DEFENSE INFORMATION SYSTEMS AGENCY FISCAL YEAR (FY) 2007 BUDGET ESTIMATES



RESEARCH, DEVELOPMENT, TEST & EVALUATION (RDT&E)

FEBRUARY 2006

DEFENSE INFORMATION SYSTEMS AGENCY FISCAL YEAR (FY) 2007 BUDGET ESTIMATES R-1 EXHIBIT

Program E		FY 2005	FY 2006	FY 2007
0303129K	Defense Message System (DMS)	9,179	13,176	11,202
0303140K	Information Systems Security Program (ISSP)	4,764	0	0
0303141K	Global Combat Support System (GCSS)	16,961	17,695	18,556
0303158K	Joint Command and Control Program	2,905	15,358	47,031
0305840K	Electronic Commerce (EC)	3,379	6,602	0
0604764K	Advanced IT Services Joint Program Office	17,980	9,192	9,392
Total S	ystem Development and Demonstration (BA 5)	55,168	62,023	86,181
0208045K	C4I Interoperability	40,706	66,257	84,313
0302016K	NMCS-Wide Support	1,209	649	721
0302019K	Defense Info. Infras.(DII) Engin. & Integ.	3,104	5,388	34,007
0303126K	Long Haul Communications	10,158	1,449	1,523
0303131K	Min. Essen. Emerg. Comm. Netw. (MEECN)	7,792	7,332	7,691
0303148K	DISA Mission Support Operations	0	9,291	1,224
0303149K	C4I for the Warrior	20,257	6,221	6,551
0303150K	Global Command and Control System	60,979	51,584	59,681
0303153K	Joint Spectrum Center	17,839	13,896	12,448
0303165K	Defense Collaboration Tool Suite	6,554	0	0
0303170K	Net-Centric Enterprise Services	49,184	77,037	28,630
0303610K	Teleport Program	9,945	7,078	14,424
0305208K	Distributed Common Ground/Surface Systems	0	0	7,451
Total (perational System Develop. (BA 7)	227,727	246,182	258,664
тот	'AL DISA RDT&E	282,895	308,205	344,845

Exhibit R-2, RDT&E Budget Item Justifica	Date: February 2006						
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K						
COST (in millions)	millions) FY05 FY06		FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	11.202	7.621	7.596	7.822	8.113		

A. Mission Description and Budget Item Justification:

The Defense Message System (DMS) provides secure and accountable messaging services to meet the full range of organizational and individual messaging needs throughout the Department of Defense (DoD). The Office of Assistant Secretary of Defense for Networks, Integration and Information (OASD/NII) directed development of DMS and mandated DoD's transition from legacy systems to DMS. DMS fulfills Joint Staff validated and prioritized operational requirements for an integrated writer-reader capable, organizational messaging system that is accessible worldwide (to include tactically deployed military personnel), and interfaces to Allies. DMS utilizes Commercial-Off-the-Shelf (COTS) and modified COTS components to provide multi-media messaging and directory capabilities that complement and leverage the Global Information Grid (GIG). DMS capability exceeds that of pure COTS applications with reliable handling of information at all classification levels, compartments, and handling instructions, thus meeting DoD's unique messaging requirements and maintaining interoperability with our Allies. DMS incorporates state-of-the-art information technologies, including the internationally developed Allied Communications Protocol (ACP) 120 implementation of the Common Security Protocol (CSP), which provides automated access controls for compartments, code words, and caveats. Public Key Infrastructure (PKI) certificates are used for authentication and access control. DMS utilizes DoD Class 4 PKI products developed by the National Security Agency (NSA) to provide message signature and encryption via approved algorithms and protocols (FORTEZZA). This is referred to as DMS "high grade" service and supports the level of protection required for unclassified and classified military organizational messaging. tenet of the DMS acquisition strategy was to leverage commercial products to the maximum extent possible. This strategy necessitates continued software integration and testing of commercial product updates (operating systems and applications) throughout the life cycle to avoid obsolescence and to ensure adequate life cycle support.

DISA is working with the Joint Staff, Services, Agencies, and industry to insure DoD's Command and Control (C2) messaging requirements are met through convergence with emerging commercial capabilities. This Program Element (PE) is under Budget Activity 5 and involves major upgrades that improve system performance and extend useful service life. A number of DMS products formerly provided by NSA will be maintained by DISA in FY 2006 as part of each maintenance release. While these products will become part of DMS releases (including operating system updates) and result in an increase to RDT&E within PE 0303129K, total Program budget has been reduced to sustainment levels based on an

Exhibit R-2, RDT&E Budget Item Justifica	Date: February 2006						
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COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	13.176	11.202	7.621	7.596	7.822	8.113	

anticipated reduction in commercial technology refresh.

Accomplishments/Planned Program:

*DMS Maintenance Release	FY 05	FY 06	FY 07
Subtotal Cost	4.593	5.450	7.272

*Note FY 2005 activity was dually funded through PE 0303129K and Information Assurance, PE 0303140K. Starting in FY 2006, the effort is funded from PE 0303129K only, with RDT&E funds increased accordingly to meet program requirements. While total DMS program budget has decreased, realignment of program elements within DISA has increased RDT&E funds in PE 0303129K.

RDT&E funds support software integration and developmental testing activities required to avoid complete divergence of DMS products from current commercial technology and activities required to meet evolving DoD security policies and counter evolving information warfare threats. Products newly implemented by the Services and Agencies must also be tested and integrated into the system to ensure compatibility and interoperability and for configuration management. System improvements, such as patches (for bug fixes), commercial service packs, and mitigation of emerging security vulnerabilities, are integrated and implemented through DMS software releases, which are similar to commercial Service Packs. During FY 2005, DMS RDT&E funds provided for the final phase of integration, and testing of major Directory Security Enhancements (DSE) resulting from an OSD mandated system security assessment (conducted by NSA). These enhancements increased the robustness of security for organizational messaging through Top Secret/SCI and are required for implementation of DMS within the Intelligence Community (IC).

Beginning in FY 2006, a number of DMS products formerly provided by NSA will begin to be maintained by DISA (updated and integrated as part of each DMS Release), including operating system updates. Future DMS releases will provide for engineering and integration of security, interoperability, and communications support capabilities and functionality unique to DMS operations in the IC and tactical environments. Areas of focus will be resolution of IC- functional

Exhibit R-2, RDT&E Budget Item Justifica	Date: February 2006						
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COST (in millions)	FY05 FY06		FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	11.202	7.621	7.596	7.822	8.113		

capabilities and legacy interoperability issues that are identified as the IC increases their implementation of DMS. In addition, DMS security services (FORTEZZA) will be migrated from a principally client/server topology to a principally domain or "boundary server" topology. This represents a significant evolution of the DMS to provide a higher degree of user service while removing the complexities associated with FORTEZZA from the users' workstations. To allow full-scale implementation, existing products will require significant performance and scalability enhancements. In FY 2006 and FY 2007, the DMS program will continue to maintain a number of DMS products formerly provided by NSA in addition to the regular suite of DMS products originally developed and maintained by DISA. The full set of products required to provide the full range of DMS functionality will continue to update and integrate as part of each DMS Release (including operating system updates) until the system is replaced and/or users are migrated to another alternative command and control messaging solution.

RDT&E funds support system engineering activities associated with DMS releases (above), and activities required in support of evolving DoD security policies and to counter evolving information warfare threats. The supported tasks include program and systems management, technical assessments of system performance against operational requirements, and analysis of recommended solutions to any identified deficiencies or security vulnerabilities. During FY 2005, the primary systems engineering focus was translation of top-level requirements for improved system level and directory security into more detailed specifications and product plans. Focus for FY 2006 will be assessment of and resolution of system scalability issues. As systems engineering functions become more maintenance oriented in the sustainment phase of the DMS life cycle, these functions will be performed with O&M.

Exhibit R-2, RDT&E Budget Item Justifica	Date: February 2006						
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K						
COST (in millions)	(in millions) FY05 FY0		FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	11.202	7.621	7.596	7.822	8.113		

*Note that FY 2005 activity was dually funded through PE 0303129K and Information Assurance, PE 0303140K. Starting in FY 2006, the effort is funded from PE 0303129K only.

DMS releases undergo developmental, operational, and security testing before widespread fielding. The Joint Interoperability Test Command (JITC) provides DMS test support for all new releases, including correction of problems identified with product functionality or system capability. Information Assurance Vulnerability Alerts (IAVAs) are continuously assessed and often require product changes either within a software release or asynchronously. Requisite product changes are tested and delivered to protect and sustain the fielded system. In FY 2005, DMS Release 3.1 (which included final implementation of DSE mandated by OSD) underwent initial operational testing and implementation at operational test sites. In FY 2006 and FY 2007, changes identified through operational usage will be implemented after completion of appropriate developmental and operational tests.

B. <u>Program Change Summary</u>:

	FY 05	F.X 06	FY U/
Previous President's Budget	5.584	13.367	$\overline{11.05}$ 0
Current Submission	9.179	13.176	11.202
Total Adjustments	3.595	-0.191	0.152

Change Summary Explanation:

FY 2005 change was due to below threshold reprogramming; FY2006 change is due to undistributed congressional reductions to the Defense-wide RDT&E appropriation; FY2007 change is due to revised fiscal guidance.

Exhibit R-2, RDT&E Budget Item Justific		Date: February 2006							
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K								
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Defense Message System/DM01	9.179	13.176	11.202	7.621	7.596	7.822	8.113		
C. Other Program Funding Summary:									

								То	Total
	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	Complete	Cost
Procurement, DW	4.675	8.792	6.247	4.351	4.842	5.093	4.999	Contg	Contg

15.664

17.878

17,983

17.761

Contg

Contg

18.121

O&M. DW

24.993

20.262

- D. <u>Acquisition Strategy</u>: The overall strategy is based upon the fundamental premise that Commercial-Off-the-Shelf products will continue their evolution through the constant refresh of commercial technology. To maintain an interoperable system, DMS will continue to use a single contractor as an overall integrator. Contract Administration is under a fee for service arrangement by the DMS Contracting Office, which is based at Maxwell Air Force Base Gunter Annex, Alabama. Additionally, DMS utilizes contract vehicles within DISA to acquire other equipment and services to support the implementation of DMS such as the Next Generation Contract. Contracts have been competitively awarded and provide support in the following areas: program planning and control; analytic services of the DMS system integration; organizational messaging; tactical deployment; operations; configuration management; and training and logistics. These contracts also provide support for the fielding of Virtual Private Networking (VPN) technology that provides protection for specific aspects of the DMS backbone. The DMS employs several strategies for the acquisition of products and services:
- 1. Ordering of DMS hardware, software, integration, engineering and technical services from the DMS integration contract.
- 2. Standard commercial products and services required to accomplish DMS implementation are procured via existing GSA Schedule or other high volume/ID-IQ contract vehicles. Specialized security products (libraries/drivers) are currently provided by NSA and incorporated as Government Furnished Equipment (GFE) by the integrator. Beginning in FY 2006, a number of DMS products formerly provided by NSA will begin to be maintained by DISA as part of the competed follow-on integration contract support.

Exhibit R-2, RDT&E Budget Item Justifica	Date: February 2006							
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K							
COST (in millions)	FY05 FY06		FY07		FY08	FY09	FY10	FY11
Defense Message System/DM01	9.179	13.176		11.202	7.621	7.596	7.822	8.113

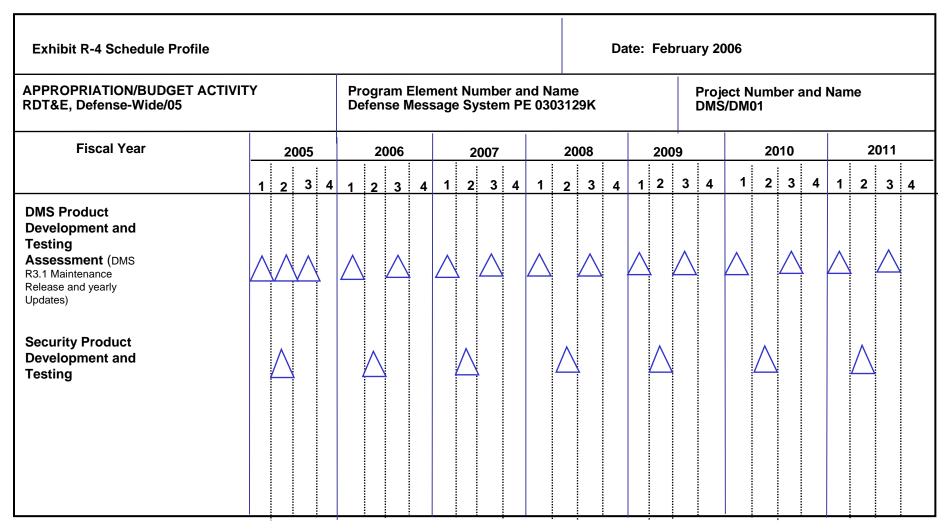
E. Performance Metrics:

Key Performance Parameters (KPPs) were established to ensure DMS system performance meets or exceeds critical operational requirements contained in the validated Joint Staff requirements document. For each KPP, an objective and threshold value has been established, and measures are monitored each month. There are 24 KPPs for DMS, as defined in the DMS Acquisition Program Baseline. A subset of these KPP's is described below.

KPP Name	Objective	Threshold	Status
Backbone System Availability	≥ 99% availability of Regional Node	99.67%	Green
Local Site Availability	≥ 99% availability of Commissioned Sites	99.4%	Green
Directory Search, Level 5-8	\leq 5 sec for DMS user over Network LAN	0.82 sec	Green
Directory Browse, Level 5-8	≤ 20 Sec for DMS user over Network LAN	9.74 sec	Green
Backbone Speed of Service	Normal - ≤ 20 min for speed of service	1.53 min	Green
Directory Accuracy (Data Errors)	≤ 2% detected via scan	1.3%	Green

Exhibit R-3 Cost Analysi	is					DATE: February 2006					
APPROPRIATION/BUDGET ACT	TIVITY		PROGRAI						PROJECT NAME AND NUMBER		
RDT&E, Defense-Wide/05			Defense Message System (DMS)/PE					E	Defense	Message System/DM01	
			0303129	9K							
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs <u>Cost</u>	FY 06 Cost	FY 06 Award <u>Date</u>	FY07 Cost	FY 07 Award <u>Date</u>	Cost To Complete	Total <u>Cost</u>	Target Value of Contract	
Product Development Maintenance Release & Sys Engineering	CPAF/	Lockheed Martin, Manassas, VA	27.652	9.511	05/06	7.272	05/07	0	44.435	44.435	
Systems Engineering	MIPR	Field Security Ops DISA, Letterkenny Army Depot, PA		0.100	06/06	0.000	N/A	0	0.100	0.100	
	MIPR	Joint Inter- Operability Test Command (JITC), Indian Head, MD	0.000	0.100	04/06	0.000	N/A	0	0.100	0.100	
Subtotal Product Developmer	nt		27.652	9.711		7.272					
Test and Evaluation Developmental Test & Evaluation	MIPR	Joint Inter- Operability Test Command (JITC), Indian Head, MD	6.696	2.915	10/05	2.750	10/06	0	12.361	12.361	
	CPAF/ SS	Data Systems Analysts Fairfax, VA	1.570	0.000	01/06	0.550	01/07	0	2.120	2.120	
Conduct ST&E	MIPR	Field Security Ops DISA, Letterkenny Army Depot, PA		0.000	06/06	0.080	06/07	0	0.080	0.080	
Operational Test & Evaluation	MIPR	JITC Ft Huachuca, AZ	1.050	0.550	10/05	0.550	10/06	0	2.150	2.150	
Subtotal Test and Evaluation		Fi Huaciluca, AZ	9.316	3.465		3.930					

Exhibit R-3 Cost Analysis DATE: February														
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT									PROJECT	NAME AND NUMBER				
RDT&E, Defense-Wide/05			Defense Message System (DMS)/PE 0303129K							Defense Message System/DM01				
Cost Category	Contract Method & Type	Performing Activity & <u>Location</u>	Total PYs <u>Cost</u>	FY 06 Cost	FY 06 Award <u>Date</u>	FY07 Cost	FY 07 Award Date	Cost To Complete	Total <u>Cost</u>	Target Value of <u>Contract</u>				
TOTAL			36.968	13.176		11.202								



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Exhibit R-4 Schedule Profile								Date: February 2006																				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05 Program Element Number and National Defense Message System PE 0303					lame 0312	9 29K					Proje DMS	ect N S/DM	lum 01	ber a	and	Nan	ne											
Fiscal Year		2	2005			2	006			2	:007			20	800			200)9			20	010			2	011	
	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
DMS Product Operational Assessment (DMS R3.1 Maintenance Release and yearly Updates)			Δ	Ž		\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.		Δ		Δ		Δ		Δ		Δ		Δ		\triangle		Δ	7	\triangle		Δ		Δ
Implementation to Infrastructure																												

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Exhibit R-4a Schedule Detail			DATE: F	DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	PRO	GRAM ELEMENT	•		PROJECT NAME	AND NUMBER						
RDT&E, Defense-Wide/05	Defe	ense Message Sy	ystem / PE 0303	3129K	DMS / DM01							
Schedule Profile	FY 2005	<u>FY 2006</u>	FY 2007	FY 2008	<u>FY 2009</u>	FY 2010	FY 2011					
Begin Development and Testing of DMS R3.1 MR & yearly Updates	1Q - 3Q	1Q & 3Q	1Q & 3Q	10 & 30	1Q & 3Q	1Q & 3Q	1Q & 3Q					
Security Product Development & Testing	2Q	2Q	2Q	2Q	2Q	2Q	2Q					
R3.1 & R3-1 Update Operational Assessment	3Q	1Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q					
Implementation To Infrastructure	1Q & 3Q	10 & 30	1Q & 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q					

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE								
RDT&E, Defense-Wide/05	Information Systems Security Program (ISSP) PE 0303140K								
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Information Systems Security Program / IA01	4.764	0	0	0	0	0	0		

A. <u>Mission Description and Budget Item Justification</u>: The DISA Information Systems Security Program (ISSP) is focused on designing and deploying proactive protections, deploying attack detection, and on performing Information Assurance (IA) operations to ensure that adequate security is provided for information collected, processed, transmitted, stored, or disseminated on the Global Information Grid (GIG). These efforts include tasks associated with affording protection to telecommunications, information systems, and information technology that process sensitive and classified data as well as efforts to ensure the confidentiality, authenticity, integrity, and availability of the information and the systems. The information provided here demonstrates how DISA supports the DoD IA Strategic Plan.

DISA protects information by safeguarding data as it is being created, used, modified, stored, moved, and destroyed, on the communication networks, within the enclave, at the enclave boundary, at the client, and within the computing environment. This ensures that all information has a level of trust commensurate with mission needs. A portion of the ISSP budget focuses on the security aspects of the Defense Message System (DMS). In FY 2005, DMS increased protection of audit logs and updated products for stronger mapping of Public Key Infrastructure (PKI) identity for access control decisions within the FORTEZZA server. Starting in FY 2006, DMS is entirely funded through PE 0303129K, due to realignment of program elements within DISA. This program element is under Budget Activity 5 because it involves the development of major upgrades that increase the performance of existing systems.

B. Accomplishments/Planned Program:

Systems Engineering & Integration	FY 05	FY 06	FY 07
Subtotal Cost	0.750	0.000	0.000

RDT&E funds supported basic Systems Engineering activities of both the DMS PMO (including contractor support) and the DMS Prime Integrator, and were critical to completion of worldwide fielding and sustaining of the program. The supported tasks included Program and Systems Management to conduct technical assessments/analyses of new commercially available security features, and incorporation of them into DMS. In addition, changes were made to DMS products, documentation, and procedures to ensure continued compliance with evolving security policies, including implementation of Security Technical Implementation Guides (STIGS), Security Policy Translation Tables (SPTTs), and Security Policy Information Files (SPIFs). During FY 2005, the Prime Contractor implemented and fielded system capabilities through a series of coordinated Product and Maintenance Releases. Future DMS Release 3.0 maintenance releases will provide additional critical enhancements to the organizational messaging capabilities provided in Release 3.0. This basic core

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE								
RDT&E, Defense-Wide/05	Information Systems Security Program (ISSP) PE 0303140K								
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Information Systems Security Program /	4.764	0	0	0	0	0	0		
IA01									

of activity upgrades keep the DMS high grade system up to date with technology, minimize any further divergence from COTS, and provide the basis for full Intelligence Community (IC) and tactical implementation, final AUTODIN closure, Allied interoperability, and transition to Next Generation Messaging. DISA is working closely with the Joint Staff, Services, and Agencies as well as with industry, to ensure satisfaction of DoD's Command and Control (C2) messaging requirements through convergence of DMS security mechanisms with emerging commercial capabilities. System Security enhancements shall also be provided, per OSD guidance contained in the DMS Milestone III (GENSER) decision memorandum. DISA developed the following products for the GCCS-J: shareware security tools, new technologies, embedded Commercial-Off-The-Shelf (COTS) products, encryption, authentication, access control, and password storage and handling techniques to improve the security posture of the GCCS-J. DMS developed and fielded software and documentation that mitigated/fixed security vulnerabilities identified in previous certification and accreditation testing.

Test Support:	<u>FY05</u>	FY06	FY07
Subtotal Cost	$\overline{1.11}4$	0.000	0.000

The Joint Interoperability Test Command (JITC) provided DMS integration test support for all new DMS releases. Each DMS release contains both Information Assurance (IA) and non-IA functionality, and as such, portions of the Developmental Testing involved testing of functionality specifically geared to information security/assurance. Problems found during testing result in "fixes" in the form of Problem Trouble Reports (PTRs) or Information Assurance Vulnerability Alerts (IAVAs), any of which may pertain to information security/assurance. RDT&E funds provided testing support to include Development Test and Evaluation (DT&E), Operational Test and Evaluation (OT&E), test equipment, assessment of IAVAs, and development of security products and measures to protect DMS against a variety of system vulnerabilities. DMS supports a series of security tests and develops plans of action that address security risks as security threats change. In FY 2005, DMS developed a process and provided a plan of action that addressed implementation of NSA recommended security enhancements as a result of an ASD (NII) mandated security assessment. DMS continued to support JITC security tests and developed plans of action to address security risks.

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE								
RDT&E, Defense-Wide/05	Information Systems Security Program (ISSP) PE 0303140K								
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Information Systems Security Program / IA01	4.764	0	0	0	0	0	0		

Congressional Add: $\underline{FY05}$ $\underline{FY06}$ $\underline{FY07}$ Subtotal Cost 2.900 0.000 0.000

Information Assurance Trend/Metric Analysis Support, and Center for Secure Telecommunications.

B. Program Change Summary: FY05 FY06 FY07 Previous President's Budget 5.014 0.000 0.000 Current Submission 4.764 0.000 0.000 Total Adjustments -.250

Change Summary Explanation:

FY 2005 change was due to below threshold reprogramming.

C. Other Program Funding Summary:

	FY 05	FY U6	FY U/	FY U8	FY09	F. X T O	F. X T T
Operations and Maintenance:	123.636	176.5 18	$\overline{196.9}21$	$\overline{194.6}29$	243. 599	225.298	200.263
Procurement:	41.191	26.709	20.675	24.275	36.258	32.808	34.706

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006								
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RDT&E, Defense-Wide/05	Information Systems Security Program (ISSP) PE 0303140K								
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Information Systems Security Program /	4.764	0	0	0	0	0	0		
IA01									

D. Acquisition Strategy:

Public Key Enablement activities are emerging in DoD and the commercial marketplace. Time and materials contracts provide maximum flexibility, as this work is unprecedented and difficult to assign firm fixed price and specific level of effort in advance. IT integration companies with IA as a core competency will assist DoD in addressing the challenge of PK Enabling DoD's mission critical applications while keeping in step with COTS evolution.

The overall DMS strategy is based upon the fundamental premise that COTS products continue their evolution through the constant refresh of commercial technology. To maintain an interoperable system, DMS continues to use a single contractor as an overall integrator. Contract Administration is under a fee for service arrangement by the DMS Contracting Office, which is based at Maxwell Air Force Base (MAFB)-Gunter Annex, Alabama (AL). Additionally, DMS utilizes contract vehicles within DISA to acquire other equipment and services to support the implementation of DMS such as the Next Generation Contract. All contracts have been competitively awarded and provide support in the following areas: program planning and control; analytic services of the DMS system integration; organizational messaging; tactical deployment; operations; configuration management; and training and logistics. These contracts also provide support for fielding of Virtual Private Networking (VPN) technology that will protect the DMS backbone.

There are several strategies for the acquisition of products and services:

- a. Ordering of DMS hardware, software, integration, engineering, and technical services from the DMS Lockheed Martin contract.
- b. Standard commercial products and services required to accomplish DMS implementation are bought via existing GSA Schedule or other high volume/ID-IQ contract vehicles. Specialized security products (such as High Assurance Guard (HAG) and Certificate Authority Workstation (CAW) are provided by NSA and incorporated as Government Furnished Equipment (GFE) by the integrator.
- c. MITRE as a Federally Funded Research and Development Center (FFRDC) provides systems engineering and integration support for the DMS community, applying engineering discipline and principles to DMS in function areas of system architecture, technical strategy, program strategy, and program execution.

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE								
RDT&E, Defense-Wide/05	Information Systems Security Program (ISSP) PE 0303140K								
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Information Systems Security Program /	4.764	0	0	0	0	0	0		
IA01									

E. Performance Metrics:

The following Metrics are being collected and tracked in support of the Global Command Control System (GCCS):

- 1. Sites and developers that are applying and executing GCCS-J security processes and methodologies.
- 2. Number of Applications developers successfully applying documents and assessment tools.

The following Metrics are being tracked in support of the Net-Centric Enterprise Services (NCES) program:

- 1. Measure the value that NCES adds by developing applications that pull the right information at the right time, and in the right format to meet the war fighter's operational/tactical needs.
- 2. Compressing decision cycles by providing near real-time connectivity/computing power for war fighters and other national security users to enhance collaboration and parallel vice sequential actions.

The following Metrics are being tracked in support of the DMS program:

1. Assessment of all Information Assurance Vulnerability Alerts (IAVAs) and the development of the required security products and measures to protect DMS against all system vulnerabilities. DMS is funded through PE 0303129K, which currently has 24 Key Performance Parameters to meet critical operational requirements contained in the validated Joint Staff requirements document.

Exhibit R-3 Cost And		TE: Febr	ruary 2006							
APPROPRIATION/BUDGE	T ACTIVIT	Y	PROGRAM E	LEMENT			PROJECT	NAME AND N	UMBER	
RDT&E, Defense-Wide	/05		Informati	_		_	Informa	ation System	s Security 1	Program /IA01
			Program (ISSP)/ P	E 030314	10K				
Cost Category	Contract Method & Type	Performing Activity & Location	Tota PYs <u>Cos</u> t	FY 06	FY 06 Award <u>Date</u>	FY 07 <u>Cost</u>	FY 07 Award Date	Cost to Complete	Total <u>Cost</u>	Target Value of Contract
Product Development Systems Engineering and Integration	CPFF, FFP/c	Lockheed Ma Company, Manassas, V		0.000) N/A	0.000	N/A	0.000	32.321	32.321
Systems Engineering	CPAF/SS	Data System Analysis Fairfax, VA		0.000) N/A	0.000	N/A	0.000	0.980	0.980
	FFRDC	MITRE, Arlington,	0.5 VA	0.000	N/A	0.000	N/A	0.000	0.584	0.584
Systems Integration	CPFF/C	SAIC, Arlin VA	gton, 2.4	89 0.000	N/A	0.000	N/A	0.000	2.489	2.489
	CPFF/C	UNISYS, Arlington,	1.3 VA	0.000	N/A	0.000	N/A	0.000	1.300	1.300
	CPFF/C	Booz, Allen Hamilton, McLean, VA	. & 0.3	36 0.000	N/A	0.000	N/A	0.000	0.336	0.336
	T&M/C	SRA, Fairla VA	kes, 2.5	0.000	N/A	0.000	N/A	0.000	2.528	2.528
Engineering/Technical Services	T&M/C	Pragmatics, McLean, VA	1.7	0.000	<u>)</u> N/A	0.000	N/A	0.000	1.775	1.775
Subtotal Product Development			42.3	0.000)	0.000		0.000	42.313	42.313
Test and Evaluation Operational Test & Evaluation Test and Evaluation	MIPR	Joint Interoperab Test Comman Huachuca, A	d, Ft	46 0.000) N/A	0.000	N/A	0.000	3.746	3.746
Security/Developmental Test & Evaluation	MIPR	Joint Interoperab Test Comman Indian Head	d,	277 0.000) N/A	0.000	N/A	0.000	3.277	3.277

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Exhibit R-3 Cost And	alysis				DAT	E: Febru	ary 2006						
APPROPRIATION/BUDGE RDT&E, Defense-Wide		Inf	GRAM ELEM ormation gram (ISS	System				PROJECT NAME AND NUMBER Information Systems Security Program /IA01					
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs <u>Cost</u>	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total <u>Cost</u>	Target Value of Contract			
Security/Development Test & Evaluation	CPAF/SS	Data Systems Analysis Fairfax, VA	0.753	0.000	N/A	0.000	N/A	0.000	0.753	0.753			
Security Test & Evaluation	MIPR	National Security Agency	0.814	0.000	N/A	0.000	N/A	0.000	0.814	0.814			
Conduct Security Test & Eval	CPFF/C	Computer Sciences Corp Falls Church, V	0.100 TA	0.000	N/A	0.000	N/A	0.000	0.100	0.100			
Subtotal Test and Evaluation			8.690	0.000		0.000		0.000	8.690	8.690			
Congressional Adds	TBD	TBD	2.900	0.000	N/A	0.000	N/A	0.000	2.900	2.900			
TOTAL			53.903	0.000		0.000		0.000	53.903	53.903			

APPROPRIATION/BUDGET / RDT&E, Defense-Wide/05	RDT&E, Defense-Wide/05 Informatio PE 030314					ogram Element Number and Name ormation System Security Program (ISSP) 0303140K						Project Number and Name Project ISSP/IA01																
Fiscal Year		20	2005		2006				2007				2008			2009			2010			2011						
	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	
DMS Products																												
Begin Dvlpmnt of 3.0/ MR2 – MR4		7		Δ																								
Begin Dvlpmnt Test of 3./MR1 – MR3				Δ																								
3.0/MR1-MR3 Operational Test		Δ	Δ	<u> </u>																								

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Exhibit R-4a Schedule Detail		DATE: F	ebruary 20	06				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	PROGRAM ELEMENT Information System 0303140K	m Security Pr	rogram (ISS	SP) PE	PROJECT NAME AND NUMBER ISSP / IA01			
Schedule Profile	FY 200	5 FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
DMS Products								
Begin Development of 3.0/MR2 - MR4	1Q & 4	Q:						
Begin Development Test of 3.0/MR1 - MR3	4Q							
3.0/MR1-MR3 Operational Test	2Q - 3	Q						

Exhibit R-2, RDT&E Budget Item Justificati	lon		DATE: Februar	ry 2006				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE							
RDT&E, Defense-Wide/05			Global Combat	Support Sy	stem (GCSS)	/ PE 0303141	K	
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Global Combat Support System	17.695	18.556	18.963	19.379	20.107	20.857		
(GCSS CC/JTF) CS01								

A. Mission Description and Budget Item Justification:

The Global Combat Support System (GCSS) is an initiative that provides end-to-end visibility of retail and unit level Combat Support (CS) capability up through the National Strategic Level, facilitating information interoperability across and between CS and Command and Control (C2). In conjunction with other Global Information Grid (GIG) elements including Global Command and Control System - Joint (GCCS-J), Defense Information System Network (DISN), Defense Message System (DMS), Defense Enterprise Computing Center Detachments (DECC-D), and the Combatant Commands, Services, and Agencies information architecture, GCSS (CC/JTF) will provide the information technology (IT) capabilities required to move and sustain joint forces throughout the spectrum of military operations. Per Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6723.01, within the GCSS Family of Systems (FOS), DISA is responsible for two main efforts: System Architecture and Engineering for the GCSS FOS; and development, integration, fielding, and operation and maintenance of the GCSS (CC/JTF). GCSS (CC/JTF) provides enhanced CS situational awareness to the joint warfighter by integrating CS information into the C2 environment, and facilitating communications between the forward deployed elements and the sustaining bases, ultimately resulting in faster, more efficient decision making by the joint warfighter. GCSS (CC/JTF) significantly increases access to information stored in disparate databases via a single sign on, web Portal application, using a SIPRNet Public Key Infrastructure (PKI) certificate. The administration, data mediation, and enterprise management features provide the springboard for delivery of capabilities to meet the vision of the future Net-Centric environment. GCSS (CC/JTF) falls under "Exploit the GIG for Improved Decision Making" and is postured to accomplish the objective Net Centric Vision by using web-based technology to meet the Focused Logistics tenets of Joint Vision 2020 (JV 2020). This program element is under Budget Activity 5 because it involves the development of major upgrades that increase the performance of existing systems.

System Architecture and Engineering - This effort involves system architecture and engineering for the GCSS (CC/JTF) and for the GCSS Family of Systems (FOS). During FY 2005, funds were used to complete the initial system and data architecture for the GCSS FOS improving interoperability and information sharing at the Combatant Command and Joint Task Force level. Work also continued with GCSS FOS programs and related projects including the GCSS AF, Navy Taskforce Web (NTW), Theater Medical Information Program (TMIP) and the Joint Total Asset Visibility and Integrated Data

Exhibit R-2, RDT&E Budget Item Justificati	Exhibit R-2, RDT&E Budget Item Justification							
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE							
RDT&E, Defense-Wide/05			Global Comba	t Support Sy	stem (GCSS)	/ PE 0303141	K	
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Global Combat Support System	17.695	18.556	18.963	19.379	20.107	20.857		
(GCSS CC/JTF) CS01								

Environment (JTAV/IDE) to ensure individual program alignment with the FOS architecture. Funds were also used to conduct the analysis and the purchase of the new Enterprise Information Integration tool to support a more robust and modern infrastructure, enabling the Program to meet the National Information Infrastructure (NII) vision for a Net-Centric Enterprise Services (NCES) environment. Security work focused on the continued development of the web-based security guard and the initial development of a PKI enabled single-sign on solution that enables user authentication and access controls across all FOS applications.

During FY 2005 through FY 2007, the program incrementally implements the next-generation net-centric architecture for GCSS (CC/JTF) Phase 6, which includes integration of the new Enterprise Information Integration (EII), Business Intelligence (BI), Workflow, Knowledge Management, Web Service Management, and Security tools. The new net-centric architecture also includes incremental implementation of a more robust Continuity of Operations Plan (COOP), failover, Enterprise System Management (ESM), and security (e.g., intrusion detection on GCSS strategic servers and next generation guards) processes and tools. Phase 6 will also include the Force Closure capability, which will allow the user to visually monitor and generate complex reports showing current location, movement and status of assigned assets to include; personnel and equipment. The Electronic Battlebook capability creates a repository for documents in a controlled shared environment, which uniquely configures and manages these documents by COCOM. This new architecture will enable the program to become fully net-centric and enable accelerated introduction of new data source integration and application development, greater flexibility for the end-user in how they evaluate and view fused data, dynamic report capability, more rapid exposure of data to Communities of Interest, and increased security. This architecture migration directly supports DISA Balanced Scorecard Corporate strategy "C-1 Transition to a net-centric environment to transform the way DoD shares information by making data continuously available in a trusted environment." System architecture and engineering support to GCSS FOS will focus on the integration of new technologies that will improve interoperability and data sharing at the Combatant Command and Joint Task Force Level. Work will continue on the implementation of the architecture and engineered solutions across all FOS programs and projects.

 $\frac{\text{FY05}}{\text{Subtotal Cost:}} \frac{\text{FY06}}{14.606} \frac{\text{FY07}}{14.840}$

GCSS (CC/JTF) - This effort involves the development, integration, and fielding of the GCSS (CC/JTF). RDT&E funds were used in FY 2005 to support life cycle development efforts, requirements analysis, system engineering, software development, configuration management, and testing activities. During FY 2005, the GCSS Program developed and

Exhibit R-2, RDT&E Budget Item Justificati	on		DATE: Februa	ry 2006					
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE							
RDT&E, Defense-Wide/05			Global Combat	Support Sy	stem (GCSS)	/ PE 0303141	K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Global Combat Support System (GCSS CC/JTF) CS01	16.961	17.695	18.556	18.963	19.379	20.107	20.857		

delivered Phase 5 of the Global Combat Support System (Combatant Command/Joint Task Force) [GCSS (CC/JTF)], which was comprised of three capability increments (CI). CI 1 was a strategic server release (v4.0.1) fielded to limited COCOMs in November 2004; CI 2 was a client release and was (v4.0) fielded with GCCS-J V4.0B, and CI 3 (v4.1/4.2) was fielded in March 2005. In FY 2005, the GCSS (CC/JTF) Program developed and provided an initial web-based mapping capability (WebCOP), Electronic Battle Book (EBB), and Watchboard capabilities. The Program also added the Munitions Reporting System (MUREP), SIPRNET-Intransit Visibility System (S-ITV), Integrated Rail/Road Information System (IRRIS) and Integrated Consumable Items Analysis System (ICIS) links, all of which use the GCSS account management and security infrastructure so that users require only a SIPRNET PKI certificate and GCSS user account to access these applications.

In FY2005 through FY2007, the program will begin incrementally implementing the next-generation net-centric architecture for GCSS Phase 6, which includes integration of the new Enterprise Information Integration (EII), Business Intelligence, Workflow, Knowledge Management, Web Service Management, and Security tools. The new net-centric architecture also includes incremental implementation of a more robust Continuity of Operations Plan (COOP), failover, Enterprise System Management (ESM), and security (e.g., intrusion detection on GCSS strategic servers and next generation quards) processes and tools. Phase 6 will also include the Force Closure capability, which will allow the user to visually monitor and generate complex reports showing current location, movement and status of assigned assets to include; personnel and equipment. The Electronic Battlebook capability creates a repository for documents in a controlled shared environment, which uniquely configures and manages these documents by COCOM. This new architecture will enable the program to become fully net-centric and enable accelerated introduction of new data source integration and application development, greater flexibility for the end-user in how they evaluate and view fused data, dynamic report capability, more rapid exposure of data to Communities of Interest, and increased security. This architecture migration directly supports DISA Balanced Scorecard Corporate strategy "C-1 Transition to a net-centric environment to transform the way DOD shares information by making data continuously available in a trusted environment." RDT&E funds will support the development efforts, requirements analysis, system engineering, software development, configuration management and testing activities required to incrementally integrate the identified next generation net-centric architecture and tools above.

Exhibit R-2, RDT&E Budget Item Justificati	Exhibit R-2, RDT&E Budget Item Justification									
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE							
RDT&E, Defense-Wide/05			Global Combat	Support Sy	stem (GCSS)	/ PE 0303141	K			
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11			
Global Combat Support System (GCSS CC/JTF) CS01	16.961	17.695	18.556	18.963	19.379	20.107	20.857			

B. Program Change Summary:

	<u>FY05</u>	FY06	<u>FY07</u>
Previous President's Budget	16.961	17.952	18.304
Current Submission	16.961	17.695	18.556
Total Adjustments	-	-0.257	+0.252

Change Summary Explanation: FY 2006 change is due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation. FY 2007 change is due to revised fiscal guidance.

C. Other Program Funding Summary:

								10	Iotai
	FY05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	Complete	Cost
Procurement, DW	2.390	2.650	2.652	2.716	2.908	3.081	3.171	Contg	Contg
O&M, DW	14.442	15.721	16.127	16.468	18.240	18.394	18.162	Contg	Contg

D. <u>Acquisition Strategy</u>: GCSS (CC/JTF) strives to maximize system performance, promote the use of commercial services, shift risk away from the government, and achieve savings. To realize these goals, a performance-based services acquisition (PBSA) Task Order (TO) for Software Development & Integration (SD&I) services was awarded. In the past, various contractors developed components of the system with the government acting as the integrator. This approach did not prove to be the most efficient or effective method. The intent of the SD&I TO is to improve the software development and integration process by using a single SD&I source who is responsible for effectively executing the associated processes and delivering exceptional products to support the warfighter.

A secondary objective of the PBSA is meet the mandates prescribed by the OMB Memorandum dated September 7, 2003, "Increasing the use of Performance-Based Service Acquisition" and the OSD policy dated August 19, 2003, that 50% of applicable contract awards will be performance based service acquisitions (PBSA). This TO award enables GCSS (CC/JTF) to successfully meet these mandates.

Exhibit R-2, RDT&E Budget Item Justificati	lon		DATE: Februar	ry 2006				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE							
RDT&E, Defense-Wide/05			Global Combat	Support Sy	stem (GCSS)	/ PE 0303141	K	
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Global Combat Support System	17.695	18.556	18.963	19.379	20.107	20.857		
(GCSS CC/JTF) CS01								

Previously, all GCSS (CC/JTF) software development contractors were awarded Time & Material contracts. The model on contract type shifted with the award of the PBSA. The SD&I effort incorporates a hybrid of Firm Fixed Price and Cost Reimbursable elements, which mitigates risks associated with cost.

