

DEFENSE INFORMATION SYSTEMS AGENCY

FISCAL YEAR (FY) 2006/FY 2007

BUDGET ESTIMATES



RESEARCH, DEVELOPMENT, TEST & EVALUATION

(RDT&E)

FEBRUARY 2005

UNCLASSIFIED

DEFENSE INFORMATION SYSTEMS AGENCY
FISCAL YEAR (FY)2006/ FY 2007 BUDGET ESTIMATES

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

TABLE OF CONTENTS

RDT&E Program Summary, R-1	1
Defense Message System, PE 0303129K	2
Information Systems Security Program, PE 0303140K	14
Global Combat Support System, PE 0303141K	24
Joint Command and Control Program, PE 0303158K	32
Electronic Commerce, PE 0305840K	41
Advanced Information Technology Services Joint Program Office, PE 0604764K	47
Defense Technical Information Services, PE 0605801K	61
C4I Interoperability, PE 0208045K	68
National Military Command System (NMCS) Support, PE 0302016K	83
Defense Information Infrastructure (DII) Engineering & Integration, PE 0302019K	89
Long-Haul Communications, PE 0303126K	102
Minimum Essential Emergency Communications Network (MEECN), PE 0303131K	113
DISA Mission Support Operations, PE 0303148K	124
C4I for the Warrior, PE 0303149K	129
Global Command and Control System, PE 0303150K	155
Joint Spectrum Center, PE 0303153K	175
Defense Collaboration Tool Suite, PE 0303165K	183
Net-Centric Enterprise Services, PE 0303170K	189
Teleport Program, PE 0303610K	203
Termination Liability Funding For Major Defense Acquisition Programs, R-5 Exhibit ...	211

UNCLASSIFIED

UNCLASSIFIED

DEFENSE INFORMATION SYSTEMS AGENCY
 FISCAL YEAR (FY) 2006/FY 2007 BUDGET ESTIMATES
 R-1 EXHIBIT

Program Element =====	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>
0303129K Defense Message System (DMS)	12,390	5,584	13,367
0303140K Information Systems Security Program (ISSP)	7,673	5,014	0
0303141K Global Combat Support System (GCSS)	15,896	16,961	17,952
0303158K Joint Command and Control Program	0	3,905	14,580
0305840K Electronic Commerce (EC)	5,909	3,379	6,698
0604764K Advanced IT Services Joint Program Office	16,031	16,605	9,325
Total System Development and Demonstration (BA 5)	57,899	51,448	61,922
0605801K Defense Technical Information Services	42,690	0	0
Total RDT&E Management Support (BA 6)	42,690	0	0
0208045K C4I Interoperability	42,857	40,706	65,517
0302016K NMCS-Wide Support	1,076	1,209	659
0302019K Defense Info. Infrac.(DII) Engin. & Integ.	2,337	2,437	5,466
0303126K Long Haul Communications	1,373	10,789	1,470
0303131K Min. Essen. Emerg. Comm. Netw. (MEECN)	7,644	7,789	7,438
0303148K DISA Mission Support Operations	0	0	3,426
0303149K C4I for the Warrior	34,601	23,526	6,311
0303150K Global Command and Control System	52,191	62,944	52,331
0303153K Joint Spectrum Center	15,239	17,839	14,097
0303165K Defense Collaboration Tool Suite	11,969	6,590	0
0303170K Net-Centric Enterprise Services	30,267	49,904	79,018
0303610K Teleport Program	9,903	9,945	12,180
Total Operational System Develop. (BA 7)	209,457	233,678	247,913
TOTAL DISA RDT&E	310,046	285,126	309,835

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	12.390	5.584	13.367	11.050	7.521	7.524	7.739	8.019

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. DMS also allows use of the DoD Common Access Card (CAC), with DoD Class 3 PKI certificates for individual messaging. At this time, the CAC does not provide the requisite level of support to meet operational "high grade" messaging requirements. A key 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. Some security efforts of the Program are funded in PE 0303140K (not duplication of effort). DMS products formerly

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	12.390	5.584	13.367	11.050	7.521	7.524	7.739	8.019

provided by NSA will be maintained by DISA (beginning 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 anticipated reduction in commercial technology refresh.

Accomplishments/Planned Program:

*DMS Maintenance Release	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	4.097	3.590	8.055	7.120

*Note that FY 2004 and FY 2005 activity is 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 2004, DMS RDT&E funds provided for engineering, 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).

In FY 2005, the final phase of DSE will be integrated and tested. Future DMS releases will provide for engineering and

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification					Date: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K			
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	12.390	5.584	13.367	11.050	7.521	7.524	7.739	8.019

integration of security, interoperability, and communications support capabilities and functionality unique to DMS operations in the IC and tactical environments. Areas of focus for the IC include DSE and additional legacy translation support. Areas of focus for tactical DMS use include operations in limited bandwidth environments, and support for connectionless mode transport in the messaging application. In addition, DMS security services (FORTEZZA) will be migrated from a client/server topology to a 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. Beginning in FY 2006, 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.

DMS Systems Engineering	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	5.194	0.744	1.382	0.000

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 2004, 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 2005 and 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.

*Test Support	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	2.549	1.250	3.930	3.930

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	12.390	5.584	13.367	11.050	7.521	7.524	7.739	8.019

*Note that FY 2004 and FY 2005 activity is 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 2004, directory security enhancements (as mandated by OSD) were developmentally tested with DMS Release 3.0 Maintenance Release 1 (MR1). Testing was focused on resolution of Problem Ticket Reports (PTRs) and continuing integration of DSE. In FY 2005, DMS Release 3.1 (which includes final implementation of DSE) will be operationally tested and further changes identified through NSA assessment and will be implemented after completion of appropriate developmental and operational tests. Scope of testing efforts is constrained by funding cuts to the Program.

Emergency Action Message (EAM) Support	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.550	0.000	0.000	0.000

In order to preserve a seamless tactical and strategic DMS implementation, including interoperability with the Nuclear Command and Control Community and Allies, DMS participated in long-term requirements definition, architectural development, analysis of alternatives, and a proof of concept effort. The DMS program tested an interim solution for Nuclear Command and Control messaging. Fielding of DMS in support of non-time-critical Emergency Action Message (EAM) users was completed in March 2004.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	12.390	5.584	13.367	11.050	7.521	7.524	7.739	8.019

B. Program Change Summary:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	9.662	6.623	6.348	6.637
Current Submission	12.390	5.584	13.367	11.050
Total Adjustments	2.728	-1.039	7.019	4.413

Change Summary Explanation:

FY 2004 change is due to below threshold reprogramming.

FY 2005 change is due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation as well as below threshold reprogramming.

FY 2006 and FY 2007 changes are due to DMS program restructuring to incorporate products formerly provided by NSA and security functions formerly budgeted in PE 0303140K. Note that FY 2004 and FY 2005 activity is dually funded through PE 0303129K and Information Assurance, PE 0303140K. Starting in FY 2006, the work is funded from PE 0303129K only.

C. Other Program Funding Summary:

	<u>FY 04</u>	<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>	<u>To Complete</u>	<u>Total Cost</u>
Procurement, DW	9.270	4.182	8.912	6.657	4.788	4.797	5.080	5.420	Contg	Contg
O&M, DW	15.820	28.583	21.645	22.038	17.623	17.761	17.964	18.207	Contg	Contg

D. Acquisition Strategy: 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

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	12.390	5.584	13.367	11.050	7.521	7.524	7.739	8.019

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 fielding of Virtual Private Networking (VPN) technology that will protect 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 Lockheed Martin 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 (such as High Assurance Guard [HAG] and Certificate Authority Workstation [CAW]) are currently provided by NSA and incorporated as Government Furnished Equipment (GFE) by the integrator. In FY 2006 and beyond, these products will be provided by DISA.
3. 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 functional areas of system architecture, technical strategy, program strategy, and program execution.

