	2010	3	2011
JDAWS Versions Development Releases	2	2009	1	2013
Dynamic Spectrum Access (DSA) Technical Framework	3	2009	4	2014
GEMSIS Systems Engineering Support and Integration (Increment 1)	1	2009	2	2010
GEMSIS Increment 1 Fielding Decision	1	2010	1	2010
GEMSIS Systems Engineering Support and Development (Increment 2)	1	2011	1	2013
Spectrum Data Sharing Capability Releases	2	2012	2	2015

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	5.429	1.775	3.366	0.000	3.366	1.947	1.046	1.413	1.580	Continuing	Continuing
T57: *Net-Centric Enterprise Services (NCES)*	5.429	1.775	3.366	0.000	3.366	1.947	1.046	1.413	1.580	Continuing	Continuing

A. Mission Description and Budget Item Justification

Net-Centric Enterprise Services (NCES) provides 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. This supports the joint warfighting force operations and the supporting business domains requirement to quickly discover information sources and collaborate in a more effective manner. NCES services will support 100 percent of the active duty Military and Government civilian; 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 NCES Capability Production Document (CPD) 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). NCES will expand to support integration of Managed Service Provider (MSP) products through: follow on contracts; integration of pre-planned product improvements into the NCES baseline; and the integration of additional Programs of Record into the Service Oriented Architecture Foundation. The Program Executive Office Global Information Grid Enterprise Services (PEO GES) will transition and enhance Strategic Knowledge Integration Web (SKIWeb) from United States Strategic Command (USSTRATCOM) to Defense Information Systems Agency (DISA) Defense Enterprise Computing Centers (DECCs).

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303170K: *Net-Centric Enterprise Services*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.428	1.782	0.000	0.000	0.000
Current President's Budget	5.429	1.775	3.366	0.000	3.366
Total Adjustments	5.001	-0.007	3.366	0.000	3.366
• Congressional General Reductions		-0.007			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	5.001	0.000	3.366	0.000	3.366

Change Summary Explanation

The FY 2009 increase of $5.001 million supported enhanced (testing of Collaboration, User Access (Portal), Content Discovery and Delivery, and Service Oriented Architecture Foundation (SOAF) capabilities, and operational assessments of overall NCES services. The FY 2010 adjustments of -$0.007 million reflect Congressional reductions for Economic Assumptions. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
T57: *Net-Centric Enterprise Services (NCES)*	5.429	1.775	3.366	0.000	3.366	1.947	1.046	1.413	1.580	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Department of Defense (DoD) is transforming the way it conducts warfare, business operations, and enterprise management by embracing the concept of "Net-Centricity." Net-Centricity is the realization of a robust, globally interconnected, network environment (including infrastructure, systems, processes, and people). In this environment, data is shared in a timely and seamless way among users, applications, and platforms. This improved knowledge management during all phases of warfighting efforts enables substantially improved situational awareness and significantly shortened decision-making cycles. Net-Centric Enterprise Services (NCES) provides the enterprise level services that enable communities of interest (COI) and mission applications to make their data and services visible, accessible, and understandable by exposing data sources, web-service enabling, and registering of reusable services. The Program Executive Office Global Information Grid Enterprise Services (PEO-GES) is transitioning and enhancing the Strategic Knowledge Integration Web (SKIWeb). SKIWeb is a strategic decision support tool designed to improve situational awareness for Department of Defense (DoD) and strategic Allied users, from local operations at the United States Strategic Command (USSTRATCOM) to an enterprise service supporting all COCOMS at the Defense Enterprise Computing Centers (DECCs).

To support the operational needs of the NCES customers in the joint warfighting force and the supporting business domains, NCES services are adaptive, scalable, available, reliable, easily accessible, and responsive. The suite of NCES services allow users and automated information systems to discover, post, and access relevant information, and collaborate in a more effective manner.

NCES will include effective security services that protect critical information and sources from unauthorized use or access, and that are adaptive to the user's information management policy.

The NCES Warfighter Concept of Operations clearly describes how NCES capabilities should be applied by U.S. Forces, Coalition forces, and Allies to produce Net-Centricity and support full spectrum joint and expeditionary campaign operations. NCES supports these missions by: exposing critical information sources so that data can be discoverable and quickly recovered by users no matter where they are located or when they need the information; allowing authorized users to include unanticipated mission and coalition partners in collaborative sessions; and, continuously evolving the delivered services to support mission changes and feedback from its users and stakeholders. The services delivered by NCES along with the PEO-GES initiatives are also a key enabler supporting the Defense Information Systems Agency (DISA) mission of providing an enterprise infrastructure to continuously operate and assure a global net-centric enterprise in direct support to the joint warfighter, National level leaders, and other mission and coalition partners across the full spectrum of operations. Further, it enables the DoD Net-Centric Services Strategy (NCSS) vision of an environment that increasingly leverages shared services and Service Oriented Architecture (SOA). The benefits that the NCES customers receive include:

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*

• Enhanced collaborative decision-making processes that are supported by the Collaboration, Content Discovery and Delivery, Metadata Discovery, User Access (Portal), Mediation, and People Discovery services.
• Content Discovery and Delivery, Service Discovery, Enterprise Service Management, and Metadata Discovery services provide the capability to share and exchange knowledge and services between units and commands at all levels (interagency and multinational partners), improves coordinated maneuver, and integrates situational awareness.
• Machine-to-Machine Messaging, Content Discovery and Delivery, Collaboration, and People Discovery supports knowledge exchange to enable the decision-maker to understand the situation, determine the effects desired, select a course of action and the forces to execute it, and accurately assess the effects of that action.
• Collaboration, Content Discovery and Delivery, User Access (Portal) and Service Oriented Architecture Foundation services combined improve the ability of our decision-makers to effectively operate inside the decision loop of even the most capable adversary.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Test and Evaluation	5.429	1.775	3.366	0.000	3.366

Test and Evaluation (T&E) of enterprise services include early and continuous involvement of the test community starting with contractor demonstrations prior to contract award. For NCES T&E relies on a stable and robust user group to support all levels of testing and a series of early user tests (EUT) that integrate source selection and operational events. This testing approach is used to confirm individual services and products, or groups of services and products meet performance specifications documented in the NCES Capability Production Document (CPD) and contract performance work statements. T&E also includes independent certifications for required items, such as interoperability and security.