E. <u>Performance Metrics</u>: GCSS (CC/JTF) develops and fields capabilities that are based upon Joint Staff validated, approved and prioritized functional requirements taken from the approved GCSS (CC/JTF) Operational Requirements Document (ORD). GCSS (CC/JTF) also meets strategic goals identified in the DISA Balanced Score Card. All of these requirements and goals are translated into Phases with specific capability increments, which have established cost/schedule/performance parameters approved by the DISA's Component Acquisition Executive/Milestone Decision Authority. Additionally, GCSS (CC/JTF) has an approved Incremental Program Baseline (IPB) for each Phase, which baselines cost, schedule and performance metrics specific to each capability increment.

The Joint Staff prioritizes the fielding schedule for each GCSS (CC/JTF) release and the program gathers metrics from each fielded location throughout the release lifecyle. Metrics are gathered through several sources and include functional users satisfaction, local system administrator feedback, customer surveys and the GCSS User's Forum (GUF) website. Metrics and requirements are also gathered directly by the GCSS Customer Requirements Team (CRT) or GCSS Fielding and Installation Team during onsite training/installations. GCSS (CC/JTF) also gathers metrics on a routine basis directly from the strategic servers. These metrics are analyzed by GCSS (CC/JTF) to ensure that Key Performance Parameters (KPPs) continue to be met and/or whether system enhancements/capabilities could be of benefit to the user. Future capabilities will include tools that will allow GCSS (CC/JTF) to refine and enhance the type of performance metrics, which can be gathered and analyzed. This will become increasingly more important as GCSS (CC/JTF) continues to integrate additional data sources and federated applications, and completes the implementation of the EII and BI tools. These will posture and allow GCSS (CC/JTF) to directly support DoD's Net-Centric vision of exposing and consuming web services. However, performance will be key in this type of environment and as GCSS (CC/JTF) usage increases and new capability increments are fielded, GCSS (CC/JTF) will continue to gather metrics to ensure the system is meeting established KPPs and the customer's requirements.

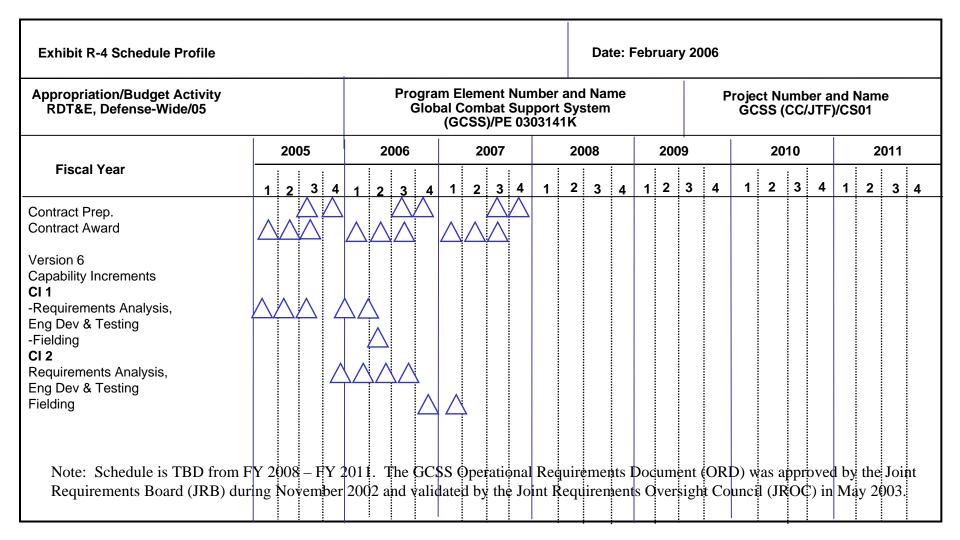
The Program currently maps to the DISA Balanced Scorecard Corporate Strategy in two areas; "C-4 Transition to DoD enterprise-wide capabilities for Communities of Interest (COI) (e.g., command and control, combat support) that exploit the GIG for improved decision-making" and is directly supported by the decision support tools and federated

Exhibit R-2, RDT&E Budget Item Justificati	on		DATE: Februa:	ry 2006				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE							
RDT&E, Defense-Wide/05			Global Combat	Support Sy	stem (GCSS)	/ PE 0303141	K	
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Global Combat Support System (GCSS CC/JTF) CS01	17.695	18.556	18.963	19.379	20.107	20.857		

applications delivered by GCSS (CC/JTF), and "C-1: Transition to Net-Centric environment to transform the way the DoD shares information by making data continuously available in a trusted environment."

Exhibit R-3 Cost Analysis DATE: February 2006											
APPROPRIATION/B	SUDGET ACT	IVITY	PROGRAM E					PROJECT NAME A	AND NUMBER		
RDT&E, Defense-	Wide/05		Global Co			stem (GO		Global Combat			
			CC/JTF) P	E 030314	41K			Command/Joint	Task Force)	(GCSS CC/JTF)/CS01	
Cost Category	Contract	Performing	Total		FY 06		FY 07		_	Target Value of	
	Method & Type	Activity & Location	PYs Cost	FY 06 Cost	Award Date	FY 07 Cost	Award Date	Cost to Complete	Total Cost	<u>Contract</u>	
Management	FFRDC	MITRE,	11.479	2.393	11/05	2.902	11/06	Contg	16.774	16.774	
Services	FFRDC	Vienna, VA	11.479	2.393	11/05	2.902	11/06	Contg	10.774	10.774	
	CPFF	UMD, Eastern Shore	0.811 MD	0.210	05/06	0.210	05/07	Contg	1.231	1.231	
	MIPR	IDA, Alexandria, VA	0.482	0.267	01/06	0.267	01/07	Contg	1.016	1.016	
	MIPR	JFCOM, Norfolk, VA	0.100	0	N/A	0	N/A	0	0.100	0.100	
Product Development	T&M	ENTERWORKS, Sterling, VA	8.317	0.428	01/06	0	N/A	0	8.745	8.745	
	T&M	WFI (DSI), Manassas, VA	3.696	0.429	12/05	0	N/A	0	4.125	4.125	
	FFP/TM	NGMS, Reston, VA	0	10.000	11/05	12.000	11/06	Contg	22.000	22.000	
	T&M	SAIC, Falls Church,	18.635	0.429	12/05	0	N/A	0	19.064	19.064	
	CPFF	NGIT, Reston,		0.429	11/05	0	N/A	0	17.697	17.697	
	T&M	UNISYS, Falls Church,	5.362 VA	1.250	01/06	1.317	01/07	Contg	7.929	7.929	
	MIPR	FGM, Reston, VA	5.482	0	N/A	0	N/A	0	5.482	5.482	
	FFP	Merlin, McLean, VA	1.664	0	N/A	0	N/A	0	1.664	1.664	
	MIPR	JDTC, Ft Eustis, VA	0.586	0.433	11/05	0.433	11/06	Contg	1.452	1.452	
	MIPR	CSC, Norfolk, VA	0	0.200	03/06	0.200	03/07	Contg	0.400	0.400	
Test & Evaluation	CPFF	COMTEK, Sterling VA	3.152	0.750	03/06	0.750	03/07	Contg	4.652	4.652	
	MIPR	SSO, Montgomer	y 0.450	0.050	10/05	0.050	10/06	Contg	0.550	0.550	

UNCLASSIFIED Exhibit R-3 Cost Analysis DATE: February 2006											
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05			PROGRAM ELEMENT Global Combat Support System (GCSS CC/JTF) PE 0303141K				CSS	PROJECT NAME AND NUMBER Global Combat Support System (Combatant Command/Joint Task Force) (GCSS CC/JTF)/C			
	MIPR	NSA	0	0.077	08/06	0.077	08/07	Contg	0.154	0.154	
	MIPR	JITC, Ft. Huachuca,AZ	0	0.350	11/05	0.350	11/06	Contg	0.700	0.700	
otal			77.484	17.695		18.556			113.735	113.735	



R-1 Line Item No. 106 Page 9 of 10

Exhibit R-4a Schedule Detail			DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	PROGRAM ELE Global Comb PE 0303141F	oat Support	System (CC/J	JTF)/	Globa	CCT NAME AND al Combat Sup TTF)/CS01	NUMBER pport System		
Schedule Profile	<u>FY 2005</u>	FY 2006	<u>FY 2007</u>	FY 2008	FY 2009	FY 2010	FY 2011		
Contract Preparation	3Q-4Q	3Q-4Q	3Q-4Q	TBD	TBD	TBD	TBD		
Contract Award	1Q-3Q	1Q-3Q	1Q-3Q						
Capability Increments									
Version 6.0 - Requirements Analysis, Eng Dev & Testing - Fielding	1Q-4Q	1Q-2Q 2Q-3Q							
Version 6.1 - Requirements Analysis, Eng Dev & Testing - Fielding	3Q-4Q	1Q-4Q	1Q-2Q						

Note: Schedule is TBD from FY 2008 - FY 2011 for Version 7. The GCSS Operational Requirements Document (ORD) was approved by the Joint Requirements Board (JRB) in November 2002 and validated by the Joint Requirements Oversight Council (JROC) in May 2003.

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE				
RDT&E, Defense-Wide/05			Joint Command and Control /PE 0303158K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Joint Command and Control (JC2)/JC01	2.905	15.358	47.031	53.120	26.874	27.573	28.430	

A. <u>Mission Description & Budget Item Justification</u>: Joint Command and Control (JC2) Capability is the next generation of command and control for the Department of Defense (DoD). JC2 Capability is the follow-on to the Global Command and Control System (GCCS) Family of Systems including the DISA-provided GCCS-J, the current Joint C2 system of record for the Department. JC2 Capability is a key DoD Transformation effort that will provide a wide range of strategic, operational and theater-level Command and Control (C2) capabilities to the warfighter based on a more net-centric, webbased, open system standards architecture. It will leverage the technologies and Core Enterprise Services provided by the Net-Centric Enterprise Services (NCES) and other net-centric providers. JC2 Capability is based on the Joint Requirements Oversight Council (JROC)-approved Operational Requirements Document (ORD), dated 22 August 2003, and the Draft JC2 Capability Development Document (CDD) currently being finalized by Joint Forces Command (JFCOM). JC2 will provide capabilities in eight Mission Capability Packages: Situational Awareness, Force Readiness, Force Projection, Intelligence, Force Protection, Force Employment (Air/Space Operations), Force Employment (Land Operations), and Force Employment (Maritime/Littoral Operations). The requested RDT&E funding is critical to supporting DoD Transformation in the area of joint command and control. Accordingly, this program element is under Budget Activity 05.

In accordance with DoD goals, next generation C2 efforts merged with JC2 in FY 2006 and beyond: Net-Centric Capabilities Pilot (NCCP) (PE 0604764K, AITS-JPO/Project T26) and C2 Community of Interest (COI) Services/User Defined Operational Picture (UDOP) (PE 0303149K, C4I For the Warrior/Project T55). JC2 will also use the NCES Core Enterprise Services (CES) and/or NCES Evaluation Capability Modules (ECM) as they become available. These components will support Global Information Grid (GIG) requirements of the Combatant Commanders (COCOM) and the Joint Task Forces (JTF). This project supports JC2 major milestone activities to include concept exploration, program planning, and technology risk reduction through prototyping, development, integration, evaluation and limited operational use for evaluation.

Accomplishments/Planned Program:

	FY 05	FY 06	FY 07
Subtotal Cost	2.905	14.358	47.031

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY		1	R-1 ITEM NOMEN	ICLATURE				
RDT&E, Defense-Wide/05			Joint Command and Control /PE 0303158K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Joint Command and Control	2.905	15.358	47.031	53.120	26.874	27.573	28.430	
(JC2)/JC01								

JC2-related pilot capabilities will prove net-centric warfighting mission capabilities for the C2 Community of Interest (COI) based on Combatant Commander defined Joint Mission Threads (JMT) and a services oriented (web-based) architecture. JMT is a JFCOM-led effort that will develop comprehensive descriptions of architectural elements (including associated operational requirements and the systems engineering approach) that define how the joint force will execute key warfighting mission threads. FY 2005 funding supported JC2 concept refinement activities: developing the Technology Development Strategy, Test and Evaluation Strategy, Clinger Cohen Act compliance, and Information Assurance Strategy. FY 2006 through FY 2007 funding will support the Technology Development phase activities and the pre-MS B activities necessary to reduce the risk across the life cycle of the program. Two FY 2005 DISA projects have merged with JC2 Capability beginning in FY06, Net-Centric Capabilities Pilot (NCCP) (PE 0604764K, AITS-JPO/Project T26) and C2 Community of Interest (COI) Services/User Defined Operational Picture (UDOP) (PE 0303149K, C4I For the Warrior/Project T55).

- DISA sponsored Net-Centric Capabilities Pilot (NCCP) began in FY 2004. It started a discovery process and a dialogue with the warfighting, development and acquisition communities on how to build, test, certify and operate effective, robust, and secure net-centric warfighting capabilities. This piloting effort is compliant with DODD 5000.1 and supports JC2 Capability concept exploration, technology risk reduction, and provided insight in developing the JC2 Technology Development Strategy (TDS) and Test and Evaluation Strategy (TES). As part of the JC2 Technology Development (TD) phase, NCCP activities will be transitioned into the JC2 Joint Program Management Office (JPMO). These activities will include periodic demonstration events to showcase selected mission threads, which describe how capabilities will enable a key joint warfighting capability or mission area and identify operational needs for those capabilities to Combatant Commanders (COCOMs), DoD senior leadership, and others such as coalition partners.
- User-Defined Operational Picture (UDOP) capabilities will provide a tailored relevant operational context that enables users to share a common understanding, improve their situational awareness, and conduct mission threads more effectively. Capabilities will be achieved within a services-oriented architecture that leverages GIG Enterprise Services (GES). The resulting capability will provide improved situational awareness, planning, collaboration and execution. JC2 capability's situational awareness/UDOP capabilities will be more flexible and extensible than the currently deployed client-server based GCCS Family of Systems' (FOS) Common Operational Picture (COP). The UDOP will provide increased agility for the user by generating an operational context from net-centric sources and services using a variety of web-based situational awareness tools as opposed to a hierarchical-COP generated by a single command authority.

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY		F	R-1 ITEM NOME	ICLATURE				
RDT&E, Defense-Wide/05			Joint Command and Control /PE 0303158K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Joint Command and Control (JC2)/JC01	2.905	15.358	47.031	53.120	26.874	27.573	28.430	

- JC2 Technology Development phase capabilities are being developed, integrated, tested and certified in a joint, distributed, collaborative development environment. Mission thread capabilities demonstrated in NCCP are composed from many Combatant Command/Service/Agency web-enabled data sources and services (e.g., DISA to include available NCES Core Enterprise Service (CES) pilot services and some C2 COI UDOP services, Service development and research commands, other agencies, Advanced Concept Technology Demonstrations (ACTDs), Programs of Record, and industry). These capabilities will continue to evolve as JC2 capabilities. Pilot/demonstration capabilities are made available to users on the classified network for evaluation, maturation and limited operational use (through a participating Program of Record) per ASD (NII) direction.

JC2 Capability Development and Strategic Planning - JC2 Capability will build upon and expand the capabilities developed and integrated in the GCCS Family of Systems, and migrate the capabilities to a more modern, net-centric architecture. FY 2005 activities focused on several JC2 Capability pre-Milestone A tasks assigned to DISA by OASD (NII). These tasks included preparing the JC2 TDS and TES. DISA also supported the OASD(NII)-led JC2 Analysis of Alternatives (AoA). DISA was formally designated by (ASD (NII) memorandum of 2 September 2005) as the JC2 Capability lead component. As the Lead Component, DISA has concurrently stood up a Joint Program Executive Office (JPEO) and Joint Program Management Office (JPMO) and project a MS A decision in FY2006 followed by entry into the Technology Development (TD) phase activities. The TD phase is forecasted for FY06 through FY08. These activities include: 1) acquisition management, 2) system engineering and architectural analysis, 3) establish/operate/validate the Federated Development and Certification Environment, 4) technical risk reduction piloting efforts, and 5) planning for MS B and the System Development and Demonstration Phase.

JC2 increase in FY06 for operational security.

Exhibit R-2, RDT&E Budget Item Justification	on	Di	ATE: Februar	ry 2006			
APPROPRIATION/BUDGET ACTIVITY		R-	-1 ITEM NOMEN	ICLATURE			
RDT&E, Defense-Wide/05		Jo	oint Command	and Contro	l /PE 030315	8K	
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Command and Control (JC2)/JC01	2.905	15.358	47.031	53.120	26.874	27.573	28.430

B. Program Change Summary:			
	FY 05	FY 06	FY 07
Previous President's Budget	3.905	14.580	19.674
Current Submission	2.905	15.358	47.031
Total Adjustments	-1.000	0.778	27.357

Change Summary Explanation:

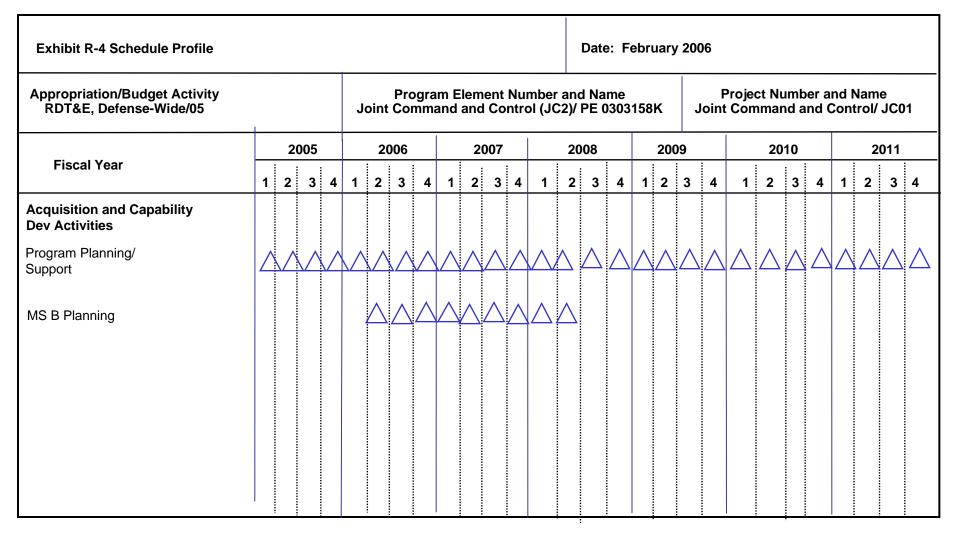
The FY 2005 change is due to transfer of funds to the Navy for an Internet Protocol v.6 testbed project. FY 2006 change is due to a Congressional add of \$1.0 million for Operational Security as well as undistributed Congressional reductions to the Defense-Wide RDT&E appropriation. FY 2007 increase is due to a Departmental decision to complete JC2 Technology Development Phase activities.

C. Other Program Funding Summary:

OCM DM	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>	<u>FY 08</u>	<u>FY 09</u>	<u>FY 10</u>	<u>FY 11</u>
O&M, DW	0.408	8.440	6.008	6.559	6.787	6.659	6.743

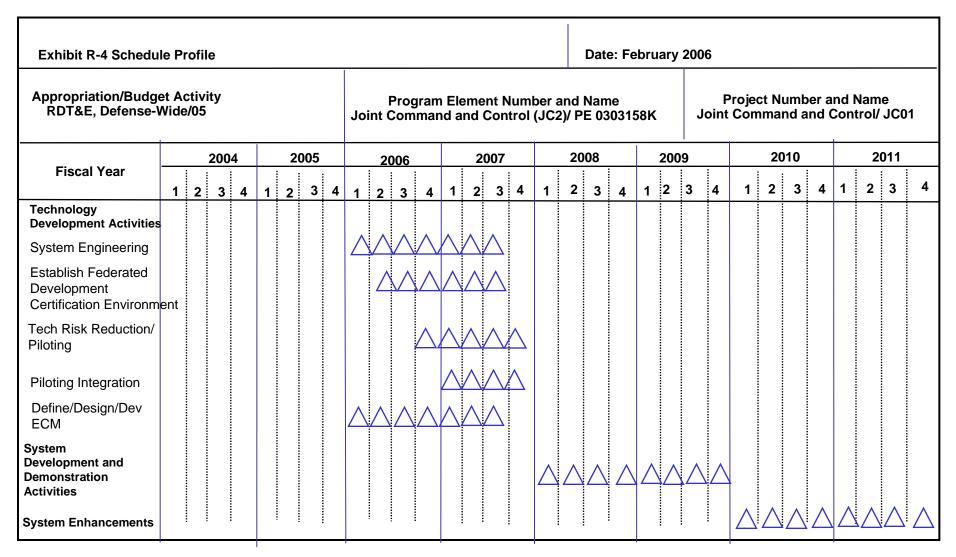
- D. <u>Acquisition Strategy</u>: JC2 Capability will utilize existing IDIQ contract vehicles during the Technology Development phase. Support will span a wide array of areas to include acquisition planning, systems engineering, tech piloting, and test/certification activities. During this timeframe, the JPMO will build an acquisition strategy for the program. Performance based contracts will be used when applicable.
- E. <u>Performance Metrics</u>: JC2 Capability supports several DISA Balanced Scorecard measures including net-centric compliance and providing Community of Interest (COI) capabilities to the warfighter. An internal project level Earned Value Management System has been implemented. The Program Manager will exercise oversight of contractor performance relative to established project cost, schedule, and performance milestones. Monthly In Process Reviews (IPRs) and routine program reviews will continue to be used to provide timely information on contractor expenditures. Routine status will also be provided through the OSD Integrated Product Team (IPT) structure.

Exhibit R-3 Cost Analys:	is			DATE	: Feb:	ruary	7 2006											
APPROPRIATION/BUDGET ACT	TIVITY	PROGRAM ELE	MENT	•		P	ROJECT N	AME AND NUI	IBER									
RDT&E, Defense-Wide/05		Joint Comma 0303158K	and Contr	ol/ PI	Ξ	J	Joint Command and Control/JC01											
Cost Category	Contract Method & Type	Performing Activity & <u>Location</u>	Total PYs <u>Cost</u>	FY 06 C <u>ost</u>	FY 06 Award <u>Date</u>	FY07 Cost	FY07 Award <u>Date</u>	Cost To Complete	Total <u>Cost</u>	Target Value of <u>Contract</u>								
JC2 Technical Risk Reduction & Piloting JC2 Acquisition Support System Engineering	TBD TBD OTF&O	TBD TBD MITRE, FFRDC McLean, VA	0.000 0.000 1.595	2.500 1.500 1.728	Mar-06 Mar-06 Oct-05	7.900 5.700 2.257	Mar-07 Mar-07 Oct-06	Contg Contg Contg	Contg Contg Contg	10.400 7.200 5.580								
JC2 Program Planning Support	F&O	BAH Arlington, VA	0.830	0.000	N/A	0.000	N/A	0	0.830	0.830								
JC2 Program Planning Support	F&O	KeyLogic Systems Columbia, MD	0.480	0.000	N/A	0.000	N/A	0	0.480	0.480								
Engineering Support	MOA	JPL, FFRDC San Diego, CA	0.000	0.300	Jan-06	2.300	Jan-07	Contg	Contg	2.600								
Pilot Integration	TBD	SAIC-APEX-968 McLean, VA	0.000	1.425	Mar-06	2.200	Mar-07	Contg	Contg	3.625								
C2IM Testing	MOA	SSC-SD GOVT San Diego, CA	0.000	0.240	Feb-06	2.500	Feb-07	Contg	Contg	2.740								
SW Dev & Tech Suppt	F&O	Various	0.000	3.275	Various	18.034	Oct-06	Contg	Contg	21.309								
C2 Visualization/Portal	F&O	Various	0.000	0.540		1.800		Contg	Contg	2.340								
SW Svs Orchestration Engineering Support	F&O F&O	NextGen-Solers, Rosslyn, VA NextGen-FGM Reston, VA	0.000 0.000	0.891 0.750	Mar-06 Mar-06	0.000		0	0.891 0.750	0.891 0.750								
Architecture/Engineering Engineering/Tech Svcs	MOA	S&T Assoc., Arlington, VA SSC-CH GOVT MOA/MIPR Suitland, MD	0.000 0.000	0.675 0.534	Mar-06 Oct-05	0.000 4.340		0 Contg	0.675 Contg	0.675 4.874								
Congressional Add	TBD	TBD	0.000	<u>1.000</u>	TBD	0.000	N/A	0	1.000	1.000								
	Total		2.905	15.358		47.03	1											



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R-1 Line Item No. 107



Page 7 of 8 R-1 Line Item No. 107 UNCLASSIFIED

Exhibit R-4a Schedule Detail	DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER
RDT&E, Defense-Wide/05	Joint Command and Control (JC2) / PE 0303158K	Joint Command and Control / JC01

Schedule Profile	FY2005	FY2006	FY2007	FY2008	FY2009	FY 2010	FY 2011
JC2 Capability Acquisition & Development							
Program Planning/Support	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
MS B Planning		2Q-4Q	1Q-4Q	1Q-2Q			
Technology Development Activities							
System Engineering		1Q-4Q	1Q-3Q				
Establish Federated Development Certification Envi	ronment	2Q-4Q	1Q-3Q				
Tech Risk Reduction/Piloting		4Q	1Q-4Q				
Piloting Integration			1Q-4Q				
Define/Design/Dev ECM		1Q-4Q	1Q-3Q				
System Demonstration and Development Activities	es			1Q-4Q	1Q-4Q		
System Enhancements						1Q-4Q	1Q-4Q

Exhibit R-2, RDT&E Budget Item Justification			DATE: F	ebruary 200)6						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM	NOMENCLATU	JRE						
RDT&E, Defense-Wide/05			Electronic Commerce / PE 0305840K								
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Electronic Commerce/EC01	3.379	6.602	0	0	0	0	0				

A. Mission Description and Budget Item Justification:

This program supports initiatives to increase the application of Electronic Business/Electronic Commerce (EB/EC) across the Department of Defense (DoD). This funding continues the improvement of the WAWF application to support its exponentially increasing use as a result of the Defense Federal Acquisition Regulation Supplement (DFARS) that requires the use of WAWF in the receipt and acceptance of DoD goods and services. This program element is under Budget Activity 5 because it involves the development of upgrades that increase the functional performance of the existing eBusiness systems.

	<u>FY05</u>	FY06	FY07
Subtotal Cost	1.618	4.739	0

Wide Area Workflow (WAWF) -WAWF was designed to eliminate paper from the receipts and acceptance process of the DoD contracting lifecycle. The goal is to enable authorized Defense contractors and DoD personnel the ability to create invoices and receiving reports and access contract related documents. The contract documentation is available through a seamless interface with Electronic Document Access (EDA). WAWF supports DoD's efforts to reduce unmatched disbursements in the DoD receipt, acceptance, entitlement, and payment process through data sharing and electronic processing. The benefits to DoD are global accessibility of documents, reduced need for re-keying, improved data accuracy, real-time processing, secure transactions with audit capability and faster processing resulting in fewer interest penalties. For vendors, benefits include the capability to electronically submit invoices, reduction of lost or misplaced documents, and online access to contract payment records.

Accomplishments and Planned enhancements are as follows:

FY 2005: Release 3.0.6 - 3.0.8 to provide additional interfaces to logistics, to the Defense Contract Audit Agency (DCAA), and for continued sustainment.

FY 2006: Release 3.0.9 - 3.0.10 expands to other Federal customers as appropriate. Continued sustainment.

FY 2007: Program transferred to Business Transformation Agency (BTA) effective 1 October 2006.

 $\frac{\text{FY05}}{\text{Subtotal Cost}} \qquad \frac{\text{FY06}}{1.761} \qquad \frac{\text{FY06}}{1.863} \qquad 0$

System/Program Testing and Analysis - The DISA Electronic Commerce Infrastructure consists of multiple systems

Exhibit R-2, RDT&E Budget Item Justification			DATE: F	ebruary 200)6						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM	NOMENCLATU	JRE						
RDT&E, Defense-Wide/05			Electronic Commerce / PE 0305840K								
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Electronic Commerce/EC01	3.379	6.602	0	0	0	0	0				

developed for multiple organizations by multiple vendors. These individual systems are integrated into the Electronic Commerce Infrastructure. The Joint Interoperability Test Command (JITC) performs testing ranging from developmental, system/integration, operational acceptance, database conversion, migration, validation, stress, performance, and end-to-end testing in support of all releases and patches for eBusiness applications. The JITC supports Global Exchange Service (GEX), Electronic Document Access (EDA), Central Contractor Registration (CCR), WAWF, and the Federal Technical Data Solutions (FedTeDs). JITC also provides assistance in trouble-shooting issues that arise in deployed applications. Additionally, JITC provides service that includes configuration management support, help desk support, and business support.

Accomplishments and Planned Enhancements are as follows:

FY 2005 and FY 2006: JITC will provide end-to-end integrated operational testing for all major eBusiness applications to include GEX, EDA, WAWF, CCR and FedTeDS.

B. Program Change Summary:

	FY05	FY06	FY07
Previous President's Budget	3.379	6.698	3.626
Current Submission	3.379	6.602	0.000
Total Adjustments	0	-0.096	-3.626

Change Summary Explanation:

FY 2006 change due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation. FY 2007 change due to the transfer of the program to the Business Transformation Agency.

C. Other Program Funding Summary:

								<u>To</u>	Total Cost
	FY 05	<u>FY 06</u>	<u>FY 07</u>	FY 08	FY 09	FY 10	<u>FY 11</u>	Complete	
O&M, DW	25.478	21.065	0.000	0.000	0.000	0.000	0.000	0.000	46.543

Exhibit R-2, RDT&E Budget Item Justification			DATE: F	ebruary 200)6		
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM	NOMENCLATU	JRE		
RDT&E, Defense-Wide/05			Electron				
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Electronic Commerce/EC01	3.379	6.602	0	0	0	0	0

D. <u>Acquisition Strategy</u>: Various types of contracting vehicles are utilized in accomplishing the overall mission objectives. Several vendors provide analysis and development of system interoperability to legacy systems, thus eliminating the duplication of effort and functions. Both large and small businesses have been put on contract to support eBusiness applications and eBusiness engineering. All of these efforts will allow DoD to improve business efficiency by drastically reducing processing time and the amount of paper received, processed, and stored.

E. Performance Metrics:

Initially, because the emphasis was on rapid transition from prototype to operating environment, early focus was on prototype, production, and functionality rather than program performance. However, the intent was to migrate to a more formal program management process once WAWF matured as a product while still maintaining the tenets of streamlined evolutionary acquisition. Currently, with each fiscal year, a prioritized list of requirements is developed and agreed to by the WAWF Joint Requirements Board (JRB). The JRB has representatives from the Services and Defense Agencies. Based on the list of requirements, a WAWF overall schedule is produced which includes integration activities with other Electronic Business applications, and it identifies products and milestones. A detailed work breakdown structure is then developed internal to each WAWF contractor. Fiscal year funds are allocated to contractors based on the amount of work scheduled per quarter or per year and appropriate Statements of Work are written. WAWF Program Management hosts monthly integration meetings to ensure that all integrating applications are meeting assigned target goals. WAWF Program Office reviews monthly status reports that charts budgeted costs against actual costs. WAWF Program Office also provides monthly status updates to JRB members, where some requirements are then changed and hence, these changes are recorded and appropriate cost/schedule impact is reviewed.

Exhibit R-3 Cost A	nalysis						DATE:	Februar	у 2006		
APPROPRIATION/BUDGE	ET ACTIVI	ΓY	PRO	GRAM EL	EMENT	•			PROJECT NAMI	E AND NUMBER	5
RDT&E, Defense-Wide	e/05		Ele	ctronic	Comme	cce / I	PE 0305	840K	Electronic (Commerce/EC)1
Cost Category	Contract Method & Type	Performing Activity & Location		Total PYs Cost	FY 06 Cost	FY 06 Award <u>Date</u>	FY 07 Cost	FY 07 Award <u>Date</u>	Cost to Complete	Total <u>Cost</u>	Target Value of Contract
Wide Area Workflow-RA	PR	New Performance based servi- contract to awarded Apri- 2006	ces be	0.000	4.619	4/06	0.000	N/A	0.000	4.619	4.619
Wide Area Workflow-RA	PR	Science Applications Internations Corporation (SAIC) Falls Church, VA	al	1.200	0.000	N/A	0.000	N/A	0.000	1.200	1.200
Wide Area Workflow-RA		CACI Inc. Chantilly, Jacksonville		5.658	0.000	N/A	0.000	N/A	0.000	5.658	5.658
		Concurrent Technology Corp. (CTC) Seminole, F		0.267	0.00	N/A	0.000	N/A	0.000	0.267	0.267
	PR	NGIT Reston VA	,	0.582	0.120	01/06	0.000	N/A	0.000	0.702	0.702
	PR	Merlin		0.305	0.000	N/A	0.000	N/A	0.000	0.305	0.305

Exhibit R-3 Co	st Analysis					DATE:	Februa	ry 2006			
APPROPRIATION/	BUDGET ACTIV	/ITY	PROGRAM E	LEMENT	·				ME AND NUMBE	ER	
RDT&E, Defense			Electronic	c Comme	rce / 1	PE 0305	840K	Electronic	Commerce/EC	201	
Testing	MIPR	JITC Ft Huachuca, <i>F</i>	1.276 AZ	1.863	11/05	0.000	N/A	0.000	3.139	3.139	
TOTAL			9.288	6.602		0.000					

Exhibit R-4 Schedule P	rolle													<u> </u>	pat	e: I	epi	uai										
Appropriation/Budget AcRDT&E, Defense-Wide/05	tivity										Num										ct 1					me EC0	1	
Fiscal Year		200				20	06				07			20			2009				2010				2011			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DEVELOPMENT TECHNICAL TESTING																												
SYS/PROG Test & Analysis- Application T&A	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ																				
SYS/PROG Test & Analysis- Integration T&A	Δ	Δ	Δ	Δ		Δ	Δ	Δ																				
PRODUCT IMPROVEMENT		_	^	^	_	^	Δ	^																				
772772																												

		UNCLASS	SIFIED						
Exhibit R-4a Schedule Detail			DATE: Febru	ary 2006					
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	PROGRAM ELE Electronic		PE 0305840K			PROJECT NAME AND NUMBER Electronic Commerce / EC01			
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
	11 2003	11 2000	11 2007	11 2000	11 2005	11 2010	11 2011		
DEVELOPMENT TECHNICAL TESTING									
SYS/PROG T&A - Application Test and Analysis	1-4Q	1-4Q							
SYS/ PROG T&A - Integration Test and Analysis	1-4Q	1-4Q							
PRODUCT IMPROVEMENT									
Wide Area Work Flow (WAWF)	1-4Q	1-4Q							

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE			
RDT&E, Defense-Wide/05			Advanced Info	rmation Tec	hnology Serv	ices Joint P	rogram
			Office (AITS-3	JPO) / PE 0	604764K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information	17.980	9.192	9.392	10.285	14.344	15.696	16.287
Technology / T26							

A. <u>Mission Description and Budget Item Justification</u>: The mission of the Advanced Information Technology Services Joint Program Office (AITS-JPO) is to expedite the transition of new Information Technology into those operational information systems that support the Combatant Commands and our nation's warfighters. The AITS-JPO works with many sources, including private industry, the Military Service labs, and the Defense Advanced Research Projects Agency (DARPA) to identify maturing technology to meet warfighter needs.

The AITS-JPO was created primarily to help transition emergent mature technologies into operational systems. The key mechanism for the transition of the technology is the Advanced Concept Technology Demonstration (ACTD). ACTDs were initiated to allow for the early and inexpensive evaluation of mature or maturing advanced technology to solve important military problems. ACTDs are "pre-acquisition" activities and are designed to provide the warfighting community with prototype capabilities and support them in the evaluation and maturation of the capabilities. The warfighter evaluates the technology to determine its military utility before commitments are made for formal acquisition. If an ACTD is successful and proves its military utility, the capability may then transition to a full-blown acquisition program, or be given to a DoD Agency, Military Service, or Combatant Command (COCOM). ACTDs benefit their customers by providing technology to joint warfighters that responds to a critical military need with the hardware/software requirements, operational concepts, and the organizational structure required to meet that need. For example, ACTD efforts support improved visualization of the battle space, streamlining logistics, and responding to enemy actions in a faster cycle than the enemy can respond.

ACTD-related work makes up the bulk of the AITS-JPO efforts. In addition, the AITS-JPO: a) engineers and reinforces Components for leave behind ((US only) after Military Utility Assessment (MUA) proves that a particular capability is useful and needs to be fielded) and integration into the Global Information Grid (GIG), including the Global Command and Control System - Joint (GCCS-J) and the Global Combat Support System (GCSS); b) augments transitioning products with improved security, scalability, and Net-Centric Enterprise Services (NCES) compliance; and c) provides advanced, hardened capabilities--Leading Edge Services (LES). LES is a network infrastructure, pilot capability until system of record can provide and deploy the capability, and value added services that include information processing, storage and retrieval; communications (voice, data, video, and multimedia); security technology and application in command and control, intelligence, and combat support for the worldwide DoD communities; and information sharing between the US and its coalition partners. The LES provides the network and computing infrastructure that supports ACTD demonstrations

Exhibit R-2, RDT&E Budget Item Justificat:	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE				
			Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Leading Edge Pilot Information Technology / T26	17.980	9.192	9.392	10.285	14.344	15.696	16.287	

and evaluations. As components mature in an ACTD, some of its outputs will be network services. These services will transition into the NCES system of record.

Within an ACTD, the Operational Manager arranges for MUAs of the various products of the ACTD, toward the end of the development period. ACTD capabilities will be built upon and contribute to NCES as it evolves. Technology solutions to many of the GCCS-J priority requirements are needed.

Included in the requirements is the need for mission-dependent information in the Common Operational Picture (COP) to support time-critical tactical decision making, for advanced visualization of the COP, and for enhanced imagery products and processing technology. The Joint Blue Force Situational Awareness (JBFSA) ACTD supports these requirements. In order to support the full spectrum of crisis action planning and execution, GCCS-J requires new functionality for courses of action development and assessment, automated assistance in plan generation, predictive monitoring of planned vs. actual plan execution, and support for the less structured but operationally important areas of humanitarian operations and counter-terrorist/force protection coordination. Joint Decision Support Tools and data fusion/visualization techniques are needed to transform raw data from multiple sources into decision-relevant information in a rapidly understandable format. Methods are needed to couple combat support planning and execution to the operations planning and execution of GCCS-J. Predictive techniques are required for detecting and assessing shortfalls before they occur. In addition, methods for coordinating logistics support across security domains in a coalition or host-nation-based operation are needed. AITS-JPO, through several ACTDs, is developing, prototyping, and implementing a network centric IT architecture for the Global Information Grid (GIG). Collaboration products as well as portal-based products are being prototyped under this project.

Products from this effort should transition to the GIG and Information Dissemination Management (IDM) with the goal of better matching dynamic services of the Defense Information Systems Network and other networks with the mission-critical applications and information flows of the Joint Task Force. IDM applies to the GIG in that it is the standard for information dissemination management processes and services to all new or upgraded C4I systems. As a part of both Network Operations and the host of applications systems of the GIG, the warfighter requires protection, detection, and reaction to attempted penetrations of the C4 enterprise. Toward that end the DoD has established a Joint Task Force for Computer Network Defense (JTF-CND), and any techniques that can provide an integrated Information Assurance Situation Assessment and response capability for individual commands, Joint Task Forces/Combatant Commanders, and to the JTF-CND,

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE			
RDT&E, Defense-Wide/05			Advanced Info	rmation Tec	hnology Serv	ices Joint P	rogram
			Office (AITS-3	JPO) / PE 0	604764K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information	17.980	9.192	9.392	10.285	14.344	15.696	16.287
Technology / T26							

will help provide tools for defense-in-depth protection of the military cyberspace.

FY 2005 Net Centric Capabilities Pilot (NCCP) activities added robustness to the Global Strike and Situational Awareness Evaluation Capability Modules (ECMs). New FY 2005 candidate NCCP capabilities included Intelligence/Targeting Support services (e.g., joint targeting/Air Tasking Order service; Intelligence, Surveillance and Reconnaissance (ISR) management; strategic/tactical Unmanned Autonomous Vehicle (UAV) video services), and Force Projection services (e.g., force, course of action, and transportation planning; combat support; and movement planning and execution services). NCCP includes periodic demonstration events to showcase selected mission threads, which describe how capabilities will enable a key joint warfighting capability or mission area and identify mission needs for those capabilities, to COCOMs, DoD senior leadership, and others such as coalition partners. FY 2005 activities supported JC2 concept exploration and technical risk reduction plus assisted in refining JC2 Analysis of Alternatives (AoA) options. NCCP activities also helped validate the NCES Technology Development Strategy (TDS) and Test and Evaluation Strategy (TES), the JC2 TDS and TES, and helped baseline GIG Bandwidth Expansion (GIG-BE) performance. In accordance with Departmental guidance, NCCP funding was transferred to PE 0303158K/Joint Command and Control in FY 2006 and beyond.

Accomplishments/Planned Program:

Battlespace Awareness (BA) - Leading Edge Services: - Battlespace Awareness is one of the key technology areas for Leading Edge Services. The Battlespace Awareness efforts include improving the Common Operational Picture at the Combatant Commander and Joint Task Force levels to provide enhanced situational awareness.

Exhibit R-2, RDT&E Budget Item Justifi		DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE				
			Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Leading Edge Pilot Information Technology / T26	17.980	9.192	9.392	10.285	14.344	15.696	16.287	
	FY 05		FY 0	6	FY	07		
Subtotal Cost	0.893		0.73	3	1.0	000		

Global Command and Control System (GCCS-J) - Leading Edge Services: Requirements include the technology insertion and transition engineering for the Agile Transportation for 21st Century ACTD. Output includes complete architecture, technical strategy, systems engineering, and full life cycle development. Benefits include a more robust development of products, with transition strategies, and actual transitioning into C2 Systems and the Joint Command and Control (JC2) areas. The benefits include working with the technical managers and operations managers at the Defense Transportation Systems to ensure technology transition within the architecture and framework of the C2 systems as well as coordination and socialization with TRANSCOM and other COCOMS and the DoD community.