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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Message System/DM01	12.390	5.584	13.367	11.050	7.521	7.524	7.739	8.019

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	≤ 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

UNCLASSIFIED

Exhibit R-3 Cost Analysis								DATE: February 2005				
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 & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost To Complete	Total Cost	Target Value of Contract
<u>Product Development</u>	CPAF Comp	Lockheed Martin, Manassas, VA	20.775	4.334	05/05	9.437	05/06	7.120	05/07	0	41.666	41.666
	MIPR	NSA, Ft Meade, MD	0.047	0	N/A	0	N/A	0	N/A	0	0.047	0.047
<u>Systems Engineering</u>	FFRDC	MITRE, McLean, VA	3.424	0	N/A	0	N/A	0	N/A	0	3.424	3.424
	CPFF SS	NAVY/SPAWAR Charleston, SC	0.382	0	N/A	0	N/A	0	N/A	0	0.382	0.382
Subtotal Product Development			24.628	4.334		9.437		7.120				
<u>Test and Evaluation</u>												
<u>Developmental Test & Evaluation</u>	MIPR	Joint Inter-Operability Test Command (JITC), Indian Head, MD	6.696	0.800	10/04	2.750	10/05	2.750	10/06	0	12.966	12.966
	CPAF/ SS	Data Systems Analysts Fairfax, VA	1.570	0	N/A	0.550	01/06	0.550	01/07	0	2.670	2.670
<u>Conduct ST&E</u>	MIPR	Field Security Ops/ DISA, Letterkenny Army Depot, PA	0.000	0	N/A	0.080	06/06	0.080	06/07	0	0.160	0.160
<u>Operational Test & Evaluation</u>	MIPR	JITC Ft Huachuca, AZ	0.600	0.450	10/04	0.550	10/05	0.550	10/06	0	2.150	2.150
Subtotal Test and Evaluation			8.866	1.250		3.930		3.930				

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005							
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 & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY07 Cost	FY 07 Award Date	Cost To Complete	Total Cost	Target Value of Contract
<u>Emergency Action Message (EAM) Support</u>												
EAM Hybrid Solution	CPFF SS	John Hopkins, Baltimore, MD	0.382	0	N/A	0	N/A	0	N/A	0	0.382	0.382
	T&M Contract	SAIC	0.105	0	N/A	0	N/A	0	N/A	0	0.105	0.105
	MIPR	JITC Indian Head, MD	0.063	0	N/A	0	N/A	0	N/A	0	0.063	0.063
Subtotal EAM Support			0.550	0		0		0				
TOTAL			34.044	5.584		13.367		11.050				

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05													Program Element Number and Name Defense Message System PE 0303129K													Project Number and Name DMS/DM01												
Fiscal Year	2004				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	4	1	2	3	4						
DMS Product Development and Testing Assessment (DMS R3.1 Maintenance Release (MR2 +DSE 1.5) and yearly Updates)				▲	▲			▲	▲			▲	▲			▲	▲			▲	▲			▲	▲			▲	▲			▲	▲					
Security Product Development and Testing										▲				▲					▲					▲								▲						
Closure of DMS Transition Hubs (DTH)	▲	▲																																				

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05													Program Element Number and Name Defense Message System PE 0303129K													Project Number and Name DMS/DM01												
Fiscal Year	2004				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	4	1	2	3	4						
DMS Product Operational Assessment (DMS R3.1 Maintenance Release (MR2 +DSE 1.5) and yearly Updates) Implementation to Infrastructure				△	△	△	△		△			△	△			△	△			△	△			△	△			△	△			△						
					△			△	△			△	△			△	△			△	△			△	△			△	△			△						

UNCLASSIFIED

Exhibit R-4a Schedule Detail				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NAME AND NUMBER				
RDTE, Defense-Wide/05	Defense Message System / PE 0303129K			DMS / DM01				
Schedule Profile	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Closure of DMS Transition Hubs (DTHs)	1Q - 2Q							
Begin Development	4Q	1Q - 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q
Test of DMS R3.1 MR & yearly Updates			2Q	2Q	2Q	2Q	2Q	2Q
Security Product Development & Testing								
R3.1 & R3-1 Update	4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q	2Q & 4Q
Operational Assessment								
Implementation To Infrastructure		1Q & 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q	1Q & 3Q

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP) PE 0303140K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Systems Security Program / IA01	7.673	5.014	0	0	0	0	0	0

A. Mission Description and Budget Item Justification: 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. The RDT&E portion of DISA's ISSP budget focuses on the security aspects of the Defense Message System (DMS). These funds are not duplicative of, but rather are additive to, work being done by the DMS in PE 0303129K. In FY 2004 to support the requirement to develop and implement protection control techniques, DISA established efforts to: identify secure software architectures that use security patterns and multiple levels that are integrated with standard wireless infrastructure; develop secure routing protocols for ad hoc wireless and sensor networks; investigate and identify the benefits of performing wireless and wired network intrusion detection using data mining; develop protocols and methodologies for biometric identity management on wireless networks; test IA cryptographic primitives and protocols; identify improvements to personnel identification schemes; develop a network management risk management framework; and define an organizationally based security assessment tool to monitor compliance with policies and processes. To support development and deployment of protection capabilities across the enterprise, in FY 2004, DISA developed security tools that use shareware, new technologies, embedded Commercial-Off-The-Shelf (COTS) products, and encryption, authentication, access control, and password storage and handling techniques to improve the Global Command and Control System-Joint (GCCS-J) security posture; developed bridge products for transitioning Common Operating Environment (COE) based mission application legacy systems into the Net-Centric Enterprise Services (NCES) environment; and added strong authentication of directory read operations and completed Directorates for Software Engineering (DSE) development on the Defense Message System (DMS). In FY 2005 DMS will increase protection of audit logs and update products for stronger mapping of Public Key Infrastructure (PKI) identity for access control decisions within the FORTEZZA server. Starting in FY 2006 the effort will be 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.

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP) PE 0303140K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Systems Security Program / IA01	7.673	5.014	0	0	0	0	0	0

B. Accomplishments/Planned Program:

Systems Engineering & Integration	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	2.739	1.000	0.000	0.000

RDT&E funds support basic Systems Engineering activities of both the PMO (including contractor support) and the Prime Integrator, and are critical to completion of worldwide fielding and sustaining of DMS. The supported tasks include Program and Systems Management to conduct technical assessments/analyses of new commercially available security features, and incorporate them into DMS. In addition, changes are 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 2004 through FY 2005, the Prime Contractor implements and fields 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 of activity upgrades will keep the current 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. Developed and fielded software and documentation that mitigates/fixes security vulnerabilities identified in previous certification and accreditation testing.

<u>Test Support:</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Subtotal Cost	3.159	1.114	0.000	0.000

The Joint Interoperability Test Command (JITC) provides 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

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP) PE 0303140K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Systems Security Program / IA01	7.673	5.014	0	0	0	0	0	0

Developmental Testing involve testing of functionality specifically geared to information security/assurance. Problems found during testing may 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 are programmed to provide 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 will support a series of security tests and develop plans of action to address security risks as security threats change. In FY 2004 and FY 2005, DMS will develop a process and provide a plan of action that addresses implementation of NSA recommended security enhancements as a result of an ASD (NII) mandated security assessment. DMS will continue to support JITC security tests and develop plans of action to address security risks.

<u>Security Features:</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Subtotal Cost	1.775	0.000	0.000	0.000

Provided engineering efforts to identify robust solutions for the Secure Telecommunications Networking Initiative by performing security readiness reviews on voice data networks, researching and developing a Security Technical Implementation Guide (STIG) for use on the nodes of voice networks, and examining methods of securely managing Voice over Internet Protocol (VoIP) networks. NCES IA Security features include development of bridge products from the COE to the NCES environment.

<u>Congressional Adds:</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Subtotal Cost	0.000	2.900	0.000	0.000

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

<u>B. Program Change Summary:</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Previous President's Budget	6.688	2.493	0.000	0.000
Current Submission	7.673	5.014	0.000	0.000
Total Adjustments	0.985	2.521	-	-

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP) PE 0303140K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Systems Security Program / IA01	7.673	5.014	0	0	0	0	0	0

Change Summary Explanation:

FY 2004 change is due to below threshold reprogramming.

FY 2005 change is due to Congressional Adds and undistributed Congressional reductions to the Defense-Wide RDT&E appropriation.

C. Other Program Funding Summary:

	<u>FY 04</u>	<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>FY11</u>
Operations and Maintenance:	116.048	99.981	174.253	175.739	168.223	180.451	178.792	171.230
Procurement:	30.360	46.618	27.072	20.847	21.476	27.946	31.059	32.982

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 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 (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.

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP) PE 0303140K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Systems Security Program / IA01	7.673	5.014	0	0	0	0	0	0

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.
- d. Pragmatics Corporation will provide engineering and technical services in support of the Secure Telecommunications Network Initiative.

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.