FY 2009 Accomplishments:
FY 2009 funds supported testing of Collaboration, User Access (Portal), Content Discovery and Delivery, and Service Oriented Architecture Foundation (SOAF) capabilities, and operational assessments of overall NCES services. Funds also supported security certification, accreditation testing, interoperability testing, and validation of all Managed Service Provider (MSP) Services. FY 2009 funds supported the Initial Operational Test and Evaluation (IOT&E) testing events for the NCES product lines for the Full Deployment Decision Review awarded in May 2009. These funds

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
also supported a Follow-on Operational Test and Evaluation (FOT&E) event for Service Discovery to support a follow-on Fielding Decision. This funding provided for Operational Test Agency (OTA) support from the four Services and Lead OTA support from the Joint Interoperability Test Command (JITC). *FY 2010 Plans:* FY 2009 funds supported testing of Collaboration, User Access (Portal), Content Discovery and Delivery, and Service Oriented Architecture Foundation (SOAF) capabilities, and operational assessments of overall NCES services. Funds also supported security certification, accreditation testing, interoperability testing, and validation of all Managed Service Provider (MSP) Services. FY 2009 funds supported the Initial Operational Test and Evaluation (IOT&E) testing events for the NCES product lines for the Full Deployment Decision Review awarded in May 2009. These funds also supported a Follow-on Operational Test and Evaluation (FOT&E) event for Service Discovery to support a follow-on Fielding Decision. This funding provided for Operational Test Agency (OTA) support from the four Services and Lead OTA support from the Joint Interoperability Test Command (JITC). *FY 2011 Base Plans:* FY 2011 funds will provide the required testing to integrate modeling and simulation needed to support source selection activities for contract re-competes. The SKIWeb 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. The funding will also support any required testing to integrate enhanced services into the NCES baseline from JCTDs, ACTDs, or P3I(s) required to adapt NCES services to evolving Program of Record (POR)/COI and warfighter mission needs. Funding decrease for Test and Evaluation between FY 2010 to FY 2011 (-$0.003 million) reflects reduced levels of testing needed to support the projected integration of enhanced services into the NCES baseline and operational testing to ensure					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
enterprise suitability for any new MSP capability. A funding increase between FY 2010 and FY 2011 of (+$1.594 million) total will provide funding for the transition and enhancement required to transition SKIWeb from USSTRATCOM to DISA DECCs. Lack of funding in FY 2011 will prevent the transition and enhancement of SKIWeb from USSTRATCOM to the DISA DECCs as an enterprise service and critically impair the ability to perform verification testing and any required modeling and simulation for the Collaboration contract source selection activities. Also, this will impair the operational testing of follow-on services required to ensure they meet the requirements and operational metrics from the performance work statement and the NCES CPD and impact the deployment of enhanced services to the warfighter.					
Accomplishments/Planned Programs Subtotals	5.429	1.775	3.366	0.000	3.366

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M, DW/PE 0303170K: *O&M, DW*	85.237	110.813	120.293		120.293	118.608	122.351	127.517	129.026	Continuing	Continuing
• Procurement, DW/PE 0303170K: *Procurement, DW*	30.699	3.037	4.391		4.391	3.483	2.873	2.859	2.852	Continuing	Continuing

D. Acquisition Strategy

The NCES acquisition approach is to adopt proven specifications, best practices, and interface definitions to buy new commercial managed services through a variety of acquisition approaches. The NCES managed services will be network-based services or applications delivered, hosted and managed by a service provider in accordance with Service Level Agreements (SLAs) established between the NCES Program Management Office (PMO) and the service providers. The NCES SLAs describe the particular services in terms of an exact, agreed-upon quality and quantity for a set duration. The SLAs also constrain the demands users may place upon the service to the limits defined by the contract.

The acquisition approach also enables rapid fielding of low to moderate risk capabilities to meet operational need and provide value to the end-user. To achieve rapid deployment of the NCES portfolio, the NCES acquisition approach is based on the following principles:

• The program will use performance-based services acquisition (PBSA) practices and incorporate commercial standards, performance specifications, and interface definitions to acquire NCES capabilities through selected commercial managed enterprise.
• Each managed service provider will manage, operate, maintain, and administer the enterprise services in accordance with an SLA.
• Service Providers are responsible for full life cycle support including infrastructure investment, resourcing, integration, operational support (e.g., hosting, user assistance, performance reporting, and maintenance), technology refresh, training and training materials (as needed), pre-production testing service, and operational management (e.g., trouble ticketing, performance reporting, and Tier 2 and Tier 3 Help Desk support).
The benefits of the NCES acquisition approach include:
• Delivering fully operational NCES Increment 1 capabilities faster than the traditional acquisition approach.
• Shifting investment risk to service providers in an evolving technology market.
• Enabling accountability and service delivery through SLAs and PBSA procedures.
• Enabling agility in selecting service capabilities.
The NCES Program's business strategy seeks to strike a balance between ensuring accountability, through SLAs and performance based contracts, and recognizing the government's responsibility and accountability for the acquisition and management of MSPs. To achieve the DoD net-centricity vision, programs accessing NCES services from enterprise, maritime, airborne, and land-based GIG computing nodes must be motivated to share their information and services. Using NCES shared core services, mission applications and capabilities can be developed and made available across the GIG faster and at lower cost. As programs consume NCES and make their own services available, the Department gains unprecedented information sharing. Throughout Increment 1, the NCES Program will work with the user community to understand how to plan for and consume NCES services by providing software toolkits and guidelines to assist users in their efforts. Government and industry participation is key to executing this acquisition strategy. Partnering with the DoD Components, NCES will rapidly deliver Increment 1 functionality and capability at the lowest possible risk.