Global Combat Support System (GCSS) - Leading Edge Services: Provide tools to plan and execute coalition strategic deployment/redeployment, coalition sustainment and field services. Also provide Coalition Theater Logistics (CTL) and infrastructure information.

 $\frac{\text{FY 05}}{2.095}$ $\frac{\text{FY 06}}{1.620}$ $\frac{\text{FY 07}}{1.550}$

Global Information Grid (GIG) Infrastructure: The Homeland Security (HLS)C2 ACTD provides the systems and operations to do the command and control mission to protect our installations throughout the world and in CONUS from terrorist attack. The use of different systems working together provides alerting, visualization, and collaboration capability. Technology focuses on rapid secure information sharing, sensor/IT integration and command, control and coordination to multiple homeland security participants. More critically, the HLS/D C2 ACTD works with the Joint Staff Antiterrorism/Force Protection community to develop concepts of operation. The ACTD is scheduled for transition in FY 2006 and will be completed by the end of FY 2007. The Commander in Chief 21 (CINC 21) ACTD continues the task of transitioning capabilities that will assist Combatant Commanders in employing a decision support environment that will

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE			
RDT&E, Defense-Wide/05			Advanced Info	rmation Tec	hnology Serv	ices Joint P	rogram
			Office (AITS-	JPO) / PE 0	604764K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information	17.980	9.192	9.392	10.285	14.344	15.696	16.287
Technology / T26							

provide a tailored rendering of relevant information to the Commanders, their staff, Joint Task Forces, non-government organizations, and coalition forces. This dynamic decision support environment will leverage Net-Centric Enterprise Services (NCES), the next generation Global Command and Control Services, and web services provided by the GIG. The data/information will be dynamically updated yielding better situational awareness and more efficient collaboration and mission execution.

Subtotal Cost $\frac{\text{FY } 05}{1.960}$ $\frac{\text{FY } 06}{0.000}$ $\frac{\text{FY } 07}{0.000}$

Advanced Information Assurance (IA) Services: Includes Active Network Intrusion Defense (ANID) and Coalition Information Assurance Common Operational Picture (C-IA COP) requirements. ANID capabilities provide for better sensor methods for detecting network and host intrusions (e.g., anomaly detections, reduced false-alarm rates, and improved data reduction), fusion of information from multiple sensors and sites to create a means of detecting sophisticated and coordinated attacks, spontaneous response methods to provide first level "defense-in-depth" while isolating the attack paths, and technologies for improving boundary control between security enclaves as we increase interaction with coalition forces. Lessons learned from the ANID ACTD and resulting CONOPS establishes the focus for the next IA focused ACTD, to speed IA protection solutions across the DoD community.

 FY 05
 FY 06
 FY 07

 Subtotal Cost
 0.320 0.730 0.742

Coalition Services: Under this effort, AITS-JPO coordinates research and development experiments using the Coalition Federated Battle Laboratories Network (CFBLNet) and prototypes and develops capabilities across the CFBLNet, which can be transitioned into strategic and operational coalition networks. This requirement provides for the coordination and conduct of coalition advanced technology experiments in conjunction with the Joint Battle Center, Services and Allies via the CFBLNet. Includes the support to complete and deploy the capability to coordinate an Air Tasking Order electronically between the U.S. and Allies and to prototype and do collaborative planning among the US and selected Allies. The need for an ubiquitous capability throughout the net-centric environment drives FY 2005 through FY 2007 funding to develop and integrate standard capability with other systems of record, and provide enterprise collaboration services that support warfighters in all security domains. The tactical environment demands state-of-the-art

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE			
RDT&E, Defense-Wide/05			Advanced Info	rmation Tec	hnology Serv	ices Joint P	rogram
			Office (AITS-	JPO) / PE 0	604764K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information	17.980	9.192	9.392	10.285	14.344	15.696	16.287
Technology / T26							

technology when deployed in theater and interfacing with the Intelligence Community and Coalition Partners. Our objective is to meet all potential threats from a global perspective in real time.

Subtotal Cost $\frac{\text{FY 05}}{6.034}$ $\frac{\text{FY 06}}{0.000}$ $\frac{\text{FY 07}}{0.000}$

Net Centric Capabilities Pilot (NCCP): Provides net-centric, services oriented architecture-based mission capabilities for the C2 Community of Interest (COI) based on Combatant Commander approved mission threads, which describe how capabilities will enable a key joint warfighting capability or mission area and identify mission needs for those capabilities. In accordance with Departmental guidance, NCCP transfers to PE 0303158K/Joint Command and Control.

Joint/Coalition Task Force Operations Tools: Develop C2 tools for Joint and Coalition Task Force operations, including adaptive near-real-time situation assessment and decision support, targeting, mission management, and interoperability with allies via the operational Griffin network (formerly Coalition Wide Area Network). Demonstrate these capabilities in the Combined Federated Battle Laboratories and in the Coalition Warfare Interoperability Demonstration (CWID). Provide situation assessment displays, which support automatically tailored decision support to warfighters. Provide enhanced, collaborative situation awareness for unexpected situations. Improve targeting-related positional accuracy for platforms sensed by image and video means. Improve capabilities of U.S. and Allies to exchange situational awareness, IA, tasking and targeting, logistics support information, and decision support information via the Griffin network. Provide a cross-function planning/execution service to support the shared data and cross-mission effects synchronization during planning, execution, & assessment via the CWAN and classified networks.

 FY 05
 FY 06
 FY 07

 Subtotal Cost
 1.450 2.380 3.128

Crisis Action Planning Tools: Develop advanced collaborative and iterative crisis action planning and execution tools

Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE				
RDT&E, Defense-Wide/05			Advanced Information Technology Services Joint Program					
			Office (AITS-JPO) / PE 0604764K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Leading Edge Pilot Information	17.980	9.192	9.392	10.285	14.344	15.696	16.287	
Technology / T26								

to support C2 for rapid, continuous, end-to-end deployment and sustainment of joint forces from Garrison to the battlefield. Accelerate the transformation of advanced Joint C4 to web-based, network-centric capabilities. Provide visualization; semi-automated force generation; and command center decision support. Develop portal-based capability to plan deployment and sustainment pipeline from end-to-end in a collaborative, incremental manner as planned refinement and operations execution progresses.

B. Program Change Summary:

	FY 05	FY 06	FY 07
Previous President's Budget	16.605	9.325	9.264
Current Submission	17.980	9.192	9.392
Total Adjustments	1.375	-0.133	0.128

Change Summary Explanation:

FY 2005 changes are due to below threshold reprogramming.

FY 2006 changes are due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation.

FY 2007 changes are due to revised fiscal guidance.

C. Other Program Funding Summary:

Other Funding for the salaries and operating expenses of this RDT&E project:

	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>	FY 08	FY 09	FY 10	FY 11	<u>To</u> Complete	Total Cost
O&M PE0604764K	6.809	5.741	6.501	6.665	7.571	7.650	7.647	Contg	Contg

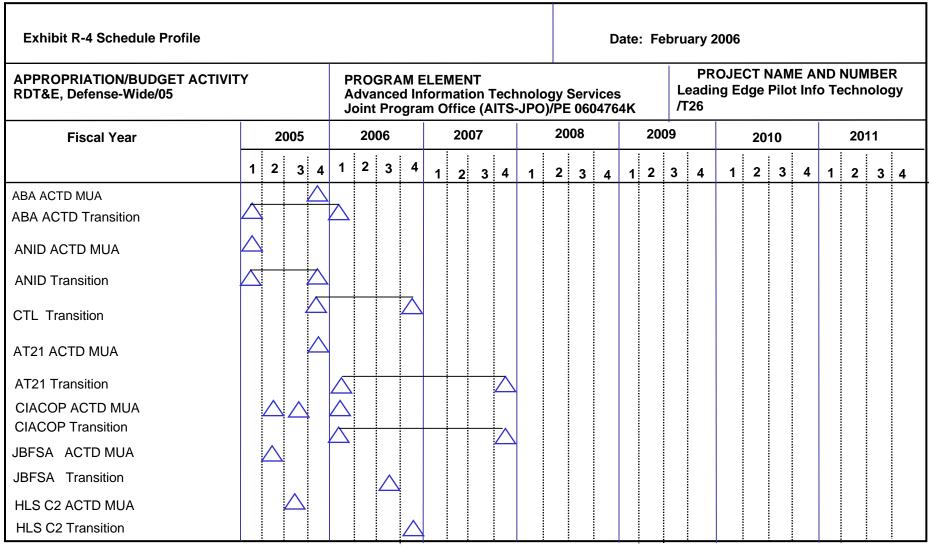
Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE			
RDT&E, Defense-Wide/05			Advanced Infor			ices Joint P	rogram
			Office (AITS-J	JPO) / PE 0	604764K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information	17.980	9.192	9.392	10.285	14.344	15.696	16.287
Technology / T26							

- D. Acquisition Strategy: AITS-JPO efforts are accomplished through a combination of strategies focused on operations, technical integration, program management, and financial tracking. Market research performed during the acquisition process includes 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. All contractors available from DISA sources were evaluated for their ability to deliver the products required specifically for the unique AITS-JPO efforts. Additionally, many of the DISA contracts were awarded with multiple options and cost factors are already defined for several years. Prior success in these areas was considered in the investigations. Several sources are contacted for cost estimates. The AITS-JPO 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 also provided additional sources of information. Quotes from multiple sources helps to provide an average for a more realistic price.
- E. <u>Performance Metrics</u>: The bulk of AITS-JPO efforts are structured as Advanced Concept Technology Demonstrations (ACTDs). An ACTD proposal is developed through a collaborative effort between the JPO and one of the Combatant Commands. This proposal is then formalized, and undergoes a vetting process involving leadership in DISA, OSD, the Joint Staff, and the Combatant Commands. The ACTD is then proposed to senior leadership within the OSD R&D ACTD community where it is subjected to additional requirements scrutiny by Joint Requirements Oversight Council (JROC). Those approved by senior leadership become formal ACTDs. The next step for an ACTD is to develop an Implementation Directive and a Management Plan. These guidance documents involve a general/flag officer commitment between OSD, DISA, and the Combatant Command. These lay out the basic objectives, schedule, and funding, for the ACTD. The detailed objectives, against which the Operational Sponsor (one of the Combatant Commands) will assess military utility, and the detailed mechanisms by which military utility will be assessed and results measured are developed and documented during the first year of the ACTD. Each ACTD has its own schedule and detailed objectives. ACTDs are usually developed using a spiral methodology, with incremental demonstrations, limited utility assessments of the demonstrated capabilities, and refinement of future capabilities based on feedback. Additionally, the AITS-JPO has implemented an internal Earned Value Management System where project managers exercise oversight of contractor performance relative to established

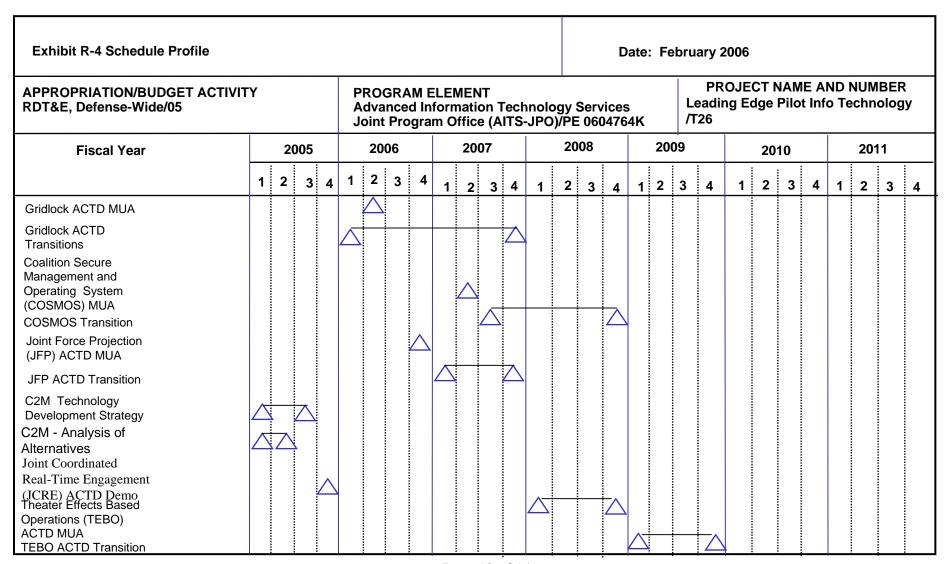
Exhibit R-2, RDT&E Budget Item Justificati	DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	ICLATURE			
RDT&E, Defense-Wide/05			Advanced Info	rmation Tec	hnology Serv	ices Joint P	rogram
			Office (AITS-3	JPO) / PE 0	604764K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information	17.980	9.192	9.392	10.285	14.344	15.696	16.287
Technology / T26							

project milestones and provide managers notification of the status of projects in terms of schedule and cost. The AITS-JPO also incorporates internal processes to enhance financial reporting and track contractor spending. Monthly reports provide timely information on contractor expenditures. The AITS-JPO utilizes several web-based financial management tools to obtain budget and execution information. The Earned Value Management System (EVMS) provides a tool for AITS-JPO project managers to see how well they are meeting their plan. Commanders use the Military Utility Assessment as a tool to evaluate products. Other internal measures, such as, timeliness of equipment purchases, travel, lab and demo support are also evaluated to assess if each requirement is effectively meeting the overall requirements of the AITS-JPO's mission.

Exhibit R-3 Cost Analysis	Exhibit R-3 Cost Analysis DATE: February 2006									
APPROPRIATION/BUDGET ACT RDT&E, Defense-Wide/05	IVITY	Advanced Info	PROGRAM ELEMENT Advanced Information Technology Services Joint Program Office (AITS-JPO)/ PE 0604764K			_	PROJECT NAME AND NUMBER Leading Edge Pilot Information Technology/T26			
Cost Category	Contract Method & <u>Type</u>	Performing Activity & Location	Total PYs Cost	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT Development & Tech Services	MIPR	SSC, Charleston, SC	8.566	0.400	02/06	0.300	02/07	Contg	Contg	9.266
	T&M	NGMS, McLean, VA	13.950	1.288	02/06	1.478	02/07	Contg	Contg	16.716
		Various(To include Encore, GEMS, and NEXGEN)	10.566	0.563	Var.	0.662	Var.	Contg	Contg	N/A
SUPPORT COSTS Engineering/Technical Support	T&M	HAI, Arlington, VA	14.714	0.533	03/06	0.861	03/07	Contg	Contg	16.108
Systems Integration	CPFF	SAIC Arlington, VA	16.869	3.349	04/06	2.896	04/07	Contg	Contg	23.114
System Engineering	FFRDC	MITRE, Arlington, VA	14.757	1.983	02/06	1.911	02/07	Contg	Contg	18.651
		Various(To include Encore, GEMS and NEXGEN)	11.105	0.559	Var.	0.484	Var.	Contg	Contg	N/A
TEST & EVALUATION		Various(To include Encore, GEMS and NEXGEN)	8.964	0.517	Var.	0.800	Var.	Contg	Contg	N/A
Total			99.491	9.192		9.392				



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Exhibit R-4a Schedule Detail			DATE: Febr	uary 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT			PROJECT	NAME AND NU	MBER
RDT&E, Defense-Wide/05				ervices Joint			Information
	Program Off	ice / PE 0	504764K		Technol	ogy / T26	
Schedule Profile	FY 2005	FY 2006	<u>FY 2007</u>	FY 2008	FY 2009	FY 2010	FY 2011
ABA ACTD Military Utilization Assessment	4Q						
ABA Transition	1Q-4Q	1Q					
Active Network Intrusion Detection (ANID) ACTD MUA	10						
ANID Transition	1Q-4Q						
CTL Transition	4 Q	1Q-4Q					
Agile Transportation 21 st Century ACTD MUA	4Q						
AT21 Transition		1Q-4Q	1Q-4Q				
Coalition Information Assurance Common Operational Picture (C-IA COP) ACTD MUA	2Q, 3Q	10					
CIA COP Transition		1Q-4Q	1Q-4Q				
Joint Battlefield Situation Awareness (JBFSA) ACTD MUA	3 2Q						
JBFSA Transition		3Q					
Homeland Security C2 ACTD MUA	3Q						

Exhibit R-4a Schedule Detail		DATE: Febr	uary 2006				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEI					NAME AND NU	
RDT&E, Defense-Wide/05				ervices Joint			Information
	Program Off:	ice / PE 06	04764K		Technol	ogy / T26	
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
HLS C2 Transition		4Q					
Gridlock ACTD MUA		2Q					
Gridlock Transition		1Q-4Q	3Q-4Q				
Coalition Secure Management and Operating System (COSMOS) MUA			2Q				
COSMOS Transition			3Q-4Q	1Q-4Q			
Joint Force Projection (JFP) MUA		4Q					
JFP Transition			1Q-4Q				
C2M Technology Development Strategy	1Q-3Q						
C2M Analysis of Alternatives	1Q-2Q						

Exhibit R-2, RDT&E Budget Item Justification			Date: February 2006					
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE					
RDT&E, Defense-Wide/07		C4I	Interopera	bility/PE ()208045K			
COST (in millions)	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11	
Total Program Element	40.706	66.257	84.313	91.583	93.542	95.798	96.985	
Test and Evaluation/T30	25.816	28.444	21.961	22.284	22.548	22.857	22.839	
Major Range Test Facility Base	14.890	37.813	62.352	69.299	70.994	72.941	74.146	
(MRTFB)/T40								

A. Mission Description and Budget Item Justification: As required by DoD Directive 4630.5, DoD Instruction 4630.8, DoD Directive 5105.19, DoD Regulation 5000.2-R, and CJCSI 6212.01C, the Joint Interoperability Test Command provides life cycle test, evaluation, certification and technical support for all DoD National Security Systems/Information Technology Systems (NSS/ITS) to assure all users that Combatant Commander, Service, and Agency systems are effectively interoperable, compatible and integrated in a joint and combined environment. JITC is DoD's sole joint interoperability certifier. It serves as the designated Joint Operational Test Agency (OTA) to determine the operational effectiveness and suitability of the Global Information Grid - Bandwidth Expansion (GIG-BE), Net Centric Enterprise Services (NCES), Global Command and Control System Joint (GCCS-J), Teleport, Defense Video Teleconferencing Services-Global (DVS-G), Defense Message System (DMS), Next Generation Collaborative Services (NGCS), and other systems managed or procured by the Defense Information Systems Agency, Services, and other Joint agencies. In accordance with DoD Directive 3200.11, it functions as the only non-Service member of DoD's Major Range and Test Facility Base (MRTFB). allowing work with commercial vendors to test and certify their products. It acts as Executive Agent for testing of selected National Geospatial-Intelligence Agency (NGA) programs, National Security Agency (NSA) and Service programs. It assists Allies in establishing similar interoperability and supportability programs throughout the life cycle of DoD systems. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

B. Program Change Summary:

	FY 05	FY 06	_FY 07
Previous President's Budget	40.706	65.517	65.930
Current President's Budget	40.706	66.257	84.313
Total Adjustments	0	.740	18.383

Change Summary Explanation:

FY 2006 adjustment due to a Congressional increase of \$1.7M for the System of Systems Engineering Center, and undistributed Congressional reductions to the Defense-Wide RDT&E appropriation.

FY 2007 adjustment due to (1) realignment of \$21.821M of DISA O&M and Procurement funds from PE 0303149K to this

Exhibit R-2, RDT&E Budget Item Justification	1	D	ate: Februar	y 2006			
APPROPRIATION/BUDGET ACTIVITY		R	-1 ITEM NOMEN	CLATURE			
RDT&E, Defense-Wide/07		C	4I Interopera	bility/PE ()208045K		
COST (in millions)	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Total Program Element	40.706	66.257	84.313	91.583	93.542	95.798	96.985
Test and Evaluation/T30	25.816	28.444	21.961	22.284	22.548	22.857	22.839
Major Range Test Facility Base	14.890	37.813	62.352	69.299	70.994	72.941	74.146
(MRTFB)/T40							

program to consolidate operational testing into a single program managed under MRTFB rules and procedures; (2) reduction of \$4.4M of Joint Distributed Engineering Plant (JDEP) funds for establishment of Joint Mission Environment Test Capability (JMETC) Program; and (3) various pricing adjustments.

Exhibit R-2a, RDT&E Project Justification DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT			MENT		PROJECT NAME	AND NUMBER	
RDT&E, Defense-Wide/07	Defense-Wide/07 C4I Interoperability/PE 0208045K			Test and Evaluation/T30			
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	25.816	28.444	21.961	22.284	22.548	22.857	22.839

A. <u>Mission Description and Budget Item Justification</u>: Provides life cycle test, evaluation, certification, and technical support for all DoD National Security Systems/Information Technology Systems (NSS/ITS) to assure the warfighter that Combatant Commander, Service, and Agency systems are effectively interoperable, compatible, and integrated in a joint and combined environment. JITC is DoD's sole joint interoperability certifier. Serves as the designated Joint Operational Test Agency (OTA) to determine the operational effectiveness and suitability of the Global Information Grid - Bandwidth Expansion (GIG-BE), Net Centric Enterprise Services (NCES), Global Command and Control System Joint (GCCS-J), Defense Video Teleconferencing Services-Global(DVS-G), Defense Message System (DMS), Next Generation Collaborative Services (NGCS), and other systems managed or procured by the Defense Information Systems Agency, Services, and other Joint agencies. Acts as Executive Agent for testing of selected National Geospatial-Intelligence Agency (NGA) programs, National Security Agency (NSA) and Service programs. Assists Allies in establishing similar "joint" test organizations. Works with Combatant Commanders during exercises and contingency operations to ensure interoperability and supportability throughout life cycle of DoD systems.

B. Accomplishments/Planned Program:

Operational Test and Evaluation	FY 05	<u>FY 06</u>	FY 07
Subtotal Cost	2.658	3.070	2.975

Provide Operational Test and Evaluation (OT&E) of systems acquired, assigned or managed by the Defense Information Systems Agency (DISA) to determine if the systems meet users' requirements. Conduct OT&E of Global Command and Control System Joint (GCCS-J) major and minor releases to ensure operational requirements are met in a real operational environment; operational assessment and IOT&E of the Global Information Grid Bandwidth (GIG-BE) expansion to assess operational effectiveness and suitability. Develop and execute OT&E strategy for Network Centric Enterprise Services (NCES); operationally assess the Next Generation Collaborative Services (NGCS) to support the milestone decision; perform operational assessments of Defense Message System (DMS) software releases and follow-on maintenance releases to ensure operational effectiveness and suitability; conduct continuous operational test and evaluation of Defense Video Teleconferencing Services-Global (DVS-G) to ensure operational effectiveness and suitability; and assess operational effectiveness and suitability of DoD Teleport program; provide assessment testing for the Defense Switch Network (DSN) family of products; provide operational testing support for GCCS-J and GCSS (CC/JTF).

Exhibit R-2a, RDT&E Project Justification DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELE	MENT		PROJECT NAME	AND NUMBER	
RDT&E, Defense-Wide/07		C4I Interoperability/PE 0208045K			Test and Eval		
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	25.816	28.444	21.961	22.284	22.548	22.857	22.839
				0.5		^_	

Joint Interoperability Testing	FY 05	FY 06	FY 07
Subtotal Cost	10.637	12.286	$\overline{11.92}$ 2

Conduct joint interoperability test and certification of DoD National Security Systems/Information Technology Systems (NSS/ITS) to ensure end-to-end interoperability, compatibility and integration. Complete Tactical Digital Information Link 11A/11B/16 certification tests (e.g., Airborne Warning and Control System (AWACS) Link 16, Special Information System (SIS) Senior Scout (SS) Link 11, Joint Stars Link 16, Airborne Battlefield Command and Control Center (ABCCC) Link 16, Forward Area Air Defense System (FAAD) Link 11B, and Modular Control Equipment (MCE) Link 11, 11B and 16, Joint Strike Fighter (JSF)); perform certification testing of Navy communications systems in support of Navy transition to DMS; conduct Department of Defense (DoD) Interoperability Communications Exercises (DICE) to validate joint communications architectures, identify interoperability issues, perform systems' assessments, and certify the interoperability of voice, video, data, transmission, and messaging systems. Perform certification and related compliance and standards conformance testing of over 70 tactical, theater and national Intelligence Surveillance and Reconnaissance (ISR) systems supporting all Services, Combatant Commanders, and selected Agencies.

Support to Warfighter	<u>FY 05</u>	FY 06	FY 07
Subtotal Cost	3.324	3.839	3.722

Provide projected on-site exercise support (pre-exercise architecture review and analysis, architecture documentation, operational assessments, traffic loading and simulation, and testing); on-site exercise support to identify and resolve technical issues, identify uncertified and/or untested interfaces, and determine compliance with CJCSM 6231.01B, Manual for Employing Joint Tactical Communications, which establishes standards and procedures for communications supporting joint operations and exercises; provide solutions to problems raised in hot-line calls; and publish four issues annually of Lessons Learned Reports.

Joint Distributed Engineering Plant	FY 05	FY 06	FY 07
Subtotal Cost	3.695	$\frac{4.214}{}$	0

Provide management and strategic planning for the Joint Distributed Engineering Plant (JDEP) to continue building the reusable test infrastructure that will enable warfighters, system developers, and testers to evaluate the interoperability of joint NSS/ITS systems-of-systems. Tasks include coordination of test events, systems, network and

Exhibit R-2a, RDT&E Project Justification DATE: February 2006											
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELE	MENT		PROJECT NAME	AND NUMBER					
RDT&E, Defense-Wide/07		C4I Interop	erability/PE	0208045K	Test and Eval	luation/T30					
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Project Cost	25.816	28.444	21.961	22.284	22.548	22.857	22.839				

testbed engineering, and data analysis. Focus will be continued test and evaluation of interoperability fixes to warfighting systems and capabilities, and on expansion of the common test infrastructure to begin testing of systems providing the ground commander's situational awareness and combat identification. In FY07 funding is withdrawn from DISA for establishment of the Joint Mission Environment Test Capability (JMETC) Program.

Combined Interoperability Testing $\frac{\text{FY 05}}{2.952}$ $\frac{\text{FY 06}}{3.335}$ $\frac{\text{FY 07}}{3.342}$

Provide joint and coalition Command, Control, Communications, Computers, and Intelligence (C4I) interoperability test support to Combatant Commanders to ensure successful combined operations with our Allies and Coalition partners. This includes Coalition exercise support, tactical digital information link (TADIL) testing support and communications Command and Control Interoperability Boards (CCIB) support, Coalition Network migration, and US/Coalition communications equipment testing; provide projected on-site exercise support (pre-exercise architecture review and analysis, architecture documentation, operational assessments, traffic loading and simulation, and testing); on-site exercise support to identify and resolve technical issues, identify uncertified and/or untested interfaces, and determine compliance with CJCSM 6231.01B, Manual for Employing Joint Tactical Communications, which establishes standards and procedures for communications supporting joint operations and exercises; provide solutions to problems raised in hot-line calls; and publish four issues annually of Lessons Learned Reports.

System of Systems Engineering Center $\frac{\text{FY 05}}{2.550}$ $\frac{\text{FY06}}{1.700}$ $\frac{\text{FY 07}}{0}$

Established a System of Systems Engineering Center that will develop a formal engineering methodology to be applied to DoD programs; extend traditional systems engineering to address challenges faced in today's complex combination of systems that must function as an overall whole to produce desirable results; and initiate prototype applications for port security.

Exhibit R-2a, RDT&E Project Justification DATE: February 2006											
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELE	MENT		PROJECT NAME	AND NUMBER					
RDT&E, Defense-Wide/07		C4I Interop	erability/PE	0208045K	Test and Eval	luation/T30					
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Project Cost	25.816	28.444	21.961	22.284	22.548	22.857	22.839				

C. Other Program Funding Summary:

								10	Total
	FY05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	Complete	Cost
O&M, DW	6.676	5.274	3.348	3.191	3.209	3.216	3.226	Contg	Contg

D. Acquisition Strategy:

Three prime contracts, with multiple sub-contracts, support this project. These competitively awarded, 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.

E. Performance Metrics:

JITC performance metrics identified in the FY 2005 Capital Investment Report were interoperability and standards conformance certifications, and timely, accurate solutions to all Hotline calls. As part of DISA's Balanced Scorecard Initiative, these metrics were refined and data have been collected. FY 2004 is the benchmark for workload counts (181 certification/assessment memoranda and 218 Hotline calls). These data will provide factual, accurate, independent, timely, and value-added information to assess customer satisfaction.

Exhibit R-3 Cost Ana	lysis			DATE: Febr	uary 2	2006				
APPROPRIATION/BUDGET	CACTIVITY	PR	ROGRAM ELEMENT		PI	ROJECT NAM	E AND 1	UMBER		
RDT&E, Defense-Wide/	07	C4	Interoperability	/ PE 0208045F	ζ Te	est and Ev	raluatio	on / T30		
Test & Evaluation										
Cost Category	Contract	Performing			FY 06		FY 07			Target
	Method &	Activity &		FY 06	Award	FY 07	Award	Cost to	Total	Value of
	Type	Location	Cost	Cost	<u>Date</u>	Cost	<u>Date</u>	Complete	Cost	Contract
Engineering/Technical Services	FFP/LOE	NGMS Ft. Hua, AZ	13.590	4.094	10/05	2.376	10/06	5.940	26.000	26.000
	FFP/LOE	Interop Ft Hua, AZ	. 16.328	4.435	10/05	3.218	10/06	8.045	32.026	32.026
	FFP/LOE	NGIT Ft. Hua, AZ	11.236	2.843	10/05	2.127	10/06	5.317	21.523	21.523
	CPFF	CTC Arlington, VA	9.350	1.700					11.050	11.050
Subtotal Contracts				13.072		7.721				
In-House				15.372		14.240				
Total Project				28.444		21.961				

Appropriation/Budget Activ RDT&E, Defense-Wide/07	ty					Program Element Number and C4I Interoperability / PE 0208						nd N 080	d Name P 3045K 1				Proje Test	roject Number and Name Test and Evaluation / T30										
Fiscal Year		2	2005	;		2006				2007			2	2008 200			09			20	10			2011				
	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	2 3	3 4
Provide Operational Test & Evaluation (OT&E) of DISA acquired systems.																												
Conduct joint interoperability test and certification on DoD C4I systems																										_ 		
System of systems engineering center																												

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Exhibit R-4 Schedule Profile															Date: February 2006													
Appropriation/Budget Activity RDT&E, Defense-Wide/07	ropriation/Budget Activity Program E DT&E, Defense-Wide/07 C4I Inter				Elei rope	men erab	t Nu ility	ımb / Pi	er ar E 020	nd N 0804	lam 45K	е			Project Number and Name Test and Evaluation / T30													
Fiscal Year		2	2005	j		20	06			20	07			20	008			200)9			20	10			20	11	
	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
Manage Joint Distributed Engineering Plant (JDEP)																												
On-site exercise support for ~ 6-8 exercises per year																												
Operate 24/7 hotline			-	-		:		:							:	-				:		:	· · ·	:			:	-
Publish quarterly Lessons Learned reports																												
Combined nteroperability Test			<u> </u>			<u> </u>	-					<u> </u>			<u> </u>					<u> </u>		<u> </u>					<u> </u>	<u></u>
support to combatant commanders																												

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Exhibit R-4a Schedule Detail	DATE: F	February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER
RDT&E, Defense-Wide/07	C4I Interoperability / PE 02080	3045K Test and Evaluation / T30

Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Provide Operational Test & Evaluation (OT&E) of DISA ac	1-4Q cquired syste			1-4Q VS-G)	1-4Q	1-4Q	1-4Q
Conduct joint interoperability test and certificate planning and conducting Defense Int	ation on DoD	NSS/ITS such	as TADIL L	ink 11 & Lin	1-4Q k 16 tests,		1-4Q ncluding
Establish System of Systems Engineering Center	1-4Q	1-40					
Manage Joint Distributed Engineering Plant (JDEP), including planning & support		1-4Q t of core doc	uments, tec	hnical frame	work, node i	nstallations	and event
On-site exercise support for six to eight exercises		1-4Q .g. COBRA GOL				~	1-4Q
Operate 24/7 hotline & Publish quarterly Lessons Learned reports	1-4Q	1-4Q	1-40	1-4Q	1-4Q	1-4Q	1-4Q
Provide Combined Interoperability Test support to Co	1-4Q ombatant Com	1-4Q manders	1-4Q	1-40	1-4Q	1-40	1-4Q

Exhibit R-2a, RDT&E Project Just	cification		DATE: F	ebruary 2006			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELE	MENT		PROJECT NAME A	ND NUMBER	
RDT&E, Defense-Wide/07		C4I Interop	erability / PA	E 0208045K	Major Range Te	st Facility	Base / T40
Cost (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	14.890	37.813	62.352	69.299	70.994	72.941	74.146

A. <u>Mission Description and Budget Item Justification</u>: This project provides Institutional funds for DISA's Joint Interoperability Test Command (JITC), which serves as the only non-Service member of DoD's Major Range and Test Facility Base (MRTFB), in accordance with DoD Directive 3200.11. The increase in FY06 is due to Congressional action directed by Section 232 of P.L. 107-314 that requires that the institutional (indirect and overhead) costs of MRTFB facilities be funded by the major T&E investment accounts; DoD customer Acquisition Programs reflect an offsetting decrease since these indirect costs may no longer be charged to DoD customers. In addition, beginning in FY 2007 the MRTFB has increased its scope within the Agency.

B. Accomplishments/Planned Program:

Interoperability Test Support	FY 05	FY 06	FY 07
Subtotal Cost	11.835	30.113	54.110

Funds the MRTFB institutional and overhead costs associated with operating the Joint Interoperability Test Command (JITC). Institutional costs include maintaining and operating JITC's base operations, multi-purpose testbed maintenance, contract management, award fee costs, communications, automation support, operating expenses, and associated civilian pay costs for all overhead functions at Indian Head, MD and Fort Huachuca, AZ. Funds provide for the development, implementation, and maintenance of JITC's interoperability testing tools necessary to conduct testing of National Security Systems/Information Technology Systems (NSS/ITS). FY07 increase reflects the realignment of DISA O&M and Procurement funds from PE 0303149K to this program to consolidate operational testing into a single program managed under MRTFB rules and procedures.

Net Readiness Capabilities Resources	FY 05	FY 06	FY 07
Subtotal Cost	3.055	7.700	8.242

Continue to implement Net Readiness Capabilities Resources (NRCR), which will provide DoD with an off-line, life-cycle support capability for DoD's tactical and strategic networks and their interfaces. The NRCR allows testers to assess and evaluate performance of new systems, software revisions, and hardware modifications to various elements without risking disruption of operational IT networks.

Exhibit R-2a, RDT&E Project Just	ification		DATE: F	ebruary 2006			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELE	MENT		PROJECT NAME A	ND NUMBER	
RDT&E, Defense-Wide/07	C4I Interop	erability / PI	E 0208045K	Major Range Test Facility Base / T40			
Cost (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	14.890	37.813	62.352	69.299	70.994	72.941	74.146

C. Other Program Funding Summary:

								<u>1'0</u>	Total
	FY05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	Complete	Cost
O&M, DW	3.851	7.011	9.504	9.925	10.102	10.261	10.475	Contg	Contg

D. <u>Acquisition Strategy</u>: Three prime contracts, with multiple sub-contracts, 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.

E. Performance Metrics:

This project funds JITC's Institutional cost incurred to operate and maintain the Major Range Test Facility Base. The output associated with this project is the availability of testbeds and testing facilities for customer testing; there were no down days for JITC facilities and testbeds during the last fiscal year.

ysis			DATE: Februa	ary 200	б				
ACTIVITY	PROG	RAM ELEMENT		PROJ	ECT NAME	AND NUI	MBER		
7	C4I	Interoperability	/ PE 0208045K	Majo	r Range a	and Test	Facility	Base / T	40
Contract	Performing	Total		FY 06		FY 07			Target
Method &	Activity &	PYs	FY 06	Award	FY 07	Award	Cost to	Total	Value o
<u>Type</u>	Location	Cost	Cost	Date	Cost	<u>Date</u>	Complete	Cost	Contract
FFP/LOE	NGMS Ft.	5.124	5.652	10/05	9.313	10/06	23.283	43.372	43.372
	•								
FFP/LOE	Interop Ft. Hua, AZ	8.412	12.739	10/05	20.650	10/06	51.625	93.426	67.235
FFP/LOE	NGIT Ft. Hua, AZ	5.324	6.404	10/05	10.528	10/06	26.320	48.576	48.576
	,		24.795		40.491				
			13.018		21.861				
			37.813		62.352				
	Contract Method & Type FFP/LOE	Contract Performing Method & Activity & Type Location FFP/LOE NGMS Ft. Hua, AZ FFP/LOE Interop Ft. Hua, AZ	PROGRAM ELEMENT C4I Interoperability Contract Performing Total Method & Activity & PYs Type Location Cost FFP/LOE NGMS Ft. 5.124 Hua, AZ FFP/LOE Interop Ft. 8.412 Hua, AZ FFP/LOE NGIT Ft. 5.324	ACTIVITY 7 PROGRAM ELEMENT C4I Interoperability / PE 0208045K Contract Performing Total Method & Activity & PYs FY 06 Type Location Cost Cost FFP/LOE NGMS Ft. 5.124 5.652 Hua, AZ FFP/LOE Interop Ft. 8.412 12.739 Hua, AZ FFP/LOE NGIT Ft. 5.324 6.404 Hua, AZ 13.018	PROGRAM ELEMENT PROJUCT PROJUC	PROGRAM ELEMENT C4I Interoperability / PE 0208045K Major Range Range	PROGRAM ELEMENT PROJECT NAME AND NUME	ACTIVITY 7	PROGRAM ELEMENT PROJECT NAME AND NUMBER Major Range and Test Facility Base / T

Appropriation/Budget Activity Pr RDT&E, Defense-Wide/07			Program Element Number and Name C4I Interoperability / PE 0208045K			Project Number and Name MRTFB / T40																						
Fiscal Year		2	2005	j		20	006			20	07			2	800			20	09			20	10				2011	1
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	2	3
Provide interoperability test support to																												
warfighter																												
Implement Net Readiness Capabilities		<u> </u>	<u> </u>	<u> </u>								<u> </u>			<u> </u>	<u> </u>						<u> </u>				<u> </u>	_ _	
Resources																												

Exhibit R-4a Schedule Detail	DATE: Februar	у 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER
RDT&E, Defense-Wide/07	C4I Interoperability / PE 0208045K	Major Range and Test Facility Base / T40

Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Develop & implement Interoperability test systems to	1-4Q support warf	1-4Q ighters	1-40	1-40	1-40	1-40	1-4Q
Implement Net Readiness Capabilities Resources	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

Exhibit R-2, RDT&E Budget Item Justificati	on.		DATE: Februar	ry 2006			
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE			
RDT&E, Defense-Wide/07			National Milit	ary Comman	d System (NM	CS) / PE 030	2016K
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
NMCS Command Center	1.209	.649	.721	.720	.625	.584	.534
Engineering / S32							

A. Mission Description and Budget Item Justification:

The National Military Command System (NMCS) provides the President of the United States, the Secretary of Defense, National Military Command Center (NMCC) and NMCC Site R, Executive Travel Fleet, Office of the Secretary of Defense (OSD), and Chairman, Joint Chiefs of Staff with the ability to maintain Command and Control (C2) capabilities, ensure continuous availability of emergency messaging, and maintain situational and operational awareness. Additionally, the NMCS provides informed, decision-making linkage between the President, the Secretary of Defense, and the Combatant Commanders. The NMCS program utilizes improved C2 methodologies and technology insertion opportunities to meet the command, control and information requirements for all crises and security threats involving US military forces.

DISA Command Center Engineering, within the Strategic Communications Office, provides innovative and cost-effective engineering solutions to ensure that the NMCS components and facilities located at the NMCC and NMCC Site R provide the Joint Staff with the necessary emergency messaging, situation awareness, crisis action, and operational capabilities. The NMCS engineering 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. The projects comprising NMCS support provide C4I systems engineering for the NMCS in direct execution of Director, DISA's role as the DoD systems engineer, IAW Department of Defense Directive 5105.19. Furthermore, these projects support the Director's objective to provide responsive, timely, and accurate information to the warfighter. Support is provided to the Joint Staff in configuration management of over 150 systems and to the planning and implementation of the relocation of the NMCC as part of the Pentagon renovation. All efforts emphasize interoperability and are designed to contribute directly to the achievement of the global information infrastructure. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

Accomplishments/Planned Program:

NMCS Systems Engineering	FY 05	FY 06	FY 07
Subtotal Cost	1.209	.649	.721

Exhibit R-2, RDT&E Budget Item Justificati		DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE					
RDT&E, Defense-Wide/07			National Milit	tary Comman	d System (NM	CS) / PE 030	2016K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
NMCS Command Center	1.209	.649	.721	.720	.625	.584	.534		
Engineering / S32									

Specific accomplishments in FY 2005 included initial fielding and continued design of NMCS Information Resource Management (IRM) portal and Master Reference Guide, technical insertion evaluations, engineering studies/analyses/designs for NMCS component system upgrades/modernization included the Site R Integration Program (SRIP), and configuration management of NMCS systems and facilities. The continuations of these efforts are planned outputs for FY 2006-FY 2011.