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP) PE 0303140K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Systems Security Program / IA01	7.673	5.014	0	0	0	0	0	0

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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/05			Information Systems Security Program (ISSP)/ PE 0303140K				Information Systems Security Program /IA01					
Cost Category	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 05 Cost	FY 05 Award Date	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 Systems Engineering and Integration	CPFF, FFP/c	Lockheed Martine Company, Manassas, VA	31.571	1.000	05/05	0.000	N/A	0.000	N/A	0.000	32.571	32.571
Systems Engineering	CPAF/SS	Data Systems Analysis Fairfax, VA	0.980	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.980	0.980
	FFRDC	MITRE, Arlington, VA	0.584	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.584	0.584
Systems Integration	CPFF/C	SAIC, Arlington, VA	2.489	0.000	N/A	0.000	N/A	0.000	N/A	0.000	2.489	2.489
	CPFF/C	UNISYS, Arlington, VA	1.300	0.000	N/A	0.000	N/A	0.000	N/A	0.000	1.300	1.300
	CPFF/C	Booz, Allen & Hamilton, McLean, VA	0.336	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.336	0.336
	T&M/C	SRA, Fairlakes, VA	2.528	0.000	N/A	0.000	N/A	0.000	N/A	0.000	2.528	2.528
Engineering/Technical Services	T&M/C	Pragmatics, McLean, VA	<u>1.775</u>	<u>0.000</u>	N/A	<u>0.000</u>	N/A	<u>0.000</u>	N/A	<u>0.000</u>	<u>1.775</u>	<u>1.775</u>
Subtotal Product Development			41.563	1.000		0.000		0.000		0.000	42.563	42.563
Test and Evaluation Operational Test & Evaluation	MIPR	Joint Interoperability Test Command, Ft Huachuca, AZ	3.746	0.000	11/04	0.000	N/A	0.000		0.000	3.746	3.746
Test and Evaluation Security/Developmental Test & Evaluation	MIPR	Joint Interoperability Test Command, Indian Head, MD	2.577	0.700	10/04	0.000	N/A	0.000		0.000	3.277	3.277

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/05			Information Systems Security Program (ISSP)/ PE 0303140K				Information Systems Security Program /IA01					
Cost Category	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	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		0.000	0.753	0.753
Security Test & Evaluation	MIPR	National Security Agency	0.400	0.414	01/05	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, VA	0.100	0.000	04/05	0.000	N/A	0.000	N/A	0.000	0.100	0.100
EAM Hybrid Solution	MIPR	JITC Indian Head, MD	0.000	0.000	10/04	0.000	N/A	0.000	N/A	0.000	0.000	0.000
Subtotal Test and Evaluation			7.576	1.114		0.000		0.000		0.000	51.253	51.253
Congressional Adds	TBD	TBD	0.000	2.900	TBD	0.000	N/A	0.000	N/A	0.000	2.900	2.900
TOTAL			49.139	5.014		0.000		0.000		0.000	54.153	54.153

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05													Program Element Number and Name Information System Security Program (ISSP) PE 0303140K													Project Number and Name Project ISSP/IA01												
Fiscal Year	2004				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	4	1	2	3	4						
<u>DMS Products</u>																																						
Begin Dvlpmnt of 3.0/ MR2 – MR4																																						
Begin Dvlpmnt Test of 3./MR1 – MR3																																						
3.0/MR1-MR3 Operational Test																																						

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	PROGRAM ELEMENT Information System Security Program (ISSP) PE 0303140K	PROJECT NAME AND NUMBER ISSP / IA01

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
DMS Products								
Begin Development of 3.0/MR2 - MR4	1Q & 4Q	1Q & 4Q						
Begin Development Test of 3.0/MR1 - MR3	4Q	4Q						
3.0/MR1-MR3 Operational Test	2Q - 3Q	2Q - 3Q						

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Global Combat Support System (GCSS) / PE 0303141K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Combat Support System (GCSS CC/JTF) CS01	15.896	16.961	17.952	18.304	18.714	19.196	19.894	20.615

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). GCSS for the Combatant Command/Joint Task Force Commander (CC/JTF) is fielded as a GCCS-J mission application, providing decision makers with fused CS data and C2 information on the same workstation. 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 simple sign on, web Portal application, using a SIPRNet 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.

	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Subtotal Cost:	1.756	2.355	2.855	3.005

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 2004, 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

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Global Combat Support System (GCSS) / PE 0303141K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Combat Support System (GCSS CC/JTF) CS01	15.896	16.961	17.952	18.304	18.714	19.196	19.894	20.615

Web (NTW), Theater Medical Information Program (TMIP) and the Joint Total Asset Visibility and Integrated Data Environment (JTAV/IDE) to ensure individual program alignment with the FOS architecture. Funds were also used to conduct the analysis and selection 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 Public Key Infrastructure enabled single-sign on solution that enables user authentication and access controls across all FOS applications.

In FY2005 through FY2007, the program will incrementally implement the next-generation net-centric architecture for GCSS, 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 guards) processes and tools. 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.

	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Subtotal Cost:	14.140	14.606	15.097	15.299

GCSS (CC/JTF) - This effort involves the development, integration, and fielding of the GCSS (CC/JTF). RDT&E funds were used in FY 2004 to support life cycle development efforts, requirements analysis, system engineering, software development, configuration management, and testing activities. During FY 2004, the GCSS Program developed and delivered Phase 5 of the Global Combat Support System (Combatant Command/Joint Task Force) [GCSS (CC/JTF)], and was comprised of three capability increments (CI). CI 1 was a strategic server release (v4.0.1) fielded to limited COCOMs

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Global Combat Support System (GCSS) / PE 0303141K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Combat Support System (GCSS CC/JTF) CS01	15.896	16.961	17.952	18.304	18.714	19.196	19.894	20.615

in November 2004; CI 2 is a client release and will be (v4.0) fielded with GCCS-J V4.0B, and CI 3 (v4.1/4.2) will be fielded in March 2005. In FY 2004, 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, 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 guards) processes and tools. 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.

B. Program Change Summary:

	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Previous President's Budget	16.396	17.867	18.001	18.409
Current Submission	15.896	16.961	17.952	18.304
Total Adjustments	-.500	-.906	-.049	-.105

Change Summary Explanation: FY 2004 change is due to below threshold reprogramming. FY05 change is due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation as well as below threshold

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Global Combat Support System (GCSS) / PE 0303141K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Combat Support System (GCSS CC/JTF) CS01	15.896	16.961	17.952	18.304	18.714	19.196	19.894	20.615

reprogramming. FY 2006 and FY 2007 changes are due to revised fiscal guidance.

C. Other Program Funding Summary:

	<u>FY 04</u>	<u>FY05</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>	<u>To</u> <u>Complete</u>	<u>Total</u> <u>Cost</u>
Procurement, DW	2.474	2.390	2.686	2.739	2.806	2.880	3.073	3.279	Contg	Contg
O&M, DW	11.463	11.226	13.565	13.955	14.281	14.638	14.822	15.018	Contg	Contg

D. Acquisition Strategy: GCSS (CC/JTF) is an evolutionary acquisition with its implementation divided into capability increments. The GCSS (CC/JTF) program has been structured to take advantage of both government and industry best practices, and to employ acquisition reform initiatives, which improve program performance effectively and efficiently. The GCSS (CC/JTF) uses existing contract vehicles within DISA and other Federal Agencies including the General Services Administration (GSA). For all multiple-award IDIQ contract vehicles, fair opportunity for consideration is used to allow for adequate competition. When using Federal Supply Schedules, multiple vendors are evaluated for best value prior to selection. During FY 2004, 69% of total contract funds were awarded to small businesses in support of the GCSS (CC/JTF) mission. In FY 2005 through FY 2011, the GCSS program will continue to utilize small business to the maximum extent possible.

All RDT&E work will either be contracted out to industry or a Military Interdepartmental Purchase Request (MIPR) will be prepared to other Services/Agencies. Product development is procured through Wireless Facilities Incorporated (formerly Dyad Sodality Inc (DSI)), Enterworks, FGM, Northrop Grumman Management Systems (formerly IT), SAIC and UNYSIS. The Joint Interoperability Test Command (JITC), and Communications Technologies (COMTEK) will provide program Test and Evaluation support. Engineering Technical Management Services are procured through MITRE, the Institute for Defense Analysis (IDA) and the University of Maryland, Eastern Shore (UMD-ES).

E. Performance Metrics: GCSS (CC/JTF) develops and fields capabilities that are based upon Joint Staff - J4 validated, approved and prioritized functional requirements taken from the approved GCSS (CC/JTF) Operational Requirements Document (ORD) and the CINC 129 requirements. GCSS (CC/JTF) also meets strategic goals identified in the

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Global Combat Support System (GCSS) / PE 0303141K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Combat Support System (GCSS CC/JTF) CS01	15.896	16.961	17.952	18.304	18.714	19.196	19.894	20.615

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 (J4) prioritizes the fielding schedule for each GCSS (CC/JTF) release and the program gathers metrics from each fielded location throughout the release lifecycle. 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 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 COI (e.g., command and control, combat support) that exploit the GIG for improved decision-making" is directly supported by the decision support tools and federated 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."