E. Performance Metrics

The validated NCES CPD contains the functional, operational, and Key Performance Parameter (KPP) metrics that the NCES stakeholders consider as the threshold performance required to support a military utility determination. These performance metrics form the basis for the Initial Operational Test and Evaluation (IOT&E) and subsequent FOT&E testing by the Lead OTA to make the suitability, effectiveness, and survivability determination.
To support a continuous monitoring approach to ensure the NCES Program continues to meet the mission needs of the stakeholders, the NCES Program Manager (PM) developed a Performance Measurement Plan consisting of five key performance management areas with the expected outcomes. These areas include:
Activity Expected Outcome
• Customer Perspective (Determine the customers' (warfighter, business, and DoD Portion of the Intelligence Mission Area) needs and work with them and the Operational Sponsor to develop reasonable performance expectations that support evolving missions, and solicit continual feedback from the customer on the utility, effectiveness, and suitability of all delivered services) Receive an overall customer satisfaction rating of three or better as defined in the NCES CPD Operational Metrics

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*

• Financial Perspective (Satisfy Clinger-Cohen Act of 1996, DISA and DoD Cost Strategic Goals, determine if Program funding is supporting the customers' mission needs and effectively supporting preplanned product improvements (P3I), and decreased sustainment costs) Continue to provide services to additional POR/COIs and scale services out to support user demand while maintaining an overall return on investment (ROI) that is greater than or equal to one

• Requirements Satisfaction (Deliver NCES CPD stated requirements, work with the Operational Sponsor to identify deltas from the NCES Capability Development Document (CDD) that were not fully satisfied and determine when they can be implemented via P3I, and work with the Operational Sponsor to re-validate service requirements prior to contract re-compete and identify any added enhancements required to support evolving mission needs) Continue to improve the performance while adding functionality and extending access to additional unanticipated users; receive an overall satisfaction rating of three or better from the NCES Operational Sponsor

• Contractor Performance (Service providers meet or exceed required service levels and demonstrated capability to quickly respond to short notice requirements) Monthly analysis of performance reporting by the managed service providers, and independent Enterprise Service Management (ESM) service will verify and validate that service performance and availability meet established SLAs

• Internal Process Perspective (Perform timely and effective program control and execution, pro-actively identify and resolve issues prior to the customers' awareness of the problem, and implementation of effectiveness business processes which facilitates continual improvement on performance requirements in SLAs). Maintain a comprehensive integrated management schedule to track status of program actions to provide management visibility into currency of all actions; data includes: Planned Start/End Dates, Actual Start/End Dates, Level of Effort (Planned, Current, Spent), and Progress (% Complete)

The management areas are designed to ensure that problems in NCES PMO activities can be identified rapidly for resolution, while providing maximum support to the NCES stakeholders' mission. These five quantitative management areas and their associated metrics will provide quantitative data that can be used to prove that NCES is realizing its vision of providing core enterprise services to DoD that are secure, interoperable, and responsive to current and future NCES stakeholder missions in a cost-effective manner.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Service Oriented Architecture Foundation Service 1	MIPR	JEDS JEDS	2.566	0.000		0.000		0.000		0.000	0	2.566	2.566
Service Oriented Architecture Foundation Service 2	C/Various	BAH BAH	3.084	0.000		0.000		0.000		0.000	Continuing	Continuing	3.084
Service Oriented Architecture Foundation Service 3	C/FPI	CSC CSC	15.051	0.000		0.000		0.000		0.000	Continuing	Continuing	30.235
Service Oriented Architecture Foundation Service 4	C/FP	Various Various	7.132	0.000		1.594	Mar 2011	0.000		1.594	Continuing	Continuing	5.898
Service Oriented Architecture Foundation Service 5	C/Various	FGM FGM	8.699	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing
Content Discovery and Delivery Service 1	C/Various	SOLERS SOLERS	4.143	0.000		0.000		0.000		0.000	Continuing	Continuing	5.143
Content Discovery and Delivery Service 2	C/CPIF	CSD CSD	8.417	0.000		0.000		0.000		0.000	Continuing	Continuing	8.212
Content Discovery and Delivery Service 3	C/FPI	ICES ICES	4.071	0.000		0.000		0.000		0.000	Continuing	Continuing	5.457
Content Discovery and Delivery Service 4	C/FP	Various Various	0.341	0.000		0.000		0.000		0.000	Continuing	Continuing	0.950
Collaboration Service 1	C/FPI	IBM IBM	4.339	0.000		0.000		0.000		0.000	Continuing	Continuing	5.248
Collaboration Service 2	C/FPI	Carahsoft	5.634	0.000		0.000		0.000		0.000	Continuing	Continuing	10.934

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
		Carahasoft											
Collaboration Service 3	C/FPI	Various Various	1.501	0.000		0.000		0.000		0.000	Continuing	Continuing	0.608
User Access (Portal) 1	MIPR	Army Army	9.756	0.000		0.000		0.000		0.000	Continuing	Continuing	11.110
User Access (Portal) 2	C/FP	Northrup Grumman Northrup Grumman	3.167	0.000		0.000		0.000		0.000	0.000	3.167	3.167
		Subtotal	77.901	0.000		1.594		0.000		1.594			

Remarks

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
PMO Engineering and Support 1	TM	DSA DSA	12.351	0.000		0.000		0.000		0.000	Continuing	Continuing	12.351
PMO Engineering and Support 2	FFRDC	MITRE MITRE	15.072	0.000		0.000		0.000		0.000	Continuing	Continuing	15.072
PMO Engineering and Support 3	C/FP	CSD CSD	23.056	0.000		0.000		0.000		0.000	Continuing	Continuing	23.056