B. Program Change Summary:

	FY 05	<u>FY 06</u>	FY 07
Previous President's Budget	1.209	0.659	0.711
Current Submission	1.209	0.649	0.721
Total Adjustments	0.0	(.010)	0.010

Change Summary Explanation:

FY 2006 reduction is due to undistributed congressional reductions to the Defense-wide RDT&E appropriation. FY 2007 increase is due to revised fiscal guidance.

C. Other Program Funding Summary:

								10	Total
	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	Complete	Cost
O&M DW	4.038	4.274	4.562	4.745	4.939	5.053	5.182	Contg	Contg

D. Acquisition Strategy:

Full and open competition; currently work is tasked via cost plus fixed fee contract.

Exhibit R-2, RDT&E Budget Item Justificati		DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE					
RDT&E, Defense-Wide/07			National Milit	tary Comman	d System (NM	CS) / PE 030	2016K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
NMCS Command Center	1.209	.649	.721	.720	.625	.584	.534		
Engineering / S32									

E. Performance Metrics:

The NMCS Command Center Engineering team 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 Command Center Engineering, contractor, and Joint Staff working together to achieve common program goals.

Exhibit R-3 Cost Ana	alysis			DATE: Februa	ary 20	06				
APPROPRIATION/BUDGET		N	ROGRAM ELEMENT ational Military Comm NMCS) / PE 0302016K	and System		JECT NAM S Command		JMBER Engineer	ing / S	32
Cost Category	Contract Method & Type	Performing Activity & Location		FY 06	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Support Costs Engineering/ Tech Services	CPFF/C	Raytheon E-Sys Arlington,	1.169	0.312	04/06	0.365	04/07	Contg	Contg	1.846
Systems Engineering	CPFF/C	VA SRA Fairfa VA	ax, 2.172	0.337	04/06	0.356	04/07	Contg	Contg	2.865
Total Cost			3.341	0.649		0.721				

Exhibit R-4 Schedule Profile															Date	e: F	ebr	uary	200)6								
Appropriation/Budget Activity RDT&E, Defense-Wide/07					N	Pı atio	rogr nal	am I Milit	ary	Coı	mma	umbe and 016K	Syst	nd N tem	lame (NM	CS)				F	Proje NMC	cs c	omr	per a nand ring/	d Ce	enter	e	
		2	2005			20	006			2	007			20	008			200	9			20	010			2	011	
Fiscal Year	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
Update Info Resource Mgt Sys			\triangle	<u> </u>			Δ				Δ	V.			Δ				Δ				Δ			,	Δ	
Revise Master Ref Guide/Info Portal		,		Δ			Δ	Δ			Δ	Δ			Δ	Δ			Δ	Δ			Δ	Δ		Δ.	Δ	
Tech Insertion Evaluations	\land	7			Δ				Δ															4				
NMCC/Site R Conf Mgt Reviews	\land	7	\triangle	<u> </u>	Δ		Δ		Δ		Δ	<u>V</u>			Δ				Δ				Δ	,			Δ	
Site R Integration Prog Assessments		\triangle	,	Δ		Δ		Δ		Δ		Δ		Δ		Δ		Δ		Δ		Δ		Δ		Δ		Δ
Command Center Engineering Analysis		\triangle	<u> </u>			Δ				Δ				Δ				Δ				Δ				Δ		

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Exhibit R-4a Schedule Detai	i1		DATE	: February 20	06		
APPROPRIATION/BUDGET ACTIVE RDT&E, Defense-Wide/07	ITY	PROGRAM ELEMEN National Milit PE 0302016K		System (NMCS)	PROJECT NAME NMCS Command	E AND NUMBER l Center Engin	eering / S32
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Update Info Resource Mgt System	3Q	3Q	3Q	3Q	3Q	3Q	3Q
Revise Master Ref Guide/Info Portal	3Q,4Q	3Q,4Q	3Q,4Q	3Q,4Q	3Q,4Q	3Q,4Q	3Q,4Q
Tech Insertion Evals	1Q	1Q	1Q	1Q	1Q	1Q	1Q
NMCC Configuration Management Reviews	1Q, 3Q	1Q, 3Q	1Q, 3Q	1Q, 3Q	1Q, 3Q	1Q, 3Q	1Q, 3Q
Site R Integration Program Assessments	2Q, 4Q	2Q, 4Q	2Q, 4Q	2Q, 4Q	2Q, 4Q	2Q, 4Q	2Q, 4Q
Command Center Engineering Analysis	2Q	2Q	2Q	2Q	2Q	2Q	2Q

Exhibit R-2, RDT&E Budget Item Justification		DATE:	February 2	2006			
APPROPRIATION/BUDGET ACTIVITY		R-1 IT	EM NOMENCL	ATURE			
RDT&E, Defense-Wide/07		Defens	e Informati	ion Infrast	ructure Eng	gineering &	
		Integr	ation / PE	0302019К			
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element	3.104	5.388	34.007	5.842	8.128	9.245	9.569
Global Information Grid Systems Engineering & Support/T62	3.104	2.571	2.719	2.780	2.844	2.953	3.066
Modeling and Simulation/E65	0	2.817	2.902	3.062	5.284	6.292	6.503
UHF SATCOM Integrated Waveform/KCD	0	0	28.386	0	0	0	0

A. <u>Mission Description and Budget Item Justification</u>: This program element funds efforts involving the development and fielding of Global Information Grid (GIG) Enterprise Services, including engineering support for the resolution of critical interoperability and integration issues, and assessment of C4I initiatives that will ensure compatibility, interoperability, and technical integration.

Global Information Grid (GIG) Systems Engineering and Support, Project T62, involves the definition and implementation of various aspects of evolving the GIG. It will strengthen critical GIG foundation technologies and programs through the application of precise, short-term, technical, engineering and integration expertise.

Modeling and Simulation, Project E65, provides architecture, systems engineering, and modeling and simulation functions for DISA and its customers, ensuring integrated capabilities to fulfill warfighter mission requirements. Specifically, it 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; evaluation of horizontal (cross-cutting) operational and system architectures; 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 consistency of DoD's GIG architectures and ensuring that critical GIG programs are consistent with them and with each other; (2) developing standardized DISA systems engineering and integration processes to improve systems integration across DISA for all DISA-developed communication systems; and (3) providing the underlying modeling and simulation and analytical support for end-to-end DISA and DoD systems engineering and assessment. These modeling and simulation operations are to provide DoD decision-makers, from the Office of the Secretary of Defense (OSD) level to the warfighter, with services and a suite of tools capable of identifying key

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
RDT&E, Defense-Wide/07	Defense Information Infrastructure Engineering &
	Integration / PE 0302019K

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.

The Ultra High Frequency (UHF) Satellite Communications (SATCOM) Integrated Waveform (IW) System, Project KCD, is developed by DISA as an improvement to the present UHF SATCOM waveforms. UHF SATCOM provides the US Department of Defense (DoD) and other US Government departments and agencies with critical beyond line-of-sight communications for tactical and special forces operations. UHF SATCOM is the only commercial or 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 the replacement system, the Mobile User Objective System (MUOS), will not provide initial operational capability (IOC) until 2010 and full operational capability (FOC) until 2014, at the earliest. The UHF SATCOM Integrated Waveform 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.

This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

B. Program Change Summary:

	FY05	FY06	<u>FY07</u>
Previous President's Budget	2.437	5.466	5.545
Current Submission	3.104	5.388	34.007
Total Adjustments	0.667	078	28.462

Change Summary Explanation:

FY 2005 changes are due to below threshold reprogramming.

FY 2006 changes are due to undistributed Congressional Reductions to the Defense-Wide RDT&E appropriation.

FY 2007 increase is due principally to funding for the new project UHF SATCOM Integrated Waveform.

Exhibit R-2a, RDT&E Project Justifica	tion	Date	e: Februar	y 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NAME A	ND NUMBER	
RDT&E, Defense-Wide/07	DII Engineering	& Integrat	ion / PE 0	302019K	Global Informa	tion Grid (G	IG)
					Systems Engine	ering and Su	pport/ T62
COST (in millions)	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Project Cost	3.104	2.571	2.719	2.780	2.844	2.953	3.066

A. Mission Description and Budget Item Justification:

Efforts under this project will strengthen critical Global Information Grid (GIG) technologies and programs through the establishment of DISA technology strategies, and through the implementation of those strategies in DISA programs and services. This engineering and technical expertise will be applied in conducting technical reviews of all solutions, products, and services to determine compliance with overall DISA strategy, and to evaluate soundness of technical approach. 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 project supports definition of various aspects of evolving the GIG, including developing system architecture constructs for the GIG and its components, providing engineering guidance for component evolution including incorporation of new technology from industry. Subtasks are assigned based on need to address specific technical problems, mitigate risks, and take advantage of cross-program synergies.

B. Accomplishments/Planned Program:

 FY 05
 FY 06
 FY 07

 Subtotal Cost
 3.104 2.571 2.719

Engineering and technical support of DISA programs that implement 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 effort. It includes the support of information exchanges with the Services, OSD, the Combatant Commanders, and the Joint Staff to identify opportunities, issues, and solutions to improve DISA products; and facilitation and harmonization of cross-corporate programs relative to DISA programs and the GIG.

C. Other Program Funding Summary: O&M, DW

FY05	FY06	FY07	<u>FY08</u>	FY09	FY10	FY11
0.369	0.833	0.958	0.950	0.942	0.935	0.894

D. <u>Acquisition Strategy</u>: MITRE, McLean, VA, This project provides 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), GIG Bandwidth Expansion (GIG-BE), Defense Information Systems Network (DISN), Satellite Communications

Exhibit R-2a, RDT&E Project Justifica	tion	Date	e: Februar	ry 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NAME A	ND NUMBER	
RDT&E, Defense-Wide/07	DII Engineering	& Integrat	ion / PE 0	302019K	Global Informa	ition Grid (G	;IG)
					Systems Engine	ering and Su	pport/ T62
COST (in millions)	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Project Cost	3.104	2.571	2.719	2.780	2.844	2.953	3.066

(SATCOM), GIG Directory Service, Global Combat Support System (GCSS), Joint Command and Control (JC2), 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. 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.

E. Performance Metrics:

The Task Order is composed of multiple short-suspense technology research/exploration components with a concrete deliverable targeted at some facet of the DISA mission.

Each research initiative is produced in collaboration with a designated task subject matter specialist.

These engineering tasks are short term in nature and designed to facilitate bringing high-potential over-the-horizon technology into engineering programs supporting the Agency mission.

Engineering support is provided for CTO technical reviews of DISA programs, at least 4 reviews supported per month.

		UNCI	LASSIFIED						
lysis			DATE: February	2006					
ACTIVITY	PRO	GRAM ELEMENT		PROJECT	NAME	AND NUME	BER		
07	DII	Engineering & I	ntegration/PE	Global	Inform	ation Gr	rid (GIG)	Syste	ms
	030	2019K		Engine	ering a	nd Suppo	ort / T62		
Contract	Performing			FY06		FY07			Target
Method &	Activity &	Total PYs	FY06	Award	FY07	Award	Cost To	Total	Value o
Type	Location	Cost	Cost	Date	Cost	Date	Complete	Cost	Contrac
Other Than	MITRE								
Full & Open CPFF	McLean, VA	11.616	2.571	Various	2.719	Various	Contg	Contg	16.906
_									
	Method & Type Other Than Full &	CONTRACT PRO	PROGRAM ELEMENT OT DII Engineering & I 0302019K Contract Performing Method & Activity & Total PYs Type Location Cost Other Than MITRE Full & McLean, VA 11.616	PROGRAM ELEMENT DII Engineering & Integration/PE 0302019K Contract Performing Method & Activity & Total PYs FY06 Type Location Cost Cost Other Than MITRE Full & McLean, VA 11.616 2.571	Alysis PROGRAM ELEMENT O7 DII Engineering & Integration/PE 0302019K Contract Method & Activity & Total PYs Type Location Other Than MITRE Full & McLean, VA 11.616 PROGRAM ELEMENT PROJECT Global Enginee FY06 Award Cost Date	Contract Performing Method & Activity & Total PYs Location Cost Date Cost Date Cost Date Cost Date Cost Pull & MCLean, VA 11.616 DATE: February 2006 DATE: February 2006 PROJECT NAME Global Inform Engineering a FY06 Award FY07 Cost Date Cost Date Cost Date Cost Date Cost Date Cost Date Cost Pull & McLean, VA 11.616 2.571 Various 2.719	Contract Performing Method & Activity & Total PYS Type Location Cost Other Than MITRE Full & McLean, VA 11.616 DATE: February 2006 PROGRAM ELEMENT Grant February 2006 PROJECT NAME AND NUMB Global Information Grant Fy07 Global Information Grant Fy07 Engineering and Suppose Fy06 Award Fy07 Award Fy07 Award Cost Date Cost Date Cost Date Cost Date	PROGRAM ELEMENT O7 DII Engineering & Integration/PE 0302019K Contract Method & Activity & Total PYs Type Location Cost Other Than MITRE Full & McLean, VA 11.616 PROGRAM ELEMENT DATE: February 2006 ROJECT NAME AND NUMBER Global Information Grid (GIG) Engineering and Support / T62 FY06 Award FY07 Award Cost To Cost Date Complete Other Than MITRE Full & McLean, VA 11.616 2.571 Various 2.719 Various Contg	DATE: February 2006 PROGRAM ELEMENT OF DII Engineering & Integration/PE O302019K Contract Performing Method & Activity & Total PYS Location Cost Cost Date Complete Cost Other Than MITRE Full & McLean, VA 11.616 DATE: February 2006 PROJECT NAME AND NUMBER Global Information Grid (GIG) System and Support / T62 FY06 Award FY07 Award Cost To Total Cost Date Complete Cost Other Than MITRE Full & McLean, VA 11.616 DATE: February 2006 PROJECT NAME AND NUMBER FY07 Award Cost Ost To Total Cost Other Than MITRE Full & McLean, VA 11.616 DATE: February 2006 PROJECT NAME AND NUMBER FY07 Award Cost To Total Cost Other Than MITRE Full & McLean, VA 11.616 DATE: February 2006

Exhibit R-4 Schedule Profile																				ry 20								
Appropriation/Budget Activity RDT&E, Defense-Wide/07					Pi Di	rogi II Ei	ram ngin	Eler eeri	nen ng 8	t Nu & In	ımb tegr	er a atio	nd N n/PE	lame : 030	e 0201	9K		G	loba E	al Inf	ject orma neeri	atior	า Gr	id (G	iG)	me Syst /T62	tem	S
Fiscal Year		2	005			20	06			20	07			20	800			20	09			20	10			201	11	
	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
Technical Direction Agent (TDA)		<u> </u>																										Z

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Exhibit R-4a Schedule Detail			DATE: Februar	ry 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	ENT		PROJECT N	NAME AND NUM	BER	
RDT&E, Defense-Wide/07	DII Engineer	ing & Integ	gration/			rid (GIG) S	ystems
	PE 0302019K			Engineer	ing and Supp	ort / T62	
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Technical Direction Agent (TDA)	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

Exhibit R-2a, RDT&E Project Justi	fication		DA	ATE: Februar	cy 2006	5			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT				PROJ	ECT NAME ANI	NUMBER	
RDT&E, Defense-Wide/07	DII Engi	neering & 1	Integration	/PE 0302019	K	Mode	ling & Simul	lation / E65	
COST (in Millions)		FY05	FY06	FY07	FY(8	FY09	FY10	FY11
Project Cost *		0	2.817	2.902	3.0	62	5.284	6.292	6.503

- A. Mission Description and Budget Item Justification: This 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. Specifically, 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; evaluation of horizontal (cross-cutting) operational and system architectures; setting character-oriented message standards; 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 consistency of DoD's Global Information Grid (GIG) architectures and ensuring that critical GIG programs are consistent with them and with each other; (2) developing standardized DISA systems engineering 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.
- * Beginning in FY 2006 this project has been realigned from PE 0303149K. Modeling and Simulation was formerly titled Technical Integration Services. The modeling and simulation portion of Technical Integration Services has been realigned to PE 0302019K due to its direct engineering and integration support to the GIG.
- B. Accomplishments/Planned Program:

FY 2006 - Horizontal Engineering will explore, identify, and frame key end-to-end issues associated with the ability of the GIG to support the warfighter by improving system engineering decisions of DISA programs, and provide a DoD framework for assuring performance meets mission capability requirements.

Exhibit R-2a, RDT&E Project Justi	fication		DA	TE: Februar	y 2006	5			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT				PROJ	JECT NAME ANI	NUMBER	
RDT&E, Defense-Wide/07	DII Engi	neering & 1	Integration	/PE 0302019	K	Mode	eling & Simul	lation / E65	
COST (in Millions)		FY05	FY06	FY07	FY0	8	FY09	FY10	FY11
Project Cost *	2.817	2.902	3.0	62	5.284	6.292	6.503		

FY 2007 - Horizontal Engineering will continue the development of a monitoring framework for the GIG to identify and prioritize key end-to-end issues using qualitative and quantitative methods for comparative assessment of alternative architectures in terms of system performance, mission outcome, and potential impact to DoD communication systems together with the assessment of performance management tools to improve application performance.

	FY 05	<u>FY 06</u>	FY 07
Subtotal Cost	0	1.782	1.806

FY 2006 - Modeling and Simulation Applications will provide final net-centric transitional designs for the seamless convergence of all DISN customers/services onto GIG as a result of the GIG Bandwidth Expansion (GIG-BE) project, which provides a ubiquitous, secure, and robust network. These designs will provide the detailed roadmap for DISN customers to transition to the GIG-BE by providing "power to the edge" capabilities and capacity that far exceed the existing DISN.

FY 2007 - Modeling and Simulation Applications will provide predictive modeling capability and net-centric support for the ongoing and planned major Internet Protocol (IP) services and Net-centric Enterprise Services (NCES) applications in the converged IP Services, which will improve quality of service and the ability to evaluate Service Level Agreements (SLAs) with the warfighter.

C. Other Program Funding Summary: (\$M)

	<u>FY 05</u>	FY 06	FY 07	FY 08	FY 09	FY 10	<u>FY11</u>	<u>To</u> Complete	<u>Total</u> Cost
RDT&E, DW (PE0303149K)	9.848	0	0	0	0	0	0	0.000	9.848
O&M, DW	3.586	6.612	5.502	6.000	9.238	9.477	9.857	Contg	Contg

D. <u>Acquisition Strategy</u>: Uses a number of contractors for modeling support with Booz, Allen Hamilton, Inc. and OPNET Technologies being the two main providers of these services. The level of support includes network model development; software installation and maintenance; software revisions or patches; and software upgrades. These companies are

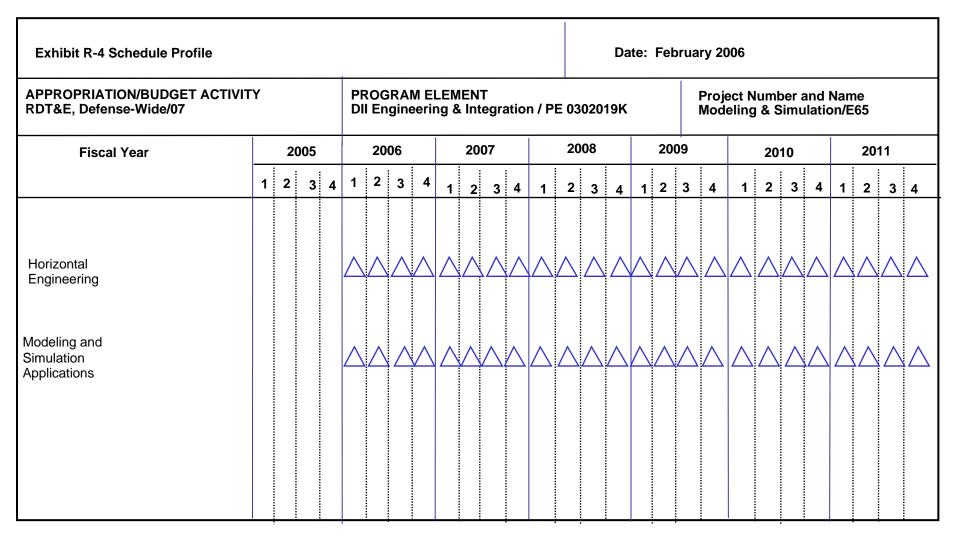
Exhibit R-2a, RDT&E Project Justi	fication		DA	TE: Februar	ry 2006)			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM :	ELEMENT				PROJ	JECT NAME ANI	NUMBER	
RDT&E, Defense-Wide/07	DII Engi:	neering & I	Integration	/PE 03020191	K	Mode	eling & Simul	ation / E65	
COST (in Millions)		FY05	FY06	FY07	FY0	8	FY09	FY10	FY11
Project Cost *		0	2.817	2.902	3.00	62	5.284	6.292	6.503

uniquely qualified to provide the necessary level of technical support and services to ensure DISA uses the leading edge communication technologies.

E. Performance Metrics:

Modeling and Simulation's systems engineering is measured by its impact on the DoD communications planning and investment strategy, with criteria based on performance of a broad spectrum of technical activities. These include application assessments; contingency planning; network capacity planning and diagnostics; system architecture evaluation; technical and operational assessments of emerging technologies; and systems-level modeling and simulation.

Exhibit R-3 Cos	t Analysis				DA	TE: Febru	uary 2006			
APPROPRIATION/B	SUDGET ACTI	VITY PROGR	AM ELEM	ENT				PROJECT N	AME AND	NUMBER
RDT&E, Defense-	Wide/07	DII E	ngineer	ing & Int	egration	/ PE 0302	019K	Modeling 8	& Simula	ation / E65
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Modeling and Simulation Systems Engineering and Integration	CPFF	Verizon/BBNT McLean, Va	0	0.725	02/06	0.729	02/07	Contg	Contg	1.454
Com modeling and simulation	CPFF	OPNET Tech, Inc. Bethesda, MD	0	0.416	01/06	0.460	01/07	Contg	Contg	0.876
	CPFF	Pragmatics, McLean, Va	0	0.675	01/06	0.679	01/07	Contg	Contg	1.354
	CPFF/8A	CNS, Inc Springfield, Va	0	0.400	01/06	0.400	01/07	Contg	Contg	0.800
	CPFF	Booz, Allen & Hamilton, McLean, VA	0	0.501	03/06	0.534	03/07	Contg	Contg	1.035
		Various Contracts	0	0.100	Various	0.100	Various	Contg	Contg	0.200
TOTAL			0	2.817		2.902				



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Exhibit R-4a Schedule Detail		DAT	E: February 20	006					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT	NAME AND NUMBI	≅R			
RDT&E, Defense-Wide/07	DII Engineering &	Integration	Modeling	Modeling and Simulation / E65					
Schedule Profile FY	2005 FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011			
Horizontal Engineering Modeling and Simulation Applications	1-4Q 1-4Q	1-4Q 1-4Q	1-4Q 1-4Q	1-4Q 1-4Q	1-4Q 1-4Q	1-4Q 1-4Q			

Exhibit R-2a, RDT&E Project Justi	fication		DA	ATE: Februar	ry 2006	5			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT				PRO	JECT NAME ANI	NUMBER	
RDT&E, Defense-Wide/07	DII Engi	neering & 1	Integration	/ PE 030201	9K	UHF	SATCOM Integ	grated Wavefo	orm / KCD
COST (in Millions)		FY05	FY06	FY07	FY0	18	FY09	FY10	FY11
Project Cost *		0	0	28.386	0		0	0	0

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 the only commercial or 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 the replacement system, the Mobile User Objective System (MUOS), will not provide initial operational capability (IOC) until 2010 and full operational capability (FOC) until 2014, at the earliest. The MUOS deployment is contingent on the Joint Tactical Radio System (JTRS) terminals being fielded across all services. Assuming that the MUOS and JTRS are deployed on time and all current UHF satellites continue to operate, the UHF SATCOM system is short on meeting present user needs. DISA developed the Integrated Waveform (IW) as an improvement on the present UHF SATCOM waveforms. 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 PACOM and EUCOM apportionments. But even with these additional channels, UHF SATCOM resources were not sufficient to meet CENTCOM needs.

B. Accomplishments/Planned Program:

FY 2007 - By developing IW demand assignment capabilities, preplanned or ad-hoc services can be activated and deactivated by user terminals using orderwire messages. IW improves demand assigned service because the assignment is permitted across a larger pool of resources. IW is more efficient and will have more access resources available. Having more accesses, users will be able to receive a quicker response with IW than with the current Demand Assigned Multiple Access (DAMA) services. Implementing a much simpler and easier to use service-on-demand will enable warfighters to maximize the advantages of the present UHF SATCOM system. In addition, it will prepare the users for the Mobile

User Objective System (MUOS), which will be a demand assignment system. Implementing the IW capabilities in the

Exhibit R-2a, RDT&E Project Justi	fication		DA	ATE: Februar	ry 2006	5			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT				PRO	JECT NAME ANI	NUMBER	
RDT&E, Defense-Wide/07	DII Engi:	neering & 1	Integration	/ PE 030201	9K	UHF	SATCOM Integ	grated Wavefo	orm / KCD
COST (in Millions)		FY05	FY06	FY07	FY(8(FY09	FY10	FY11
Project Cost *		0	0	28.386	0		0	0	0

fielded software-programmable terminals will provide the warfighter:

- Substantially more system capacity
- Demand assignment of preplanned services
- Support ad-hoc services
- Dynamic bandwidth allocation
- Join The NET request (Informs a user to join a NET in progress)
- Service-waiting notification (similar to call-waiting)

C. Other Program Funding Summary: N/A

D. Acquisition Strategy:

Fixed price contract will be awarded for IW software development for selected UHF SATCOM terminals. Based on current military operations, the Joint Staff and STRATCOM have evaluated and recommended, which fielded terminals should be IW upgraded. The Net-Centric Functional Configuration Board endorsed the Joint Staff and STRATCOM recommended terminals for IW upgrades. DISA will lead the software development for six types 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), developed by General Dynamics, and the Satellite Access Control (SAC) system developed by the Navy, will be upgraded to IW. The software will be certified for waveform compliance and interoperability and then will be fielded. Software installation and operating instructions will be developed to assist the UHF SATCOM users with the software upgrades and operations of the terminals.

E. Performance Metrics:

The system engineering for the IW waveform improvement has been completed 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 and 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.

Exhibit R-3 Co	st Analysi	.s			DAT	E: Februa	ary 2006			
APPROPRIATION/ RDT&E, Defense			AM ELEME ngineeri	NT ng & Inte	egration /	PE 03020	19К	PROJECT NAI		UMBER ted Waveform / KCD
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Deployed legacy terminals	FPAF	Harris Corp Rochester NY	0			4.000	02/07	4.000	4.000	4.000
software development	FPAF	Raytheon Corp Ft Wayne IND	0			3.500	01/07	3.500	3.500	3.500
	FPAF	ViaSat Corp Carlsbad Ca	0			4.000	01/07	4.000	4.000	4.000
SCA compliant terminal software development	FPAF	TBD	0			5.000	03/07	5.000	5.000	5.000
Channel Controller (CC) Software development	FPAF	TBD	0			5.000	02/07	5.000	5.000	5.000
CC terminal Software development	FPAF	Gen. Dynamics Scottsdale AZ	0			4.500	02/07	4.500	4.500	4.500
Terminal certification testing	FPAF	JITC Various Contracts	0			0.450	11/07	0.450	0.450	. 450
Engineering & Help Desk Support	CPFF	Able Communications Sterling VA	0			1.936	01/07	1,936	1.936	1.936
TOTAL			0			28.386				28.386

Exhibit R-4 Schedule Profile																Da	ite:	Fel	brua	ry 20	006							
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 PROGRAM ELEMENT DII Engineering & Integration / PI									PE 0302019K						UHF	ect N SAT	COI	M In	and tegr	Nar ated	ne d							
Fiscal Year		2	005	;		20	006			20	07			20	800			20	09			20	10			20	11	
	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
UHF SATCOM Integrated Waveform (IW) Software Development										\triangle				\triangle	\triangle													

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			UNCLASSIFI				
Exhibit R-4a Schedule Deta			DAT	E: February 20			
APPROPRIATION/BUDGET ACTIV		GRAM ELEMENT				NAME AND NUMB	
RDT&E, Defense-Wide/07	DII	Engineering 8	Integration	/ PE 0302019K	UHF SATC	OM Integrated	Waveform / KCD
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
UHF SATCOM Integrated Waveform (IW) Software Development			1-4Q	1-3Q			

Exhibit R-2, RDT&E Budget Item Justification	DATE:	DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	R-1 IT	R-1 ITEM NOMENCLATURE								
RDT&E, Defense-Wide/07	Long H	Long Haul Communications PE 0303126K								
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11			
Total Program Element	10.158	1.449	1.523	1.555	1.591	1.654	1.715			
DISN Systems Engineering Support/T82	.965	1.449	1.523	1.555	1.591	1.654	1.715			
Presidential and National Voice Conferencing/PC01	9.193	0	0	0	0	0	0			

A. <u>Mission Description and Budget Item Justification</u>: This Program Element (PE) funds system engineering for the Defense Information Systems Network (DISN) which provides defense-wide communications for the day-to-day operations of the DoD and serves as the core of DoD wartime communications for the President, the Secretary of Defense, the Joint Chiefs of Staff (JCS), the Combatant Commanders, and other critical users. PE 0303126K provides for the engineering to consolidate the operational communications networks into DISN and supports the transition of Service and DoD Agency connections into the GIG. This PE funds the critical and essential engineering required to use commercial equipment and service offerings, to implement rapidly advancing communications technology, to update the network design tools so as to continue providing cost savings, and to continue offering valuable new cost effective information technology capabilities and services to customers. It provides for the cost-effective development of needed information technology capabilities by targeting RDT&E efforts to DoD mission needs. This PE supports the military requirements identified by Joint Mission Needs Statement (JMNS) and Joint Capstone Requirements Document (JCRD). This PE is under Budget Activity 07 because it involves efforts supporting operational systems development.

В.

Program Change Summary:	FY05	FY06	FY07
Previous President's Budget	$\overline{10.7}89$	1.470	$\overline{1.50}$ 2
Current Submission	10.158	1.449	1.523
Total Adjustments	631	021	+.021

Change Summary Explanation:

FY 2005 change is due to below threshold reprogramming.

FY 2006 change is due to undistributed Congressional adjustment to Defense-Wide RDT&E appropriation.

FY 2007 change is due to revised fiscal guidance.

Exhibit R-2a, RDT&E Project Justification	Date: February 2006							
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE							
RDT&E, Defense-Wide/07	Long Haul Communications/PE 0303126K							
COST (in millions)	FY 05	FY ()6	FY07	FY08	FY09	FY10	FY11
DISN Systems Engineering	.965	1.449		1.523	1.555	1.591	1.654	1.715
Support/T82								!

A. <u>Mission Description and Budget Item Justification</u>: This Program Element (PE) funds system engineering for the Defense Information Systems Network (DISN) which provides defense-wide communications for the day-to-day operations of the DoD and serves as the core of DoD wartime communications for the President and Secretary of Defense, the Joint Chiefs of Staff (JCS), the Combatant Commanders, and other critical users. PE 0303126K 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 GIG. This PE funds the critical and essential engineering required to use commercial equipment and service offerings, to implement rapidly advancing communications technology, to update network design tools so as to continue providing cost savings, and to continue offering valuable new cost effective information technology capabilities and services to customers. It provides for the development of needed information technology capabilities by targeting RDT&E efforts to DoD mission needs.

B. Accomplishments/Planned Program:

 FY 05
 FY 06
 FY 07

 Subtotal Cost
 .684
 .718
 .742

Systems Engineering - Provide ongoing systems engineering to reduce the risks and delays of inserting new communications technologies into the DISN by performing assessments and proof of concept implementations. Engineer the insertion of technology into the DISN/GIG (e.g., Wave Division Multiplexing (WDM), intelligent optical networking, gigabit/terabit routers, Virtual Private Networks (VPNs), converged network/integrated services, Voice over Internet Protocol (VoIP), IP Class of Service/Quality of Service (CoS/QoS), cell encryption, broadcast quality video, and wireless/mobility services). Continue support of DISN/Global Broadcast System (GBS) risk reduction trials. Continue engineering support for on-going Network Engineering Assessment Facility (NEAF) testbed assessments, prototyping, and mission support. Provide technical leadership in implementing recommended solutions involving DISN services. New efforts involve supporting the transition from the DISN to the GIG, supporting integration of Services/Agencies networks into the GIG, developing overarching design for next generation routing/QoS/CoS, and IP enabled Services such as Telephony, IPv6 and Enterprise Applications.

Exhibit R-2a, RDT&E Project Justification		Dat	te: Februar	y 2006					
APPROPRIATION/BUDGET ACTIVITY	R-3	R-1 ITEM NOMENCLATURE							
RDT&E, Defense-Wide/07		Lor	Long Haul Communications/PE 0303126K						
COST (in millions)	FY 05 FY 06		FY07	FY08	FY09	FY10	FY11		
DISN Systems Engineering	.965	.965 1.449		1.555	1.591	1.654	1.715		
Support/T82									
FY 05		FY 06			FY07				
Subtotal Cost .281		.731			.781				

Network Design - Provide ongoing development of the network topology design algorithms, heuristics, and software based on a DoD prioritized list which includes delivery of an IP Quality of Service modeling and simulation study relevant to future DoD converged services over Multi-Protocol Label Switching (MPLS) IP infrastructure. This initiative supports DoD transformational goals, global net-centricity, and the development of future Defense Information System Network (DISN) programs. Conduct modeling and simulation analyses of existing, emerging and future technologies and services. Focus efforts on assured service, MPLS, information assurance architecture impacts on network performance, and enterprise service management architecture impacts on network performance. Also, efforts focus on converged voice, video, and data services coexisting in a converged IP network that provides assured service in support of global net-centricity.

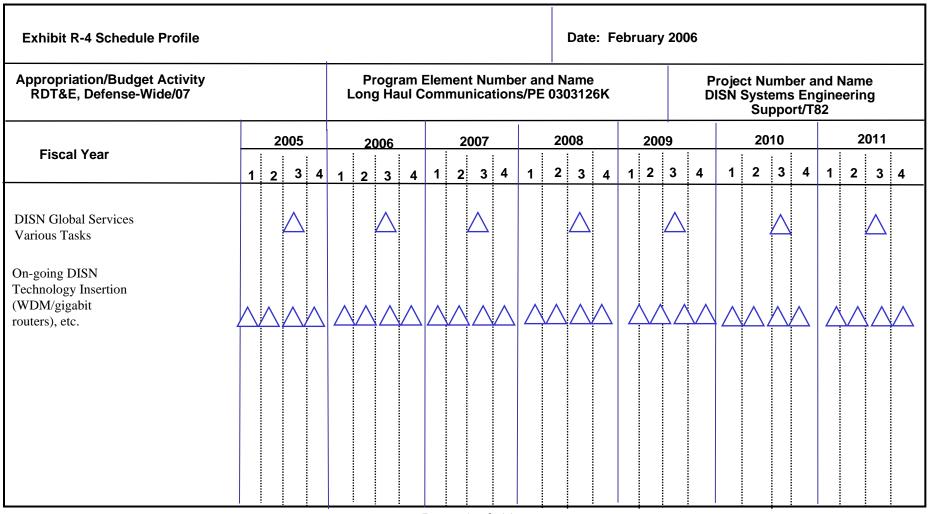
C. Other Program Funding Summary: N/A

D. <u>Acquisition Strategy</u>: Continue with the same acquisitions that include a Small Disadvantaged contractor under the DISN Global Services (DGS) contract and a sole-source contract. Procure test hardware and tools from a variety of Commercial Off-the-Shelf vendors.

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.

Exhibit R-3 Cost Analysis						DATE: February 2006					
PPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT					PROJECT NAME AND NUMBER						
DT&E, Defense-Wid	le/07	Long Haul Communicati 0303126K			ons / PE	1	DISN	DISN Systems Engineering Support / T82			
	Contract	Performing			FY06		FY07			Target	
	Method &	Activity &	Total PYs	FY06	Award	FY07	Award	Cost To	Total	Value of	
Cost Category	Type	<u>Location</u>	Cost	Cost	<u>Date</u>	Cost	<u>Date</u>	Complete	Cost	Contract	
System Engineering	Various	Various performers	1.679	1.449	06/06	1.523	06/07	Contg	Contg	N/A	



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Exhibit R-4a Schedule Detail			DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	EMENT								
RDT&E, Defense-Wide/07	Long Haul Communications/ PE 0303126K			DISN Sy	DISN Systems Engineering Support/ T82					
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011			
DISN Global Services Tasks	3Q	3Q	3Q	3Q	3Q	3Q	3Q			
On-going DISN Tech Insertion (Wave Division Multiplexing (WDM)/gigabit routers) Convergence Network/ Integrated Service Assessments & Pilots, etc.	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q			
On-going Development and Application of Network Design, Analysis, Modeling & Simulation Tools		1-4Q	1-4Q	1-40	1-4Q	1-4Q	1-4Q			

Exhibit R-2a, RDT&E Project Justification	DAT	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/07	Long Haul Co	ommunicatio	ons / PE		Presidential and National Voice Conferencing/PC01				
					3.				
Cost (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Presidential and National Voice	9.193	0	0	0	0	0	0		
Conferencing/PC01									

A. <u>Mission Description and Budget Item Justification</u>: As the Presidential and National Voice Conferencing (PNVC) program lead and system engineer, this project funds system engineering, planning, development, integration, installation, and testing of new baseband (cryptographic and voice encoder/vocoder) equipment needed to provide survivable, near toll-quality voice conferencing capability for the President and other national/military leaders. This project funds the critical and essential engineering required to develop a new voice processing algorithm, as well as the development of new vocoder and cryptographic equipment by taking advantage of ongoing RDT&E efforts by another Defense component. These baseband devices implement new technology capabilities such as multi-stream cryptography/vocoding and information technology capabilities such as baseband Ethernet interfaces supporting baseband Internet Protocol (IP) addressing. This project supports the Joint Staff's requirement to fully implement the recommended Advance Extreme High Frequency (AEHF) PNVC improvements no later than FY 2010 for all PNVC participants.

B. Accomplishments/Planned Program:

The primary effort in FY 2005 was development of the PNVC system design description, engineering and technical analysis and associated engineering developmental model prototypes to develop the crypto/vocoder definition and production and technical specifications to meet the goal of beginning production at the start of FY 2007. PNVC product integration, installation, and testing is scheduled to start in FY 2008 and be completed in FY 2010. Initial Operational Capability (IOC) has been tentatively scheduled for the end of FY 2009 and is defined to be the deployment of the first CONUS AEHF satellite and the PNVC initiative implemented at the principal conferees' locations.

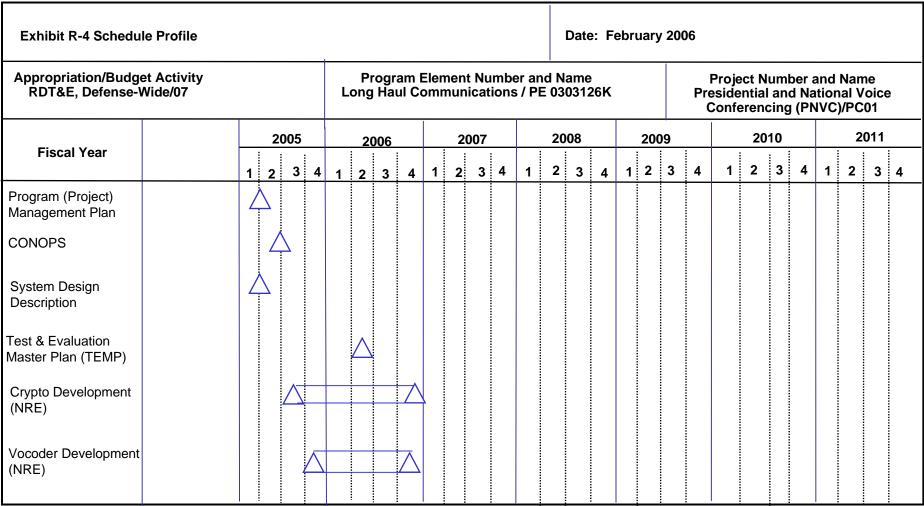
- C. Other Program Funding Summary: None
- D. <u>Acquisition Strategy</u>: The PNVC program involves the development of new baseband equipment (vocoder and crypto) requiring the services of NSA for the design development and certification. Engineering support services for the PNVC

Exhibit R-2a, RDT&E Project Justification	DAT	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/07	Long Haul Co	ommunicatio	ons / PE		Presidential and National Voice Conferencing/PC01				
					3.				
Cost (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Presidential and National Voice	9.193	0	0	0	0	0	0		
Conferencing/PC01									

is provided by contract and FFRDC support. Although some limited in-house government capability exists, the expertise necessary to fulfill the mission and responsibilities of the PNVC does not exist. Full and open competition is used for the acquisition of support through existing DISA contracts.

E. <u>Performance Metrics</u>: PNVC Program metrics track the development of various documents: Program Management Plan (PMP), Concept of Operations (CONOPS), Test and Evaluation Master Plan (TEMP), and other specifications needed to manage the program. Milestone metrics (schedule (actual vs. planned)) are used for the Non-Recurring Engineering (NRE) and certification effort to deliver to DISA the vocoder and crypto design specification documents, PMP, CONOPS, and TEMP. The Program also uses the funding obligation rate (planned vs. actual) and financial reporting requirements as metrics throughout the life cycle of the program.

