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

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

A. Mission Description and Budget Item Justification

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

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

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

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

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency	DATE: February 2012
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The Interoperability Enhancement Process (IEP) supports the resolution of Tactical Data Enterprise Services (TDES) through issues resolution, the developing TDES capability, and TDES verification and certification. The overarching objective of the IEP will be to support the realization and maintenance of interoperable Net-Centric weapons, sensors, and Command and Control (C2) systems at the tactical edge.

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

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

Change Summary Explanation

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

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

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

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

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
E65: *Modeling and Simulation*	26.090	12.946	5.775	-	5.775	5.972	5.814	6.005	6.083	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

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

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

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

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Title: Modeling and Simulation	26.090	12.946	5.775

FY 2011 Accomplishments:

Funds supported EWSE efforts to resolve near and mid term high-priority technical issues impacting GIG end-to-end interoperability and performance. Six technical tasks were completed in FY11: Federated SOA Architecture for GIG Services; Hosting Applications and Data in a Virtual Computing Environment, End-to-End Service and Performance & SLA Management; Common Radio Interface to IP Layer; Global Access Control; and GIG Multicast Network Architecture. GIG Technical Profiles (GTP) were developed and delivered under these tasks. GTPs are used by the DoD Programs of Record for NR-KPP compliance. EWSE also continued to technically manage Integrated SATCOM Operations Management JCTD; develop DoD level GIG NetOps Technical Architecture; and evolve DISA Unified Communications and Collaboration Architecture. In partnership with DoD standards management office, EWSE coordinated DoD WiMAX Secure Profile RFI with the industry and adjudicated vendor comments. Four technical tasks were initiated in FY11: Secure Federated GIG Core Architecture and Routing Services; GIG VPN Services and Architecture; Service-Orientation in DIL; and DoD Enterprise User Initiative-Directory Services. All tasks directly support customers within DISA and stakeholder in the DoD community. Preliminary results from the Service-Orientation in DIL task were used for Enterprise Engineering Technical Track at the DISA Customer Conference.

Funds supported development of GIG Convergence Master Plan Vol. I which defines the DISA technical strategy and articulates the near-term target technical architecture and Vol. II which consists of the complete service offering to service capability mapping, and the complete DISA technical baseline. Modeling and Simulation funds provided enhanced modeling and instrumentation techniques for Enterprise Email end-to-end performance assessment; enabled continued, enhanced, modeling capabilities to prepare for the FY 2013 Technology Refresh and to meet new user requirements in each theater; provided DoD Internet traffic models and analyses for capacity planning and IA initiatives, for DISA Director, CYBERCOM, and Network Services; enhanced modeling tools and techniques to provide inputs to network planning in support of Unified Communications and end to-end security goals of the evolving DISN, to ensure timely support of the plans/stages in the DISN Technical Evolution Plan and GIG Convergence Master Plan; and supported modeling for customer needs in DISA program/project decisions and planning.

DISA EE3 successfully tested, verified, validated, and fielded in DECC operational environment the GIG Technical Guidance federation (GTG-F) to allow for "data-centric" Interoperability and Supportability analysis of Joint Information Support Plans by the Services. Established a program entry point through the Enhanced Information Support Plan (EISP) application to transparently tag data as it is entered or imported in to a structured template with Extensible Markup Language (XML). In addition, the Interoperability Assessment Module (IAM) was developed within the GTG-F to perform assessment of the data tables to alert the Joint assessment community of potential interoperability gaps. The introduction of this new "data-centric" analysis capability is a positive paradigm shift from document driven reviews to data architecture analysis to continuously improve system level interoperability for the Joint Warfighter.

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013

DISA EE3, as the DoD Executive Agent for IT Standards, merged the process that determines DoD IT standards applicability and utilization with the emerging standards management processes developed within the Intelligence Community. This change will improve interoperatbility and enterprise information sharing among the DoD and the IC.

FY 2012 Plans:

Funds continue EWSE efforts to resolve near term (1 to 3 years) high-priority technical issues impacting operational capabilities affecting GIG end-to-end (E2E) performance in transport, computing services, applications, information assurance (IA), NetOps and Enterprise Services.

Modeling and Simulation funding continues, enhanced, modeling capabilities that provide: DISN IP and Transport Capacity Planning models, to include addressing FY 2013 Technology Refresh and new user requirements in each theater; DoD Internet traffic analyses for capacity planning and IA initiatives, supporting DISA Director, CYBERCOM, Network Services, and PEO-MA projects; enhanced modeling tools and techniques to provide inputs to network planning in support of Unified Communications and end to-end security goals of the evolving DISN, to ensure timely support of the plans/stages in the DISN Technical Evolution Plan and GIG Convergence Master Plan; enhanced modeling and instrumentation techniques for net-centric applications planning and tuning, to include Enterprise services, and modeling support for customer needs in DISA program/project decisions and planning.