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*	

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
PMO Engineering and Support 4	C/CPFF	SRA SRA	1.478	0.000		0.000		0.000		0.000	Continuing	Continuing	1.478
PMO Engineering and Support 5	C/Various	BAH BAH	10.224	0.000		0.000		0.000		0.000	Continuing	Continuing	10.224
PMO Engineering and Support 6	C/Various	SOLERS SOLERS	4.853	0.000		0.000		0.000		0.000	Continuing	Continuing	4.853
PMO Engineering and Support 7	C/CPFF	Pragmatics Pragmatics	1.735	0.000		0.000		0.000		0.000	Continuing	Continuing	1.735
PMO Engineering and Support 8	C/CPFF	MMI MMI	2.689	0.000		0.000		0.000		0.000	Continuing	Continuing	2.689
PMO Engineering and Support 9	C/FP	Various Various	24.756	0.000		0.000		0.000		0.000	Continuing	Continuing	24.756
		Subtotal	96.214	0.000		0.000		0.000		0.000			96.214

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 1	MIPR	JITC JITC	27.912	1.775	Oct 2009	1.772	Oct 2010	0.000		1.772	Continuing	Continuing	30.401

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 2	MIPR	SPAWAR SPAWAR	18.070	0.000		0.000		0.000		0.000	Continuing	Continuing	18.070
Test and Evaluation 3	MIPR	JFCOM JFCOM	0.210	0.000		0.000		0.000		0.000	Continuing	Continuing	0.232
Test and Evaluation 4	C/Various	SAIC SAIC	11.541	0.000		0.000		0.000		0.000	Continuing	Continuing	11.541
Test and Evaluation 5	MIPR	TE TE	0.512	0.000		0.000		0.000		0.000	Continuing	Continuing	0.512
		Subtotal	58.245	1.775		1.772		0.000		1.772			60.756

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	232.360	1.775		3.366		0.000		3.366			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*	

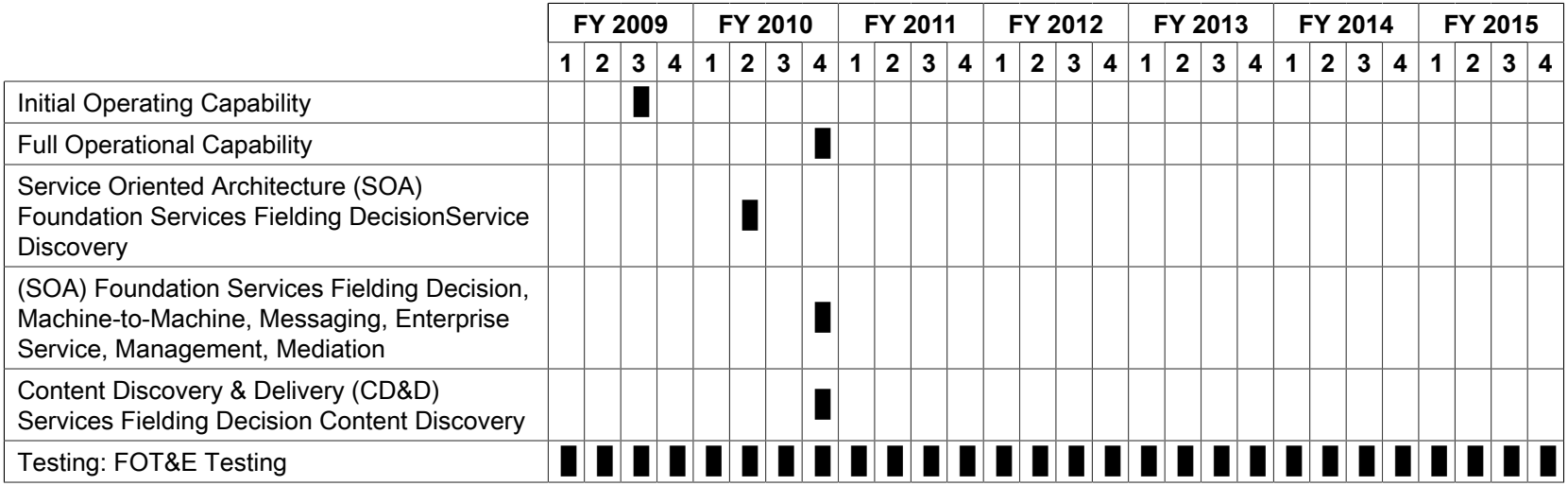

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303170K: *Net-Centric Enterprise Services*	PROJECT T57: *Net-Centric Enterprise Services (NCES)*

Schedule Details

	Start		End	
Event	Quarter	Year	Quarter	Year
Initial Operating Capability	3	2009	3	2009
Full Operational Capability	4	2010	4	2010
Service Oriented Architecture (SOA) Foundation Services Fielding DecisionService Discovery	2	2010	2	2010
(SOA) Foundation Services Fielding Decision, Machine-to-Machine, Messaging, Enterprise Service, Management, Mediation	4	2010	4	2010
Content Discovery & Delivery (CD&D) Services Fielding Decision Content Discovery	4	2010	4	2010
Testing: FOT&E Testing	1	2009	4	2015

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency										DATE: February 2010	
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 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	2.054	5.217	6.880	0.000	6.880	6.824	6.150	5.706	5.623	Continuing	Continuing
NS01: *Teleport Program*	2.054	5.217	6.880	0.000	6.880	6.824	6.150	5.706	5.623	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Department of Defense (DoD) Teleport program provides multi-frequency Military Satellite Communications (MILSATCOM) and Commercial Satellite Communications (COMSATCOM) to forward deployed tactical users requiring access to the Defense Information System Network (DISN) on demand. The DoD Teleports are the only system capable of providing this capability to forward deployed users over Commercial SATCOM (C-band and Ku-band) and MILSATCOM (X-band, Ka-band, Ultra High Frequency (UHF) and Extremely High Frequency (EHF)) and leverages improved DoD SATCOM and Global Information Grid (GIG) technologies to meet the connectivity, capacity, interoperability, availability, security, and throughput to meet Combatant Commands, Services, and Agency requirements.