Exhibit R-3 Cost Analys	sis			DATE: Fel	bruary	2006					
APPROPRIATION/BUDGET AC	CTIVITY	PROGRAM ELEM	ENT			PROJEC	T NAME	AND NU	MBER		
RDT&E, Defense-Wide/07		Long Haul Co	mmunications	/ PE 0303	126K				tional Vo	ice	
						Confer	rencing	(PNVC)	/PC01		
Cost Category	Contract Method & <u>Type</u>	Performing Activity & Location	Total PYs Cost		FY06 Cost	FY06 Award Date	FY07 Cost	FY07 Award <u>Date</u>	Cost To Complete	Total <u>Cost</u>	Target Value of <u>Contract</u>
FFRDC Engineering /Technical Spt	CPAF	Aerospace Fld Ofc Falls Church, VA	1.556		0	N/A	0	N/A	0	1.556	1.556
System Engineering & Technical Assistance (SETA) Support	CPAF	Booz Allen Hamilton (BAH), Tysons Corner, VA	.300		0	N/A	0	N/A	0	0.300	0.300
NSA Engineering/Technical Support	TBD	NSA	7.337		0	N/A	0	N/A	0	7.337	7.337
Total			9.193		0		0		0		



Note: NRE = Non Recurring Engineering

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Exhibit R-4a Schedule Detail				ATE: Febru	ary 2006			
APPROPRIATION/BUDGET ACTIVITY		M ELEMENT				PROJECT NAME		
RDT&E, Defense-Wide/07	Long H	aul Communi	ications / P	E 0303126K		Presidential Conferencing		
Schedule Profile		FY 2005	FY 2006	FY 2007	FY 200	8 <u>FY 2009</u>	FY 2010	FY 2011
MIPR funds to NSA		1Q						
MIPR funds to SMC (Aerospace Sup	port)	1Q						
NexGen SETA Task order Award		1Q						
MOU/MOA with NSA for crypto/voco development	der	1Q						
Crypto & Vocoder Systems Require Reviews (SRP)	ments	2Q						
Crypto & Vocoder Trade Studies		3Q						
Crypto & Vocoder Critical Design Reviews (CDR)			2Q					
PNVC Test and Evaluation Master (TEMP)	Plan		2Q					
Crypto & Vocoder Design Specific Delivery	ation		3Q					

Exhibit R-2, RDT&E Budget Item Justification		DAT	E: Februar	y 2006			
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NO	MENCLATURE					
RDT&E, Defense-Wide/07	Minimum Esse	ential Emer	gency Commu	unications	Network (M	EECN) / PE	0303131K
Cost (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element	7.792	7.332	7.691	7.862	8.045	8.356	8.670
Strategic C3 Support / T70	3.154	2.553	2.673	2.841	3.019	3.134	3.253
Special Projects / T64	4.638	4.779	5.018	5.021	5.026	5.222	5.417

A. Mission Description and Budget Item Justification:

This program element (PE) supports DISA's role as the Nuclear Command, Control, and Communications (NC3) system engineer in five major areas: (1) Plans and Procedures; (2) Systems Analysis; (3) Operational Assessments; (4) Systems Engineering; and (5) Development of Concepts of Operation and Architectures. The NC3 System is composed of C3 assets that provide 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. This 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. Efforts assure an informed decision making linkage between the President, the Secretary of Defense, and the Commanders of the Unified and Specified Commands. Additionally, through this program element, DISA provides direct and specialized support to ASD(NII) and the Joint Staff (JS) and recommends support or non-support for NC3 programs as well as fail-safe procedures and risk reduction actions. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development

B. Program Change Summary:

	<u>FY 05</u>	FY 06	FY 07
Previous President's Budget	7.789	7.438	7.586
Current Submission	7.792	7.332	7.691
Total Adjustments	0.003	(0.106)	0.105

Change Summary Explanation:

FY 2006 reduction is due to undistributed congressional reductions to the Defense wide RDT&E appropriation FY 2007 increase is due to revised financial guidance.

Exhibit R-2a, RDT&E Project Justificat	ion		Date	e: Februar	y 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRA	AM ELEMENT				PROJECT NAME A	AND NUMBER	
RDT&E, Defense-Wide/07			al Emergenc / PE 030313	y Communica 1K	ations	Strategic C3 S	Support/T70	
COST (in millions)	FY 06	FY07	FY08	FY09	FY10	FY11		
Strategic C3 Support/T70	` '					l 3.019	3.134	3.253

A. Mission Description and Budget Item Justification: This project has four elements: (1) Systems Analysis; (2) Operational Assessments; (3) Plans and Procedures; and (4) Systems Engineering. Together, these elements perform the mission of the Nuclear Command Control and Communications (C3) Systems Engineer and provide Executive Leadership and Nuclear C3 support for the Office of the Assistant Secretary of Defense (OASD), Networks and Information Integration (NII)) and the Joint Staff. Systems Analysis supports long range planning and vulnerability assessments to ensure the Nuclear C3 System is adequate under all conditions of stress or war. This element analyzes the Nuclear Command and Control System (NCCS) (i.e., strengths and weaknesses) and recommends investment strategies to evolve the NCCS to achieve desired capabilities. Nuclear threats to include terrorist activities, both regional and global, are analyzed in special reports for ASD(NII) and the Joint Staff. Operational Assessments of fielded systems and weapon platforms are the sole means for positive verification of communications plans and procedures, operation orders, training, equipment, and end-to-end system configuration. Assessments include strategic and theater, and national level C3 interfaces into the Nuclear C3 System. DISA conducts assessments in an operational setting with the Joint Staff, Combatant Commanders, and nuclear forces worldwide. Plans and procedures support the Chairman, Joint Chiefs of Staff and the nuclear C3 warfighting community during times of stress and national emergency, up to and including nuclear war. The Nuclear C3 System is composed of C3 assets that provide 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. It 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. Systems engineering provides the Senior Leaders Communications System with technical and management advice, planning and engineering support, and Test & Evaluation (T&E). Leading Edge 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).

B. Accomplishments/Planned Program:

	FY 2005	FY 2006	FY 2007	
Subtotal Cost	0.550	0.564	0.621	

Exhibit R-2a, RDT&E Project Justification	tion		Date	e: Februar	y 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRA	M ELEMENT				PROJECT NAME A	ND NUMBER	
RDT&E, Defense-Wide/07			al Emergenc / PE 030313	4	ations	Strategic C3 S	Support/T70	
COST (in millions)	FY 06	FY07	FY08	FY09	FY10	FY11		
COST (in millions) FY 05 In Strategic C3 Support/T70 3.154				2.673	2.841	3.019	3.134	3.253

Provide NC3 Review Report and Systems Analysis Documents.

Update Emergency Conferencing and Action Plans and Procedures.

Plan and Conduct Strategic and Theater Operational Assessments.

Plan and Conduct Staff Assistance Visits for US Strategic Command, US Northern Command, US Pacific Command and JS Battle Staffs.

 FY 2005
 FY 2006
 FY 2007

 Subtotal Cost
 .676
 .686
 .703

Provide Aircraft and Command Center Engineering.

C. Other Program Funding Summary:

Total To FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 Complete Cost 4.147 4.023 6.297 3.881 4.222 4.296 O&M, DW Contq Contq

D. Acquisition Strategy:

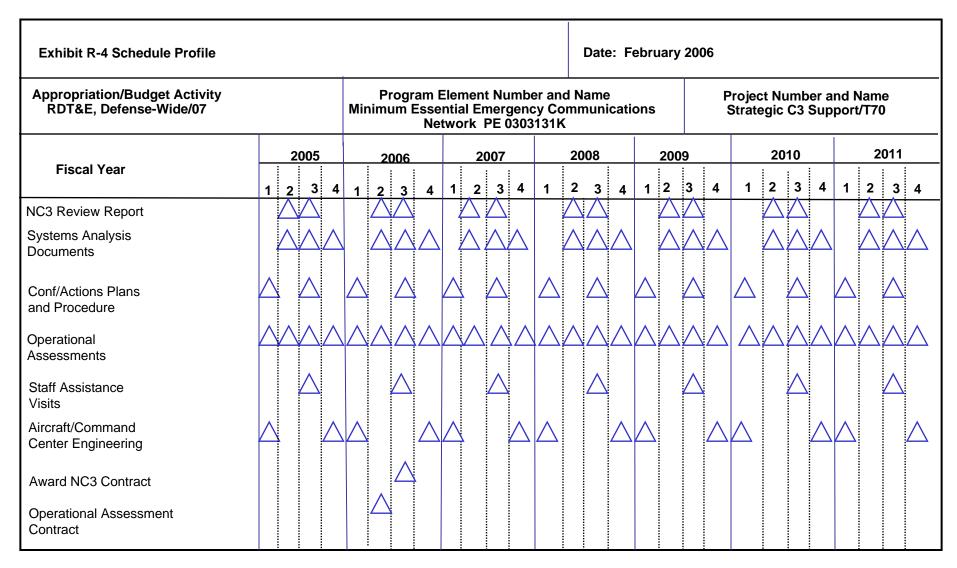
Full and open competition resulted in contract vehicles with Raytheon, Arlington, VA; Science Applications International Corporation (SAIC), McLean, VA; and Booz Allen & Hamilton (BAH), Falls Church, VA.

Exhibit R-2a, RDT&E Project Justificat	ion	Dat	e: Februar	y 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	:			PROJECT NAME A	AND NUMBER	
RDT&E, Defense-Wide/07	Minimum Essenti Network (MEECN)			ations	Strategic C3 S	Support/T70	
COST (in millions)	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Strategic C3 Support/T70	3.154	2.553	2.673	2.841	3.019	3.134	3.253

E. Performance Metrics:

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 Nuclear Command and Control: 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 Cos	st Analysi	.s			DATE:	Febr	uary 20	006					
APPROPRIATION/	SUDGET ACT	'IVITY I	PROGRAI	M ELEMENT	•		PRO	JECT NA	ME AND	NUMBER			
RDT&E, Defense-	-Wide/07		Minimum Essential Emergency Communications Network/PE 0303131K					Strategic C3 Support / T70					
Cost Category	Contract Method & <u>Type</u>	Performing Activi <u>Location</u>	ty &	Total PYs Cost		FY 06 Cost	FY 06 Award <u>Date</u>	FY 07 <u>Cost</u>	FY 07 Award <u>Date</u>	Cost to Complete	Total <u>Cost</u>	Target Value of Contract	
Systems Engineering	CPAF	Science Application International Corporation McLean		1.848		.564	06/06	.621	06/07	Cont	Cont	3.033	
	CPAF	Raytheon Company Arlington, VA		4.525		1.303	02/06	1.349	02/07	Cont	Cont	7.177	
	CPFF	Booz Allen & Hami Falls Church, VA	lton	1.974		.686	10/05	.703	10/06	Cont	Cont	3.363	
		Total		8.347		2.553		2.673					



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Exhibit R-4a Schedule Deta	il		DAT	E: February 2	2006				
APPROPRIATION/BUDGET ACTIVE RDT&E, Defense-Wide/07	Min	GRAM ELEMENT imum Essential work (MEECN) /	Emergency Co	mmunications		PROJECT NAME AND NUMBER Strategic C3 Support / T70			
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
NC3 Review Report	2-3Q	2-3Q	2-3Q	2-3Q	2-3Q	2-3Q	2-3Q		
Systems Analysis Documents	2-4Q	2-4Q	2-4Q	2-4Q	2-4Q	2-4Q	2-4Q		
Plans and Procedures	1,3Q	1,3Q	1,3Q	1,3Q	1,3Q	1,3Q	1,3Q		
Operational Assessment	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q		
Staff Assistance Visits	3Q	3Q	3Q	3Q	3Q	3Q	3Q		
Aircraft/Command Center Engineering	1,4Q	1,4Q	1,4Q	1,4Q	1,4Q	1,4Q	1,4Q		
Award NC3 Contract		3Q							
Operational Assessment Contract		2Q							

Exhibit R-2a, RDT&E Project Justification		DATE: February 2006						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEI	MENT		PROJ	ECT NAME ANI	NUMBER		
RDT&E, Defense-Wide/07	Minimum Essential Emergency Special Projects / T64							
	Communications Network (MEECN)/PE							
	0303131K							
Cost (in millions)	FY05 FY06 FY07 FY08 FY09 FY10 FY11						FY11	
Project Cost	4.638	4.779	5.018	5.021	5.026	5.222	5.417	

- A. <u>Mission Description & Budget Item Justification</u>: 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. Other Program Funding Summary: N/A
- C. Acquisition Strategy: Information requires special access.

Exhibit R-3 Cost A	nalysis				DA	DATE: February 2006							
APPROPRIATION/BUDG	ET ACTIVIT	Y	PROGE	RAM ELEMENT	•		Pl	ROJECT	NAME AN	D NUMBER			
RDT&E, Defense-Wid	e/07			num Essential unications Ne		0303131		pecial	Project	s/T64			
Cost Category	Contract Method & <u>Type</u>	Perform Activit Locatio	у &	Total PYs Cost		FY06 Cost	FY06 Award <u>Date</u>	FY07 Cost	FY07 Award <u>Date</u>	Cost To Complete	Total <u>Cost</u>	Target Value of Contract	
Systems Engineering and Integration	SS/C CPAF MIPR	Multipl Perform Activit	ning	15.341		4.779	Various	5.018	Various	Contg	Contg	N/A	

appropriation/Budget Activity RDT&E, Defense-Wide/07					Mi	P nim	rogr	Ess	enti	al E	mei	ger	er ar icy C 3131	om	ame	icat	ions	6		F	Proje Sp	ct Ni ecia	umb I Pr	oer a	nd I ts/T	Nam 64	ie	
Figure Vers		2	005			2	006			2	007			20	800			200	09			20	10			2	011	
Fiscal Year	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
All aspects of this project are classified and require special access.																												

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xhibit R-4a Schedule Detail			DATE: Febru	ary 2006			
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	EMENT			PROJE	CT NAME AND	NUMBER
DT&E, Defense-Wide/07	Minimum Ess	sential Emer	gency Commun	nications	Speci	al Projects	/T64
	Network (ME	EECN) PE 030	3131K				
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
l aspects of this project are cl	assified and re	quire speci	al access.				

Exhibit R-2, RDT&E Budget Item Justifica		DATE: February 2006										
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOME	NCLATURE										
RDT&E, Defense-Wide/07	DISA Mission	Support Ope	rations/PE 0	303148K								
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11					
Defense Enterprise Accounting and Management System/DE01	0	9.291	1.224	0	1.215	1.252	0					

A. Mission Description and Budget Item Justification:

Office of the Chief Financial Executive (CFE) activities in the Mission Support area focus on the legislative mandates contained in the Chief Financial Officer (CFO) Act, Financial Managers Financial Integrity Act (FMFIA), and the Government Performance and Results Act (GPRA) as well as the Budget and Performance Integration goal of the President's Management Agenda (PMA). The Directorate provides financial services support and financial automation support to the Agency as well as annual Agency-wide financial statements. In addition, it conducts economic analyses, cost estimating and program and organizational assessments. A major challenge is to provide accurate, reliable, and timely financial information in a cost-effective way to support planning, engineering, acquiring, and fielding Global Net-centric solutions and operating the Global Information Grid.

Direction from the DoD Comptroller requires DISA to implement a new accounting system in order to meet the Presidential Management Agenda for Financial Management Improvements that specifically requires: 1) financial management systems meet federal financial management system requirements and applicable federal accounting and transaction standards; 2) accurate and timely financial information; 3) integrated financial and performance management systems supporting day-to-day operations; and 4) unqualified and timely audit opinion on the financial statements; no material internal control weaknesses reported by the auditors. In addition, the OMB/DoD mandated audit of DISA's financial statements have identified material weaknesses in DISA's accounting of its resources. Some of these weaknesses can only be fixed with a new accounting system. This program element is under Budget Activity 7 because it supports operational systems development.

Accomplishments/Planned Program:

Accounting System	FY 05	FY 06	FY 07
Subtotal Cost	0.000	3.291	$\overline{1.224}$

RDT&E dollars are required to conduct testing; certification; interface development; and system upgrades of the DISA Standard Finance and Accounting System (DSFAS). DSFAS is a Commercial-Off-the-Shelf (COTS) software that will replace DISA's existing accounting systems: Washington Headquarters Services Allotment Accounting System (WAAS), Financial Accounting Management Information System - Telecommunication Services and Enterprise Acquisition Services (FAMIS-TSEAS). DSFAS will comply with the DoD Enterprise Architecture and will be Joint Financial Management Improvement Plan (JFMIP) certified.

Exhibit R-2, RDT&E Budget Item Just	ification	1	DATE: Februa:	ry 2006			
APPROPRIATION/BUDGET ACTIVITY		1	R-1 ITEM NOME	NCLATURE			
RDT&E, Defense-Wide/07		DISA Mission	Support Ope	rations/PE 0	303148K		
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Enterprise Accounting	0	9.291	1.224	0	1.215	1.252	0
and Management System/DE01							
Congressional Add		FY 06	5		FY 07		

6.000

0.000

Additional dollars received in support of the Critical Infrastructure Test Range at the Idaho National Laboratory. This is a congressional add that will be executed by the Department of Energy.

B. Program Change Summary:

Subtotal Cost

	FY 05	FY 06	<u>FY 07</u>
Previous President's Budget	0	3.426	1.207
Current Submission	0	9.291	1.224
Total Adjustments	0	+5.865	+0.017

0.000

Change Summary Explanation: FY 2006 change is due to the Congressional Add for the Critical Infrastructure Test Range that will be executed by the Department of Energy, as well as undistributed Congressional reductions to the Defense-Wide RDT&E appropriation. FY2007 change is due to revised fiscal guidance.

C. Other Program Funding Summary:

	<u>FY 05</u>	FY 06	<u>FY 07</u>	FY 08	FY 09	<u>FY 10</u>	<u>FY 11</u>	<u>To</u> Complete	<u>Total</u> <u>Cost</u>
Procurement, DW	0	3.592	0.794	0	0	0	0	4.461	4.461
O&M, DW	0	1.519	1.676	0.900	1.200	1.024	1.031	Contq	Contg

D. <u>Acquisition Strategy</u>: The overall strategy is based upon the fundamental premise that COTS products will continue their evolution through the constant refresh of commercial technology. To maintain an interoperable system, DSFAS will use a single contractor as an overall integrator. Additionally, DSFAS will utilize other contract vehicles within DISA to acquire additional equipment and services to support the implementation of DSFAS.

Exhibit R-2, RDT&E Budget Item Justificati	I	DATE: February 2006										
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE											
RDT&E, Defense-Wide/07	DISA Mission S	Support Ope	rations/PE 0	303148K								
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11					
Defense Enterprise Accounting	0	9.291	1.224	0	1.215	1.252	0					
and Management System/DE01												

E. <u>Performance Metrics</u>: 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 Balanced Scorecard Strategy to provide greater transparency, quality and timeliness of financial information.

Exhibit R-3 Cost Analy	sis			DATE: Februa	ary 2006					
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM ELE	MENT		PROJECT NA	AME AND	NUMBER	Ł		
RDT&E, Defense-Wide/07		DISA Missio 0303148K	n Support (Operations/ PE	Defense Er System/DE(_	se Acco	ounting ar	nd Manag	gement
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY Co:	FY 06 06 Award st Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total <u>Cost</u>	Target Value of Contract
Testing	TBD	TBD	0	1.8	814 08/06	0.805	TBD	Contg	Contg	2.619
Certification	TBD	TBD	0	0.3	806 08/06	0.000	N/A	Contg	Contg	0.806
Interface Development	TBD	TBD	0	0.0	671 08/06	0.419	TBD	Contg	Contg	1.208
Congressional Add				6.0	000 TBD	0.000	N/A	0.000	0.000	
TOTAL			0	9.3	291	1.224				

Exhibit R-4 Schedule Profile																Da	ite:	Fel	orua	ry 20	006							
APPROPRIATION/BUDGET A RDT&E, Defense-Wide/07	CTIVITY				Pr DI	Program Element Number and Nan DISA Mission Support Operations/							ame	s/PE 0303148K De						Project Number and Name Defense Enterprise Accounting Management System/DE 01						ing	and	
Fiscal Year		2	005			20	06			20	07			20	800			20	09			20	10			20	11	
	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
Testing							\triangle	Δ	_	<u> </u>	\triangle	Δ																
Certification							\triangle	Δ																				
Interface Development								Δ	Δ	Δ	Δ	\triangle																
System Upgrade																			Δ	\triangle			Δ	Δ				

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Exhibit R-4a Schedule Detail		DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT DISA Mission Support (Operations / PE 0303148K	PROJECT NAME AND NUMBER Defense Enterprise Accounting and Management System / DE01
Schedule Profile	FY 2005 FY 2006	FY 2007 FY 2008	FY 2009 FY 2010 FY 2011
Testing	3Q - 4Q	1Q - 4Q	
Certification	3Q - 4Q		
Interface Development	4Q	1Q - 4Q	
System Upgrade			3Q - 4Q 3Q - 4Q
Certification Interface Development	3Q - 4Q		3Q - 4Q 3Q - 4Q

Exhibit R-2, RDT&E Budget Item Justification			DATE: Febru	uary 2006			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			R-1 ITEM NON	MENCLATURE Jarrior/PE 0303	3149K		
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element (PE)	20.257	6.221	6.551	6.656	6.775	6.984	7.246
Information Dissemination Management/IM01 *	5.844	0	0	0	0	0	0
Command and Control Infrastructure Modernization (C2IM)/T55 **	4.565	0	0	0	0	0	0
Network Warfare Simulation (NETWARS)/E62 ***	9.848	6.221	6.551	6.656	6.775	6.984	7.246

- A. <u>Mission Description and Budget Item Justification</u>: This program element (PE) is the Chairman of the Joint Chiefs of Staff (CJCS) initiative that promotes joint and coalition C4I interoperability. Through it the DoD seeks to identify, prioritize, and solve C4I interoperability problems. These three overlapping phases lead the Department to global interoperability for US military forces deployed anywhere, on any mission, with maximum flexibility in force composition. Efforts under this PE provide focus and visibility into resolving C4I interoperability issues.
- * Beginning in FY 2006, development efforts for IDM capabilities are under the Net-Centric Enterprise Services (NCES) Program, PE 0303170K.
- ** Beginning in FY 2006, Command and Control Infrastructure Modernization is realigned to the Joint Command and Control Program in PE 0303158K.
- *** NETWARS (formerly Technical Integration Services) is now funded as a separate project in PE 0303149K. The Modeling and Simulation segment of Technical Integration Services was realigned to PE 0302019K beginning in FY 2006 due to its direct engineering support to that PE.

Information Dissemination Management (IDM) integrates Government-Off-the-Shelf (GOTS) and Commercial-Off-the-Shelf (COTS) advanced information management technology to provide Information Awareness, Access, and Delivery Management to C4ISR (surveillance and reconnaissance) systems to enhance their information dissemination performance. Command and Control Infrastructure Modernization provides the prototyping, development, testing, and deployment of information system mission capabilities and will use the Net-Centric Enterprise Services (NCES) infrastructure as it becomes available. These information system components will provide an improved situational awareness and analysis set of services, as required within the Global Information Grid (GIG). Messaging capabilities were engineered and

Exhibit R-2, RDT&E Budget Item Justification			DATE: February 2006									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		R-1 ITEM NOMENCLATURE C4I for the Warrior/PE 0303149K										
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11					
Total Program Element (PE)	20.257	6.221	6.551	6.656	6.775	6.984	7.246					
Information Dissemination Management/IM01 *	5.844	0	0	0	0	0	0					
Command and Control Infrastructure Modernization (C2IM)/T55 **	4.565	0	0	0	0	0	0					
Network Warfare Simulation (NETWARS)/E62 ***	9.848	6.221	6.551	6.656	6.775	6.984	7.246					

implemented to provide continued interoperability between existing legacy systems and pending messaging system interfaces (such as for deployed and nuclear user communities and allies). In addition to providing support for the integrated information operations within the SIPRNET (the classified DoD internet), components were developed for the exchange of information with allies, coalition partners, and the Homeland Defense communities. NETWARS is a state-of-the-art C4 Modeling and Simulation (M&S) tool used by C4 planners and analysts to: (a) assess the effects of full operational combat traffic loading on current and future communications systems and networks in a joint task force, major theater of war scenario, (b) conduct quick turn-around communications planning for contingency operations including small regional conflicts and peacekeeping scenarios, and (c) evaluate the impact of new communications technologies, organizational structures, and operational concepts. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

B. Program Change Summary:

Program Change Summary:	FY05	FY06	<u>FY07</u>
Previous President's Budget	23.526	6.311	6.462
Current Submission	20.257	6.221	6.551
Total Adjustments	-3.269	-0.090	0.089

Change Summary Explanation:

FY 2005 change is due to below threshold reprogramming.

FY 2006 change is due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation.

FY 2007 change is due to revised fiscal guidance.

Exhibit R-2a, RDT&E Project	Justificat	DATE: H	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT		PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07	C4I for the	Warrior/P	Е 0303149К	Information Dissemination Management (IDM)/IM01						
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11			
Information Dissemination Management/IM01	5.844	0.000	0.000	0.000	0.000	0.000	0.000			

A. <u>Mission Description and Budget Item Justification</u>: Information Dissemination Management (IDM) integrates Government-Off-the-Shelf (GOTS) and Commercial-Off-the-Shelf (COTS) advanced information management technology to provide Information Awareness, Access, Delivery Management, and Support services to C4ISR (surveillance and reconnaissance) systems to enhance their information dissemination performance. The goal is to provide the warfighter three critical capabilities: awareness of the existence of operationally relevant information, access to the relevant information, and delivery of relevant information in an authenticated, secure, and timely manner. The core services are defined by the "Framework for Information Dissemination Management" document distributed in April 1998 as Awareness, Access, Delivery, and Support and satisfy requirements described in the IDM Mission Needs Statement validated by the Joint Requirements Oversight Council (JROC) in July 1999, and the Capstone Requirements Document approved by the JROC in January 2001. Rather than being developed as a "system", IDM was incrementally developed and fielded as tools and services, providing a rapid insertion of technology capability to the warfighter. It supports information flow across echelons, from national centers to tactical warfighters and coalitions, by improving awareness of information holdings, access to the information, retrieval of information via smart pull, and management of information products via various communications paths.

B. Accomplishments/Planned Program:

	FY05	FY06	FY07
Subtotal Cost	5.844	0.00	0.00

Content Staging - Continued to establish a Content Staging (CS) capability to support information sharing of service and agency information products by providing an awareness of and access to that information. Continued fielding IDM feature packs and maintenance releases to the Combatant Commands and to selected forward deployed sites, primarily, but not exclusively in the CENTCOM Area of Responsibility (AOR). By the end of FY 2005, all Combatant Commanders have initial/pilot IDM capabilities, with at least some presence in their AORs. Continued the integration of information sources into the IDM infrastructure to make their information holdings available to the IDM user community. Provided logistics support and sustainment of operations. Assisted in implementation of new and

Exhibit R-2a, RDT&E Project Justification DATE: February 2006										
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT		PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07	C4I for the	Warrior/P	Е 0303149К	Information Dissemination Management (IDM)/IM01						
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11			
Information Dissemination Management/IM01	5.844	0.000	0.000	0.000	0.000	0.000	0.000			

enhanced IDM capabilities contained in releases 4.x, 5.x, and 6.x and incremental bands of capabilities. By the end of FY 2005, the initial transition framework from content staging to NCES was in place.

Development and Integration - Continued development and integration of improved capabilities through feature packs and maintenance release capabilities. Feature packs address improved functionality such as enhanced search and awareness features, alert notifications, message routing enhancements, improved ability to advertise information holdings, and enhanced smart pull capabilities for mission information. Incorporated patches and fixes into maintenance releases as needed. Development of enhanced capabilities beyond FY 2005 will be under the auspices of the Net-Centric Enterprise Services (NCES) Program.

Testing - Continued with a comprehensive testing and evaluation program for IDM tools and services to include Independent Verification & Validations (IV&Vs), security, performance, and operational assessments.

C. Other Program Funding Summary:

	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>To</u> Complete	Total Cost
Operations and Maintenance, DW	11.012	7.483	0	0	0	0	18.495
Procurement, DW	3.556	0	0	0	0	0	3.556

- D. Acquisition Strategy: All RDT&E work will be contracted out or funded using MIPRs.
- E. <u>Performance Metrics</u>: Information Dissemination Management: Performance criteria consist of bandwidth utilization, accuracy of information delivery and elapsed time for delivery. Measures taken before and after implementation illustrate improvements in delivery of information using IDM. Additional operational metrics are also in place that provide a qualitative assessment of how easy IDM is to operate. Finally, on-site contractor

Exhibit R-2a, RDT&E Project	Justificat	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	ROGRAM ELEMENT PROJECT NAME AND NUMB							
RDT&E, Defense-Wide/07	C4I for the	Warrior/PE	E 0303149K	Information	Dissemination				
				Management (IDM)/IM01					
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Information Dissemination Management/IM01	5.844	0.000	0.000	0.000	0.000	0.000	0.000		

augmentation is being used to continuously gather a wide array of user inputs regarding how well IDM is performing in meeting its functional requirements. To accurately measure customer satisfaction with IDM, a User Feedback capability on the SIPRNet IDM Web site has been established. This is used both to measure acceptance and satisfaction with IDM, and also serve as a conduit for suggestions and new requirements. Regularly scheduled follow-on visits to sites to monitor effectiveness are part of the deployment methodology. Schedule, performance, and customer satisfaction measures are compiled both as a realtime barometer as to how well IDM is doing and also to predict success in meeting future IDM objectives. The nature of this compiled data permits objective assessments as to the quality and reliability of IDM support to its customers. In FY 2005, the Content Staging program provided increasing levels of support to our warfighters. Content Staging version 4.1.3, supported the Global War on Terrorism and Homeland defense operations, and consolidated global metrics have consistently and accurately measured performance improvements with this version. Information Discovery capabilities have provided over 8 million information products a month that can be searched, accessed, and retrieved by our users. These products have been accessed, cumulatively, over 5 million times and user enterprise information search query response times are normally less than 5 seconds. Delivery capabilities have reached 5,244 gigabytes of information globally. Although dependent on varying levels of connectivity, information delivery averages 1 megabyte and 333 megabytes a minute over terrestrial and Global Broadcast Service satellite systems, respectively. Some specific performance measures include:

- Security Performance Improvement Goal- At Initial Operational Capability (IOC), provides the necessary interfaces to enable IDM directory, security, and format management operations (Resource, Status, Directory, Security, Operations, and Administration). Provides system and user administrative controls.
- Search and Retrieval Performance Improvement Goal Information Advertisement, Search, and Retrieval capabilities to the global enterprise at IOC, the results of which are 95% relevant to the user query.
- Delivery Performance Improvement Goal: At Full Operational Capability (FOC), provides the capability to perform seamless, automated, and peer-to-peer information delivery control by tying expanded quality of service parameters to specific heterogeneous communications links. Metrics: (1) Accuracy Percentage of data accuracy obtained during information access; (2) Timeliness Time to receive usable information products; (3) Relevancy Percentage of user success rating for events.

Exhibit R-2a, RDT&E Project	Justificat	DATE: February 2006							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	ROGRAM ELEMENT PROJECT NAME AND NUMB							
RDT&E, Defense-Wide/07	C4I for the	Warrior/PE	E 0303149K	Information	Dissemination				
				Management (IDM)/IM01					
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11		
Information Dissemination Management/IM01	5.844	0.000	0.000	0.000	0.000	0.000	0.000		

- Integration Performance Improvement Goal: At FOC, integrates IDM/content staging services with appropriate data quards, Public Key Infrastructure (PKI), server certificates, and Virtual Private Networks (VPNs). IDM has migrated to an enterprise level system and the IDM services developed under this program will be a content staging (CS) service within the Net-Centric Enterprise Services (NCES). At the program level, CS/IDM employs Earned Value Management techniques and participates in DISA's Program Plan Review process quarterly. All contracts deliver monthly status reports on efforts accomplished and planned, deliverables produced, planned and actual schedule/cost/hours expended. Monthly, and in critical cases, bi-monthly or weekly Progress Status Reviews are held. Software deliverables are inspected visually for completeness and adherence to requirements, and undergo functional testing where applicable. Documentation is reviewed and accepted based on adherence to task order requirements, completeness, and technical merit. At a macro level, the IDM Build Plan is the measure for performance as it covers multiple releases and shows at a glance not only current efforts but past accomplishments. It provides an extensive historical record, along with future projections. On a micro level, the Milestone Schedule is a measure for performance for the most imminent release. The Build Plan states the requirement, the computer platforms targeted, the date for accomplishing the requirement, whether or not this requirement will be retrofitted to earlier releases, and the responsible agent. The Milestone Schedule states the requirement, the computer platforms targeted, the date for accomplishing the requirement, and the responsible agent. Customer acceptance is the greatest performance measurement tool. All IDM documentation, to include the Build Plan, will be available on the IDM homepage for constant review by the entire customer base. The two performance measures are adherence to schedule and adherence to approved Build Plan contents. Earned Value is tracked throughout the life of the contract.

Exhibit R-3 Cost	Analysis			DATE: F	ebruary	2006					
APPROPRIATION/BUI RDT&E, Defense-Wi		ITY	PROGRAM ELEMENT C4I for the Warrior/	49K	<pre>PROJECT NAME AND NUMBER/ Information Dissemination Management (IDM)/IM01</pre>						
Cost Category	Contract Method & <u>Type</u>	Performing Activity & Location	Total PYs <u>Cost</u>	FY06 Cost	FY06 Award <u>Date</u>	FY07 Cost	FY07 Award <u>Date</u>	Cost To	Total <u>Cost</u>	Target Value of Contract	
Product Development	GSA	SOLERS	4.081	0	N/A	0	N/A	0	4.081	4.081	
Product Fielding	GSA	ВАН	.800	0	N/A	0	N/A	0	.800	.800	
Product Fielding	GSA	Merlin	. 292	0	N/A	0	N/A	0	.292	.292	
Test & Evaluation	GSA	CSC	.600	0	N/A	0	N/A	0	.600	.600	
Test & Evaluation	IASSURE	SRA	.071	0	N/A	0	N/A	0	.071	.071	
Totals			5.844						5.844		
1											

Exhibit R-4 Schedule Profile															Da	te: I	-eb	rua	ry 20	06								
Appropriation/Budget Activity RDT&E, Defense-Wide/07		Program Element Number C4I for the Warrior/PE 0			r and	and Name Pr 803149K Inform				Project Number and Name rmation Dissemination Mgmt (IDM)/IM01																		
		2	2005	;		2	006			2	007	,		20	800			20	009			2	010			2	2011	
Fiscal Year	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Develop IDM 4.1.3																												
Test IDM 4.1.3																												
Deploy IDM 4.1.3																												
Develop IDM 4.1.3 NCES Transition Messaging Release																												
Test IDM 4.1.3 NCES Transition Messaging Release		7																										
Deploy IDM 4.1.3 NCES Transition Messaging Release		\triangle	7																									
Develop IDM 4.1.3 Feature Pack 2 Discovery		\triangle	\triangle	7																								
Test IDM 4.1.3 Feature Pack 2 Discovery			^																									
Deploy IDM 4.1.3 Feature Pack 2 Discovery				\triangle																								

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Exhibit R-4a Schedule Detail			DATE: Febi	ruary 2006	б		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT			PROJECT NAME	AND NUMBER/	
RDT&E, Defense-Wide/07	C4I for	the Warrior	/PE 0303149F	K	Information I (IDM)/IM01	Disseminatio:	n Management
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	<u>FY 2009</u>	FY 2010	FY 2011
Develop IDM 4.1.3							
Testing of IDM 4.1.3							
Deploy IDM 4.1.3							
Develop IDM 4.1.3 NCES Transition Messaging	10						
Testing of IDM 4.1.3 NCES Transition Messaging Release	10						
Deploy IDM 4.1.3 NCES Transition Messaging Release	2Q						
Develop IDM 4.1.3 Feature Pack 2 Discovery	2-3Q						
Testing of IDM 4.1.3 Feature Pack 2 Discovery	3Q						
Deploy IDM 4.1.3 Feature Pack 2 Discovery	4Q						

Exhibit R-2a, RDT&E Project	Justificatio	on	DATE:	February 200	6		
APPROPRIATION/BUDGET ACTIVIT	r	PROGRAM ELEM	MENT		PROJECT NAME	AND NUMBER	
RDT&E, Defense-Wide/07		C4I for the	Warrior/PE 03	03149K	Command and	Control Infras	structure
			Modernizatio:	n (C2IM)/T55			
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	4.565	0	0	0	0	0	0

A. Mission Description and Budget Item Justification: This project provides for the prototyping, development, testing, and deployment of information systems-based mission capabilities and utilizes the Net-Centric Enterprise Services (NCES) Core Enterprise Services (CES) and/or NCES Evaluation Capability Modules (ECMs) as they became available. These components support Global Information Grid (GIG) requirements of the Combatant Commanders (COCOMs) and the Joint Task Forces (JTFs). Based on DoD Transformation objectives, these components provide increased real-time execution capability, through an improved situational awareness and analysis set of services, as required within the GIG and its Joint, Service, Allied, and non-DoD components. This project develops interoperability pilots, demonstrates them in appropriate evaluations or exercises (e.g., Joint Forces Command (JFCOM) evaluations, Joint Warrior Interoperability Demonstrations), with transitioning of matured components into a fielded Joint Command and Control (JC2)/next generation C2 and intelligence (C2I) capability. These capabilities are designed to use the NCES infrastructure and support interoperability and integration across multiple C4I domains. Programs supported include Navy's XTCF Project, the Global Command and Control Family of Systems, and the Family of Interoperable Operational Pictures (FIOP). C2IM capabilities supported new commercial operating systems (with increased emphasis on security). In addition to supporting integrated information operations within the SIPRNET environment, components were developed for the exchange of information with allies, coalition partners and the Homeland Defense communities.

During FY 2005, as net-centric infrastructure services evolved, this project's funds were used to develop and pilot the initial User Defined Operational Picture (UDOP) infrastructure capabilities supporting the Command and Control Community of Interest (C2 COI). Mature UDOP capabilities provided a tailored, relevant, and correlated operational picture that enable the user to share that view with a collaborative COI. Capabilities were realized within a Services-Oriented Architecture (SOA) that leveraged NCES (e.g., discovery services) and the Global Information Grid-Bandwidth Expansion (GIG-BE) to provide improved timely situational awareness for the next generation of C2I capabilities. Each user or aggregation of users determines the appropriate operational picture for their particular mission using a producer/consumer or publish/subscribe model that supports raw and processed data for Task, Post, Process and Use (TPPU) paradigm as well as smart push. More flexible and extensible than the currently deployed client-server based Common Operational Picture (COP), the loosely coupled UDOP provides increased agility for the user by generating a picture on demand as opposed to a hierarchal COP generated by a single command authority.

The C2 COI Global Strike and Situational Awareness ECMs were showcased in early FY 2005 as part of Net-Centric Capability Pilot's (NCCP) Oktoberfest demonstration. C2 COI ECMs were made available to users on the SIPRNET for evaluation, maturation, and limited operational use. Additionally, they supported concept exploration and technical

Exhibit R-2a, RDT&E Project	ct Justificati	.on	DA	TE: February	2006		
APPROPRIATION/BUDGET ACTIVE RDT&E, Defense-Wide/07	/ITY	PROGRAM I	ELEMENT the Warrior/P	Е 0303149К	Command a	NAME AND NUMBE and Control Ir ation (C2IM)/1	nfrastructure
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	0	0	0	0	0		

risk reduction for the next generation of C2I (e.g., Joint Command and Control (JC2)). C2IM's FY 2005 efforts focused on hardening and maturing previously developed capabilities. Beginning in FY 2006, C2IM has been realigned to the Joint Command and Control Program in PE 0303158K.

B. Accomplishments/Planned Program:

The major products delivered under C2IM/C2 COI UDOP were Architecture Products and Pilot/Demo Services Products. Cost detail, broken out by services (capabilities), is as follows:

Runtime Services for Net-Centric Computing:

C2IM runtime services enable the discovery and integration of information published within the net-centric computing environment. These services are used to dynamically build tailored presentations of real-time situational awareness information, the C2 COI UDOP, according to user preferences and operational requirements of the Combatant Commands and JTFs. FY 2005 funds were used to harden and mature UDOP and associated interfaces to the NCCP ECMs/services. FY 2005 funds supported:

- Common situation awareness and situation analysis support services
- Runtime search and discovery of network resources
- Network resource metadata collection, storage, management and vending
- Common Horizontal Fusion services (Horizontal Fusion provides toolsets that will enable smart pull and rapid integration of data by users.)
- Network publication service for "community spaces"
- Integrated collaborative planning supporting C2, Combat Support (CS) and Intelligence
- Net-centric Joint Warfighter portal supporting integration of C2, CS, and Intel information repositories

Common Edge Services and Warfighter Visualizations:

Exhibit R-2a, RDT&E Proje	DA	TE: February	2006				
APPROPRIATION/BUDGET ACTI RDT&E, Defense-Wide/07	VITY	PROGRAM E	ELEMENT The Warrior/P	Е 0303149К	Command a	NAME AND NUMBER And Control In Ation (C2IM)/T	nfrastructure
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	4.565	0	0	0	0	0	0

Common Edge Services enable the tailored and secure user access to NCES infrastructure services and the intelligent pull of all information available within the net-centric environment. Users are able to establish their context and seamlessly gather appropriate information for their particular mission and functions. In addition to user authentication mechanisms and the integration of NCES information discovery services, Common Edge Services enable the integration of real-time situational awareness information from multiple sensors and data sources. FY 2005 funding was used to harden and mature the common Edge User pilot services.