The decrease of -$13.144 between FY 2011 and FY 2012 is attributable to a decrease of -$10.000 for the One-Time Congressional Add for the Cyber Security Pilots Program and a decrease of -$3.144 is due to the expected closeout of the IEP Project in FY 2011.

Primary execution of FY11 Cyber Security Pilot funds in support of the overall objective of more rapid introduction of commercial information assurance products and technologies into DoD operations. Specifically, planned and ongoing pilots will be executed to explore and evaluate the viability of commercial solutions in the areas of non-signature-based detection products at both the host and network levels, enclave security policy evaluation, data center attack detection and diagnosis, securing managed and unmanaged mobile endpoints, end-to-end cloud security, and cryptographic tagging for data loss prevention. DISA's involvement in overseeing and managing these pilots is to ensure the objectives and metrics associated with the pilots are optimized to facilitate enterprise deployment and sustainment. Another key aspect of the cyber pilot funding for FY12 is the advancement of the cyber accelerator concept as an innovative mechanism for identifying and incubating promising information assurance technologies and products for the DoD.

FY 2013 Plans:

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

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

C. Other Program Funding Summary ($ in Millions)

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

D. Acquisition Strategy

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

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

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

E. Performance Metrics

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

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

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

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency			DATE: February 2012
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development 1	SS/FFP	OPNET Tech, Inc.:Bethesda, MD	3.022	1.262	Aug 2012	1.302	Aug 2013	-		1.302	Continuing	Continuing	5.102
Product Development 2	C/CPFF	APPTIS:Chantilly, VA	1.137	0.336	Jan 2012	0.117	Jan 2013	-		0.117	Continuing	Continuing	0.990
Product Development 3	SS/FFP	Noblis:Falls Church, VA	1.312	-		-		-		-	Continuing	Continuing	0.980
Product Development 4	C/FFP	Booz Allen, Hamilton:McLean, VA	1.092	1.092	Dec 2011	2.019	Dec 2012	-		2.019	Continuing	Continuing	3.111
Product Development 5	C/FFP	NRL:Washington, DC	0.100	-		-		-		-	Continuing	Continuing	0.100
Product Development 6	C/CPFF	TBD:TBD	0.161	1.006	Mar 2012	1.544	Mar 2013	-		1.544	Continuing	Continuing	2.711
Product Development 7	C/FFP	TBD:TBD	2.200	0.500	Dec 2011	0.143	Dec 2012	-		0.143	Continuing	Continuing	3.443
Product Development 8	C/CPFF	TBD:TBD	0.926	0.500	Dec 2011	0.154		-		0.154	Continuing	Continuing	0.500
Product Development 9	C/CPFF	TBD:TBD	3.109	0.750	Mar 2012	-		-		-	Continuing	Continuing	3.147
Product Development 10	MIPR	Various:Various	7.011	-		-		-		-	Continuing	Continuing	7.011
Enterprise Wide Systems Engineering 11	C/FFP	Northrop Grumman:Fairfax, VA	1.784	-		-		-		-	Continuing	Continuing	1.784
Clear Sky Pilot	C/CPFF	AFRL Terremark:TBD	11.000	7.500		-		-		-	Continuing	Continuing	3.000
Narus	C/CPFF	AFRL:Rome, NY	1.450	-		-		-		-	Continuing	Continuing	1.450
Cyber Accelerator	C/CPFF	DTIC:Alexandria, VA	7.516	-		-		-		-	Continuing	Continuing	2.800
Commercial Integration Demonstration	C/CPFF	DTIC:Alexandria, VA	2.750	-		-		-		-	Continuing	Continuing	2.750
Web Content Filtering: Perimeter Defense Integration	C/FFP	Oberon Associates:Ft. Meade, MD	1.854	-		-		-		-	Continuing	Continuing	1.854
Host Based Security Ops Assessment	C/FFP	Summit Technologies, Inc:Ft Meade, MD	0.700	-		-		-		-	Continuing	Continuing	0.700
Secure Configuration Management Ops Assessment	C/FFP	Cyber Security research and Solutions Corp:Ft Meade, MD	0.964	-		-		-		-	Continuing	Continuing	0.964
		Subtotal	48.088	12.946		5.279		-		5.279			42.397

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency			DATE: February 2012
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Test and Evaluation ($ in Millions)