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/05			Global Combat Support System (GCSS CC/JTF) PE 0303141K			Global Combat Support System (Combatant Command/Joint Task Force) (CGSS CC/JFT) / CS01						
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Management Services	FFRDC	MITRE, Vienna, VA	9.532	1.947	11/04	2.070	11/05	2.070	11/06	Contg	15.619	15.619
	CPFF	UMD, Eastern Shore MD	0.601	0.210	05/06	0.210	05/07	0.226	05/08	Contg	1.247	1.247
	MIPR	IDA, Alexandria, VA	0.165	0.317	01/05	0.320	01/06	0.320	01/07	Contg	1.122	1.122
	MIPR	JFCOM, Norfolk, VA	0.100	0		0		0			0.100	0.100
Product Development	T&M	ENTERWORKS, Sterling, VA	6.584	1.733	01/05	2.600	01/06	2.600	01/07	Contg	13.517	13.517
	T&M	DSI, Manassas, VA	1.921	1.841	12/04	1.775	12/05	1.893	12/06	Contg	7.430	7.430
	T&M	SAIC, Falls Church, VA	14.605	3.842	12/04	4.030	12/05	4.043	12/06	Contg	26.520	26.520
	CPFF	NGIT, Reston, VA	16.042	1.226	11/04	1.226	11/05	1.426	11/06	Contg	19.920	19.920
	T&M	UNISYS, Falls Church, VA	3.768	1.594	01/05	1.841	01/06	1.841	01/07	Contg	9.044	9.044
	MIPR	FGM, Reston, VA	3.432	2.050	12/04	2.050	12/05	2.050	12/06	Contg	9.582	9.582
	FFP	Merlin, McLean, VA	1.664	0.720	12/04	0.330	12/05	0.330	12/06	Contg	3.044	3.044
	MIPR	JDTC, Ft Eustis, VA	.205	.381	11/04	.400	11/05	.405	11/06	Contg	1.391	1.391
Test & Evaluation	CPFF	COMTEK, Sterling VA	2.352	0.800	03/05	0.800	03/06	0.800	03/07	Contg	4.752	4.752
	MIPR	SSO, Montgomery	0.150	0.300	10/04	0.300	10/05	0.300	10/06	Contg	1.050	1.050
Total			61.121	16.961		17.952		18.304			114.338	114.338

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/05													Program Element Number and Name Global Combat Support System (GCSS)/PE 0303141K													Project Number and Name GCSS (CC/JTF)/CS01												
Fiscal Year	2004				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	4	1	2	3	4						
Contract Prep.			△	△			△	△			△	△			△	△																						
Contract Award					△	△	△		△	△	△		△	△	△																							
Phase 6 Capability Increments CI 1 -Requirements Analysis, Eng Dev & Testing -Fielding			△	△	△	△	△	△	△																													
CI 2 Requirements Analysis, Eng Dev & Testing Fielding					△	△	△	△	△	△			△	△																								

Note: Schedule is TBD from FY06 – FY09. The GCSS Operational Requirements Document (ORD) was approved by the Joint Requirements Board (JRB) during November 2002 and validated by the Joint Requirements Oversight Council (JROC) in May 2003.

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/05	Global Combat Support System (CC/JTF)/ PE 0303141K	Global Combat Support System (CC/JTF)/CS01						
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Contract Preparation	3Q-4Q	3Q-4Q	3Q-4Q	3Q-4Q	TBD	TBD	TBD	TBD
Contract Award	1Q-3Q	1Q-3Q	1Q-3Q	1Q-3Q				
Capability Increments								
Version 5.0								
- Requirements Analysis, Eng Dev & Testing	4Q	1Q-4Q	1Q					
- Fielding			1Q					
Version 5.1								
- Requirements Analysis, Eng Dev & Testing		3Q-4Q	1Q-2Q					
- Fielding			2Q-3Q					
Note: Schedule is TBD from FY 2008 - FY 2011. 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.								

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Joint Command and Control /PE 0303158K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Command and Control (JC2)/JC01	0	3.905	14.580	19.674	25.802	26.288	26.940	27.760

A. Mission Description & Budget Item Justification: Joint Command and Control (JC2) is the next generation of command and control for the Department of Defense (DoD). JC2 is the follow-on to the Global Command and Control System (GCCS) Family of Systems including the DISA-provided GCCS-J, the current C2 system of record for the Department. JC2 is a key DoD Transformation effort that will provide a wide range of strategic, operational and theater-level Command, Control and Intelligence (C2I) capabilities to the warfighter based on a more net-centric, web-based, 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 is based on the Joint Requirements Oversight Council (JROC)-approved Operational Requirements Document (ORD), dated 22 August 2003, and the JC2 Capabilities Development Document (CDD) that is currently in JROC staffing. 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). Additionally, JC2 will provide the software component for the Navy's Deployable Joint Command and Control (DJC2) program. The requested RDT&E funding is critical to supporting DoD Transformation in the area of strategic and operational command and control. Accordingly, this program element is under Budget Activity 05.

In accordance with DoD goals, next generation C2I efforts are consolidated into JC2 in FY 2006 and beyond. This project supports JC2 major milestone activities to include concept exploration, acquisition documentation, and technology risk reduction through prototyping, development, integration, testing and limited operational use for evaluation. Two FY 2005 DISA projects are consolidated into JC2, 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 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).

DISA sponsored Net-Centric Capabilities Pilot (NCCP) beginning in FY 2004. NCCP starts 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. NCCP is consistent with DODD 5000.1. NCCP activities support JC2 concept exploration, technology risk reduction, and will help validate JC2 Technology Development Strategy (TDS) and Test and Evaluation Strategy (TES) that are being developed in FY 2005 as part of DISA's JC2 pre-milestone A responsibilities. NCCP includes periodic demonstration events to showcase selected mission threads

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Joint Command and Control /PE 0303158K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Command and Control (JC2)/JC01	0	3.905	14.580	19.674	25.802	26.288	26.940	27.760

to COCOMs, DoD senior leadership, and others such as coalition partners.

Accomplishments/Planned Program:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.000	3.905	5.000	5.100

JC2 Development and Strategic Planning - The current GCCS-J system is scheduled for development through Block V. JC2 will build upon and expand the capabilities developed and integrated in the GCCS era, and migrate capabilities to a more modern, net-centric architecture. FY 2005 activities are focused on several JC2 pre-Milestone A tasks for DISA. These include preparing the JC2 TDS and TES. DISA is also supporting the ASD(NII)-led JC2 Analysis of Alternatives (AoA) which is scheduled for completion in late FY 2005. In FY 2006 DISA expects to participate in several forecasted JC2 pre-Milestone B activities. These include: 1) strategic planning to identify net-centric C2 capability gaps that must be mitigated by suitable government development and/or other risk reduction activities, 2) an economic analysis to identify and mitigate total life cycle cost to DoD, 3) selected system engineering and architectural analysis, and 4) technical risk reduction pilots. Activities will assist in refining AoA options, provide the initial steps of the technical development, and help guide operational users engaged in developing operational tactics, techniques, and procedures for employing net-centric C2 capabilities.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.000	0.000	9.580	14.574

Next Generation C2I Capabilities - Provides net-centric warfighting mission capabilities for the C2 Community of Interest (COI) based on Combatant Commander approved 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 will refine JC2-related pilot capabilities that were demonstrated in FY 2004, the USSTRATCOM-sponsored Global Strike capability, the JFCOM-sponsored Situational Awareness capability. Intelligence/Targeting Support services for enhanced time-sensitive targeting, and a Force Projection capability that supports an improved joint deployment process are FY 2005 candidate capabilities. New capabilities will be added in FY 2006 and FY 2007 based on a collaborative management decision by JFCOM, other COCOMs, OSD, and

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Joint Command and Control /PE 0303158K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Command and Control (JC2)/JC01	0	3.905	14.580	19.674	25.802	26.288	26.940	27.760

Joint Staff.

- Mature UDOP capabilities will provide a tailorable relevant operational context that enables users to share a common understanding, improve their situational awareness, and conduct mission threads more effectively. Capabilities will be realized within a services-oriented architecture that leverages GIG Enterprise Services (GES) such as NCES (e.g., discovery services) and the Global Information Grid-Bandwidth Expansion (GIG-BE) to provide improved timely situational awareness, planning, collaboration and execution. Each user or aggregation of users will be able to define and use an operational context tailored to meet their needs by composing multiple net-centric data sources and services 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. JC2's situational awareness 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.

- JC2-related 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, ACTDs, Programs of Record, and industry). Pilot/demonstration capabilities are made available to users on the classified network for evaluation, maturation and limited operational use per ASD(NII) direction.

B. Program Change Summary:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	0.000	3.000	0.000	0.000
Current Submission	0.000	3.905	14.580	19.674
Total Adjustments	-	+0.905	+14.580	+19.674

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Joint Command and Control /PE 0303158K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Command and Control (JC2)/JC01	0	3.905	14.580	19.674	25.802	26.288	26.940	27.760

Change Summary Explanation:

The FY 2005 changes are due to support for a Navy Internet Protocol v.6 testbed project and undistributed Congressional reductions to the Defense-Wide RDT&E appropriation.

The FY 2006 and FY 2007 changes extend the initial JC2 funding to support the ASD(NII) Acquisition Decision Memorandum tasking for DISA to take the lead in developing the Test and Evaluation Strategy (TES) and Technology Development Strategy (TDS) for JC2. The proposed funding stream is based on the OSD-approved Concept Decision that directed DISA to support pre-Milestone A efforts including an Analysis of Alternatives and other DoDD 5000 activities in anticipation of a successful Milestone B decision in FY 2007.