FY 2005 funds supported:

- Integrated information, displays, and decision aids, shared across a joint force, for collaborative situation development, crisis assessment, courses of action development/selection planning and execution.
- Provided mission-tailored JTF displays of real-time combat information to support operational and tactical decision-making across the JTF.
- Provided access to NCES user authentication and authorization services.

Web Enabling Legacy Applications:

This effort supported the integration of existing information system components into the next generation C2I capability. FY 2005 funds were used to integrate web-enabled legacy applications with the Net-Centric pilot services. FY 2005 funds supported:

- Integrated functionality from Global Command and Control System (GCCS), Global Combat Support System (GCSS), and relevant Advanced Concept Technology Demonstrations (ACTDs) into JTF headquarters capability.

System Engineering for Tailorable C2 Capability Suites:

Provides the architecture supporting the deployment of net-centric services and the integration of capabilities into multiple end-user applications. Enables multiple channel distribution and integration of capabilities through the web, wireless, and handheld platforms and clients. FY 2005 funding provided engineering support for the piloting of

Exhibit R-2a, RDT&E Project	DATE:	February 200	6								
APPROPRIATION/BUDGET ACTIVIT	Ϋ́	PROGRAM ELE	MENT		PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07	C4I for the	Warrior/PE 03	303149K	Command and Control Infrastructure							
					Modernizatio	n (C2IM)/T55					
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Project Cost	4.565	0	0	0	0	0	0				

net-centric services.

FY 2005 funds supported:

- Common JTF HQ architecture with architectural compliance guidelines and validation mechanisms
- Software capabilities that require nominal hardware/software platforms
- Piloting tailored C2 capability suites

Information Interoperability and Security for Homeland Defense and Coalition Partners:

This effort provided the tools needed for the integration of information between security domains and supported the secure transfer of information between SIPRNET and other external networks as required by the JTFs. FY 2005 funds were used to provide assessments of effectiveness and military utility of the security and information exchange pilot services.

FY 2005 funds supported:

- C2 capability to coordinate force protection and homeland defense operations
- Prototype coalition communication mechanisms (includes provisions for intermittent network access)
- Extensible Mark up Language (XML) based message transformation and translation into common formats and vocabularies
- Assessment of effectiveness and military utility for security services and information exchange services
- C. Other Program Funding Summary: N/A
- D. Acquisition Strategy:

Made use of MITRE support and the DISA Next Generation Contractual vehicle.

Exhibit R-2a, RDT&E Project J	DATE:	February 200	6								
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEM			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07	C4I for the	Warrior/PE 03	03149K	Command and Control Infrastructure							
					Modernization (C2IM)/T55						
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Project Cost	4.565	0	0	0	0	0	0				

Ε.	Performanc	e Metrics:	The per:	formance met	rics for	the software	include	capacity	(number	of messages	communicated),
por	tability,	extensibili	ty, and a	architectura	al scalabi	lity (number	of clie	nts and n	umber of	track objec	cts).

Exhibit R-3 Cost Analysi	.s				DATE: Februa:	ry 200	б									
APPROPRIATION/BUDGET ACT			PROJECT	NAME	AND NUMBE	:R										
RDT&E, Defense-Wide/07				for the Warrior	/ PE 0303149K		Command and Control Infrastructure									
							Moderni	zation	(C2IM) /	T55						
Cost Category	Contract Method & Type	Perform: Activity Location	у &	Total PYs Cost	FY 06 Cost	FY 06 Award Date		FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract					
System Engineering	OTF&O	MITRE, MCLean,	FFRDC 2.248		0	N/A	0	N/A	0	2.248	2.248					
Engineering Support	MOA	JPL, FFI San Dieg CA		1.750	0	N/A	0	N/A	0	1.750	1.750					
NCCP / (UDOP) Pilot Integration	Various	Various		0.850	0	N/A	0	N/A	0	0.850	N/A					
C2IM UDOP JDEP Testing	MOA	SSC-SD (San Die CA		0.890	0	N/A	0	N/A	0	0.890	0.890					
UDOP SW Dev & Tech Suppt	F&O	NGMS, FO Polexis Reston,		13.596	0	N/A	0	N/A	0	13.596	13.596					
UDOP Visualization/Portal SW	F&O	NGMS, FO Polexis Reston,	·	3.425	0	N/A	0	N/A	0	3.425	3.425					
UDOP Engineering Support	F&O	NextGen		2.950	0	N/A	0	N/A	0	2.950	2.950					
UDOP Architecture/Engineering	F&O	S&T Asso Reston,		4.200	0	N/A	0	N/A	0	4.200	4.200					
Engineering/Tech Svcs	Various	Various		2.650	0	N/A	0	N/A	0	2.650	N/A					
	Total			32.559						32.559						

Exhibit R-4 Schedule Profile															Dat	e: Fe	ebru	ary	200)6								
Appropriation/Budget Activity RDT&E, Defense-Wide/07					C4I for the Warrior/PE 0303149K													Command and Control Infrastructure Modernization(C2IM)/T55										
Figure Vers		2	005			2	006			2	007			20	800			200	9			20)10				2011	
Fiscal Year	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
Architecture/Integ/ Dev.																												
UDOP/NCCP Integration &Test																												
UDOP Software Dev																												
UDOP Portlet Dev																												
Pilots / Demonstrations																												
NCCP/UDOP Spring Demonstration																												
NCCP/UDOP Fall Demonstration		\triangle	Δ																									

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Exhibit R-4a Schedule Detail		Date: Februar	ry 2006						
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT C4I for the Warri			AND NUMBER ontrol Infrastructure (C2IM)/T55					
Schedule Profile	FY 2005	FY 2006 FY 20	07 FY 2008	FY 2009	FY 2010	FY 2011			
Architecture / Integr / Development UDO Integration Test	DP/NCCP 1Q								
UDOP Software Development	1Q								
UDOP Portlet Development Pilots / Demonstrations	10								
NCCP/UDOP Spring Demonstration	10								
NCCP/UDOP Fall Demonstration Architecture, Development, Integration Demo/Pilot Exercise	1Q-3Q & Test								

Exhibit R-2a, RDT&E Project J	ustificatio:	TE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	T		PROJECT NAME	AND NUMBER						
RDT&E, Defense-Wide/07		C4I for the Wa	rrior/P	E 0303149K	NETWARS (Formerly Technical					
					Integration Services) /E62					
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11			
Project Cost	9.848	6.221	6.551	6.656	6.775	6.984	7.246			

A. <u>Mission Description and Budget Item Justification</u>: This effort supports the successful deployment of DoD information systems by performing a broad spectrum of activities in support of C4I programs. DISA supports the development of C4I programs and systems through analytical and technical integration activities including application performance assessments; cross-domain network solutions; contingency planning; network capacity planning and diagnostics; system architecture development and evaluation; technical and operational assessment of emerging technologies; and systems-level modeling and simulation. DISA provides systems engineering and technical integration support dedicated to solving problems for, and meeting the unique engineering, integration and analysis needs of its customers (Combatant Commands (COCOMs), Services, Defense Agencies, Office of the Secretary of Defense, and the Joint Staff).

The Network Warfare Simulation (NETWARS) is a state-of-the-art C4 modeling and simulation (M&S) tool that can be used by C4 planners and analysts to: (a) assess the effects of full operational combat traffic loading on current and future communications systems and networks in a joint task force major theater of war scenario, (b) conduct quick turn-around communications planning for contingency operations including small regional conflicts and peacekeeping scenarios, and (c) evaluate the impact of new communications technologies, organizational structures, and operational concepts. NETWARS supports the acquisition process by conducting end-to-end analyses of networks with new C4 systems and C2 applications applied, reducing new system testing costs and risks, and providing empirical support for C4 acquisition decisions. NETWARS also provides C4 measures of performance to the Joint Warfare Simulation (JWARS) tool and fulfills the M&S requirements of the Joint Network Management System (JNMS). Ultimately, NETWARS makes it possible for communications planners and analysts to validate their C4 support plans and assess their ability to execute them, thus enabling the warfighter to achieve network-centric warfare operations.

* Beginning in FY 2006, only the NETWARS part of this project will remain in PE 0303149K. The other portion has been realigned to Modeling and Simulation/Project E65 under PE 0302019K because it directly supports DISA's Engineering and Integration tasks under that program element.

Exhibit R-2a, RDT&E Project J	ustificatio	IE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	T		PROJECT NAME	AND NUMBER						
RDT&E, Defense-Wide/07		C4I for the Wa	rrior/P	E 0303149K	NETWARS (Formerly Technical					
					Integration Services) /E62					
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11			
Project Cost	9.848	6.221	6.551	6.656	6.775	6.984	7.246			

B. Accomplishments/Planned Program:

FY 2005 - Warfighter & Combatant Commands Support provided network traffic analysis for warfighter architectures endto-end system engineering issues.

FY 2005 - C3 Community Support continued to provide the C3 Community M&S tools to evaluate software development of communication and related systems for OSD and COCOMs to determine communications effects on combat outcome.

FY 2006 - Enhance the NETWARS program by establishing communication plans for tactical networks, based on traffic generated by Net-Centric Enterprise Services (NCES) Core Enterprise Services.

FY 2007 - Enhance the NETWARS Program to increase usability for the warfighter through: 1. addition of models of new and emerging communications technology. 2. expansion of the organization library to include new doctrinal structures. 3. inclusion of additional application traffic.

FY 2005 - DISA Program Support provided performance assessments for existing and transitioning networks, applications, and technology; and develop recommendations for network performance improvement, survivability and reliability.

Exhibit R-2a, RDT&E Project J	ustificatio	TE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	T		PROJECT NAME	AND NUMBER						
RDT&E, Defense-Wide/07		C4I for the Wa	rrior/P	E 0303149K	NETWARS (Formerly Technical					
					Integration Services) /E62					
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11			
Project Cost	9.848	6.221	6.551	6.656	6.775	6.984	7.246			

	FY 05	FY 06	FY 07
Subtotal Cost	1.297	0	0

FY 2005 - Key Interface Point Architectures provided architecture baselines for key DISA communication interfaces to satisfy joint information flow requirements.

C. Other Program Funding Summary: (\$M)

С.	Other Program Funding	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	<u>FY 11</u>	Total Complete	Total <u>Cost</u>
RD'	r&E, DW (PE0302019K)	0	2.817	2.902	3.062	5.284	6.292	6.503	Contg	Contg
08	kM, DW	1.510	0.660	1.179	1.345	1.423	1.463	1.500	Contg	Contg

D. <u>Acquisition Strategy</u>: Uses a number of contractors for modeling support. The level of support includes network model development; software installation and maintenance; software revisions or patches; and software upgrades. These companies are uniquely qualified to provide the necessary level of technical support and services to ensure DISA uses leading edge communication technologies.

E. Performance Metrics:

This project is measured by its impact on the DoD communications planning and investment strategy, with criteria based on the performance of a broad spectrum of technical activities. These include application assessments; contingency planning; network capacity planning and diagnostics; system architecture evaluation; technical and operational assessments of emerging technologies; and systems-level modeling and simulation. In FY 2006 and thereafter, NETWARS will be evaluated based on its ability to provide DoD decision makers with the impact on Net-Centric Enterprise Services prior to conflict.

APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 Contract Method & Type Technical Integration CPFF/Comp Services System Engineering and Integration Com modeling and simulation FFRDC CPFF/Comp	Performing Activity & Location OPNET Tech, Inc. Bethesda, MD RAND Tysons Corner, VA	Total PYS Cost 7.389	PE 0303149K FY 06 Cost 3.501	NETWAR		_	MBER echnical Cost to Complete	Integra Total Cost	Target Value of Contract
Contract Method & Type Technical Integration CPFF/Comp Services System Engineering and Integration Com modeling and simulation FFRDC CPFF/Comp	Performing Activity & Location OPNET Tech, Inc. Bethesda, MD RAND Tysons Corner, VA	Total PYs Cost 7.389	FY 06 Cost	Servic FY 06 Award Date	es) /E FY 07 Cost	FY 07 Award Date	Cost to	Total	Target Value of
Cost Category Technical Integration Services System Engineering and Integration Com modeling and simulation CPFF/Comp CPFF/Comp	Activity & Location OPNET Tech, Inc. Bethesda, MD RAND Tysons Corner, VA	PYs <u>Cost</u> 7.389	Cost	FY 06 Award Date	FY 07	FY 07 Award Date			Value of
Cost Category Technical Integration Services System Engineering and Integration Com modeling and simulation CPFF/Comp CPFF/Comp	Activity & Location OPNET Tech, Inc. Bethesda, MD RAND Tysons Corner, VA	PYs <u>Cost</u> 7.389	Cost	Award <u>Date</u>	Cost	Award <u>Date</u>			Value of
Technical Integration	OPNET Tech, Inc. Bethesda, MD RAND Tysons Corner, VA	7.389					Complete	Cost	Contract
Services System Engineering and Integration Com modeling and simulation FFRDC CPFF/Comp	Inc. Bethesda, MD RAND Tysons Corner, VA		3.501	01/06	3.685	01/07			
CPFF/Comp	Tysons Corner, VA	.555				01/07	Contg	Contg	14.575
			0	N/A	0	N/A	N/A	.555	.555
ODEE / Comp	Northrop Grumman Reston, VA	1.750	0	N/A	0	N/A	N/A	1.750	1.750
CPFF/Comp	SAIC Seven Corners, VA	1.630	0	N/A	0	N/A	N/A	1.630	1.630
FFRDC	MITRE Seven Corners, VA	.597	0	N/A	0	N/A	N/A	.597	.597
CPFF/Comp	Verizon/BBNT McLean, Va	.853	0	N/A	0	N/A	N/A	.853	.853
CPFF/8A	CNS, Inc Springfield, Va	.800	0	N/A	0	N/A	N/A	.800	.800
CPFF/Comp	Pragmatics, McLean, Va	.733	0	N/A	0	N/A	N/A	.733	.733
CPFF/Comp	Booz, Allen & Hamilton, McLean, Va	5.922	2.720	12/05	2.866	12/06	Contg	Contg	11.508
	Various Contracts	.599	0	N/A	0	N/A	N/A	.599	N/A
Subtotal Product Development		20.828	6.221		6.551				
TOTAL		20.828	6.221		6.551				

Exhibit R-4 Schedule Profile															Date	e: F	ebru	uary	y 20	06								
Appropriation/Budget Activity RDT&E, Defense-Wide/07			Program Element Number an C4I for the Warrior / PE 030			nd Name 03149K				Project Number and Name NETWARS (Formerly Technica Integration Services)/E62					nica	I												
2005				2	006			2	007			20	800			200	08			20	10			2	011			
Fiscal Year	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
Support to DISA Ops	Z	$\sqrt{}$	\triangle	\triangle		<u> </u>																						
Warfighter Support			\triangle	\triangle																								
C3 Community Support			\triangle	\triangle		\triangle	<u> </u>			Δ				\triangle	<u>.</u>			\triangle	7			\triangle				\triangle		
DISA Program Support	_	\triangle	\triangle	\triangle																								
KIP architectures			<u>.</u>																									

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Exhibit R-4a Schedule Detail			DATE: Februa	ry 2006			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		ELEMENT the Warrior	/PE 0303149K	NET		D NUMBER ly Technical vices) /E62	
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Support to DISA Ops	1-4Q						
Warfighter Support	1-4Q						
C3 Community Support	1-4Q	2Q	2Q	2Q	2Q	2Q	2Q
DISA Program Support	1-4Q						
KIP architectures	2Q						

Exhibit R-2, RDT&E Budget Item Justification		DATE:	February :	2006							
APPROPRIATION/BUDGET ACTIVITY		R-1 IT	R-1 ITEM NOMENCLATURE								
RDT&E, Defense-Wide/07		Global Command and Control System (GCCS) / PE 0303150K									
COST (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Total Program Element	60.979	51.584	59.681	43.972	44.061	46.738	49.050				
Global Command and Control System- Joint/CC01	50.593	49.120	52.681	43.972	44.061	46.738	49.050				
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	10.386	2.464	7.000	0.000	0.000	0.000	0.000				

A. Mission Description and Budget Item Justification: The GCCS-J is the Department of Defense (DoD) Joint Command and Control (C2) System of Record and is essential to achievement of DoD Transformation objectives focusing on new Information Technology (IT) concepts, injecting new technologies, incrementally fielding relevant products and seeking to identify revolutionary technological breakthroughs. GCCS-J implements Joint Chiefs of Staff validated and prioritized joint C2 requirements. The GCCS-J suite of mission applications/systems provides critical joint warfighting C2 capabilities by presenting an integrated, near real-time picture of the battlespace for planning and execution of joint military and multinational operations. GCCS-J is used by all nine combatant commands at sites around the world, supporting joint and coalition operations. GCCS-J is a DoD major IT investment and designated as an Acquisition Category (ACAT) IAM Major Automated Information System (MAIS) program. GCCS-J is being implemented in an evolutionary manner through distinct blocks, using spiral development. Each block is self-contained, targets a specific set of user requirements and delivers multiple releases of GCCS-J functional capabilities, in accordance with an ASD (NII)-approved Acquisition Program Baseline (APB). GCCS-J Block V version releases will continue to address high priority requirements, and implement enhancements to fielded capabilities in support of the following mission areas: Intelligence; Situational Awareness; Readiness; and Force Planning, Employment, Protection, and Deployment. The program will continue to develop and refine enhancements to the core planning and assessment tools required by combatant commanders and their subordinate joint task force commanders. Because the GCCS-J program provides capability products that are critical to the direct fulfillment of military, intelligence, and other National Security Systems, the management of the GCCS-J program is an inherently governmental function. The requested RDT&E funding is critical to support DoD Transformation efforts in the area of Strategic and Operational Command and Control. In FY 2005, GCCS-J accelerated evolution towards a more net-centric, web-based, open system standards approach to providing C2 capabilities and services that will eventually result in a single integrated Joint C2 architecture. GCCS-J provided incremental improvements that incorporate cutting edge technologies and web-based, networked applications that can quickly access many sources of data and application logic. In FY 2006, RDT&E funding will finance the development of candidate applications and integration of Advanced Concept Technology Demonstrations (ACTDs) such as Situational

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
RDT&E, Defense-Wide/07	Global Command and Control System (GCCS) / PE 0303150K

Awareness enhancement tools to improve information warfare visualization and display. These tools will directly enhance the capabilities of the Deployable Joint Command and Control (DJC2), a tailorable system addressing Joint Force Commmanders' needs for air-, land-, and sea-based operations and the materiel solution for Standing Joint Force Headquarters.

Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) is a collaborative network of software tools that allows campaign planning, forecast predictions, information management and rapid execution. CFAST allows the dynamic preparation of campaign plans in a rapid expeditionary environment. The CFAST toolset will continue to adapt as required to support the Joint Planning and Execution Community (JPEC). CFAST is designed to meet DoD planning doctrine requirements of ongoing operations such as the Global War on Terrorism (GWOT) and future contingencies. The U.S. Pacific Command (USPACOM), U.S. European Command (USEUCOM), and other combatant commands are utilizing the current version of CFAST. The RDT&E funds provide CFAST system enhancements to support Joint Staff's expanding rapid deployment mission. These enhancements include user-intuitive capabilities for rapidly determining transportation requirements, performing course of action analyses, and projecting delivery profiles of troops and equipment by air, land, and sea. The improved system will be tailored for use by the Combatant Commanders component Services, regional commanders, Joint Task Forces (JTFs), and the Service staffs as a planning, forecasting, analysis, and execution tool for both deliberate and crisis action planning. The goal end-state is for rapidly produced, near-execution ready campaign plans that provide multiple courses of action; these virtual "living" plans will be adaptive to the changing regional and global environment.

В.

Program Change Summary:	FY05	FY06	FY07
Previous President's Budget	62.944	52.331	51.950
Current Submission	60.979	51.584	59.681
Total Adjustments	+1.965	-0.747	+7.731

Change Summary Explanation:

FY 2005 change is due to below threshold reprogramming.

FY 2006 change is due to undistributed Congressional reductions.

FY 2007 change is due to increased funding for CFAST and revised fiscal guidance.

Exhibit R-2a, RDT&E Project Justification			DATE: February 2006									
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE								
RDT&E, Defense-Wide/07			Global Command	and Contr	ol System (G	CCS) / PE 03	03150K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11					
Global Command and Control	50.593	49.120	52.681	43.972	44.061	46.738	49.050					
System- Joint/CC01												

A. Mission Description & Budget Item Justification: The GCCS-J is the Department of Defense (DoD) Joint Command and Control (C2) System of Record and is essential to achievement of DoD Transformation objectives focusing on new Information Technology (IT) concepts, injecting new technologies, incrementally fielding relevant products and seeking to identify revolutionary technological breakthroughs. GCCS-J implements Joint Chiefs of Staff validated and prioritized joint C2 requirements. The GCCS-J suite of mission applications/systems provides critical joint warfighting C2 capabilities by presenting an integrated, near real-time picture of the battlespace for planning and execution of joint military and multinational operations. GCCS-J is used by all nine combatant commands at sites around the world, supporting joint and coalition operations. GCCS-J is a DoD major IT investment and designated as an Acquisition Category (ACAT) IAM Major Automated Information System (MAIS) program. GCCS-J is being implemented in an evolutionary manner through distinct blocks, using spiral development. Each block is self-contained, targets a specific set of user requirements and delivers multiple releases of GCCS-J functional capabilities, in accordance with an ASD (NII)-approved Acquisition Program Baseline (APB). GCCS-J Block V version releases will continue to address high priority requirements, and implement enhancements to fielded capabilities in support of the following mission areas: Intelligence; Situational Awareness; Readiness; and Force Planning, Employment, Protection, and Deployment. The program will continue to develop and refine enhancements to the core planning and assessment tools required by combatant commanders and their subordinate joint task force commanders. Because the GCCS-J program provides capability products that are critical to the direct fulfillment of military, intelligence, and other National Security Systems, the management of the GCCS-J program is an inherently governmental function. The requested RDT&E funding is critical to support DoD Transformation efforts in the area of Strategic and Operational Command and Control. In FY 2005, GCCS-J accelerated evolution towards a more net-centric, web-based, open system standards approach to providing C2 capabilities and services that will eventually result in a single integrated Joint C2 architecture. GCCS-J provided incremental improvements that incorporate cutting edge technologies and web-based, networked applications that can quickly access many sources of data and application logic. In FY 2006, RDT&E funding will finance the development of candidate applications and integration of Advanced Concept Technology Demonstrations (ACTDs) such as Situational Awareness enhancement tools to improve information warfare visualization and display. These tools will directly enhance the capabilities of the Deployable Joint Command and Control (DJC2), a tailorable system addressing Joint Force Commmanders' needs for air-, land-, and sea-based operations and the materiel solution for Standing Joint Force Headquarters.

Exhibit R-2a, RDT&E Project Justification		DATE: February 2006									
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE							
RDT&E, Defense-Wide/07			Global Command	d and Contro	ol System (G	CCS) / PE 03	03150K				
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Global Command and Control	50.593	49.120	52.681	43.972	44.061	46.738	49.050				
System- Joint/CC01											

B. Accomplishments/Planned Program:

	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	34.531	41.214	42.422

Development and Strategic Planning: GCCS-J has executed Block IV (FY 2002 through FY 2005), and is currently executing Block V (FY 2004 through FY 2008). Block IV contains four spiral releases, including three that are fielded and operational. Implementation of a final spiral release (v4.0), which migrated all version 3.x capabilities to a new infrastructure, was initiated in FY 05 and will be fully operational in FY 06. Favorable fielding decisions were received for the three operational baselines contained within GCCS-J v4.0 on 18 January 05 (Status of Resources and Training System (SORTS) Strategic Server) and 2 September 05 (Joint Operational Planning & Execution System (JOPES) and GCCS-J Global Release). Functionality provided by GCCS-J Block IV expanded system performance capability by accelerating the development of selected Intelligence capabilities. This acceleration enabled the program to meet an operational requirement for increased support to the Global War on Terrorism (GWOT), and expedited development of Integrated Imagery Intelligence (I3) Enhanced, Joint Targeting Toolbox (JTT), Integrated Many on Many (IMOM), Collection Management Mission Application (CMMA), and Common Operational Picture (COP) enhancements. Major Block IV capabilities include:

- I3 Enhancements incorporate functional changes to the fielded I3 version.
- Improved Many on Many (IMOM) is a 2-D graphic oriented user-interactive program, which aids in mission planning and Intelligence Preparation of the Battlespace (IPB) analysis.
- Joint Threat Analysis Tools/Global Templating Toolkit (JTAT/GTT) generates terrain suitability and other tactical decision aids based on military aspects of terrain.
- Collection Management Mission Applications (CMMA) automates the generation and registration of Intelligence requirements; fuses validated requirements into all-source collection plans; synchronizes collection plans with combat operations; monitors execution of collection plans through tasking and requests for tasking; provides near real-time assessment of execution effectiveness; and enables rapid modification of collection plans based on assessment findings.

Exhibit R-2a, RDT&E Project Justification			DATE: February 2006									
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE								
RDT&E, Defense-Wide/07			Global Command	d and Contro	ol System (G	CCS) / PE 03	03150K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11					
Global Command and Control	50.593	49.120	52.681	43.972	44.061	46.738	49.050					
System- Joint/CC01												

- Global Status of Resources and Training System (GSORTS) Enhancements are Force Readiness enhancements which will provide the capability to track Service units and partial unit deployment/employment.
- JOPES incorporates functional changes to a reengineered, modernized version of the current JOPES system running on significantly upgraded servers. It provides substantial improvements in maintainability, reliability, security, communications, database synchronization, and system management.
- Common Operational Picture (COP) enhancements are highlighted by track amplifications, including the ability to differentiate and segregate simulated, exercise, and real tracks, and selectively display each group. Upgrades also included initial implementation of a community process developed Web COP.

GCCS-J Block V will incorporate new and enhanced capabilities to the v4.0 baseline. By partnering with Global Information Grid (GIG) enterprise services initiatives, GCCS-J will evolve the initial web-based architecture and maximize the use of emerging net-centric/web services. High priority services for early inclusion in Block V are: identity management via Public Key Infrastructure (PKI); directory services; portal framework; and publish/subscribe capability. Block V releases of GCCS-J will deliver a secure, collaborative, web-enabled, and tailorable C2 architecture that provides decision superiority and vertical/horizontal interoperability. Major Block V capabilities include:

- Common Operational Picture (COP) enhancements will improve the ability to display Air Tasking Order (ATO), to include more complete data and enhance user ability to manipulate the display (i.e. data selection, filtering, etc). In addition, COP has the ability to display and manipulate data associated with sites of interest including sea, air, and ground routes.
- Adaptive Battlespace Awareness (ABA) will increase the ability to filter and visualize COP data and to set and recall user-definable templates. It will also send/view alerts to/from other COP users for Operationally Significant Intelligence changes.
- Web-Enabled Execution Management Capability (WEEMC) enhancements will provide common target and weapon information across all component commanders and workflow management tools to enable common consistent deconflicted prosecution of targets.
- Generic Area Limitation Environment (GALE) Lite will integrate Signal Intelligence (SIGINT) sources into COP and provide tools to automate retrieval, creation, update, and deletion of local database SIGINT records.

Exhibit R-2a, RDT&E Project Justification			DATE: February 2006									
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE								
RDT&E, Defense-Wide/07			Global Command	d and Contr	ol System (G	CCS) / PE 03	03150K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11					
Global Command and Control	50.593	49.120	52.681	43.972	44.061	46.738	49.050					
System- Joint/CC01												

- Joint Network Management System (JNMS) will provide capability to graphically display Information Operations/Information Warfare (IO/IW) threats and own force network architectures.
- Public Key Infrastructure (PKI) Certificates will build upon the initial implementation of server PKI certificates in GCCS-J v4.0 and will fully implement strong authentication methods (client and server authentication) using PKI certificates.
- Weapons of Mass Destruction Medical Analysis Tool (WMD MAT) will enable medical planners to estimate medical resource requirements and perform course of action analysis for both conventional and non-conventional scenarios.
- Joint Engineering Planning and Execution System (JEPES) will automate the Civil Engineering deployment planning process using current business rules.

Integration and Test (I&T): GCCS-J's incremental, spiral I&T approach permits an earlier start of integration testing since all new segments will not be available at the beginning of integration 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 DOT&E guidelines, and determined through an initial risk assessment conducted by the GCCS-J Program Manager Office (PMO), Block V spiral releases will be relatively low risk, with minimal potential to (1) impact other system applications and (2) disrupt the basic system's ability to support the mission.

Joint Information Technology Center Initiative: The Joint Information Technology Center Initiative funding utilized the Pacific-based Information Technology Center (ITC) in Alaska. This center allowed DoD to integrate and implement the many successful logistics and personnel initiatives underway throughout the Department of Defense (DoD). The center processed the wide range and volume of information essential for the day-to-day operations of our

Exhibit R-2a, RDT&E Project Justification			DATE: February 2006									
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE								
RDT&E, Defense-Wide/07			Global Command	d and Contr	ol System (G	CCS) / PE 03	03150K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11					
Global Command and Control	50.593	49.120	52.681	43.972	44.061	46.738	49.050					
System- Joint/CC01												

military personnel and defense civilians. The center allowed DoD to eliminate legacy systems and to upgrade to more capable and more flexible information technology tools.

C. Other Program Funding Summary:

O&M	FY05 92.982	<u>FY 06</u> 92.929	<u>FY 07</u> 95.422	<u>FY 08</u> 88.390	<u>FY 09</u> 89.668	<u>FY 10</u> 90.256	<u>FY 11</u> 88.498	To Complete Contg	Total Cost Contg
Procurement	4.691	5.424	5.584	4.999	5.223	5.533	5.694	Contg	Contg

D. <u>Acquisition Strategy</u>: GCCS-J development, integration, and migration efforts are primarily supported through Cost Reimbursable Task Orders (TO) 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 vs. software development, integration, or testing. The GCCS-J Acquisition Strategy is structured to retain contractors capable of satisfying cost, schedule, and performance objectives. 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 (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance.

E. Performance Metrics:

Capabilities Provided: In August 2005 Joint Staff published the GCCS-J Block V Requirements Identification Document (RID) as the requirements baseline for Block V. Each Block V version release will address outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities. These enhancements may take the form of modifications to 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

Exhibit R-2a, RDT&E Project Justification			DATE: Februar	ry 2006			
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE			
RDT&E, Defense-Wide/07			Global Command	d and Contr	ol System (G	CCS) / PE 03	03150K
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	50.593	49.120	52.681	43.972	44.061	46.738	49.050

sources.

Cost & Schedule Management: The PMO 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. The PMO evaluates performance by conducting thorough Post-award Contract Reviews (PCRs) and monthly Contract Performance Reviews (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.

Exhibit R-3 Cost Analy	rsis			DATE: February 2006											
APPROPRIATION/BUDGET A	_	PROGRAM ELEMENT Global Command (GCCS) PE 03031	and Cont	rol Syste	em			AND NUMB nd and Co	SER ontrol Sys	stem-Joir	nt / CC01				
Cost Category	Contract Method & <u>Type</u>	Performing Activity & Location	Total PYs <u>Cost</u>	FY 06 Cost	FY 06 Award	l F	ry 07 Cost	FY 07 Award Date	Cost to	Total Cost	Target Value of Contract				
Product Development	CPAF	NGMS, Reston, VA	20.421	15.330	May -	-06 1	1.251	May -07	Contg	Contg	47.002				
Product Development	CPAF	NGMS, Reston, VA	15.576	6.743	Feb-0)6 1	0.286	Feb-07	Contg	Contg	32.605				
Product Development	CPAF	AB Floyd, Alexandria, VA	8.265	4.589	May-()6 4	1.751	May-07	Contg	Contg	17.605				
Product Development	CPFF	SAIC, Falls Church, VA	5.876	0.000	N/A	0	0.000	N/A	0.000	5.876	5.876				
Product Development	CPFF	SAIC, Falls Church, Va	2.090	2.401	Jan ()6 2	2.744	Jan 07	Contg	Contg	7.235				
Product Development	FFP	Dynamic Systems, Los Angeles, CA	1.310	0.899	Feb-(0 0	.444	Feb-07	Contg	Contg	2.653				
Product Development	CPFF	Pragmatics, McLean, VA	10.001	4.833	Jul -	-06 6	5.632	Jul-07	Contg	Contg	21.466				
Product Development	MIPR	Booz Allen Hamilton, McLean, VA	3.394	0.000	N/A	0	0.000	N/A	0.000	3.394	3.394				
Product Development	MIPR	JDISS, Suitland, MD	6.039	3.735	Dec-0)5 4	1.333	Dec-06	Contg	Contg	14.107				
Product Development	MIPR	SPAWAR, Charleston, SC	1.759	1.066	Jun-(0 0).935	Jun-07	Contg	Contg	3.760				
Product Development	FFRDC	MITRE, McLean, VA	2.350	1.085	Oct-()5 1	.046	Oct-06	Contg	Contg	4.481				

Exhibit R-3 Cost Anal	ysis				DATE: February 2006										
APPROPRIATION/BUDGET	ACTIVITY		PROGRAM ELEMENT				PR	ROJECT NAME	AND NUM	BER					
RDT&E, Defense-Wide/0	Global Command and C (GCCS) PE 0303150K						ontrol System Global Command and Control System-								
Cost Category	Contract Method & Type	Perfo Locat	orming Activity &	Total PYs Cost	FY 06 Cost	FY 0 Awar Date	rd	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract			
Product Development	MISC	MISC		1.382	0.533	N/A		0.000	N/A	0.000	1.915	1.915			
Product Development	FFP		: Info Technology er Initiative	20.400	0.000	N/A		0.000	N/A	0.000	20.400	20.400			
Test & Evaluation	CPAF	SAIC	Falls Church, vA	12.350	5.543	Feb-	06	7.230	Feb-07	Contg	Contg	25.123			
Test & Evaluation	MIPR	JITC	. Ft Huachuca, AZ	5.632	1.831	Oct-	05	2.524	Oct-06	Contg	Contg	9.987			
Test & Evaluation	MIPR	SSC,	San Diego, CA	3.360	0.532	Nov-	-05	0.505	Nov-06	Contg	Contg	4.397			
Total				120.205	49.120			52.681							

Exhibit R-4 Schedule Profile															Date	e: F	ebr	uary	/ 200) 6								
Appropriation/Budget Activity RDT&E, Defense-Wide/07	et Activity Program Element Number Wide/07 Global Command and Control Sy								ber and Name F System/PE 0303150K Globa							Project Number and Name oal Command and Control/CC0)1							
Fiscal Year		2005				2006				2	007			20	800			200)9	9 2010				2011				
FISCAL TEAL	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Development and	\wedge	\backslash	$\sqrt{}$	\wedge		\wedge	\wedge	\wedge	\wedge	\wedge	\wedge	\wedge	$ $ \wedge	\wedge		\wedge		\wedge	\wedge		$ $ \wedge	\wedge	\wedge		$ $ \wedge	\wedge	<u></u>	\wedge
Strategic Planning	В	loci	ks I\	//V		Blo	k V		E	3loc	k۷			Bloc	k۷		В	ock	V		ВІ	ock	٧		В	lock	V	
Integration and Testing	\wedge	\backslash	\wedge	\wedge	_			\wedge	_			\wedge	_	^		\wedge		^	\wedge	\wedge		\wedge			/	_/	\wedge	Λ
mogration and rooting	E	Bloc	ks I	V/V	E	loc	k V		E	Bloc	k۷			3loc	k۷		В	lock	V		В	lock	۷ ،		~	Bloci	c۷	

During Block V, GCCS-J will enhance the GCCS-J infrastructure and functional capabilities to support the Department's net-centric vision. GCCS-J will migrate to a more sophisticated "ntier" architecture supporting dynamic infrastructure resources, thin browser-based clients, and net-centric, enterprise services. High priority services for early inclusion are identity management via Public Key Infrastructure (PKI), directory services, portal framework, and publish/subscribe capability. To achieve this 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.

GCCS-J will transition to the JC2 capability, in accordance with schedules that will be established in concert with the JC2 program. The Program will enter into sustainment until JC2 is fully operational. Sustainment efforts include, but are not limited to, the design and testing of technical changes/software patches to the operational GCCS-J system to address high priority Global System Problem Reports (GSPRs) and Information Assurance Vulnerabilities (Alerts, Bulletins, and Technical Advisories).

Exhibit R-4a Schedule Detail			DATE: Febr	ruary 2006									
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT Clabal Command and Control Control (CCCC)											
RDT&E, Defense-Wide/07	Global Comm PE 0303150k	Slobal Command and Control System (GCCS) / Global Command and Control System-Joint / CC01											
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011						
Development and Strategic Planning	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q						
Integration and Test	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q						

During Block V, GCCS-J will enhance the GCCS-J infrastructure and functional capabilities to support the Department's net-centric vision. GCCS-J will migrate to a more sophisticated "n-tier" architecture supporting dynamic infrastructure resources, thin browser-based clients, and net-centric, enterprise services. High priority services for early inclusion are identity management via Public Key Infrastructure (PKI), directory services, portal framework, and publish/subscribe capability. To achieve this 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.

GCCS-J will transition to the JC2 capability, in accordance with schedules that will be established in concert with the JC2 Program. The Program will enter into sustainment until JC2 is fully operational. Sustainment efforts include, but are not limited to, the design and testing of technical changes/software patches to the operational GCCS-J system to address high priority Global System Problem Reports (GSPRs) and Information Assurance Vulnerabilities (Alerts, Bulletins, and Technical Advisories).

Exhibit R-2a, RDT&E Project Justification	DAT	DATE: February 2006										
APPROPRIATION/BUDGET ACTIVITY	MENT			PROJEC	T NAME AND	NUMBER						
RDT&E, Defense-Wide/07	Global Command and Control System / Collaborative Force Analysis,											
	PE 0303150K			l l			Transport	ation				
	System (CFAST)/CC02											
Cost (in millions)	FY05	FY06	FY07	FY	708	FY09	FY10	FY11				
Collaborative Force Analysis,	10.386	2.464	7.000	0.	000	0.000	0.000	0.000				
Sustainment, and Transportation												
System (CFAST)/CC02												

A. Mission Description and Budget Item Justification:

Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) is a collaborative network of software tools that allows campaign planning, forecast predictions, information management and rapid execution. CFAST allows the dynamic preparation of campaign plans in a rapid expeditionary environment. The CFAST toolset will continue to adapt as required to support the Joint Planning and Execution Community (JPEC). CFAST is designed to meet DoD planning doctrine requirements of ongoing operations such as the Global War on Terrorism (GWOT) and future contingencies. The U.S. Pacific Command (USPACOM), U.S. European Command (USEUCOM), and other combatant commands are utilizing the current version of CFAST. The RDT&E funds provide CFAST system enhancements to support Joint Staff's expanding rapid deployment mission. These enhancements include user-intuitive capabilities for rapidly determining transportation requirements, performing course of action analyses, and projecting delivery profiles of troops and equipment by air, land, and sea. The improved system will be tailored for use by the Combatant Commanders component Services, regional commanders, Joint Task Forces (JTFs), and the Service staffs as a planning, forecasting, analysis, and execution tool for both deliberate and crisis action planning. The goal end-state is for rapidly produced, near-execution ready campaign plans that provide multiple courses of action; these virtual "living" plans will be adaptive to the changing regional and global environment.

B. Accomplishments/Planned Program:

	FY 05	FY 06	FY 07
Subtotal Cost	9.186	$\frac{2.176}{}$	6.500

Development and Strategic Planning: CFAST Version 2.0 provided a prototype enhanced deliberate planning capability. CFAST Version 3.0 added an initial capability for Crisis Action Planning and Adaptive Planning. In FY 2005, CFAST began fielding of Version 3.1 (developed in FY 2004). Following receipt of final user requirements in Aug 2005, CFAST began spiral development of Block 3.X (FY 2005 through FY 2007), which will introduce more sophisticated planning

Exhibit R-2a, RDT&E Project Justification	DAT	DATE: February 2006									
APPROPRIATION/BUDGET ACTIVITY	MENT		PR	OJECT NAME AN	D NUMBER						
RDT&E, Defense-Wide/07	Global Command and Control System / Collaborative Force Analysis,										
	PE 0303150K Sustainment, and Transportation										
	System (CFAST)/CC02										
Cost (in millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Collaborative Force Analysis,	10.386	2.464	7.000	0.00	0.000	0.000	0.000				
Sustainment, and Transportation											
System (CFAST)/CC02											

capabilities, including execution planning/re-planning during crisis and execution. CFAST Version 3.x is anticipated to meet the following operational requirements:

- Force Builder A force-generation tool used to automate the design and building of Time Phased Force and Deployment Data (TPFDD) files for deliberate planning. It allows the planner to build forces, group them into force modules and place them into a priority of movement that is honored by other CFAST scheduling applications.
- Lift Allocator A collaborative tool between United States Transportation Command (USTRANSCOM) and the other Combatant Commands that calculate an average daily throughput tonnage by day. This ceiling will in turn be allocated to service components as their daily limit on transportation flow.
- Force Packager A CFAST application used to quickly build TPFDD requirements including "below the line" Combat Support and Combat Service Support (CS/CSS) capability based on rules of allocation for each service. Will provide a "one click" process for building large force requirements in support of the published Concept of Operations (CONOPS).
- Plan Builder Generate decision logs and reports.
- AmmoGen Generate ammo sustainment requirements during the building of a plan.
- PerGen Personnel Generator will allow modifications of scenarios by service for inclusion in dynamic plans/adaptive situations.
- SusGen Sustainment Generator allows for merging of scenarios by service. Imports scenarios created in standalone Joint Flow and Analysis System for Transportation (JFAST).
- Plan Viewer Option to show force flow data across modules by date range.
- Execution management tool A CFAST tool used to absorb and manage USTRANSCOM analysis and scheduling system data. It allows the user to create tools that validate movement requirements, assign requirements to carriers, report movement, and track strategic and theater lift assets and requirement movement through the Defense Transportation System globally.
- Theater log CONOPS management tool A CFAST tool that enables logistics planners to develop theater-wide concept of operations. It provides automated planning, and enables planning for theater distribution of supplies and equipment. Include support available, where applicable, from the host nation.