The FY 2011 funding will provide system engineering, program management support and test activities to integrate the Advanced Extremely High Frequency (AEHF) and the Mobile User Objective System (MUOS) satellite systems' capabilities into the DoD gateway architecture.

Without these enhancements, the Teleport gateways and the DISN services provided to SATCOM users will be inaccessible to the warfighter using AEHF's greatly improved capability, preventing them from using the most high-speed, secure, and interoperable voice, data, and video networks. In addition, MUOS will not be backwards compatible 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.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303610K: *Teleport Program*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	2.054	5.239	0.000	0.000	0.000
Current President's Budget	2.054	5.217	6.880	0.000	6.880
Total Adjustments	0.000	-0.022	6.880	0.000	6.880
• Congressional General Reductions		-0.022			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	6.880	0.000	6.880

Change Summary Explanation

The FY 2010 decrement of -$0.022 million reflect is due to Congressional taxes for Economic Assumption. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303610K: *Teleport Program*	PROJECT NS01: *Teleport Program*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
NS01: *Teleport Program*	2.054	5.217	6.880	0.000	6.880	6.824	6.150	5.706	5.623	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

DoD Teleport Generation One added Commercial SATCOM and expanded the MILSATCOM terminal, baseband equipment, and serial circuit based network services segment capabilities to six Standard Tactical Entry Point (STEP) sites to increase the throughput and functional capabilities of those sites. DoD Teleport Generation Two expanded the capacity and capabilities of all DoD Teleport facility segments and installed a converged router Net-Centric suite of equipment to allow for the use of Internet Protocol (IP) for enhanced network interoperability and enable dynamic satellite bandwidth allocation to reduce satellite lease costs and increase overall performance.

Building upon DoD Teleport Generations One and Two, DoD Teleport Generation Three (Gen 3) Satellite Gateway Enhancements (SGE) will take full advantage of state-of-the-art SATCOM radio frequency (RF), Information Assurance (IA) and packet routing/switching baseband technologies to deliver IP voice, video, and data services to the warfighter via a reliable, secure, and responsive converged Net-Centric IP architecture. Teleport's SGE will integrate the Advanced Extremely High Frequency (AEHF) and the Mobile User Objective System (MUOS) satellite systems' capabilities into the DoD gateway architecture beginning FY 2010.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Teleport Program	2.054	5.217	6.880	0.000	6.880
FY 2009 Accomplishments: FY 2009 Accomplishments: FY 2009 funding provided warfighters access to DISN services using an initial Net-Centric, IP-based architecture to meet the Combatant Commands, Services, Agency, and deployed warfighter needs. Funding allowed for improving maintainability, fielding Teleport Management and Control System (TMCS) Build 4.1 to provide remote monitoring facilitated through secure connectivity over Secret Internet Protocol router Network (SIPRNet), and implemented UHF to DISN access. Postured the program for a successful Multi-Service Operational Test and Evaluation					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303610K: *Teleport Program*	PROJECT NS01: *Teleport Program*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
(MOT&E) by enhancing the knowledge and skill set of the system operators during Scenario Based Training (SBT) and Developmental test events. Completed Ka terminal and IP/Net-Centric installation, integration and testing. *FY 2010 Plans:* System Engineering & Program Management (SEPM) will continue Teleport's technology refreshment schedule to include: installation of Joint IP Modems (JIPM) to encrypt Transmission Security (TRANSEC) and comply with DoD standardization; upgrading Net-Centric baseband and IP modem software and firmware; deployment of TMCS Build 5.0 to enhance security; DISN service enhancements; and UHF integrated waveform upgrades. Following a Material Development Decision (MDD) in 3QFY10, the program office will execute the Gen 3 acquisition plan to purchase commercial-off-the-shelf (COTS) and Government-off-the-shelf (GOTS) equipment to integrate with the Teleport system's architectural design. The Navy's multi-band's first article terminals will be purchased and prepared for testing requirements at the test bed. SEPM will support this effort to initiate the Gen 3 enhancements for increased warfighter capabilities by providing users of the current UHF system with improved service and complete interoperability with the MUOS legacy payload, to ensure a smooth transition to the next generation of mobile user equipment. These efforts support pre-milestone decision documentation and acquisition planning for Gen 3 in the following functional areas: systems engineering, network and security engineering, test support, system integration and implementation, configuration management support, logistics and safety support, program and acquisition management. *FY 2011 Base Plans:* In FY 2011, SEPM efforts continue by enabling tactical-to-tactical SATCOM voice communications between warfighters using the current UHF system and future warfighters using MUOS. The program will continue with insertion of technology refreshment schedule to maintain existing capabilities. 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					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303610K: *Teleport Program*	PROJECT NS01: *Teleport Program*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
baseband equipment. MUOS-to-Legacy installation and test begins at the Teleport Program Office (TPO) test lab. TPO installation planning begins on the fourth enhancement, WGS X/Ka Terminals. The benefit of these activities will allow Teleport gateways and the DISN services provided to SATCOM users to be accessible to the warfighter using AEHF's greatly improved capability of the most high-speed, secure, and interoperable voice, data, and video networks. In addition, MUOS will be compatible with existing UHF SATCOM equipment, and tactical users deployed in harm's way will be able to efficiently communicate with one another and their commanders through existing legacy systems.					
Accomplishments/Planned Programs Subtotals	2.054	5.217	6.880	0.000	6.880

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• O&M/0303610K: *O&M*	9.074	11.940	19.827		19.827	21.471	21.367	21.972	22.841	Continuing	Continuing
• PROCUREMENT, DW/0303610K : *PROCUREMENT, DW*	15.418	67.731	78.227		78.227	55.610	48.593	60.705	60.814	Continuing	Continuing