C. Other Program Funding Summary:

	<u>FY 04</u>	<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	0.000	0.000	0.575	2.032	3.412	4.631	4.802	4.920

D. Acquisition Strategy: DISA will use existing contract vehicles to carry out the pre-Milestone A activities. These include development of the JC2 Technology Development Strategy (TDS), the Test and Evaluation Strategy (TES), and conducting market research. The post-Milestone A acquisition strategy is still to be determined. It is contingent on the completion of pre-Milestone A activities to include the JC2 Analysis of Alternatives. Performance based contracts will be used when applicable. DISA Next Generation contractual vehicle will be used.

E. Performance Metrics: JC2 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. Project managers will exercise oversight of contractor performance relative to established project cost, schedule, and performance milestones. Monthly reports are used to provide timely information on contractor expenditures. Routine status will also be provided through the OSD Integrated Product Team (IPT) structure.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Joint Command and Control /PE 0303158K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Command and Control (JC2)/JC01	0	3.905	14.580	19.674	25.802	26.288	26.940	27.760

Net-Centric Capabilities Pilot (NCCP) and C2 Communities of Interest (COI) capabilities are developed using a spiral methodology, with incremental demonstrations, limited utility assessments of the demonstrated capabilities, and refinement of future capabilities based on the feedback. These next generation C2I capabilities support several DISA Balanced Scorecard measures including delivery of Net-Centric Enterprise Services (NCES) core services and COI capabilities to the warfighter. An internal project level Earned Value Management System has been implemented. Project managers exercise oversight of contractor performance relative to established project cost, schedule, and performance milestones. Monthly reports provide timely information on contractor expenditures. Several web-based financial management tools are used to obtain budget and execution information.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/05			Joint Command and Control/ PE 0303158K				Joint Command and Control/JC01					
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY07 Cost	FY07 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Congressional Add Navy Internet Protocol v6	TBD	TBD		1.000	TBD							
JC2 Technical Risk Reduction & Piloting	TBD	TBD				3.500	TBD	3.600	TBD	Contg	Contg	7.100
JC2 Acquisition Documentation	TBD	TBD				1.500	TBD	1.500	TBD	Contg	Contg	3.000
System Engineering	OTF&O	MITRE, FFRDC McLean, VA		1.595	Mar-05	0.950	Oct-05	0.700	Oct-06	Contg	Contg	3.245
JC2 Acquisition Documentation	F&O	BAH Arlington, VA		0.830	Jun-05					0	0.830	0.830
JC2 Acquisition Documentation	F&O	KeyLogic Systems Columbia, MD		<u>0.480</u>	Mar 05					0	0.480	0.480
Engineering Support	MOA	JPL, FFRDC San Diego, CA				0.300	Jan-06	0.300	Jan-07	Contg	Contg	0.600
NCCP / UDOP Pilot Integration	TBD	SAIC-APEX-968 McLean, VA				1.425	Mar-06	0.200	Mar-07	Contg	Contg	1.625
C2IM UDOP Testing	MOA	SSC-SD GOVT San Diego, CA				0.240	Feb-06	0.500	Feb-07	Contg	Contg	0.740
UDOP SW Dev & Tech Suppt	F&O	NGMS, FGM, Rolexis Reston, VA				3.275	Oct-05	11.034	Oct-06	Contg	Contg	14.309
NCCP C2 Visualization/Portal	F&O	NGMS, FGM, Rolexis Reston, VA				0.540	Oct-05	0.500	Oct-06	Contg	Contg	1.040
NCCP SW Svs Orchestration	F&O	NextGen-Solers, Rosslyn, VA				0.891	Mar-06	0.000	N/A	0	0.891	0.891
UDOP Engineering Support	F&O	NextGen-FGM Reston, VA				0.750	Mar-06	0.000	N/A	0	0.750	0.750
UDOP Architecture/Engineering		S&T Assoc., Arlington, VA				0.675	Mar-06	0.000	N/A	0	0.675	0.675
Engineering/Tech Svcs	MOA	SSC-CH GOVT MOA/MIPR Suitland, MD				<u>0.534</u>	Oct-05	<u>1.340</u>	Oct-06	Contg	Contg	1.874
	Total			3.905		14.580		19.674				

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/05													Program Element Number and Name Joint Command and Control (JC2)/ PE 0303158K													Project Number and Name Joint Command and Control/ JC01												
Fiscal Year	2004				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	4	1	2	3	4						
Architecture /Integ./ Dev.																																						
NCCP Integration									△	△	△	△	△	△	△	△																						
Situational Awareness ECM V2									△	△	△																											
NCCP Portal v2									△	△	△	△																										
NCCP SW Services orchestration										△	△	△																										
Pilots / Demonstrations																																						
NCCP Spring 06 Demonstration											△	△	△																									
NCCP Fall 06 Demonstration												△	△	△	△																							
NCCP Spring 07 Demonstration														△	△	△	△																					
NCCP Fall 07 Demonstration																	△	△	△	△																		

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	PROGRAM ELEMENT Joint Command and Control (JC2) / PE 0303158K	PROJECT NAME AND NUMBER Joint Command and Control / JC01

<u>Schedule Profile</u>	<u>FY2004</u>	<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>	<u>FY2008</u>	<u>FY2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
JC2 Capability Development								
Contract Preparation			3Q					
Contract Competition			4Q					
Contract Award			4Q					
Technical Risk Reduction & Piloting		3Q-4Q	1Q-2Q	3Q-4Q	1Q-2Q			
Acquisition Documentation		1Q-4Q		1Q-4Q				
Architecture / Integration & Dev								
NCCP Integration			1Q-4Q	1Q-4Q	1Q			
Situational Awareness ECM V2			1Q-3Q					
NCCP Portal V2			1Q-4Q					
NCCP SW Services Orchestration			2Q-4Q					
Pilots / Demonstrations								
NCCP Spring 06 Demonstration			3Q-4Q	1Q				
NCCP Fall 06 Demonstration			4Q-	1Q-3Q				
NCCP Spring 07 Demonstration				2Q-4Q	1Q			
NCCP Fall 07 Demonstration				4Q	1Q-3Q			
<p>Note: Only displays currently planned milestones; details of future efforts will be driven by JC2 Milestone A decision planned for third quarter FY05.</p>								

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification					DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce / PE 0305840K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Electronic Commerce/EC01	5.909	3.379	6.698	3.626	3.637	3.658	3.794	3.933	

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). Program funding is being reduced due to a transition from a development to a sustainment posture. 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>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Subtotal Cost	4.035	1.618	4.835	1.787

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 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 2004: Release 3.0.1 - 3.0.5 provided eInvoicing enhancements and system upgrades.

FY 2005: Release 3.0.6 - 3.0.8 to provide additional interfaces to logistics, DCAA, and continued sustainment.

FY 2006: Release 3.0.9 - 3.0.13 expands to other Federal customers as appropriate. Continued sustainment.

FY 2007: Release 4.0 - 4.x expands to other Federal customers as appropriate. Continued sustainment.

	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Subtotal Cost	1.874	1.761	1.863	1.839

System/Program Testing and Analysis - The DISA Electronic Commerce Infrastructure consists of multiple systems 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 Testing (OAT), database conversion, migration, validation, stress, performance, load, Common Access Card (CAC), Section 508 compliance/accessibility testing and end-to-end in support of

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification					DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce / PE 0305840K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Electronic Commerce/EC01	5.909	3.379	6.698	3.626	3.637	3.658	3.794	3.933	

all releases and patches for eBusiness applications. The JITC supports DoD Electronic Business Exchange (DEBX), 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 include configuration management support, help desk support, and business support.

Accomplishments and Planned Enhancements are as follows:

FY 2004: Continued application testing as required by the Program Managers (PM) and the EB/EC Program Office along with WAWF vendor testing.

FY 2005, FY 2006, and FY 2007: JITC will provide end-to-end integrated operational testing for all major eBusiness applications to include DEBX, EDA, WAWF, CCR and FedTeDS.

B. Program Change Summary:

	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Previous President's Budget	7.137	3.466	3.617	3.592
Current Submission	5.909	3.379	6.698	3.626
Total Adjustments	-1.228	-.087	+3.081	-0.034

Change Summary Explanation:

FY 2004 adjustment is due to below threshold reprogramming.

FY 2005, FY 2006 and FY 2007 changes are due to revised fiscal guidance.