Exhibit R-2a, RDT&E Project Justification	DAT	DATE: February 2006										
APPROPRIATION/BUDGET ACTIVITY	MENT		NUMBER									
RDT&E, Defense-Wide/07	Global Command and Control System / Collaborative Force Analysis,											
	PE 0303150K				Sustai	inment, and	Transport	ation				
	System (CFAST)/CC02											
Cost (in millions)	FY05	FY06	FY07	F	708	FY09	FY10	FY11				
Collaborative Force Analysis,	10.386	2.464	7.000	0.	000	0.000	0.000	0.000				
Sustainment, and Transportation												
System (CFAST)/CC02												

- Log Force adequacy tool The Log Force Adequacy tool will enable logistics planners, via automation, to evaluate the force list (Time Phased Force Deployment Data TPFDD) and develop estimates of supportability/concept of operations for providing adequate and timely support.
- Plan Development and Execution Process Workflow Manager- Provide capability similar to Microsoft Project for management and graphical layout of the campaign and war planning process.
- Data exchange capability (Data Port) Continue expanding the data port interface library by developing interfaces with the vast number of external systems identified by the CFAST Users Group in Jul 05.
- Planning Application Integration Develop a collaborative working environment that provides the capability to absorb, manipulate, model, display and provide updated data containing critical plan elements to/from DLA, the intelligence community, the Standing Joint Force HQ, special operations forces and the Joint medical community.

	FY 05	FY 06	FY 07
Subtotal Cost	1.200	0.288	0.500

Integration and Test (I&T): CFAST employs an incremental spiral I&T methodology. Focus is on rapidly fielding capability to users for evaluation during actual planning events. This approach permits an earlier start of integration testing. This risk reduction strategy allows testing in smaller, more manageable increments, while still enforcing a level of testing commensurate to the operational and technical complexity of each release. In accordance with DOT&E guidelines, testing is determined through an initial risk assessment conducted by the CFAST PMO.

Exhibit R-2a, RDT&E Project Justification	DAT	E: Februar	ry 20	06						
APPROPRIATION/BUDGET ACTIVITY	MENT		NUMBER							
RDT&E, Defense-Wide/07	Global Command and Control System / Collaborative Force Analysis,									
	PE 0303150K				Sustai	nment, and	Transporta	ation		
	System (CFAST)/CC02									
Cost (in millions)	FY05	FY06	FY07	F	Y08	FY09	FY10	FY11		
Collaborative Force Analysis,	10.386	2.464	7.000	0	.000	0.000	0.000	0.000		
Sustainment, and Transportation										
System (CFAST)/CC02										

C. Other Program Funding Summary:

								To	Total
	FY05	FY06	FY07	FY08	FY09	FY10	FY11	Complete	Cost
Procurement, DW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
O&M, DW	0.000	4.500	0.000	0.000	0.000	0.000	0.000	0.000	4.500

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 CFAST and the Defense Information Systems Agency (DISA) as the Material Solution Provider, effective July 2004. The CFAST Acquisition Strategy is structured to retain contractors capable of satisfying cost, schedule, and performance objectives. The CFAST project utilizes Cost Reimbursable Task Orders (TO) issued under competitively awarded contracts. The CFAST project maximizes use of competitively awarded IDIQ contracts and requires contractors to establish and manage specific earned value data. The CFAST project's strategy mitigates risk by requiring monthly Contract Performance Reviews (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance.

Exhibit R-2a, RDT&E Project Justification		DAT	E: Februar	ry 2006								
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT		Pl	ROJEC	T NAME AND	NUMBER					
RDT&E, Defense-Wide/07	Global Command and Control System / Collaborative Force Analysis,											
	PE 0303150K			St	ustai	nment, and	Transporta	ation				
	System (CFAST)/CC02											
Cost (in millions)	FY05	FY06	FY07	FY0	8	FY09	FY10	FY11				
Collaborative Force Analysis,	10.386	2.464	7.000	0.00	0.0	0.000	0.000	0.000				
Sustainment, and Transportation												
System (CFAST)/CC02												

E. Performance Metrics:

Cost & Schedule Management - The CFAST project 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. The CFAST project leader evaluates performance by conducting thorough Post-award Contract Reviews (PCRs) and monthly Contract Performance Reviews (CPRs). The CFAST project leader also conducts weekly critical path reviews of the CFAST release schedules to ensure tasks are on track and to mitigate risk across the entire program.

Exhibit R-3 Cost Analysis						DATE: February 2006										
APPROPRIATION/BUDG	GET ACTIVI	TTY	PROGRA	M ELEMENT				PROJECT I	NAME AN	D NUMBER	1					
RDT&E, Defense-Wid	de/07		Global	Command a	and Cont	rol System		Collabor	ative F	orce Ana	lysis, Su	ıstainm	ent, and			
			(GCCS)	PE 030315	0K			Transpor	tation	System (CFAST) /	CC02				
	Contract	Perform	ing					FY 06		FY 07			Target			
	Method &	Activit	у &	Total		F	Y 06	Award	FY 07	Award	Cost to	Total	Value of			
<u>Cost Category</u>	Type	Locati	<u>on</u>	PYs Cost		<u>C</u>	lost	<u>Date</u>	Cost	<u>Date</u>	Complete	Cost	Contract			
Product Development	MIPR	ORNL, Oak I	Ridge,	7.186		1.	.695	Feb-06	6.500	Feb-07	Contg	Contg	15.381			
Product Development	CPAF	Pragmatics, McLean, VA	,	2.000		0.	.481	Feb-06	0.000	N/A	Contg	Contg	2.481			
Test and Evaluation	MIPR	ORNL, Oak I	Ridge,	1.200		0.	.288	Feb-06	0.500	Feb-07	Contg	Contg	1.988			
Total				10.386		2.	.464		7.000							

Exhibit R-4 Schedule Profile															Dat	e: F	ebr	uary	/ 20	06								
Appropriation/Budget Activity RDT&E, Defense-Wide/07					Gl	oba	Pro I Co	ogra mm	am E and	elen and	nent d Co	Nu	mbei ol Sy	r and	d Na n/Pl	ame = 030	315	60K		i	Proje	ct N	umb AST	er a	nd 202	Nam	ne	
Fiscal Year		;		2006			2007				2008				200	09			2010				2011					
Fiscai Year	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Development and Strategic Planning		\triangle	\wedge	Δ		<u> </u>	\triangle	\sim	\triangle	ightharpoonup	Δ																	
			CF	AST	v3.	0 to	3.X	Tra	nsit	ion																		
Integration and Testing			\wedge	Δ	<u> </u>		'		1 —		<u> </u>	Δ																
		(CFA	ST	v3.0) to	v3.X	(Tra	nsi	tion																		

CFAST Version 2.0 provided a prototype enhanced deliberate planning capability. CFAST Version 3.0 added an initial capability for Crisis Action Planning and Adaptive Planning. In FY 2005, CFAST began fielding of Version 3.1 (developed in FY 2004). Following receipt of final user requirements in Aug 2005, CFAST began spiral development of Block 3.X (FY 2005 through FY 2007), which will introduce more sophisticated planning capabilities, including execution planning/re-planning during crisis and execution.

Exhibit R-4a Schedule Detail			DATE: Febr	ruary 2006					
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELI Global Comm PE 0303150H	nand and Con	ntrol System	PROJECT NAME AND NUMBER Collaborative Force Analysis Sustainment, and Transportat: System / CC02					
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
Development and Strategic Planning	1-4Q	1-4Q	1-4Q	N/A	N/A	N/A	N/A		
Integration and Test	1-40	1-40	1-4Q	N/A	N/A	N/A	N/A		

Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) Version 2.0 provided a prototype enhanced deliberate planning capability. CFAST Version 3.0 added an initial capability for Crisis Action Planning and Adaptive Planning. In FY 2005, CFAST began fielding of Version 3.1 (developed in FY 2004). Following receipt of final user requirements in Aug 2005, CFAST began spiral development of Block 3.X (FY 2005 through FY 2007), which will introduce more sophisticated planning capabilities, including execution planning/re-planning during crisis and execution.

Exhibit R-2, RDT&E Budget Item Justificati		DATE: February 2006										
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE											
RDT&E, Defense-Wide/07	Joint Spectrum Center /PE 0303153K											
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11					
Joint Spectrum Center /JS1	17.839	13.896	12.448	14.804	15.468	16.066	16.670					

A. Mission Description and Budget Item Justification:

The Joint Spectrum Center's (JSC) mission is to ensure the Department of Defense's (DoD) effective use of the electromagnetic spectrum in support of national security and military objectives. The JSC serves as the DoD center of excellence for Electromagnetic (EM) spectrum management matters in support of the Unified Commands, Joint Staff, Assistant Secretary of Defense for Networks and Information Integration (ASD (NII)), Military Departments, and Defense Agencies. The JSC supports the Electronic Protect missions of Information Warfare (IW) as they relate to spectrum supremacy. It is responsible for developing and maintaining DoD standard information systems that support DoD spectrum related activities and processes. Specifically, the Center designs, develops, and maintains DoD automated spectrum management systems, evaluation tools, and databases employed by the Unified Commands, Military Departments, and Defense Agencies. The JSC databases are the prime sources of information for DoD use of the EM spectrum. The JSC provides technical assistance to the Office of Assistant Secretary of Defense (OASD) NII, the Joint Staff, DoD activities and the Unified Commands in support of spectrum policy decisions and ensuring the development, acquisition, and operational deployment of systems that 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 Center is the DoD focal point for technical spectrum related support, Electromagnetic Environmental Effects (E³), and EM interference resolution 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), Command and Control (C2) Protect and other defensive IW activities as directed by the Joint Staff. This program element is under Budget Activity 07 because it supports operational systems development.

Accomplishments/Planned Program:

Spectrum Knowledge Resources	FY 05	<u>FY 06</u>	FY 07
Subtotal Cost	6.703	6.665	6.913

This function includes development and updates of DoD systems such as the Frequency Resource Record System (FRRS), the Spectrum Certification System (SCS), and the Spectrum Requirements System (SRS) which provide critical frequency assignment and equipment data that is necessary in predicting and avoiding spectrum conflicts. This area also includes development and updates of the SPECTRUM XXI, the joint standard DoD spectrum management system. This system ensures DoD has adequate spectrum access to accomplish its missions by addressing the regulatory requirements of host nation

Exhibit R-2, RDT&E Budget Item Justificati	on		DATE: February 2006									
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE											
RDT&E, Defense-Wide/07	Joint Spectrum	n Center /P	E 0303153K									
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11					
Joint Spectrum Center /JS1	17.839	13.896	12.448	14.804	15.468	16.066	16.670					

spectrum administrations and by ensuring that a common operating picture of the spectrum is available to the warfighter. SPECTRUM XXI Version 4.2 was released in FY 2005 with periodic releases planned thereafter.

Electromagnetic Environmental Effects (E3)	FY 05	FY 06	FY 07
Subtotal Cost	2.994	2.598	2.779

The mission of this program is to ensure that DoD platforms, systems, equipment, and other assets can effectively use the Electromagnetic (EM) spectrum in support of national security and military objectives. It supports the requirements generation system, the DoD acquisition process, operational test and evaluation, and EM compatibility standardization. Algorithms and E3 analytical tools are developed for functions such as Hazards of Electromagnetic Radiation to Ordnance (HERO) risk assessments in support of the COCOMS and the Joint Task Force (JTF). Assessments are conducted to determine system and equipment limitations in the operational EM environment. Efforts also include the development and maintenance of the JSC Ordnance E3 Risk Assessment Database (JOERAD), a decision support system that helps the warfighter make critical decisions about the hazards associated with the use of introduced ordnance within complex EM environments.

Emerging Spectrum Technology (EST)	FY 05	<u>FY 06</u>	FY 07
Subtotal Cost	8.142	4.633	2.756

The JSC, in conjunction with the Defense Spectrum Office, has the responsibility of planning, developing, and executing the DISA Emerging Spectrum Technology (EST) program to improve 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. This support will provide R&D analysis support to NII and other organizations with executive summary presentations; high-level reports and briefings; development of R&D roadmaps; development of an EST Testbed concept; and detailed survey and review of emerging technologies to identify trends and analyze their implications on DoD spectrum management and supportability processes and procedures. As part of the outreach efforts, focused partnerships will be pursued with internal DoD departments, federal agencies, private industry, and the academic world to complement current and future DoD R&D spectrum initiatives; collaborative spectrum R&D opportunities; advocacy of new spectrum strategies; and sponsorship of spectrum conferences and technical information exchanges. The JSC will produce necessary tools for conducting technical analyses of next-generation technologies in support of efficient DoD use of the spectrum. Efforts include the development of models, algorithms, and measurement tools for use in analyzing ultra-wideband technologies, software defined radios, and high-power and

Exhibit R-2, RDT&E Budget Item Justificati		DATE: February 2006									
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE										
RDT&E, Defense-Wide/07		Joint Spectrum Center /PE 0303153K									
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11				
Joint Spectrum Center /JS1	17.839	13.896	12.448	14.804	15.468	16.066	16.670				

directed-energy weapons. In software defined radios, the parameters (frequency range, modulation type, or maximum power) can be altered by making a software modification without changing hardware components that can affect the radio frequency emissions. As for directed energy weapons, these systems will be evaluated with respect to E3 and measurements conducted to assist in modifying Military Standards to ensure compatible coexistence of these systems with legacy systems. The FY 2005 program included the development of capabilities necessary to evaluate and manage the use of Emerging Spectrum Technologies (EST) on the battlefield, expansion of test and measurement capabilities to characterize EST systems and validate modeling capabilities, and outreach and engagement activities (key to identification and initial assessment of EST). Planned for FY 2006 and FY 2007 is completion of the EST Testbed Prototype. The goal of the Spectrum Testbed initiative is to establish capabilities that provide simulation and hardware facilities to assess and measure performance of innovative spectrum access methods, systems, and components. The JSC is developing an initial spectrum testbed prototype intended to demonstrate the knowledge that can be gained from such a capability and the benefits in terms of more effective spectrum operations. The JSC will conduct an assessment of the electromagnetic spectrum implications of adaptive networks and potential application to support DoD warfighting concepts. These networks typically consist of mobile nodes that communicate over wireless links, without any fixed network infrastructure or central control. JSC will investigate how network management functions such as initialization, routing, and security are distributed among the nodes can be combined with spectrum management for effective spectrum operations in support of network-centric warfare.

B. Program Change Summary:

	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	17.839	14.097	14.279
Current Submission	17.839	13.896	12.448
Total Adjustments	0.000	-0.201	-1.831

Change Summary Explanation: FY 2006 change is due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation. FY 2007 funding change is due to the start of the new Spectrum Supportability System (S3) funded in O&M and the reprioritization of RDT&E funds for that program.

Exhibit R-2, RDT&E Budget Item Justificati	1	DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	1	R-1 ITEM NOMENCLATURE								
RDT&E, Defense-Wide/07		Joint Spectrum	n Center /P	E 0303153K						
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11			
Joint Spectrum Center /JS1	17.839	13.896	12.448	14.804	15.468	16.066	16.670			

C. Other Program Funding Summary:

	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>	<u>FY 08</u>	FY 09	FY 10	<u>FY 11</u>	<u>To</u> Complete	Total Cost
O&M, DW	14.293	15.567	19.958	15.284	16.727	16.828	16.509	Contg	Contg

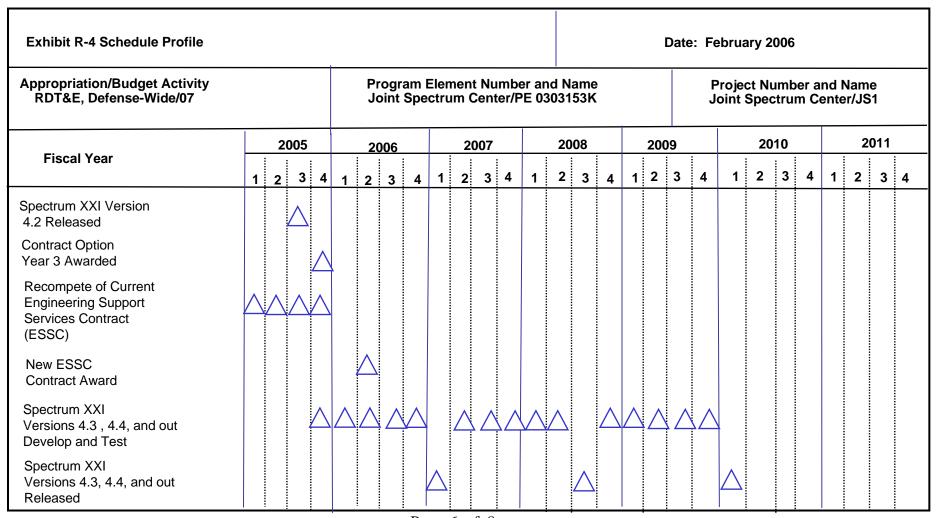
D. <u>Acquisition Strategy</u>: Engineering support services for the JSC are provided via contract. No in-house government capability exists, nor is it practical to develop one that can provide the expertise necessary to fulfill the mission and responsibilities of the JSC. Full and open competition was used for the acquisition of the current contract with ALION Science and Technology that became effective 24 August 2000 with a basic period of two years and three one year options. The final option was extended 6 months to allow completion of the recompetition efforts with expected award in FY 2006.

E. Performance Metrics:

Employ through analyses, planning, and policy, emerging spectrum-dependent technologies to enhance DoD operational capabilities by:

- a. Identifying/base lining the number of technologies to assess (% of spectrum-dependent technologies assessed).
- b. Forming strategic alliances with government, industry and academia to advocate, influence, and promote spectrum dependent emerging technologies (% of partnerships formed after outreach and engagement).

Exhibit R-3 Cost Analy	rsis			DATE: Februa	E: February 2006								
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM EI	LEMENT		PROJECT	NAME AN	D NUMB	ER					
RDT&E, Defense-Wide/07	7	Joint Spec	ctrum Center /	PE 0303153K	Joint Sp	ectrum	Center	/ JS1					
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 0 Cost		FY 07 Cost	FY 07 Award Date	Cost to Complete	Total <u>Cost</u>	Target Value of Contract			
Contractor Engineering/Technical Spt	C/CPAF	IIT Research Inst Annapolis, MD	13.408					0	13.408	13.408			
GFE	C/CPAF	IIT Research Inst Annapolis, MD	.800					0	.800	.800			
Engineering/Technical Support	C/FF	Georgia Tech	.186					0	.186	.186			
Engineering/Technical Support	C/FF	Virginia Tech	.170					0	.170	.170			
Engineering/Technical Support	MIPR	Various	2.205	. 435	Var			0	2.640	2.640			
Contractor Engineering/Technical Spt	C/CPFF	Various	1.619					0	1.619	1.619			
Contractor Engineering/Technical Spt	C/CPAF	ALION Annapolis,	59.980	4.42	0 10/05			0	64.400	64.400			
GFE	C/CPAF	ALION Annapolis,	4.439					0	4.439	4.439			
Contractor Engineering Technical/Spt	C/TBD	TBD		9.04	1 03/06	12.448	10/06	Contg	Contg	Contg			
Subtotal Test & Evaluation			82.807	13.8	96	12.448							
Total			82.807	13.8	96	12.448							



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Appropriation/Budget Activity RDT&E, Defense-Wide/07						Program Element Number and Joint Spectrum Center/PE 030				nd N 3031					F J	Project Number and Name Joint Spectrum Center /JS1				е 31								
- :		2	005			2	006			2	007			20	800			200)9			20	10			2	2011	
Fiscal Year	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	
High-power High- energy Assessment		Δ																										
Adaptive Networks Assessments														,	Δ													
Software Defined Radio Modeling n OPNET						Δ																						
Cosite Capability for EST							Δ																					
Testbed Prototype Demo		Δ																										

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Exhibit R-4a Schedule Detail			DATE: Febr	uary 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT			PROJE	CT NAME AND	NUMBER
RDT&E, Defense-Wide/07	Joint Spect	rum Center	/ PE 0303153	3K	Joint	Spectrum Ce	enter / JS1
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
SPECTRUM XXI VERSION 4.2 Released	3Q						
Contract Option Year 3 Award	4Q						
Re-compete of Current Engineering Support Services Contract (ESSC)	1-4Q						
New ESSC Contract Award		2Q					
SPECTRUM XXI Versions 4.3, 4.4 and out Development and Testing	4Q	1-4Q	2-4Q	1-2Q 4Q	1-4Q		
SPECTRUM XXI Versions 4.3, 4.4 and out Released			10	3Q		10	
High-power High-energy assessment	2Q						
Adaptive Networks Assessments				3Q			
Software Defined Radio modeling in OPNET		2Q					
Cosite Capability for EST		3Q					
Testbed Prototype Demo	2Q						

Exhibit R-2, RDT&E Budget Item Justificati		DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE									
RDT&E, Defense-Wide/07	Defense Collaboration Tool Suite/PE 0303165K									
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11			
Defense Collaboration Tool	6.554	0.000	0.000	0.000	0.000	0.000	0.000			
Suite/T60										

A. Mission Description & Budget Item Justification:

The Defense Collaboration Tool Suite (DCTS) provides Combatant Commands, Services, and Defense Agencies, interoperable collaboration capability including voice and video conferencing, document and application sharing, instant messaging, and whiteboard capability in support of defense planning. The DCTS Program identifies, fields, and sustains an evolving standard tool kit that bridges between DoD and the Intelligence Community (IC). This standard tool kit has been defined through OSD policy as the reference implementation against which all other collaboration tools must be tested to verify interoperability. The DCTS software tools provide awareness of who is online available to collaborate both in the DoD and the IC. The DCTS tool kit evolves by substituting evolving Commercial-Off-the-Shelf (COTS) products, and newer versions of the Government code that glues the COTS products together and provides a seamless user interface. The DCTS tools enhance simultaneous, ad hoc crisis, and deliberate continuous operational action planning (vertically and horizontally) across operational theaters and other domains that provide operational units and defense organizations with simultaneous access to real time operational, tactical, and administrative planning information. The ability to use chat rooms, streaming video, voice, and whiteboards to pull information and collaborate across all domains fulfills the DoD's Transformation Goal that effective operations will depend on the ability of DoD to share information and collaborate externally and internally. DCTS has become the collaboration tool of choice for Central Command (CENTCOM) and other Combatant Commands. Without this tool, CENTCOM would experience delays in making combat decisions that would jeopardize decision superiority and increase the risk of protracted war and unnecessary loss of life. It is combat-proven through extensive use throughout Operation Iraqi Freedom, and in the Global War on Terrorism in general. This project expands the fielding of collaboration tools to unclassified domains and provides interoperability across the operational community, and with the IC and Coalition Partners. It supplies enterprise collaboration servers to support warfighters temporarily displaced from their home enclaves. It sustains fielded capabilities and supports industry driven capability evolution to standards based tools. These tools reduce the bandwidth usage of collaboration users, conserving an asset that is extremely scarce to the tactical user. This program element is under Budget Activity 07 because it supports operational systems development.

Exhibit R-2, RDT&E Budget Item Justificati	.on		DATE: Februar	ry 2006			
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	NCLATURE			
RDT&E, Defense-Wide/07			Defense Collab	ooration To	ol Suite/PE	0303165K	
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Collaboration Tool Suite/T60	6.554	0.000	0.000	0.000	0.000	0.000	0.000

Accomplishments/Planned Program:

The FY 2005 effort updated the fielded DCTS capability and continued to pilot enterprise collaboration services. It extended the Net-Centric Enterprise Services (NCES) Pilot in order to resolve the technical, operational, and acquisition challenges in fielding an enterprise collaboration service. The FY 2005 effort re-tested collaboration products on DoD networks to new, more stringent interoperability criteria under development. The project provided DoD representation to the Internet Engineering Task Force and other standards bodies deliberating on the language of standards for collaboration products. This activity provided DoD a voice in the finalization of standards including Session Initiation Protocol, which defines the information exchange requirements, and protocols for future collaboration products.

Beginning in FY 2006 all DISA R&D and investment in collaboration occurs under the Net-Centric Enterprise Services Program, PE 0303170K. From that point on, the DCTS program element is for sustaining the DoD collaboration user base until the NCES Collaboration Core Enterprise Service is ready to handle the full operational load of DoD collaboration users.

B. Program Change Summary:

	<u>FY 05</u>	<u>FY 06</u>	FY 07
Previous President's Budget	6.590	0.000	0.000
Current Submission	6.554	0.000	0.000
Total Adjustments	-0.036	0.000	0.000

Change Summary Explanation:

FY 2005 change is due to below threshold reprogramming.

Exhibit R-2, RDT&E Budget Item Justificati	lon		DATE: Februar	ry 2006			
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE			
RDT&E, Defense-Wide/07			Defense Collab	oration To	ol Suite/PE	0303165K	
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Collaboration Tool	6.554	0.000	0.000	0.000	0.000	0.000	0.000
Suite/T60							

C. Other Program Funding Summary:

Operation and Maintenance	<u>FY 05</u> 11.952	<u>FY 06</u> 11.198	<u>FY 07</u>	<u>FY 08</u>	<u>FY 09</u>	<u>FY 10</u>	<u>FY 11</u>	To <u>Complete</u> 0	Total <u>Cost</u> 23.150
Procurement	2.255	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.255

D. <u>Acquisition Strategy</u>: Project accomplished through use of a combination of contracts and Government agency support services. Most contracts use standard DISA contract vehicles, including the "Next Generation (NexGen)" contract, to support DISA stewardship goals. Most tasks are awarded through competitive sourcing. Program uses performance based contracts in order to maximize value for specialized services.

E. Performance Metrics:

NCES is intended to provide a collaborative environment to warfighters and business domains for the Department of Defense that meets or exceeds current capabilities. Following are metrics currently used:

- 1. Service Availability (Measured in % of time services are available);
- 2. Number of non-classified users supported; and
- 3. Number of classified users supported.

Exhibit R-3 Cost Anal	lysis			DATE: F	'ebrua	ry 2006					
APPROPRIATION/BUDGET	ACTIVITY	PROGR	AM ELEMENT	·		PROJECT	NAME 2	AND NUME	ER		
RDT&E, Defense-Wide/()7		se Collaboration 03165K	Tool Suite	2/	Defense	e Collai	ooration	Tool Sui	te / T60)
Cost Category	Contract Method & <u>Type</u>	Performing Activity & <u>Location</u>	Total PYs <u>Cost</u>		FY 06 Cost	FY 06 Award <u>Date</u>	FY 07 Cost	FY 07 Award <u>Date</u>	Cost to Complete	Total <u>Cost</u>	Target Value of Contract
Test and Evaluation Interoperability	Various	Various	4.119	(0.000	N/A	0.000	N/A	0.000	4.119	4.119
Test and Evaluation Net- Centric Enterprise Services (NCES)	Various	Various	14.440	(0.000	N/A	0.000	N/A	0.000	14.440	14.440
Total			18.559							18.559	

ppropriation/Budget Activ RDT&E, Defense-Wide/07	ity				D	efer	Prog ise (gran Colla	n El abo	eme ratio	ent I on T	Num ool	ber Suit	and e / P	Nan E03	ne 0316	65K		I	F Defe	Proje nse	ct Ni Colla	umb abor Te	atio	nd I n To	Nam ool (ne Suit	te/
		20	05			200)6			20	07			20	008			20	09			201	10			20	011	
Fiscal Year	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	,
nterprise ollaboration lanagement nd Tool xperimentation]																							
follaboration hteroperability lanagement																												

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Exhibit R-4a Schedule Detail			DATE: Febr	uary 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	EMENT			PROJECT	NAME AND NU	MBER
RDT&E, Defense-Wide/07	Defense Col	laboration	Tool Suite/	PE 0303165K	Defense /T60	Collaboration	on Tool Suite
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Collaboration Interoperability Management	1Q-4Q						
DCTS Development	1Q-2Q						
NCES Development	1Q-4Q						

Exhibit R-2, RDT&E Budget Item Justificati	Exhibit R-2, RDT&E Budget Item Justification						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	ICLATURE			
RDT&E, Defense-Wide/07			Net-Centric Er	nterprise S	ervices (NCE	S)/PE 030317	0K
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services	49.184	77.037	28.630	30.042	25.790	20.558	21.750
(NCES)/T57							

A. Mission Description and Budget Item Justification:

Net-Centric Enterprise Services (NCES) has been identified by the Assistant Secretary of Defense for Networks and Information Integration (ASD-NII) as a key Department of Defense (DoD) Global Information Grid (GIG) supporting infrastructure. NCES is a key component of DoD's strategy for meeting its transformational goals by eliminating duplicative services within DoD by providing a common set of interoperable services supporting users in the warfighter, business, and intelligence domains.

NCES will provide enterprise level services that enable Communities of Interest (CoI) and mission applications to exchange information and data across the enterprise. To support the operational needs of the joint warfighting force and the supporting business domains, these services must be adaptive, scalable, available, reliable, easily accessible, and responsive. The suite of NCES services will allow users to find and access relevant information, provide the information they produce for others to have access to, and collaborate in a more effective manner. NCES will include effective security services that protect critical information and sources from unauthorized use or access.

The operational benefits that will be enabled by NCES include:

- 1. Increased speed of command and greater precision of desired effects resulting from shared situational awareness and informed decision-making.
- 2. Improved interoperability resulting from the use of shared services and authoritative data that is timely, understandable, and complete so that it is available to all users.
- 3. Enhanced information superiority, with the objective to achieve enhanced decision superiority, brought about by an increase in the availability of relevant and authoritative information provided at the right time in the right context to authorized users.
- 4. Increased agility enabled by the improvement in machine-to-machine interactions reducing the need for human intervention and reduced footprints resulting from greater ability to access information and services regardless of where they reside.
- 5. An improved ability to conduct planning and support coordinated execution at multiple echelons (National, Strategic, Operational, and Tactical) in a nearly parallel fashion using the concepts of shared spaces and common collaboration and decision support tools.
- 6. An improved security posture providing dynamic, continual security measures ensuring identity, data authenticity,

Exhibit R-2, RDT&E Budget Item Justificati	Exhibit R-2, RDT&E Budget Item Justification						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	ICLATURE			
RDT&E, Defense-Wide/07			Net-Centric Er	nterprise S	ervices (NCE	S)/PE 030317	0K
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services	49.184	77.037	28.630	30.042	25.790	20.558	21.750
(NCES)/T57							

and secure communications.

NCES supports DoD's transformation goals to achieve rapid decision superiority, streamline business processes, conducts effective and discriminate information operations. NCES transforms legacy planning and execution capabilities into protected, web-based, real-time collaborative business processes, including Joint and Coalition information exchanges across organizational boundaries. NCES meets the military requirement to provide dramatically improved situational awareness, robust alerting, shortened decision cycles, and shared understanding.

NCES will eliminate costly legacy interfaces among disjointed, disparate, and stove-piped systems by providing a comprehensive set of nine (9) interoperable core enterprise services. These nine (9) core enterprise services are:

- (1) Discovery: the enabling of all users no matter where they are to find the necessary information required to do their jobs faster and make better decisions faster. This service includes finding services provided by other DoD programs for users with the proper credentials to have access to (Service Discovery), finding people logged onto the network and any devices connected to the network (People and Device Discovery), finding all types of web content, and data distributed throughout DoD;
- (2) Collaboration: this service will enable real-time situational updates to time critical planning activities among joint, coalition partners, the intelligence community, and Agencies at all levels (DoD, Federal, State, and Local) and provide real-time information sharing and processing anywhere and anytime, by any user with privileges on the DoD network. Collaboration includes being able to see, hear, and talk to all participants in a collaborative session; securely share files, information, and applications stored on local computers; and make presentations to large or small audiences;
- (3) Mediation: this service will enable users to translate data from one format to another so that the data can be used by all users no matter what format they prefer. This service increases data interoperability and enables all warfighting and business users to be able to communicate with each other to support rapid decision-making;
- (4) Messaging: this service provides secure machine to machine communications on behalf of the user, provide various notifications and alerts, and interoperable global communications support. In summary, all the mechanisms for delivering content efficiently and reliably across the enterprise;

Exhibit R-2, RDT&E Budget Item Justificati	Exhibit R-2, RDT&E Budget Item Justification						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	ICLATURE			
RDT&E, Defense-Wide/07			Net-Centric Er	nterprise S	ervices (NCE	S)/PE 030317	0K
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services	49.184	77.037	28.630	30.042	25.790	20.558	21.750
(NCES)/T57							

- (5) Enterprise Services Management (ESM): this service provides the ability to monitor, manage, and scale web services appropriately, thereby assuring that the NCES services are available to the user whenever the user needs it. Enterprise Services Management (ESM) will also provide performance monitoring, mission impact assessment, and problem detection and resolution to make sure that the user is getting information and services in ways that are useful;
- (6) Application: this service will provide a protected hosting environment consisting of common hardware platforms and operating systems. This is the infrastructure where all NCES services and applications will reside within a Defense Enterprise Computing Center. Users will be able to access NCES services no matter where they are, thereby supporting mobile decision making;
- (7) User Assistant: this service provides users with help desk services, automated helper assistants, and lets the user customize the way it wants to interact with NCES;
- (8) Storage: this service provides the necessary storage to deliver the necessary content and information to the users. Warfighter, business, and Intelligence communities are developing and maintaining enough information that will push today's storage limitations beyond their current capabilities. Hence, NCES provides enough storage capacity to support current and future needs. NCES provides a storage architecture, storage operations, capacity management, and storage policies and procedures; and
- (9) Information Assurance/Security (IAS): this service provides authentication, access management, and domain security services. These security services enable resistance to non-user system access and interference, in addition to preventing user misuse and security errors. The security service interoperates with the other core services to protect the NCES as a whole entity. This service relies on the Public Key Infrastructure (PKI) and supports user authentication and validation services.
- These nine (9) Core Enterprise Services are grouped and implemented as four (4) product lines: Service Oriented Architecture Foundation, Content Discovery and Delivery, DoD Enterprise Collaboration, and Defense Online Portal. The Services Oriented Architecture Foundation provides the Enterprise Services Management, Mediation, Messaging, Information Assurance/Security, finding services provided by DoD programs (Service Discovery), and finding people or devices (People and Device Discovery). Content Discovery and Delivery provides the GoogleTM like functionality of

Exhibit R-2, RDT&E Budget Item Justificati	Exhibit R-2, RDT&E Budget Item Justification						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME	ICLATURE			
RDT&E, Defense-Wide/07			Net-Centric Er	nterprise S	ervices (NCE	S)/PE 030317	0K
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services	49.184	77.037	28.630	30.042	25.790	20.558	21.750
(NCES)/T57							

finding web content, Storage, and delivering that content to the users. The Defense Online Portal represents a way for users to get access to the services provided by NCES and provides all the tools associated with the User Assistant core enterprise service. These four (4) product lines will be provided and supported throughout the full life cycle by managed service provides who will offer their services from a qualified Global Information Grid Computing Node.

NCES also supports the following five (5) Defense Information Systems Agency Strategic Goals as stated in the Corporate Strategy Scorecard:

- 1. Strategic Goal 1: "Transition to a net-centric environment to transform the way DOD shares information by making data continuously available in a trusted environment"
- 2. Strategic Goal 2: "Build and sustain a Global Information Grid (GIG) transport infrastructure that eliminates bandwidth constraints and rapidly surges to meet demands, wherever needed."
- 3. Strategic Goal 3: "Provide NetOps technical expertise and integrated solutions for Global Information Grid (GIG) network operations and defense."
- 4. Strategic Goal 4: "Transition to DOD enterprise-wide capabilities for communities of interest, e.g., warfighting, business, and intelligence, that exploit the GIG for improved decision-making"
- 5. Strategic Goal 5: "Deliver capabilities, based on established requirements, more effectively, economically and efficiently than we do today"

Net-Centric Enterprise Services (NCES) supports Strategic Goals one (1), three (3), and four (4) by enabling Community of Interests (COI) applications and users the ability to exchange information across the enterprise. NCES supports Strategic goal two (2) by allowing authorized users access to the Global Information Grid (GIG) superhighway. NCES supports Strategic Goal five (5) by providing periodic program reviews to allow feedback from its users and stakeholders to understand any issues with NCES in providing its services. This feedback enables NCES to correct any deficiencies to improve its services. This program element is under Budget Activity 7 because it supports operational systems development.

Exhibit R-2, RDT&E Budget Item Justificati	Exhibit R-2, RDT&E Budget Item Justification						
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMEN	ICLATURE			
RDT&E, Defense-Wide/07			Net-Centric Er	nterprise S	ervices (NCE	S)/PE 030317	0K
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	49.184	77.037	28.630	30.042	25.790	20.558	21.750

Accomplishments/Planned Program:

Program Management Support	FY 05	<u>FY 06</u>	FY 07
Subtotal Cost	11.303	18.480	4.393

Program Management Support - This task area includes all management oversight, program reporting, program documentation to satisfy statutory and regulatory requirements, fiscal control, contract management, budgeting, program support, and strategic operations to include planning and communications. In FY 2005, the requested funds supported the development of statutory and regulatory Documentation for program initiation which includes the Economic Analysis (EA), Cost Analysis Requirements Description (CARD), Test and Evaluation Master Plan (TEMP), System Engineering Plan (SEP), Program Protection Plan (PPP), Information Assurance Strategy (IAS), Acquisition Program Baseline (APB), Acquisition Strategy (AS), Information Support Plan (ISP), Capability Development Document (CDD), and the Concepts of Operations (CONOPS). In FY 2006, the requested funds will be used to complete Milestone B documentation in preparation of achieving Milestone B by 3rd quarter FY 2006. In FY 2007, NCES funding will also provide for the updates to Milestone B documentation to satisfy the exit criteria for Milestone B to transition to Milestone C by second Quarter FY 2008. Funds will also be used to support the initiation of all of the statutory and regulatory documentation for the next major phase of NCES called Increment II.

Systems Engineering	FY 05	FY 06	FY 07
Subtotal Cost	3.810	21.192	5.297

Systems Engineering - This task area includes the development of specifications, performance requirements, interface definitions, and Service Level Agreements (SLAs) for the services to be acquired. It includes a contractor's System Integration Lab, Modeling, and Simulation required to evaluate the scalability of NCES, and security engineering for making sure that NCES complies with all DoD security requirements. In FY 2005, funds enabled development work, which included reviews of the latest technologically advanced commercial product offerings, managed services, and government developed services and capabilities, effectiveness analysis, technology pilots and demonstrations. FY 2005 funds were also used in support of the development of the Early Capabilities Baseline (ECB) as well as the contractor's System Integration Lab (SIL) and Modeling and Simulation (M&S) activities. In FY 2006 & FY 2007, funds support the development of specifications, performance requirements, interface definitions, and SLAs for the services to be acquired as well as

Exhibit R-2, RDT&E Budget Item Justification			DATE: February 2006					
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE					
RDT&E, Defense-Wide/07			Net-Centric Enterprise Services (NCES)/PE 0303170K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Net-Centric Enterprise Services (NCES)/T57	49.184	77.037	28.630	30.042	25.790	20.558	21.750	

incrementally enhancing service offerings.

 Services Solutions
 FY 05
 FY 06
 FY 07

 Subtotal Cost
 23.526
 22.435
 16.94

Services Solutions - This task area includes the development of the Early Capabilities Baseline (ECB) Pilots and the acquisition of the managed services to satisfy the NCES requirements. NCES will employ a managed services model where NCES capabilities are acquired for a "fee for use" that will allow enterprise users to share and discover information and services. In FY 2005, funds supported the development of an Early Capabilities Baseline (ECB) Pilot for Early Adopters of NCES to demonstrate the utility and technical feasibility of NCES capabilities. FY 2006 funds will support the initiation of a pilot that consist of a "two button" commercially managed service solution for Collaboration as well as a government managed service solution for the portal. FY 2007 funds will be used to support the acquisition of two prototypes; a commercially managed Service Oriented Architecture Foundation (SOAF) service; and a commercially managed Content Discovery & Delivery (CDD) service.