D. Acquisition Strategy

The TPO utilizes the DoD preferred evolutionary acquisition approach to acquire Commercial off-the-shelf (COTS) modified COTS, and Government-off-the-shelf (GOTS) equipment when possible. The two TPO procuring agencies, Program Manager Defense Communications and Army Transmission Systems (PM DCATS), and the Space and Naval Warfare Systems Command (SPAWAR) provide direct contracting support. Required assistance from other Departments including Army, Navy, and Air Force is acquired via Military Interdepartmental Purchase Request (MIPR) for both organic and contracted support.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303610K: *Teleport Program*	PROJECT NS01: *Teleport Program*

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 will integrate Ka (8 legacy links) and IP over SATCOM capability that dynamically allocates satellite bandwidth utilizing existing COTS IP modems (Gen 2 Phase 1) and integrate an open standard IP modems (Digital Video Broadcast-Satellite (2nd generation) / Return Channel via Satellite (DVB-S2/RCS) hubs). Gen 2 upgrades for coverage/capacity requirement.
FY 2009: As of 4QFY09 Gen 2 implementation is 91 percent complete, awaiting full wideband constellation.
FY 2010: Performance metrics for Generation 3 will be established after this increment has an approved baseline in the 2QFY10 timeframe.
FY 2011: Performance metrics for Generation 3 will be established after this increment has an approved baseline in the 3QFY10 timeframe.

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 and software.
FY 2009: As of 4QFY09 Gen 2 implementation is 100 percent complete, awaiting full wideband constellation.
FY 2010: Performance metrics for Generation 3 will be established after this increment has an approved baseline in the 2QFY10 timeframe.
FY 2011: Performance metrics for Generation 3 will be established after this increment has an approved baseline in the 3QFY10 timeframe.

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) modem software and firmware, and (3) EHF baseband hardware and software. Will complete DISN service enhancements.
FY 2009: As of 4QFY09 implementation is 80 percent complete, coverage exists where satellites are available.
FY 2010: Performance metrics for Generation 3 will be established after this increment has an approved baseline in the 2QFY10 timeframe.
FY 2011: Performance metrics for Generation 3 will be established after this increment has an approved baseline in the 3QFY10 timeframe.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303610K: *Teleport Program*	PROJECT NS01: *Teleport Program*	

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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
Contracted Systems Engineering and Program Management (SE/PM) Support	C/CPFF	Booz Allen & Hamilton Fairfax, VA	26.627	2.800	Mar 2010	2.729	Mar 2011	0.000		2.729	0	32.156	32.156
Contracted Systems Integration and Program Management Support	MIPR	STF SPAWAR	2.749	0.577	Jan 2010	0.562	Jan 2011	0.000		0.562	0	3.888	3.888
Contracted SE/PM Support	TM	SAIC SAIC	0.099	0.079	Mar 2010	0.078	Mar 2011	0.000		0.078	0	0.256	0.256
Contracted Systems Engineering and Program Management (SE/PM) Support 2	C/FFP	Wexford Wexford	0.000	0.483	Jan 2010	0.471	Oct 2011	0.000		0.471	0	0.954	0.954
MUOS Contracted Systems Engineering and Program Management (SE/PM) Test Support	TBD/TBD	TBD TBD	0.000	0.000		1.790	Jan 2011	0.000		1.790	0	1.790	1.790
		Subtotal	29.475	3.939		5.630		0.000		5.630	0.000	39.044	39.044

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303610K: *Teleport Program*	PROJECT NS01: *Teleport Program*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Test and Evaluation Support	MIPR	JITC Ft. Huachuca	7.234	1.278	Feb 2010	1.250		0.000		1.250	Continuing	Continuing	Continuing
		Subtotal	7.234	1.278		1.250		0.000		1.250			

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	36.709	5.217		6.880		0.000		6.880			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303610K: *Teleport Program*	PROJECT NS01: *Teleport Program*	