C. Other Program Funding Summary:

	<u>FY 04</u>	<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>	<u>To</u> <u>Complete</u>	<u>Total</u> <u>Cost</u>
O&M, DW	20.602	21.212	20.192	20.968	21.629	22.474	20.142	20.421	Contg	Contg

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification					DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce / PE 0305840K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	
Electronic Commerce/EC01	5.909	3.379	6.698	3.626	3.637	3.658	3.794	3.933	

D. Acquisition Strategy: 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 military Services and DoD agencies. Based on the list of requirements, a WAWF overall schedule is produced which includes integration activities with other EB 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. This is our first step towards an integrated performance management approach. 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 "fine tuned" or changed and hence, these changes are recorded and appropriate cost/schedule impact is reviewed.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/05			Electronic Commerce / PE 0305840K				Electronic Commerce/EC01					
Cost Category	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Wide Area Workflow-RA	PR	CACI Inc. Chantilly VA, Jacksonville, FL	3.533	2.125	10/04	4.835	10/05	1.787	10/06	Contg	12.280	12.280
Wide Area Workflow-INT	PR	Science Applications International Corporation (SAIC) Falls Church, VA	1.200	0.000	N/A	0.000	N/A	0.000	N/A	0	1.200	1.200
Wide Area Workflow Training	PR	Concurrent Technology Corp. (CTC) Seminole, FL	0.267	0.000	N/A	0.000	N/A	0.000	N/A	0	0.267	0.267
	PR	NGIT Reston, VA	0.582	0.000	N/A	0.000	N/A	0.000	N/A	0	0.582	0.582
	PR	Merlin	0.305	0.000	N/A	0.000	N/A	0.000	N/A	0	0.305	0.305
JITC	MIPR	JITC Ft Huachuca, AZ	0.022	1.254	10/04	1.863	10/05	1.839	10/06	Contg	4.978	4.978
TOTAL			5.909	3.379		6.698		3.626				

Exhibit R-4a Schedule Detail		DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER							
RDT&E, Defense-Wide/05	Electronic Commerce / PE 0305840K	Electronic Commerce / EC01							
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	
<u>DEVELOPMENT TECHNICAL TESTING</u>									
SYS/PROG T&A - Application Test and Analysis	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	
SYS/ PROG T&A - Integration Test and Analysis	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	
<u>PRODUCT IMPROVEMENT</u>									
Wide Area Work Flow (WAWF)	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information Technology / T26	16.031	16.605	9.325	9.264	10.150	14.208	15.530	16.098

A. Mission Description and Budget Item Justification: 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

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information Technology / T26	16.031	16.605	9.325	9.264	10.150	14.208	15.530	16.098

its coalition partners. The LES provides the network and computing infrastructure that supports ACTD demonstrations 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 (JBFSAs) 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

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information Technology / T26	16.031	16.605	9.325	9.264	10.150	14.208	15.530	16.098
<p>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, will help provide tools for defense-in-depth protection of the military cyberspace.</p> <p>In FY 2004, DISA leveraged AITS-JPO's net-centric, services oriented IT architecture-based capabilities that are evolving through several ACTDs to provide C2 Community of Interest (COI) mission capabilities that satisfy Combatant Commander-approved Joint Mission Threads (JMT). JMT is USJFCOM-led effort that will develop comprehensive descriptions of architectural elements (including associated operational requirements and the systems engineering approach) of how the joint force will execute key warfighting capabilities. C2 COI Evaluation Capability Modules (ECMs) are being developed, integrated, and tested in a joint, distributed, collaborative environment. Mission thread capabilities are composed from many sources (e.g., DISA to include available NCES Core Enterprise Services (CES) and/or NCES ECMs, Services, other agencies, ACTDs, C2 COI User Defined Operational Picture (UDOP) capabilities, Programs of Record, and industry) as part of a Net-Centric Capability Pilot (NCCP). C2 COI ECMs are made available to users on the Secret Internet Protocol Router Network for evaluation, maturation and limited operational use. Two C2 COI ECMs were developed in FY 2004, USSTRATCOM's Global Strike ECM (e.g., time critical decision management, executive decision summary, real-time collaboration), and JFCOM's Situational Awareness ECM (e.g., C2 situation monitoring and alerting, C2 COI UDOP, blue force look-up, COP to C2/intelligence association services). FY 2005 NCCP activities add robustness to the Global Strike and Situational Awareness ECMs. New FY 2005 candidate NCCP capabilities include 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 to COCOMs, DoD senior leadership, and others such as coalition partners. FY 2005 activities will support JC2 concept exploration and technical risk reduction plus assist in refining JC2 Analysis of Alternatives (AoA) options. NCCP activities will also help validate the NCES Technology Development Strategy (TDS) and Test and Evaluation Strategy (TES), the JC2 TDS and TES, and help baseline GIG Bandwidth Expansion (GIG-BE) performance. In accordance with Departmental guidance, NCCP funding will be transferred to PE 0303158K/Joint Command and Control in FY2006 and beyond.</p>								

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information Technology / T26	16.031	16.605	9.325	9.264	10.150	14.208	15.530	16.098

Accomplishments/Planned Program:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	3.480	3.468	0.722	1.059

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.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	1.300	0.893	0.722	1.000

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.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	1.559	0.460	0.361	0.000

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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information Technology / T26	16.031	16.605	9.325	9.264	10.150	14.208	15.530	16.098

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	3.583	1.445	1.586	0.000

Global Information Grid (GIG) Infrastructure: The HLS/D 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. The use of different systems combined provides alerting, visualization, and collaboration. 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 J-34 Anti-terrorism/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 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, via a web browser and a network of software bridges tied to authoritative and local data sources, that will automate much of the information gathering and decision making infrastructure. The data/information will be dynamically updated yielding better situational awareness and more efficient collaboration and mission execution.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	1.765	1.932	1.083	1.550

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. C-IA COP provides situational awareness of the information systems readiness status of all mission

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information Technology / T26	16.031	16.605	9.325	9.264	10.150	14.208	15.530	16.098

critical systems on a real or near real time basis as it relates to the Joint and/or Coalition Task Force Commander's mission. Awareness extends, but is not limited to, availability of systems/networks, availability of the information/data and integrity of systems to the Joint and/or Coalition Commander and partners.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.600	0.920	0.742	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. 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 technology when we are 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.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	3.744	5.589	0.000	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. In accordance with Departmental guidance, NCCP will transfer to PE 0303158K/Joint Command and Control. This consolidates JC2-related activities in this project and PE0303149K/C4I for the Warrior/Project T55 into a single PE.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.000	0.949	1.826	1.913

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information Technology / T26	16.031	16.605	9.325	9.264	10.150	14.208	15.530	16.098

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 ad hoc 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.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.000	0.949	2.283	3.000

Crisis Action Planning Tools: Develop advanced collaborative and iterative crisis action planning and execution tools to support C2 for rapid, continuous, end-to-end deployment and sustainment of joint forces from Garrison to the battlefield and return. Accelerate the transformation of advanced Joint C4 to web-based, network-centric capabilities. Provide visualization; semi-automated force generation; strategic movement; reception, staging, onward integration; 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:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	16.673	18.183	19.375	19.704
Current Submission	16.031	16.605	9.325	9.264
Total Adjustments	-0.642	-1.578	-10.050	-10.440

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information Technology / T26	16.031	16.605	9.325	9.264	10.150	14.208	15.530	16.098

Change Summary Explanation:

FY 2004 and FY 2005 changes are due to below threshold reprogrammings.
 FY 2006 and 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 04</u>	<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>	<u>To</u> <u>Complete</u>	<u>Total</u> <u>Cost</u>
O&M PE0604764K	5.558	5.115	4.334	4.807	4.954	5.638	5.673	5.725	Contg	Contg
O&M PE0303149K	1.821	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Contg	Contg

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 (NEXGEN, GEMS, ENCORE, etc.), GSA contracts, other DoD contract vehicles, other Service level contracts (e.g. Army, Navy, Air Force, and Marine Corps), 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 for computer hardware, software, networks, and outsourcing. The AITS-JPO works collaboratively with vendors when possible to obtain generic

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05				R-1 ITEM NOMENCLATURE Advanced Information Technology Services Joint Program Office (AITS-JPO) / PE 0604764K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Leading Edge Pilot Information Technology / T26	16.031	16.605	9.325	9.264	10.150	14.208	15.530	16.098

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. Performance Metrics: 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 scrutiny. 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 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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/05		Advanced Information Technology Services Joint Program Office (AITS-JPO)/ PE 0604764K				Leading Edge Pilot Information Technology/T26						
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 05 Cost	FY 05 Award Date	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	6.750	1.816	12/04	1.017	12/05	0.968	12/06	Contg	Contg	10.551
	T&M	NGMS, McLean, VA	10.445	3.005	12/04	1.688	12/05	1.478	12/06	Contg	Contg	16.616
		Various(To include Encore, GEMS, and NEXGEN)	8.141	2.425	12/04	0.763	12/05	0.662	12/06	Contg	Contg	11.991
SUPPORT COSTS												
Engineering/Technical Support	T&M	HAI, Arlington, VA	13.602	1.112	11/04	0.973	12/05	0.861	12/06	Contg	Contg	16.548
Systems Integration	CPFF	SAIC Arlington, VA	12.960	3.374	10/04	1.525	12/05	1.523	12/06	Contg	Contg	19.382
System Engineering	FFRDC	MITRE, Arlington, VA	12.391	2.366	11/04	1.983	12/05	1.911	12/06	Contg	Contg	18.651
		Various(To include Encore, GEMS and NEXGEN)	9.495	1.110	12/04	0.559	12/05	0.484	12/06	Contg	Contg	11.648
<u>TEST & EVALUATION</u>		Various(To include Encore, GEMS and NEXGEN)	<u>7.567</u>	<u>1.397</u>	12/04	<u>0.817</u>	12/05	<u>1.377</u>	12/06	Contg	Contg	<u>11.158</u>
Total			81.351	16.605		9.325		9.264				116.545