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

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

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0302019K: *Defense Info. Infrastructure Engineering and Integration*	**PROJECT** E65: *Modeling and Simulation*

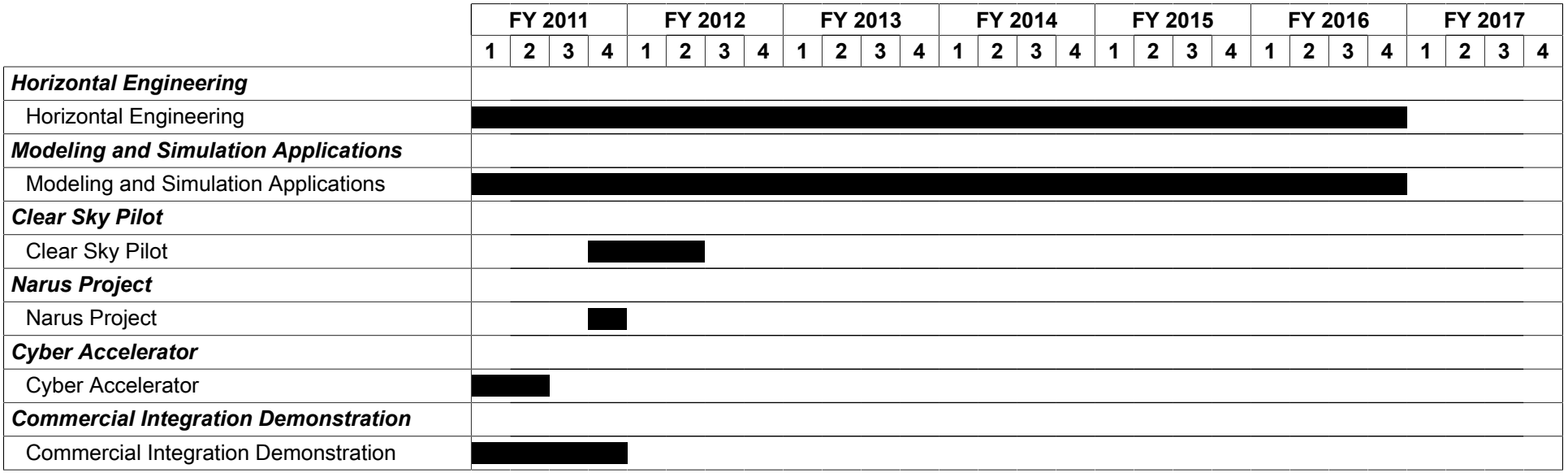

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency		DATE: February 2012
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Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Horizontal Engineering				
Horizontal Engineering	1	2011	4	2016
Modeling and Simulation Applications				
Modeling and Simulation Applications	1	2011	4	2016
Clear Sky Pilot				
Clear Sky Pilot	4	2011	2	2012
Narus Project				
Narus Project	4	2011	4	2011
Cyber Accelerator				
Cyber Accelerator	1	2011	2	2011
Commercial Integration Demonstration				
Commercial Integration Demonstration	1	2011	4	2011

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency			DATE: February 2012
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COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
T62: *GIG Systems Engineering and Support*	8.794	2.233	8.723	-	8.723	8.226	3.873	2.875	2.906	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

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

•Capability 1 supports end-to-end technology analysis, assessments, and reviews of all solutions, products, services, and capabilities to ensure all are consistent with GIG architecture and standards. These projects provide direct support to Services, COCOMS, OSD, and the Joint Staff as well as the DoD business and acquisition communities and the intelligence community (IC). The end result is more efficient and effective technology investments and ultimately improved global, net-centric operations which are delivered through GIG products, services, and capabilities to the Services, COCOMS, OSD, and the Joint Staff as well as the DoD business and acquisition communities and the IC.

•Capability 2 supports various aspects of evolving the GIG, including developing enterprise system architecture constructs for the GIG and components, providing engineering guidance for system and component evolution, including incorporating new technology from industry. Engineering and technical support of the DISA programs implementing the GIG involves technical research and analysis of state-of-the-art and emerging technologies, architectures, and data communication and application frameworks. This involves the identification and recommendation of innovative engineering techniques, practices and methodologies that are critical to the DISA in its role of instantiating the GIG architecture; the support of information exchanges with the Services, OSD, the COCOMS, and the Joint Staff to identify opportunities, issues, and solutions to improve the DISA products; and, facilitation and harmonization of cross-corporate programs relative to the DISA programs and the GIG.