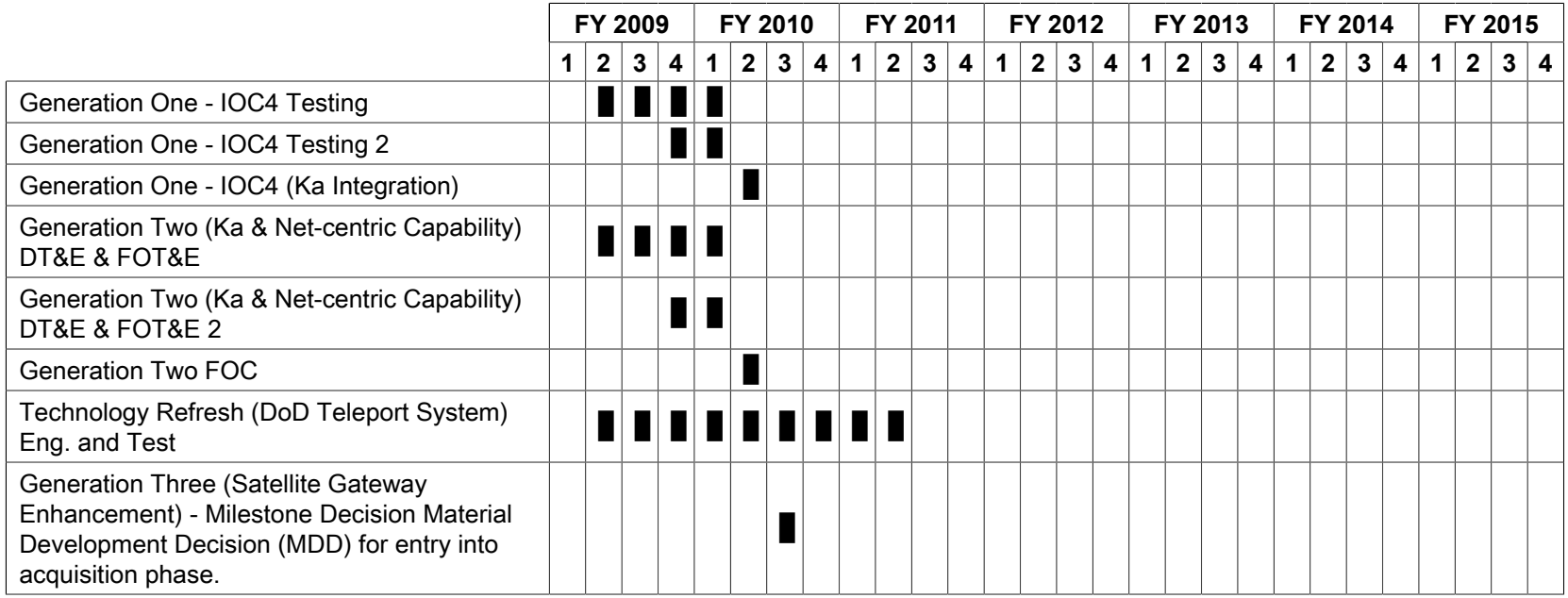

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303610K: *Teleport Program*	**PROJECT** NS01: *Teleport Program*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Generation One - IOC4 Testing	2	2009	1	2010
Generation One - IOC4 Testing 2	4	2009	1	2010
Generation One - IOC4 (Ka Integration)	2	2010	2	2010
Generation Two (Ka & Net-centric Capability) DT&E & FOT&E	2	2009	1	2010
Generation Two (Ka & Net-centric Capability) DT&E & FOT&E 2	4	2009	1	2010
Generation Two FOC	2	2010	2	2010
Technology Refresh (DoD Teleport System) Eng. and Test	2	2009	2	2011
Generation Three (Satellite Gateway Enhancement) - Milestone Decision Material Development Decision (MDD) for entry into acquisition phase.	3	2010	3	2010

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305103K: *Cyber Security Initiative*

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	12.800	10.038	2.251	0.000	2.251	2.529	2.153	2.269	2.320	Continuing	Continuing
XXX: *Cyber Security Initiative*	12.800	10.038	2.251	0.000	2.251	2.529	2.153	2.269	2.320	Continuing	Continuing

A. Mission Description and Budget Item Justification

This is a classified program. Details will be provided upon request.

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	12.765	10.080	0.000	0.000	0.000
Current President's Budget	12.800	10.038	2.251	0.000	2.251
Total Adjustments	0.035	-0.042	2.251	0.000	2.251
• Congressional General Reductions		-0.042			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.035	0.000	2.251	0.000	2.251

Change Summary Explanation

Classified

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305103K: *Cyber Security Initiative*	PROJECT XXX: *Cyber Security Initiative*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
XXX: *Cyber Security Initiative*	12.800	10.038	2.251	0.000	2.251	2.529	2.153	2.269	2.320	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Classified.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Cyber Security Initiative	12.800	10.038	2.251	0.000	2.251
Classified. *FY 2009 Accomplishments:* Classified. *FY 2010 Plans:* Classified. *FY 2011 Base Plans:* Classified.					
Accomplishments/Planned Programs Subtotals	12.800	10.038	2.251	0.000	2.251

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305103K: *Cyber Security Initiative*	**PROJECT** XXX: *Cyber Security Initiative*

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 2011 Defense Information Systems Agency										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0305208K: *Distributed Common Ground/Surface System*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	3.218	3.145	3.513	0.000	3.513	3.703	3.690	3.825	3.883	Continuing	Continuing
NF1: *Distributed Common Ground/ Surface Systems*	3.218	3.145	3.513	0.000	3.513	3.703	3.690	3.825	3.883	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, 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 2011 request of $3.513 million will fund the DDTE, which provides the DCGS Community of Interest (COI) an operationally relevant environment by establishing and maintaining connectivity between National Agency and Service facilities at unclassified, collateral, Sensitive Compartmented Information (SCI), and coalition levels, and also supports the DCGS Enterprise assessment, as directed by OUSD(I), and DCGS Governance.

A reduction in funding will result in reduced support to all components of the DCGS Program, including crucial DDTE network and DCGS Enterprise assessments necessary for ensuring the optimum operation of the DCGS systems.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Defense Information Systems Agency	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208K: *Distributed Common Ground/Surface System*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	3.218	3.158	0.000	0.000	0.000
Current President's Budget	3.218	3.145	3.513	0.000	3.513
Total Adjustments	0.000	-0.013	3.513	0.000	3.513
• Congressional General Reductions		-0.013			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	3.513	0.000	3.513

Change Summary Explanation

Change Summary Explanation: The FY 2010 decrease of $0.013 million, is due to Congressional adjustments for Economic Assumptions. The DoD did not estimate FY 2011 cost when the FY 2010 President's Budget was prepared.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208K: *Distributed Common Ground/ Surface System*	PROJECT NF1: *Distributed Common Ground/Surface Systems*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
NF1: *Distributed Common Ground/ Surface Systems*	3.218	3.145	3.513	0.000	3.513	3.703	3.690	3.825	3.883	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 Agencies on integrating, modeling and simulation capabilities, and performing Joint/Distributed Common Ground/Surface System (DCGS) event coordination, configuration, and integration functions on the Distributed Development and Test Enterprise (DDTE). These program components enable improved systems engineering and test and evaluation throughout all phases of the DCGS life-cycle.

DCGS uses the DDTE, which is composed of three parts: a distributed development network; a net-enabled enterprise testing and evaluation; and an annual DCGS demonstration or exercise (e.g.,Empire Challenge) to integrate architecture, standards, and capabilities for implementation of the DCGS Integration Backbone (DIB) and supports the migration to net-centricity, including convergence with Net-Centric Enterprise Services (NCES), for the following programs: DCGS-Army (DCGS-A), DCGS-Navy (DCGS-N), Air Force DCGS (AF DCGS), DCGS-Marine Corps (DCGS-MC), and DCGS-Special Operations Forces (DCGS-SOF). The net enabled enterprise testing is designed to more closely simulate the complexities of an actual combat environment. JITC engineers and operates the DDTE network; and provides test strategy, planning and execution to support the assessment of the DCGS Enterprise. National Agency capabilities supporting DCGS include Imagery Intelligence (IMINT), Signals Intelligence (SIGINT), Measurement and Signature Intelligence (MASINT) and Human Intelligence (HUMINT), which will also be integrated and tested in the DDTE. The DCGS programs use the DDTE to improve/validate interoperability with the reconnaissance platforms and sensors, and to integrate into the Joint Command and Control environment.