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05													PROGRAM ELEMENT Advanced Information Technology Services Joint Program Office (AITS-JPO)/PE 0604764K													PROJECT NAME AND NUMBER Leading Edge Pilot Info Technology /T26												
Fiscal Year	2004				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	4	1	2	3	4						
ABA ACTD MUA			▲					▲				▲																										
ABA ACTD Transition					▲							▲																										
CINC21 ACTD Transition				▲																																		
ANID ACTD MUA			▲	▲	▲																																	
ANID Transition			▲					▲																														
CTL ACTD MUA	▲	▲																																				
CTL Transition								▲	▲			▲																										
AT21 ACTD MUA								▲																														
AT21 Transition								▲	▲			▲																										
CIACOP ACTD MUA				▲	▲		▲		▲																													
CIACOP Transition								▲	▲			▲																										
JBFS A ACTD MUA					▲																																	
JBFS A Transition												▲																										
HLS C2 ACTD MUA			▲				▲																															
HLS C2 Transition												▲																										

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05													PROGRAM ELEMENT Advanced Information Technology Services Joint Program Office (AITS-JPO)/PE 0604764K													PROJECT NAME AND NUMBER Leading Edge Pilot Info Technology /T26												
Fiscal Year	2004				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	4	1	2	3	4						
Gridlock ACTD MUA												▲																										
Gridlock ACTD Transitions									▲							▲																						
Coalition Secure Management and Operating System (COSMOS) MUA																▲																						
COSMOS Transition																▲																						
Joint Force Projection (JFP) ACTD MUA												▲																										
JFP ACTD Transition													▲			▲																						
C2M Technology Development Strategy			▲	▲	▲		▲																															
C2M - Analysis of Alternatives			▲	▲	▲		▲																															
Joint Coordinated Real-Time Engagement (JCRE) ACTD Demo Theater Effects Based Operations (TEBO) ACTD MUA								▲												▲				▲														
TEBO ACTD Transition																					▲								▲									

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER							
RDT&E, Defense-Wide/05	Advanced Information Technology Services Joint Program Office / PE 0604764K	Leading Edge Pilot Information Technology / T26							
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	
ABA ACTD Military Utilization Assessment	3Q	4Q							
CINC 21 Transition	4Q								
ABA Transition		1Q-4Q	1Q						
Active Network Intrusion Detection (ANID) ACTD MUA	3Q-4Q	1Q							
ANID Transition	3Q-4Q	1Q-4Q							
CTL ACTD MUA	2Q, 3Q								
CTL Transition		4Q	1Q-4Q						
Agile Transportation		4Q							
21 st Century ACTD MUA									
AT21 Transition			1Q-4Q	1Q-4Q					
Coalition Information Assurance	4Q	2Q, 3Q	1Q						
Common Operational Picture (C-IA COP) ACTD MUA									
CIA COP Transition			1Q-4Q	1Q-4Q					
Joint Battlefield Situation Awareness (JBFS) ACTD MUA		2Q							
JBFS Transition				3Q					
Homeland Security C2 ACTD MUA	3Q	3Q							

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	PROGRAM ELEMENT Advanced Information Technology Services Joint Program Office / PE 0604764K	PROJECT NAME AND NUMBER Leading Edge Pilot Information Technology / T26

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
HLS C2 Transition			4Q					
Gridlock ACTD MUA			2Q					
Gridlock Transition			1Q-4Q	3Q-4Q				
Coalition Secure Management and Operating System (COSMOS) MUA COSMOS Transition				2Q				
						1Q-4Q		
Joint Force Projection (JEP) MUA			4Q					
JFP Transition				1Q-4Q				
C2M Technology Development Strategy	3Q-4Q	1Q-3Q						
C2M Analysis of Alternatives	3Q-4Q	1Q-2Q						

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				
RDT&E, Defense-Wide/06				Defense Technical Information Services / PE 0605801K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element	42.690							
001 Defense Technical Information Center	34.152							
002 Information Analysis Centers	8.538							
<p>A. <u>Mission Description and Budget Item Justification:</u> The Defense Technical Information Center's mission is to provide timely and effective exchange of Scientific and Technical Information (STI) and Research & Engineering Information (R&E), to improve the quality and resource effectiveness of DoD research, and to support DoD-wide decision making. DTIC provides centralized acquisition, processing, storage, retrieval, and dissemination of STI, including information that is restricted, controlled and/or classified. DTIC is a DoD information utility which offers multiple sources and types of information such as: DoD unclassified and unlimited distribution information resources for customers internal and external to DoD; controlled information resources for internal DoD use; and centralized single source access to STI to include sensitive, controlled, and classified information from other federal sources and international organizations (i.e. NATO). DTIC's knowledge management and leading edge information technology (IT) applications improve information services and STI transfer effectiveness benefiting the DoD's warfighters, scientists, engineers, and managers to improve the results of DoD's academic and private sector partnerships. DTIC currently serves information from its collection to approximately 9,843 registered organizations and qualified individuals worldwide. DTIC provides development, technical support, and hosting services for more than 100 DoD Web sites with an average of 40,200,000 accesses per month. The Information Analysis Center (IAC) program provides core funding, management and oversight for 11 IACs. The IACs are chartered by OSD to collect, analyze, synthesize and disseminate worldwide scientific and technical information in specialized fields such as information assurance, chemical/biological defense, weapons systems technology, and survivability and vulnerability to support the warfighter, as well as to prevent unnecessary duplication of research and promote standardization of research methodologies and processes in these areas of expertise. The Program Element for DTIC is under Budget Activity 6, RDT&E Management Support, which provides for the support of operations required for general research and development and not allocable to specific missions.</p>								

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
RDT&E, Defense-Wide/06	Defense Technical Information Services / PE 0605801K

B. Program Change Summary:Costs in Millions

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	43.494	45.203	46.203	47.397
Current Submission	42.690	0.000	0.000	0.000
Total Adjustments	-.804	-45.203	-46.203	-47.397

Change Summary Explanation:

FY 2005 - FY 2007 On June 4, 2004 the Deputy Secretary of Defense established the Defense Technical Information Center (DTIC) as a new DoD Field Activity and resources were transferred from DISA to the new activity effective FY 2005.

Project 001 - Defense Technical Information Center

A. Mission Description and Budget Item Justification: DTIC is the central Department of Defense (DoD) facility for the collection, organization, and dissemination of scientific and technical information, studies and analyses, and other DoD performed/funded research. DTIC supplies a broad range of web services support to organizations throughout the Department. DTIC provides user-appropriate access to ongoing, completed and historic information related to DoD research, and leading edge solutions to information collection, retrieval, and dissemination requirements for DoD. DTIC products and services support the Defense community and its academic and private sector partners by providing tools and information to improve the quality of DoD research and development and by leveraging the technology base through the application of advanced information technology applications and knowledge management techniques. DTIC also supports the Global War on Terrorism through web applications, and documentation of relevant research, such as studies concerning chemical, biological and radiological weapon development and defense.

B. Accomplishments/Planned Program

	<u>FY04</u>
Subtotal Cost	32.413

FY 2004:

- Funded ongoing basic operations encompassing input, storage, and delivery of information including media conversion as needed to ensure interoperability; organizing, indexing, and abstracting to aid retrieval; and Web services.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE Defense Technical Information Services / PE 0605801K
<ul style="list-style-type: none"> - Funded personnel costs, maintenance and purchase of equipment, postage, and support services provided by other government agencies via Inter-Service Support Agreements. - Increased utilizing leading edge techniques and equipment to provide state-of-the-art electronic access to DTIC products and services. - Continued to support the Defense RDT&E effort by providing Scientific and Technical Information (STI) to exploit and leverage ongoing and completed research and identifying and acquiring government information collections for archiving and dissemination through the DTIC technical report collection. - Continued phased improvements to the Electronic Document Management System (EDMS) with additional automated functions, storage capacity, hardware/software upgrades, and increasing the types and numbers of documents the system is capable of processing. - Assured continuation of system monitoring and software updating to maintain system security and data integrity. - Continued to implement modifications as required by the Security Technical Implementation Guidelines (STIG). - Issued RFP for development of a server based billing system to modernize and facilitate the billing process. - Continued to promote awareness of DTIC programs through operational Distance Learning Courses with the addition of state-of-the-art technology. Continued development of performance support SF298 (Report Documentation Page) toolkit, especially for SBIR submitters. - Explored development of a Defense Knowledge Portal, which will have the potential to provide a single integrated access point to multiple sources of DoD information and tools for collaboration, community building, and customer self-service. - Upgraded and improved intranet portal with new software version and tools improving internal information dissemination and sharing. - Initiated prototype of DTIC architecture update, including scanning of fiche, conversion to XML, PDF and TIFF; built a new document repository to interface with the fiche process; built a new front-end retrieval engine; and built a federated search interface to interact with existing DTIC search engines and products. 	