Test and Evaluation $\frac{\text{FY 05}}{\text{Subtotal Cost}}$ $\frac{\text{FY 06}}{0.959}$ $\frac{\text{FY 07}}{3.900}$

Test and Evaluation - Test and Evaluation includes early and continuous involvement of the test community starting with contractor demonstrations prior to contract award; development of a stable and robust beta user group to support all levels of testing; and a series of early user tests (EUT) that integrate developmental and operational events to confirm individual services and products, or groups of services and products that meet performance specifications and enable user defined capabilities. Test and Evaluation also includes independent certifications for required items, such as interoperability and security. An independent OT will be conducted prior to full release of services and products to the Enterprise to support the Full Deployment Decision Review (FDDR). The NCES Integrated Test Team (ITT) will combine personnel from DISA and the Service Operational Test Agencies (OTAs) to maximize expertise and efficiencies across each test opportunity. In FY 2005, funds were used to perform minor testing and integrating of potential services that will satisfy NCES requirements. In FY 2006 & FY 2007, funds are and will be used to support Early User Tests (EUT) to verify the effectiveness and suitability of the managed services to provide the capabilities described in the Capability Development Document (CDD).

Exhibit R-2, RDT&E Budget Item Justification			DATE: February 2006					
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE					
RDT&E, Defense-Wide/07			Net-Centric Enterprise Services (NCES)/PE 0303170K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Net-Centric Enterprise Services (NCES)/T57	49.184	77.037	28.630	30.042	25.790	20.558	21.750	

Hosting Services	FY 05	FY 06	FY 07
Subtotal Cost	9.586	11.030	0.000

Hosting Services - Hosting Services includes all the equipment, services, and resources required to construct, to convert to, or to maintain the NCES pilot, and testing environments. In FY 2005, funds supported the development of the Test & Integration (T&I) and Pilot Environments. In FY 2006, funds are being used to support the early capabilities baseline (ECB) pilot environment and to transition to limited operational deployment of managed services after Milestone B. No RDT&E funds are earmarked for Hosting Services in FY 2007 because the maintenance of the existing environments will be supported by O&M dollars. In addition, NCES managed service providers will offer their services from a qualified Global Information Grid Computing Node (GCN). NCES service providers will support geographically dispersed, military grade enterprise, maritime, airborne, and land-based GCNs that may include appropriately certified commercial facilities. Government Non-Classified Internet Protocol Router Network (NIPRNet) and Secret Internet Protocol Router Network (SIPRNet) facilities may be offered as a hosting option to commercial managed service providers.

B. Program Change Summary:

	<u>FY 05</u>	<u>FY 06</u>	FY 07
Previous President's Budget	49.904	7 9.018	28.241
Current Submission	49.184	77.037	28.630
Total Adjustments	-0.720	-1.981	+0.389

Change Summary Explanation:

FY05 decrease is due to below threshold reprogramming.

FY06 decrease is due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation.

FY07 increase is due to revised fiscal guidance.

Exhibit R-2, RDT&E Budget Item Justification			DATE: February 2006					
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE					
RDT&E, Defense-Wide/07			Net-Centric Enterprise Services (NCES)/PE 0303170K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Net-Centric Enterprise Services (NCES)/T57	49.184	77.037	28.630	30.042	25.790	20.558	21.750	

C. Other Program Funding Summary:

	FY 05	FY 06	<u>FY 07</u>	FY 08	<u>FY 09</u>	<u>FY 10</u>	<u>FY 11</u>	<u>To</u> Complete	Total Cost
Procurement, DW	0.000	0.000	26.952	32.836	13.357	23.878	27.570	Contg	Contg
O&M, DW	22.897	24.912	28.857	32.419	76.785	76.564	73.967	Contg	Contg

D. Acquisition Strategy:

The NCES acquisition strategy (AS) defines the strategies that the NCES Program Management Office (PMO) will use to acquire managed services to provide the requirements and capabilities listed in the NCES Capability Development Document (CDD) to the warfighter, business, and intelligence users. The Acquisition Strategy also details acquisition risks such as the ability to accurately define the interface definitions and performance specifications needed to engage managed service providers; the ability to solicit, negotiate, award and manage commercial managed services contracts; the ability to hold a Government service provider accountable over the life cycle; and the ability to rapidly field services dependent upon the complexity and time involved to receive certification and accreditation. The Acquisition Strategy also details risk mitigation strategies so that the NCES Program Management Office (PMO) has options if the risk events were to be realized. The NCES acquisition strategy is based on the following principles:

- NCES will acquire managed services
 - O Acquiring services as a commercially managed service with appropriate Service level agreements (SLAs)
 - O Requiring commercial standards, specifications, and interface definitions for services as appropriate
- Service Providers are responsible for full life cycle support
 - O Resourcing service infrastructure

Exhibit R-2, RDT&E Budget Item Justification			DATE: February 2006					
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE					
RDT&E, Defense-Wide/07			Net-Centric Enterprise Services (NCES)/PE 0303170K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Net-Centric Enterprise Services	49.184	77.037	28.630	30.042	25.790	20.558	21.750	
(NCES)/T57								

- o Providing operational support (e.g., Tier 2 and Tier 3 Help Desk, training, and maintenance)
- o Providing technology refresh
- DISA will field an initial set of capabilities, the Early Capabilities Baseline (ECB), based on the capabilities demonstrated in Horizontal Fusion and Net Centric Capabilities Pilot (NCCP) demonstrations, until the transition to managed services. The NCES Program will be responsible for the following ECB activities:
 - O Requesting approval for the transition of ECB services to "operational availability" for Early Adopters at Milestone B
 - o Sustaining and transitioning ECB to commercial service providers
 - o Developing a depreciation plan identifying when ECB service versions will be discontinued

The benefits of the NCES acquisition approach include:

- Providing immediate operational availability of existing capabilities at Milestone B
- Delivering full operational 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 the use of SLAs and performance-based services acquisition procedures
- Enabling agility in selecting service capabilities

The NCES acquisition strategy is currently under review. Changes to the acquisition strategy will be reflected in the next Budget Cycle.

E. Performance Metrics:

The NCES Capability Development Document (CDD) defines the NCES Capabilities and their Performance attributes. These Performance attributes form the Performance Baseline for NCES. The NCES Modeling and Simulation effort will utilize among other sources, performance data collected from test and evaluation activities in the pilot and test environments to demonstrate that the NCES capabilities can achieve the NCES Performance Goals.

For each capability there are three (3) general performance categories: Availability, Response Time, and Maximum Load. Availability is the amount of time that the service is available. Response Time is a specific measure of service

Exhibit R-2, RDT&E Budget Item Justification			DATE: February 2006					
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE					
RDT&E, Defense-Wide/07			Net-Centric Enterprise Services (NCES)/PE 0303170K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Net-Centric Enterprise Services	49.184	77.037	28.630	30.042	25.790	20.558	21.750	
(NCES)/T57								

responsiveness. Maximum Load is a measure of how many users, throughput, or data that a service can handle and still be effective.

A sampling of the Maximum Load target metrics for NCES are: (1) Discovery Service: 10 queries per second for 10,000 registered enterprise services; (2) Machine to Machine Messaging service: 1,000 requests per second of 1 KB messages across 100 endpoints; (3) Collaboration Service: NIPRNET: 1,500 meeting sessions (75 users each), 10 large event sessions (1,000 users each), SIPRNET: 100 meeting sessions (75 users each), 3 large event sessions (1,000 users each); (4) Mediation Service: 200 transformations of a 1.667 KB plain text file per second; (5) Service Security: SIPRNET – 300 security requests/authentications per second.

To improve mission performance, NCES has developed six (6) key performance management areas. These metrics are program performance metrics designed to rapidly identify and fix problems associated NCES PMO activities, thereby providing maximum support to the warfighter. The NCES program performance metrics are independent and provide the NCES PMO with the insight needed to transform the program as necessary. The NCES Program Performance Metrics are:

- 1. Customer Satisfaction: measures how well the Customer views NCES in terms of overall usefulness, service and support, benefits derived, and operational responsiveness. The major factors of performance in this area are deployment cycle time, training efforts, and customer assistance/help desk services.
- 2. Economic Analysis: looks at how well NCES is managing its investment. This metric evaluates the NCES program's Internal Rate of Return (IRR), Payback Period, Net Present Value (NPV), and Return on Investment (ROI) in accordance with the Clinger-Cohen Act of 1996.
- 3. Quality Management: addresses the processes in place to ensure the NCES products developed are correct, consistent and complete, and meet the goals of the program. Such processes include configuration control procedures for the Evaluation Capability Modules (ECMs), and the way in which Engineering Change Requests (ECRs) and System Change Requests (CRs) are proposed, analyzed, approved, prioritized, and implemented across the ECM lifecycle. ECRs and CRs are processed through the NCES Configuration Management Board (CMB) and Configuration Control Board (CCB) for resolution.
- 4. Requirements Satisfaction: provides an assessment of how the program is meeting its requirements as listed in the GIG ES Initial Capabilities Document (ICD) and the NCES Capabilities Development Document (CDD).
- 5. Contractor Performance: measures how effectively NCES is meeting approved schedules and controlling costs as they pertain to contractor effectiveness, and any deviation from planned budgets and schedules. The program will

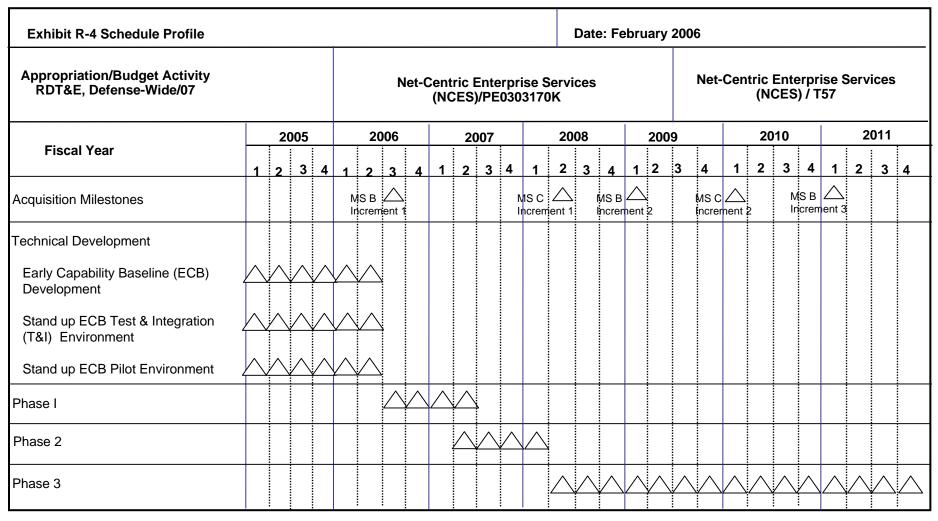
Exhibit R-2, RDT&E Budget Item Justification			DATE: February 2006					
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE					
RDT&E, Defense-Wide/07			Net-Centric Enterprise Services (NCES)/PE 0303170K					
COST (in Millions)	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Net-Centric Enterprise Services (NCES)/T57	49.184	77.037	28.630	30.042	25.790	20.558	21.750	

monitor the cost, schedule, and performance aspects of contracted services through Earned Value Management (EVM), monthly status reporting, and periodic In-Process Reviews (IPRs).

6. Program Management: measures the effectiveness of the PMO in performing its program control and execution functions. The metric will focus on process analysis to determine if the correct processes are in place and personnel are following these processes, thereby ensuring NCES will meet its mission objectives. The primary sources for the Program Management metric are the NCES Balanced Scorecard (BSC) and the Integrated Master Schedule (IMS).

Exhibit R-3 Cost A	nalysis			DATE: Februar	cy 2006					
APPROPRIATION/BUDG	ET ACTIVITY	PROG	RAM ELEMENT		PROJECT	NAME AN	D NUMBER	ર		
RDT&E, Defense-Wid			Centric Enterprise	Services				Services	(NCES)	/T57
		(NCE	S)/ PE 0303170K							
Cost Category	Contract Method &	Performing Activity &		FY 06	FY 06 Award	FY 07	FY 07 Award	Cost to	Total	Target Value of
	Type	Location	Cost	Cost	<u>Date</u>	Cost	<u>Date</u>	Complete	Cost	Contract
Program Management Support	C/FFP, SS/CPFF	Various	6.452	16.709) Various	2.100	Various	Contg	Contg	N/A
	C/CPFF	Pragmatics Mclean, VA	1 547	0.000	N/A	0.000	N/A	0.000	0.000	1.547
	C/CPFF	MMI, Silve: Spring, MD	7 444	0.309	OCT-05	1.109	Dec-06	Contg	Contg	4.912
	C/CPFF	DSA, Fairfa VA	ax, 8.689	1.462	OCT-05	1.184	OCT-06	Contg	Contg	11.335
Sub Total			20.182	18.480)	4.393				
Systems Engineering Services	C/FFP	MITRE, McClean, V	A 6.355	3.900	OCT-05	1.964	OCT-06	Contg	Contg	12.219
	C/FFP	JPL, San Diego, CA	1.591	0.000	N/A	0.000	N/A	0.000	0.000	1.591
	C/FFP	DISA, Fall: Church, VA		0.975	NOV-05	0.491	Nov-06	Contg	Contg	1.466
	C/CPFF	SAIC, Fair: VA	fax, 0.000	3.802	OCT-05	0.663	OCT-06	Contg	Contg	4.465
	C/FFP	Various	0.000	12.515	. Various	2.179	Various	Contg	Contg	N/A
Sub Total			7.946	21.192	2	5.297				
Test and Evaluation Services	C/FFP	SSC-SD GOV San Diego,		0.000	N/A	0.000	N/A	0.000	0.000	1.059
	C/FFP	DISA, Fall: Church, VA	0.000	3.900	NOV-05	2.000	Nov-06	Contg	Contg	5.900
Sub Total			1.059	3.900		2.000				
Services Solution Development	C/FFP	Various	20.029	15.297	Various	16.940	Various	Contg	Contg	N/A
	C/CPFF	SAIC, Fair: VA	fax, 6.771	0.000	N/A	0.000	N/A	0.000	0.000	6.771

Exhibit R-3 Cost	Analysis	-			DATE: Februar	ry 2006		-			
APPROPRIATION/BU RDT&E, Defense-W				ELEMENT ric Enterprise PE 0303170K	Services	PROJECT Net-Cent			R Services	(NCES)/	T57
	C/CPFF	BAH, VA	Mclean,	7.701	0.897	OCT-05	0.000	N/A	0.000	0.000	8.598
	C/CPFF	FGM, VA	Sterling,	6.275	0.877	OCT-05	0.000	N/A	0.000	0.000	7.152
	C/CPFF	Sole: Arlir	rs, ngton, VA	0.000	5.364	OCT-05	0.000	N/A	0.000	0.000	5.36
Sub Total				40.776	22.435		16.940				
Hosting Services	C/FFP		Falls ch, VA	9.586	11.030	Various	0.000	N/A	0.000	0.000	20.61
Total				79.549	77.037		28.630				



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APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 Schedule Profile Milestone B Decision (Inc 1) Milestone C Decision (Inc 1) Milestone B Decision (Inc 2) Milestone B Decision (Inc 2) Milestone B Decision (Inc 3) Technical Development ECB Development ECB Development Identify Sites Purchase RDT&E Equipment PROGRAM ELEMENT Net-Centric Ent PE 0303170K FY 2005 FY AND PROGRAM ELEMENT Net-Centric Ent PE 0303170K FY 10 10 10 10 10 10 10 10 10 10 10 10 10	r					
Schedule Profile Schedule Profile Milestone B Decision (Inc 1) Milestone C Decision (Inc 1) Milestone B Decision (Inc 2) Milestone C Decision (Inc 2) Milestone C Decision (Inc 3) Technical Development ECB Development 1-4Q Stand-up Test & Integration (T&I) Environment Identify Sites 1Q				PROJECT N.	AME AND NUM	BER
Schedule Profile Milestone B Decision (Inc 1) Milestone C Decision (Inc 1) Milestone B Decision (Inc 2) Milestone C Decision (Inc 2) Milestone C Decision (Inc 3) Technical Development ECB Development 1-4Q Stand-up Test & Integration (T&I) Environment Identify Sites	terprise	Services (No	CES)/	Net-Centr	ic Enterpri	se Services
Milestone B Decision (Inc 1) Milestone C Decision (Inc 1) Milestone B Decision (Inc 2) Milestone C Decision (Inc 2) Milestone B Decision (Inc 3) Technical Development ECB Development 1-4Q Stand-up Test & Integration (T&I) Environment Identify Sites				(NCES)/T5	7	
Milestone C Decision (Inc 1) Milestone B Decision (Inc 2) Milestone C Decision (Inc 2) Milestone B Decision (Inc 3) Technical Development ECB Development ECB Development Technical Test & Integration (T&I) Environment Identify Sites	Z 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Milestone B Decision (Inc 2) Milestone C Decision (Inc 2) Milestone B Decision (Inc 3) Technical Development ECB Development ECB Development Integration (T&I) Environment Identify Sites	2					
Milestone C Decision (Inc 2) Milestone B Decision (Inc 3) Technical Development ECB Development 1-4Q Stand-up Test & Integration (T&I) Environment Identify Sites 1Q			2Q			
Milestone B Decision (Inc 3) Technical Development ECB Development 1-4Q Stand-up Test & Integration (T&I) Environment Identify Sites 1Q				1Q		
Technical Development ECB Development Stand-up Test & Integration (T&I) Environment Identify Sites 10					1Q	
ECB Development 1-4Q Stand-up Test & Integration (T&I) Environment Identify Sites 1Q						1Q
Environment Identify Sites 1Q						
Identify Sites 1Q						
= :=						
Purchase RDT&E Equipment 20						
Set-up Web Portal Servers 3-4Q						
Set-up Application Servers 3-4Q						
Stand-up Pilot Environment						
Identify Sites 10						
Purchase RDT&E Equipment 2Q						
Set-up Web Portal Servers 3-40						
Set-up Application Servers 3-4Q						
Phase I SIPRNet Collaboration Pilot 3-	-40	1-2Q				
	-4Q -4Q	1-2Q 1-2Q				
	-4Q -4Q	1-2Q 1-2Q				
	-4Q -4Q	1-2Q 1-2Q				
	-4Q -4Q	1-20				
raily open resus	- 1 0					

Exhibit R-4a Schedule Detail			DATE: Febru	ary 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE					NAME AND NUI	
RDT&E, Defense-Wide/07	Net-Centric	: Enterprise	Services (1	NCES)/	Net-Cent (NCES)/T		ise Services
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Phase 2							
SIPRNet Collaboration & AKO Portal							
Limited Operational Availability			2-4Q	1Q			
SIPRNet SOA and CD&D Prototype			2-4Q	1Q			
NIPRNet Collaboration & AKO Portal			2	- &			
Limited Operational Availability			2-40	1Q			
NIPRNet SOA and CD&D Prototype			2-4Q	1Q			
Early User Tests			2Q	-×			
Phase 3			22				
SIPRNet Collaboration, AKO Portal							
SOA, and CD&D Limited Operational	,						
Availability				2-4Q			
NIPRNet Collaboration, AKO Portal				2 10			
SOA, and CD&D Limited Operational	,						
Availability				2-4Q			
Operational Test Readiness Review				2 1Q 2Q			
Operational Test Readiness Review				3Q			
Full Deployment Decision Review				40			
SIPRNet Collaboration, AKO Portal				10			
SOA, and CD&D Operational	,				1-4Q	1-4Q	1-4Q
NIPRNet Collaboration, AKO Portal					1-40	1-40	1-40
SOA, and CD&D Operational	1				1-40	1-40	1-40
SOA, and CD&D Operational					1-40	1-40	1-40

Exhibit R-2, RDT&E Budget Item Justification			DATE	: Februar	y 2006			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				ITEM NOMEN	CLATURE am / PE 03	03610K		
COST (in millions)	FY05	FY0		FY07	FY08	FY09	FY10	FY11
Teleport Program /NS01	9.945	7.07	18	14.424	6.094	2.174	2.256	2.340

A. Mission Description and Budget Item Justification:

The Teleport investment is driven by requirements validated by the Joint Chiefs of Staff and is linked with the Defense Information Systems Agency (DISA's) core strategic goal to transition to a net-centric environment to transform the way Department of Defense (DoD) shares information by making data continuously available in a trusted environment. The Teleport system and its capabilities support the Agency's transformational initiatives/goals and the President's Management Agenda by enabling effective communications for the warfighter by early implementation of net-centric capability; enhancing the capability and survivability of space systems and supporting infrastructure; and continuing to develop a joint interoperable Networks and Information (NII) architecture. Teleport will provide seamless access to the Defense Information System Network (DISN) and Global Information Grid (GIG), which supports the Department of Defense (DoD), Joint Staff, and DISA goals associated with Command, Control, Communications, Computers and Intelligence (C4I) for the Warrior, and Joint Vision 2020, by providing a global, secured interoperable information transport infrastructure. The RDT&E funding in this Program Element (PE) provides for system design and engineering, program management, and testing for development of the Teleport System to accomplish Critical Design Reviews (CDRs) to conduct Development Test and Evaluation and Follow-On Operational Test and Evaluation. This PE is under Budget Activity 07 because it supports operational systems development.

The DoD Teleport is a Satellite Communications (SATCOM) gateway that links the deployed warfighter to the sustaining base. It provides high-throughput, multi-band, and multi-media telecommunications services for deployed forces of all Services, whether operating independently or as part of a Combined Task Force (CTF) or Joint Task Force (JTF), during operations and exercises. The DoD Teleport provides centralized integration capabilities, contingency capacity, and the necessary interfaces to access the DISN in a seamless, interoperable, and economical manner. DoD Teleport is an upgrade of satellite telecommunication capabilities at selected Standardized Tactical Entry Point (STEP) sites. This upgrade represents a ten-fold increase to the throughput and functional capabilities of those sites. The Teleport system will provide deployed forces with interfaces for multi-band and multimedia connectivity from deployed locations to online DISN Service Delivery Nodes (SDN) and GIG information sources and support. The system will greatly improve the interoperability between multiple SATCOM systems and deployed warfighters.

Teleport is being deployed incrementally in a multi-Generational FY 2001 through FY 2012 program. Generation One will field capabilities for four Initial Operational Capabilities (IOC) events. IOC 1 implemented C, X, and Ku band Satellite Earth Terminals and associated baseband equipment at six sites to allow for a deployed warfighter anywhere between certain latitudes to be able to communicate with two Teleport sites. IOC 2 will implement Ultra High Frequency

Exhibit R-2, RDT&E Budget Item Justification			DATE: Februar	ry 2006			
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOME		0.2.6.1.0==		
RDT&E, Defense-Wide/07			Teleport Progr	cam / PE 03	03610K		
COST (in millions)	FY05	FY0	6 FY07	FY08	FY09	FY10	FY11
Teleport Program /NS01	9.945	7.07	14.424	6.094	2.174	2.256	2.340

(UHF) Satellite Earth Terminals and associated baseband equipment at four sites. IOC 3 will implement additional C, Ku, UHF, and protected communications (Extremely High Frequency (EHF)) Satellite Earth Terminals and associated baseband equipment at six sites. This will allow the deployed warfighter access to three Teleports from any location between certain latitudes. IOC 4 will complete the Generation One build-out by integrating military Ka SATCOM capabilities into five Teleport locations. Generation One, IOC 1 reached completion in March 2004. IOC 2 is scheduled to complete 4Q FY 2006. IOC 3 will be completed early FY 07.

Generation Two will add additional military Ka band capacity and will introduce Internet Protocol (IP) net-centric communications to the sites. Net-Centric communications 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. Generation Two will also provide Ka band capacity increases at six sites; it will provide IP capability at six sites; it will provide Ka band SATCOM terminals at six sites. Generation Three is envisioned to focus on advanced SATCOM systems to include the Future Wideband Systems, Advanced EHF, Mobile User Objective System (MUOS), and the Transformational Communications Architecture (TCA). Generation Three will also focus on increasing net-centric communications with technology refresh of the older communications equipment suites. Teleport Full Operational Capability (FOC) will be achieved with the final implementation scheduled for completion in FY 2012 which will allow for seamless capability, tying together the Transformational Satellite (TSAT) and the Global Information Grid-Bandwidth Expansion (GIG-BE) for global, net-centric capability.

The DoD Teleport Program is a Major Automated Information System (MAIS) ACAT-1AM program with the Assistant Secretary of Defense for Networks Information Integration (ASD (NII)) serving as the Milestone Decision Authority (MDA). ASD (NII) Designation Memorandum dated 05 May 2000 identifies the Defense Information Systems Agency (DISA) as the Executive Agent (EA) for the DoD Teleport Program. The system will satisfy Joint Requirements Oversight Council (JROC) validated operational requirements. The Teleport Program Office (TPO) received Milestone C Authority to start procurement on 15 April 2002 for Generation One.

Exhibit R-2, RDT&E Budget Item Justification			DATE:	Februar	y 2006			
APPROPRIATION/BUDGET ACTIVITY				TEM NOMEN				
RDT&E, Defense-Wide/07			Telep	ort Progr	am / PE 03	03610K		
COST (in millions)	FY05	FY0	6	FY07	FY08	FY09	FY10	FY11
Teleport Program /NS01	9.945	7.07	78	14.424	6.094	2.174	2.256	2.340

Accomplishments/Planned Program:

 $\frac{\text{FY05}}{\text{Subtotal Cost}} \qquad \frac{\text{FY06}}{7.520} \qquad \frac{\text{FY06}}{6.310} \qquad \frac{\text{FY07}}{8.276}$

Systems Engineering & Program Management (SEPM): In FY 2005 the SEPM included limited requirements analysis, system design, Critical Design Reviews (CDRs), site designs, systems integration issue identification, Acquisition Strategy, and Acquisition Program Baseline (APB) development for Generation One. In FY 2006 and FY 2007, Generation Two funding provides SEPM for limited program control mechanisms, continued development and maintenance of program documents, support to the Working-level Integrated Product Teams (WIPTs), technical analyses and reporting, and logistics planning and reporting to implement Ka band Satellite Earth Terminals and associated baseband equipment along with Internet Protocol (IP) net-centric communications to six sites.

 $\frac{\text{FY05}}{\text{Subtotal Cost}} \qquad \frac{\text{FY06}}{2.425} \qquad \frac{\text{FY06}}{.768} \qquad \frac{\text{FY07}}{6.148}$

Testing: In FY 2005 Teleport completed the secondary UHF Follow-On Operational Test and Evaluation (FOT&E). This effort consisted of interoperability certification and technical component testing. In FY 2006 and FY 2007 funding will be used to conduct the EHF Development Test & Evaluation (DT&E) and FOT&E. Testing activities also include updating the Test and Evaluation Master Plan (TEMP) for significant events and performance of customer acceptance tests. Additionally, the FY 2006 funds will be used to engineer and test X band converters, upgraded modem technology, upgraded UHF DISN services, the Teleport Management and Control System (TMCS) net-centric enhancements, and Defense Information Systems Network equipment for Generation One. In FY 2007 funds will be used to complete modem and UHF DISN testing. In FY 2007, funds will also be used to start Generation Two developmental testing for system integration and interoperability.

Exhibit R-2, RDT&E Budget Item Justification			DATE	: Februar	ry 2006			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				ITEM NOMEN	ICLATURE cam / PE 03	03610K		
COST (in millions)	FY05	FY0	6	FY07	FY08	FY09	FY10	FY11
Teleport Program /NS01	9.945	7.07	18	14.424	6.094	2.174	2.256	2.340

B. Program Change Summary:

	FY 05	FY 06	FY 07
Previous President's Budget	9.945	12.180	$\overline{14.22}$ 8
Current Submission	9.945	7.078	14.424
Total Adjustments	-0-	-5.102	.196

Change Summary Explanation:

FY 2006 change is due to a direct Congressional reduction of \$5 million as well as undistributed Congressional reductions to the Defense-Wide RDT&E appropriation. FY 2007 change is due to revised fiscal guidance.

C. Other Program Funding Summary:

	<u>FY05</u>	FY06	FY07	FY08	FY09	<u>FY10</u>	FY11	Cost to Complete	Total Cost
Procurement, DW	46.237	95.657	48.848	39.361	14.102	14.957	15.393	Contg	Contg
O&M	12.132	7.970	7.197	6.753	5.958	6.015	6.025	Contg	Contg

STEP Program Dollars included

D. Acquisition Summary:

The DISA contracting office provides direct contracting support. Assistance needed from other Departments including Army, Navy, and Air Force will be acquired via Military Interdepartmental Purchase Request (MIPR) for both their organic and contracted support.

Exhibit R-2, RDT&E Budget Item Justification			DATE: Februa	ry 2006			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			R-1 ITEM NOME Teleport Prog		03610K		
COST (in millions)	FY05	FY06	5 FY07	FY08	FY09	FY10	FY11
Teleport Program /NS01	9.945	7.07	8 14.424	6.094	2.174	2.256	2.340

E. Performance Metrics:

Teleport manages and tracks its cost, schedule, and performance parameters using an Earned Value Management-like approach, integrating the program plan, the program schedule and Work Breakdown Structure, and the financial data. Progress is monitored/documented monthly showing percentages complete of schedule and cost. Formal updates with changes to the schedule are documented against the program baseline.

Teleport delivered Generation One IOC 1 in March 2004, compared to a strategic goal delivery date of April 2004, i.e., ahead of schedule. IOC 1 was also delivered at the projected cost of \$110.7M, thus meeting the cost goal and it passed its Operational Test and Evaluation, meeting its performance objectives.

Teleport will deliver the IOC 2 capabilities by 30 November 2006 in accordance with the revised baseline (pending approval.) Teleport's schedule delivers IOC 3 capabilities on or before 31 March 2007 (threshold). Based on the Wideband Gapfiller Satellite launch schedule, IOC 4's revised baseline (pending approval) is 31 March 2009.

Exhibit R-3 Cost Anal	ysis.				DATE:	Februa	ry 2006			
APPROPRIATION/BUDGET	ACTIVITY	PF	ROGRAM ELEM	ENT			PROJECT	NAME AND	NUMBER	
RDT&E, Defense-Wide/O	17	T€	eleport Pro	gram /	PE 03036	10K	Telepor	t Program	/ NS01	
Cost Category	Contract Method & Type	Performi Activity Location	/ & PYs	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Technical Services Support Costs Contracted Systems Engineering and Program Management (SE/PM) Support	GSA Sched	Booz All & Hamilt Fairfax, VA	on	3.748	02/06	7.527	02/07	0	30.149	30.149
Contracted SE/PM Support	GSA Sched	Titan	2.182	0.240	08/06	0.484	08/07	Contg	Contg	2.906
Contracted Systems Integration and Program Management Support	MIPR DCATS	JHU/APL Baltimor MD	4.993 ce,	0.870	01/06	1.807	01/07	0	7.670	7.670
Government Systems Engineering/Program Management Support	MIPR	US Army DCATS Fort Monmouth		0.640	Various	1.512	Various	Contg	Contg	9.550
Government Systems Engineering/Program Management Support	MIPR	US Navy SPAWAR San Dieg CA		0.615	Various	1.238	Various	Contg	Contg	8.649
Test Support Government Test and Evaluation Support	MIPR	JITC, Ft Huachuca		0.700	Various	1.409	Various	0	5.742	5.742
Other Government Test Support	MIPR	Various	.940	0.265	Various	0.447	Various	Contg	Contg	N/A
Total			44.816	7.078		14.424				

Appropriation/Budget Activity RDT&E, Defense-Wide/07						Р	rogr Tel	am epo	Eler	nen ogr	t Nu	ımbe PE	er ar 030	nd Name 3610K						Project Number and Name Teleport NS01								
		20	05			2	006			20	007			20	800			200	09			20	10			2	2011	_
Fiscal Year	1	2	3	4	1	2	2006 200	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
Generation One Implementation Plans:																												
IOC 1 (C & Ku Band) Eng. And Test																												
IOC 2 (UHF Band) Test						\triangle	Δ																					
IOC3 (EHF, C, Ku & UHF) Eng. and Test				\triangle		\triangle	\triangle																					
IOC4 (Ka (8 links)) Eng. and Test														\triangle	\triangle	\triangle												

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Exhibit R-4 Scheo	lule P	rofi	le																Date	e: Fo	ebrı	uary	/ 200	06								
Appropriation/Bud RDT&E, Defense	lget A	ctiv e/07	ity		Program Eler Teleport P						lement Number and Name t Program PE 0303610K							Project Number and Name Teleport NS01														
		200	4			2	005			2	006			2	007			20	08			200)9			20)10			2	2011	
Fiscal Year	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
UHF & Xband Eng. and Test											Δ																					
Modem Refresh Eng. and Test										Δ	Δ	Δ		\triangle																		
TMCS Eng. and Test.														Δ																		
DISN Upgrade Sys. Eng and Test														Δ																		
Generation Two: Milestone C DT/OT&E FOT&E										Δ				Δ		Δ				Δ												
AEHF Eng. and Test																		Δ				Λ										
MUOS Eng. & Test																																
JTRS Eng. & Test																																
Tech Refresh Eng. and Test																														\triangle		

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Exhibit R-4a Schedule Detail			DATE: Febru	ary 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT			PROJE	CT NAME AND	NUMBER
RDT&E, Defense-Wide/07	Teleport Pr	ogram / PE	0303610K		Telep	ort / NS01	
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Generation One Implementation Plans IOC1 (C and Ku Band)							
IOC2 Testing		3Q					
IOC2 (UHF Band)			10				
IOC3 Testing	4Q	1Q-3Q					
IOC3 (EHF, C, Ku, UHF Band)			1Q				
IOC4 Testing				2Q-3Q			
IOC4 (Ka 8 Links)				4Q			
DISN Upgrades			2Q				
AEHF Systems Eng.				2Q	0.5		
Research MUOS					2Q		
JTRS Systems Eng. Tech Refresh Eng. And Test						2Q	2Q
Generation Two Milestone C		2Q					
Generation Two (Current Force Modem) DT/OT&E			2Q				
Generation Two (Current Force Modem) FOT&E			4Q				
Generation Two (Joint Modem) DT/OT&E				10			
Generation Two (Joint Modem) FOT&E				4Q			

Exhibit R-2, RDT&E Budget Item Justification	Date: February 2006										
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE										
RDT&E, Defense-Wide/07			Dist	tributed Co	mmon Ground	l/Surface Sys	stems/PE 0305	5208K			
COST (in millions)	FY05	FY	06	FY07	FY08	FY09	FY10	FY11			
Distributed Common Ground/Surface Systems (DCGS)/NF1	0.000	0.0	00	7.451	15.960	3.281	3.386	3.794			

A. Mission Description and Budget Item Justification: The Joint Interoperability Test Command (JITC), as the sole joint interoperability certification agent, will establish and maintain a Distributed Development and Test Enterprise (DDTE) for the DoD Distributed Common Ground/Surface System (DCGS) Program. DCGS is an integral and critical component of the overall DoD Intelligence, Surveillance, and Reconnaissance (ISR) interoperability and data integration strategy. The DCGS provides world-wide ground/surface capabilities to receive, process, exploit, and disseminate data from airborne and national reconnaissance sensors/platforms and commercial sources. The ability for any user to discover, access, and understand the data are key tenets of network-centric operations which is the future of DCGS operations.

JITC will implement the DDTE providing DCGS 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. JITC will coordinate with the Services and Agencies on integrating modeling and simulation capabilities, and performing Joint/DCGS event coordination, configuration, and integration functions on the DDTE. This will enable improved systems engineering and test and evaluation throughout all phases of the DCGS life-cycle.

DCGS will use the DDTE to integrate architecture, standards, and capabilities for implementation of the DCGS Integration Backbone (DIB) and support the migration to net-centricity, including convergence with Net-Centric Enterprise Services (NCES), for the following DCGS programs: DCGS-Army (DCGS-A), DCGS-Navy (DCGS-N), Air Force DCGS (AF DCGS), DCGS-Marine Corps (DCGS-MC). National Agency capabilities supporting DCGS including Imagery Intelligence (IMINT), Signals Intelligence (SIGINT), Measurement and Signature Intelligence (MASINT) and Human Intelligence (HUMINT) capabilities will also be integrated and tested in the DDTE. The DCGS programs will use the DDTE to improve / validate interoperability with the reconnaissance platforms and sensors, and integration into the Joint Command and Control environment.

JITC will develop a formal interoperability certification program and provide interoperability testing service to the DCGS program manager to document interoperability test requirements, provide standards conformance and interoperability test capabilities, develop standards conformance and interoperability test planning documents, conduct standards conformance and interoperability test events, develop DCGS program reporting documents, and conduct joint interoperability certification. Standards addressed for DDTE will include those defined in coordination with DISA for Joint Command and Control (JC2) and NCES, as well as Common Data Link (CDL), Intelligence Broadcast System (IBS),

Exhibit R-2, RDT&E Budget Item Justification	Date: February 2006											
APPROPRIATION/BUDGET ACTIVITY			R-1	ITEM NOMEN	CLATURE							
RDT&E, Defense-Wide/07			Dist	ributed Co	mmon Ground	d/Surface Sys	stems/PE 0305	5208K				
COST (in millions)	FY05	FY (06	FY07	FY08	FY09	FY10	FY11				
Distributed Common Ground/Surface Systems (DCGS)/NF1	0.000	0.00	0.0	7.451	15.960	3.281	3.386	3.794				

National Imagery Text Format (NITF), LINK 11/11B/16, United States Message Text Format (USMTF), Extensible Markup Language (XML), and Information Assurance (IA).

B. Program Change Summary:

	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	0.000	0.000	0.000
Current President's Budget	0.000	0.000	7.451
Total Adjustments	0.000	0.000	7.451

Change Summary Explanation:

FY 2007 adjustment due to identified need for interoperability certification (IAW DOD policy & guidance) and a distributed development and test enterprise.

- C. Other Program Funding. 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 will support this effort are Northrop Grumman Mission Systems and INTEROP Joint Venture.
- E. Performance Metrics.
 - Number / Percentage of DDTE supported DCGS Systems/Capabilities
 - Number / Percentage of standard compliant DDTE supported DCGS System/Capabilities
 - Number / Percentage of Interoperability certified DDTE supported DCGS System/Capabilities
 - Number / Percentage of DDTE supported DCGS Systems/Capabilities achieved IOC

Exhibit R-3 Cost Anal	ysis		DATE: Febru	ruary 2006												
APPROPRIATION/BUDGET	ACTIVITY		RAM ELEMENT	·	PROJ	ECT NAME	AND NUM	MBER								
RDT&E, Defense-Wide/0	17		ributed Common ems/PE 0305208K	•	Distributed Common Ground/Surface Systems/NF1											
Test and Evaluation																
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs <u>Cost</u>	FY 06 Cost	FY 06 Award <u>Date</u>	FY 07	FY 07 Award <u>Date</u>	Cost to Complete	Total <u>Cost</u>	Target Value of Contract						
Engineering/Technical Services	FFP/LOE	INTEROP Joint Venture, Fort Huachuca, AZ	N/A	N/A	N/A	6.701	Oct 06	Cont'g	Cont'g	Cont'g						
	FFP/LOE	Northop Grumman Mission Systems Fort Huachuca,	N/A	N/A	N/A	0.750	Oct 06	Cont'g	Cont'g	Cont'g						
Subtotal Contracts		Au				7.451										
In-House																
Total Project						7.451										

Appropriation/Budget Activity RDT&E, Defense-Wide/07						Program Element Number and Distributed Common Ground/Surfa / PE 0305208K							d N ace	d Name ace Systems					Project Number and Name Distributed Common Ground/Surface Systems / NF1												
Fiscal Year	Fiscal Year 200			2005			2006				2007			2008				2009				2010				2011					
	1	2	2	3	4	1	2	3	4	1	2	2 3	3 4	4	1	2	3	4	1	2	2 :	3 4	1	1	2	3	4	1	2	3	4
DCGS T&E IPT			T												-		-					:					:			:	:
Establishment of Infrastructure											:																				
Connectivity to Other Testbeds & Test Event Conduct	t														i		<u> </u>														
O&M and Event Conduct																				:	-	:									:

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		DATE: February 2006										
Distrib	uted Common (Ground/Surfac	ce Distr	PROJECT NAME AND NUMBER Distributed Common Ground/Surface Systems/NF1								
FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011						
		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q						
		1-4Q										
			1-4Q									
				1-4Q	1-4Q	1-4Q						
	Distrib	Systems/PE 0305208K	PROGRAM ELEMENT Distributed Common Ground/Surface Systems/PE 0305208K FY 2005 FY 2006 FY 2007 1-4Q	PROGRAM ELEMENT Distributed Common Ground/Surface Systems/PE 0305208K FY 2005 FY 2006 FY 2007 FY 2008 1-4Q 1-4Q	PROGRAM ELEMENT Distributed Common Ground/Surface Systems/PE 0305208K FY 2005 FY 2006 1-4Q 1-4Q 1-4Q 1-4Q 1-4Q	PROGRAM ELEMENT Distributed Common Ground/Surface Systems/PE 0305208K PROJECT NAME AND NUMBER Distributed Common Ground/Surface Systems/NF1 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 1-4Q 1-4Q 1-4Q 1-4Q 1-4Q 1-4Q 1-4Q						

Defense Information Systems Agency FISCAL YEAR (FY) 2007 BUDGET ESTIMATES R-5 Exhibit

Termination Liability Funding For Major Defense Acquisition Programs RDT&E Funding (\$000)

Program Defense Message System PE 0303129K *Note: The prime DMS contract is a been met. There is no termination follow-on contract vehicle in FY 20	liability.	The curren	0 hich the gu t contract	will expir	e and be re	0 unt has alre	
Global Combat Support System PE 0303141K	0	0	0	0	0	0	0
Global Command and Control System - Joint (GCCS-J) PE 0303150K	0	0	0	0	0	0	0
Net-Centric Enterprise Services (NCES) PE 0303170K	0	0	0	0	0	0	0
Teleport PE 0303610K	0	0	0	0	0	0	0