JITC will implement the DDTE, providing DCGS an off-line operationally relevant environment by: establishing and maintaining connectivity between national agency and Service facilities; integrating modeling and simulation capabilities; and performing Joint/DCGS event coordination, configuration, and integration functions. This will enable improved systems engineering and test and evaluation throughout all phases of the DCGS life cycle.

A reduction in funding will result in reduced support to all of the following: DDTE support, operation and maintenance; DCGS systems testing and evaluation; responsibilities associated with the Chair of the DCGS Test and Evaluation Focus Team; DCGS Enterprise test strategy development; and Exercise support. The DDTE network and DCGS Enterprise assessments are crucial for ensuring the capabilities of the DCGS systems are adequate before they are allowed on the operational networks.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208K: *Distributed Common Ground/ Surface System*	PROJECT NF1: *Distributed Common Ground/Surface Systems*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Interoperability Test Support	3.218	3.145	3.513	0.000	3.513

FY 2009 Accomplishments:

FY 2009 Accomplishments: Purchased contract services, government labor, associated travel, and supplies. Completed establishment of infrastructure for DCGS Program and provided connectivity and support for DDTE and DCGS Enterprise T&E support. This effort provided the basis for the DCGS Enterprise Assessment, allowing the Office of the Under Secretary of Defense (Intelligence)(OUSD-I) to determine the status of the DCGS Enterprise development.

FY 2010 Plans:

FY 2010 Plans: Continued DDTE Capability and 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. This effort will provide a DCGS Community of Interest overview of the status of the DCGS Enterprise development, which will be assessed by testing conducted by JITC. The projected costs for FY 2010 are: Fixed Costs $0.852 million; DDTE Capability Service Support $0.854 million; DCGS Enterprise T&E Support $1.439 million. The FY 2009 to FY 2010 slight decrease of -$0.073 million is a result of adjustments for non-pay inflation and revised economic assumptions. This decrease will reduce our ability to provide optimum testing activities. Loss of funding for FY 2010 would result in overall reduction of testing capability and support.

FY 2011 Base Plans:

FY 2011 Plans: Continued DDTE support and enhanced functionality. DCGS Enterprise T&E support will include enterprise-level test and evaluation for the DCGS Programs of Record and Coalition Partners, developmental testing support, operational testing support, and interoperability testing/ certification as required. DCGS Governance as the Chair of the DCGS T&E Focus Team, including the DDTE Focus Group and the DCGS T&E Integration Focus Group. The projected costs for FY 2011 are: Fixed Costs $0.950 million; DDTE Capability Service Support $0.953 million; DCGS

Exhibit R-2A, RDT&E Project Justification: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208K: *Distributed Common Ground/ Surface System*	PROJECT NF1: *Distributed Common Ground/Surface Systems*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Enterprise T&E Support $1.610 million. The FY 2010 to FY 2011 increase of $0.368 million is due to increased support for DDTE Capability Service and DCGS Enterprise T&E. If not fully funded for FY 2011, visibility of the DCGS Enterprise and the DDTE network status will be lost, leaving the DCGS Communities of Interest (COI) with vastly reduced testing capability.					
Accomplishments/Planned Programs Subtotals	3.218	3.145	3.513	0.000	3.513

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

DCGS uses an evolutionary acquisition approach. 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 expands and contracts. The current prime contractors that support this effort are Northrop Grumman Mission Systems, Northrop Grumman Information Technology, and INTEROP Joint Venture.

E. Performance Metrics

Number of operational DDTE nodes that enable the Services/agencies to participate in joint/enterprise level test and evaluation (IOC) = 14.

Number of additional DDTE nodes planned for installation in FY 2010 = 2. At this time, no additional nodes are planned for FY 2011.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208K: *Distributed Common Ground/ Surface System*	PROJECT NF1: *Distributed Common Ground/Surface Systems*

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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/ Various	N/A N/A	17.170	1.708	Oct 2009	1.891	Oct 2010	0.000		1.891	Continuing	Continuing	Continuing
		Subtotal	17.170	1.708		1.891		0.000		1.891			

Remarks

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	TM	Interop Ft. Hua, AZ	1.525	0.383	Oct 2009	0.423	Oct 2010	0.000		0.423	Continuing	Continuing	Continuing
Engineering/Technical Services 2	TM	NGMS Ft. Hua, AZ	6.282	0.798	Oct 2009	0.908	Oct 2010	0.000		0.908	Continuing	Continuing	Continuing
Engineering/Technical Services 3	TM	NGIT Ft. Hua, AZ	1.306	0.256	Oct 2009	0.291	Oct 2010	0.000		0.291	Continuing	Continuing	Continuing
		Subtotal	9.113	1.437		1.622		0.000		1.622			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Defense Information Systems Agency			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208K: *Distributed Common Ground/ Surface System*	PROJECT NF1: *Distributed Common Ground/Surface Systems*	

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	26.283	3.145		3.513		0.000		3.513			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208K: *Distributed Common Ground/ Surface System*	PROJECT NF1: *Distributed Common Ground/Surface Systems*

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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	■	■	■	■	■	■	■	■	■	■	■	■																
Establishment of Infrastructure	■	■	■	■																								
Connectivity to Other Testbeds & Test Event Conduct	■	■	■	■	■	■	■	■	■	■	■	■																
O&M	■	■	■	■	■	■	■	■	■	■	■	■																

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Defense Information Systems Agency		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208K: *Distributed Common Ground/ Surface System*	**PROJECT** NF1: *Distributed Common Ground/Surface Systems*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
DCGS T&E IPT	1	2009	4	2011
Establishment of Infrastructure	1	2009	4	2009
Connectivity to Other Testbeds & Test Event Conduct	1	2009	4	2011
O&M	1	2009	4	2011

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