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

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

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
FY 2011 funding of $4.700 million was used to evolve the TMF and continue support of the Technology Readiness Assessments (TDA). TDA is an essential capability supporting several key DISA programs of record as well as supporting the close-out of the Enterprise thin-client effort. DISA has successfully developed an initial technology environment, including the infrastructure and methodologies necessary for technology evaluation and analysis. A streamlined, Department of Defense Architecture Framework (DoDAF)-compliant Multi-level Security (MLS) Enterprise Architecture (EA) was published that fuses the architecture with recognized, dependent enterprise services such as directory and domain name system while supporting vendor agnostic enterprise and local virtual domains. The design of the Enterprise Identity Management System (EIMS) was completed, using detailed use-cases and work flows abstracted from the recently completed Joint Staff MLS thin-client pilot and leveraging evolving/ emerging IA policies/practices and best-in-class products that are MLS certified. The resulting architectural "blue-print" can serve as the building-code for architecture design and service integration/interoperability among domain and/or mission-level architectures with the EIMS, targeted for a 2QFY12 proof-of-concept, validating that the architecture is viable and can support GIG 2.0 goals of improved information sharing, security, and resiliency. The remaining $4.094 supported classified work. ***FY 2012 Plans:*** FY 2012 funding of $2.233 million is being used to refine several major elements of the TMF and continue support of the Technology Readiness Assessment. The Strategic Technology Plan is being updated to better align with the technologies that were identified in the Technology Watch List and the Technology Environment will be expanded to include venues such as DoD test ranges and the non-DoD Federal sector and peering with DoD and national laboratory assets. The Enterprise Architecture and Infrastructure effort continues to defining/refining technology gaps and mitigation of identified deficiencies through technology innovation activities and focused investments which will translate into piloting activities in support of GIG optimization resulting in improved information sharing, information security, and network performance of the GIG. The decrease of -$6.561 between FY 2011 and FY 2012 is due to the completion of DAMA-C and thin client projects. ***FY 2013 Plans:*** FY 2013 funding of $2.723 million will be used for CTO Engineering Support to refine several elements of the TMF reflecting lessons-learned and customer/user feedback and metrics measurements/results from the application of the TMF to technology management challenges within DISA (and the CTO), with other DoD organizations, the intelligence community, and initial use with non-DoD external entities in the Federal Government (e.g. Department of Homeland Security (DHS)). The funding will also be used to continue support of the Technology Readiness Assessment, an essential capability supporting several key DISA programs of record with a greater leveraging of venues such as DoD test ranges and the non-DoD Federal sector and peering with DoD and national laboratory assets to more fully realize cross-domain, cross enterprise end-to-end system testing, further realizing and resulting in improved information sharing, information security, and network performance of the GIG.			

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

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• O&M, DW/PE 0302019K: *Operation & Maintenance, Defense-Wide*	2.159	2.117	4.649		4.649	4.623	4.721	4.717	4.744	Continuing	Continuing

D. Acquisition Strategy

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

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

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

E. Performance Metrics

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

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

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency			DATE: February 2012
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Product Development ($ in Millions)

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

	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	18.714	2.233		8.723		-		8.723			28.370

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency		DATE: February 2012
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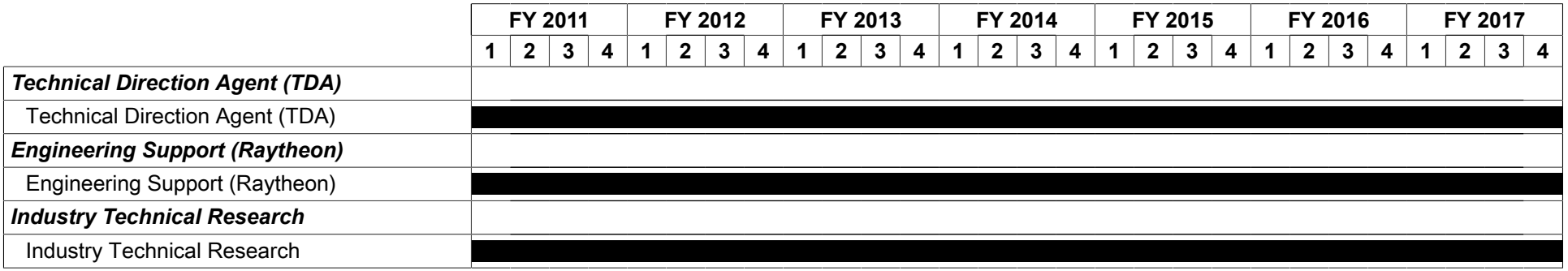

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency		DATE: February 2012
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Schedule Details

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