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE Defense Technical Information Services / PE 0605801K		
Subtotal Cost	<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">FY04</td> </tr> <tr> <td style="text-align: right;">1.523</td> </tr> </table>	FY04	1.523
FY04			
1.523			
<p><u>FY 2004:</u></p> <ul style="list-style-type: none"> - Managed and executed the Science & Technology (S&T) Integrated Solutions (formerly Business Process Reengineering (BPR)) initiatives in response to the requirements of the Director, Defense Research & Engineering (DDR&E) and Deputy Under Secretary of Defense for Science and Technology (DUSD(S&T)). - Collected data, analyzed, and disseminated DoD's FY 2003 S&T In-House Activities Report. - Updated the Research and Development Descriptive Summaries (RDDS) Website with FY 2005 President's Budget Review data. - Continued database and Website enhancements to the S&T Document Preparation Tool; the Defense Technology Area Plans (DTAP); the Technology Area Review and Assessment (TARA); and the Defense S&T Reliance. - Designed and implemented submission approval for the Virtual Technology Exposition (VTE) for the National Aeronautics and Space Administration (NASA) S&T data. - Continued development and upgraded enhancements of the Defense Technology Search (DTS). - Continued development of the Research and Engineering Portal (R&E) to provide consolidated access and distributed search capabilities to major R&E databases. - Continued development of the Defense Project Summary database to meet the Federal government's requirements under the E-Government Act of 2002. - Designed and developed prototype of R&E portal that consolidates access to all R&E databases. - Managed and executed the Basic Research Cooperative Agreements and other transactions (CA/OT) data collection and distribution; maintained CA/OT website. - Developed additional tools for collaboration among S&T community. 			

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE Defense Technical Information Services / PE 0605801K

- The Annual Customer Satisfaction Survey, which gauges the level of satisfaction among DTIC's users and identifies possible areas for improving products and services.

- The DTIC code of Service, which tracks processes and services such as document input time, responsiveness of customer service activities, and online system technical inquiries and availability.

Project 002 - Information Analysis Centers

A. Mission Description and Budget Item Justification: The Information Analysis Centers (IACs) are contractor-operated organizations chartered by OSD to support the warfighter through improved research in specialized fields or subject areas, including advanced materials, chemical-biological defense, information assurance, survivability and vulnerability and weapons systems technology. The IACs foster productivity of researchers, engineers, and program managers in the Defense research, development, and acquisition communities by collecting, analyzing, synthesizing, and disseminating worldwide scientific and technical information in clearly defined, specialized fields or subject areas. The IACs' secondary mission is to promote standardization within their respective fields. They accomplish these missions by providing in-depth analysis services and creating information and analysis products. IACs respond to technical inquiries; prepare state-of-the-art reports, handbooks, and databooks; perform technology assessments; and support exchanges of information among scientists, engineers, and practitioners of various disciplines within the scope of the IAC.

B. Accomplishments/Planned Program:

	<u>FY04</u>
Subtotal Cost	.702

FY 2004: Funded ongoing program management office operations (i.e., travel, training, communications, and infrastructure support services paid to other government agencies via Inter-Service Support Agreements). Promoted awareness of IAC capabilities. Identified and managed government information collections abandoned by disestablished organization to be transferred and incorporated into the IAC program.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE Defense Technical Information Services / PE 0605801K		
Subtotal Cost	<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;"><u>FY04</u></td> </tr> <tr> <td style="text-align: right;">7.836</td> </tr> </table>	<u>FY04</u>	7.836
<u>FY04</u>			
7.836			
<u>FY 2004:</u>			
<ul style="list-style-type: none"> - Provided basic core contract operations for 11 DoD IACs to collect, analyze, synthesize, and disseminate, worldwide Scientific and Technical Information (STI) in support of DoD's critical technologies and the warfighter. - Provided in-depth analysis services and created STI products. - Responded to technical inquiries; prepared state-of-the-art reports, handbooks and databooks; performed technology assessments; and supported the exchange of information among the respective communities of various disciplines within scope for each of the DTIC sponsored, contractor operated IACs. - Advanced Information Technology methods were employed to assure that critical information is preserved in a paperless environment. 			
C. <u>Other Program Funding Summary:</u> N/A			
D. <u>Performance Metrics:</u>			
<p>The number of Information Analysis Center (IAC) hard technical inquiries, which includes one-on-one personal contacts and e-mail exchanges on science and technology inquiries regarding specific technical area of expertise.</p>			

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				
RDT&E, Defense-Wide/07				C4I Interoperability/PE 0208045K				
COST (in millions)	FY04	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Total Program Element	42.857	40.706	65.517	65.930	67.539	68.962	70.953	73.204
Test and Evaluation/T30	30.837	25.816	27.704	27.138	27.656	28.104	28.587	29.141
Major Range Test Facility Base (MRTFB)/T40	12.020	14.890	37.813	38.792	39.883	40.858	42.366	44.063

A. Mission Description and Budget Item Justification: The Joint Interoperability Test Command, as required by DoD Directive 4630.5, DoD Instruction 4630.8, DoD Directive 5105.19, DoD Regulation 5000.2-R, and CJCSI 6212.01B, 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 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), DoD Teleport, DISN Video Services (DVS), Defense Message System (DMS), Defense Collaborative Tool Suite (DCTS), and other systems managed or procured by the Defense Information Systems Agency 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 "joint" test organizations. It works with Combatant Commanders during exercises and contingency operations to ensure interoperability and supportability throughout 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:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	43.122	41.074	43.896	44.096
Current President's Budget	42.857	40.706	65.517	65.930
Total Adjustments	- .265	-.368	+21.621	+21.834

Change Summary Explanation:

FY 2004 adjustment due to below threshold reprogramming.

FY 2005 adjustment due to a Congressional increase of \$2.550M for the System of Systems Engineering Center, undistributed Congressional reductions to the Defense-Wide RDT&E appropriation, and below threshold reprogramming.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				
RDT&E, Defense-Wide/07				C4I Interoperability/PE 0208045K				
COST (in millions)	FY04	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Total Program Element	42.857	40.706	65.517	65.930	67.539	68.962	70.953	73.204
Test and Evaluation/T30	30.837	25.816	27.704	27.138	27.656	28.104	28.587	29.141
Major Range Test Facility Base (MRTFB)/T40	12.020	14.890	37.813	38.792	39.883	40.858	42.366	44.063

FY 2006 adjustment due to (1) an increase of \$20.695M resulting from Section 232 of P.L. 107-314, which stated that the institutional and overhead costs of DoD T&E facilities within the Major Range and Test Facility Base (MRTFB) must be funded through the major T&E investment accounts; and (2) conversion of military to civilian manpower directed by SecDef. Funding migrations from Defense Acquisition Programs coincide with an associated decrease in MRTFB reimbursable funding, resulting in a net effect of zero.

FY 2007 adjustment due to (1) a Congressional increase of \$21.393M resulting from Section 232 of P.L. 107-314, which stated that the institutional and overhead costs of DoD T&E facilities within the Major Range and Test Facility Base (MRTFB) must be funded through the major T&E investment accounts; and (2) conversion of military to civilian manpower directed by SecDef. Funding migrations from Defense Acquisition Programs coincide with an associated decrease in MRTFB reimbursable funding, resulting in a net effect of zero.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT C4I Interoperability/PE 0208045K			PROJECT NAME AND NUMBER Test and Evaluation/T30		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	30.837	25.816	27.704	27.138	27.656	28.104	28.587	29.141

A. Mission Description and Budget Item Justification: 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 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), DISN Video Services (DVS), Defense Message System (DMS), Defense Collaborative Tool Suite (DCTS), and other systems managed or procured by the Defense Information Systems Agency (DISA) 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 & Evaluation	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	2.726	2.658	3.180	3.085

Provide Operational Test and Evaluation (OT&E) of systems acquired, assigned or managed by DISA to determine if the systems meet users' requirements. Conduct OT&E of GCCS-J major and minor releases to ensure operational requirements are met in a real operational environment; operational assessment and IOT&E of the GIG-BE expansion to assess operational effectiveness and suitability. Develop and execute new OT&E strategy for NCES; operationally assess the DCTS to support the milestone decision; perform operational assessments of DMS software releases and follow-on maintenance releases to ensure operational effectiveness and suitability; conduct continuous operational test and evaluation of DVS to ensure operational effectiveness and suitability; and assess operational effectiveness and suitability of DoD Teleport program.

Joint Interoperability Testing	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	10.908	10.637	12.727	12.346

Conduct joint interoperability test and certification of DoD National Security Systems/Information Technology Systems

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification						DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT C4I Interoperability/PE 0208045K			PROJECT NAME AND NUMBER Test and Evaluation/T30		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	30.837	25.816	27.704	27.138	27.656	28.104	28.587	29.141

(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; perform certification testing of joint NSS/ITS systems to ensure end-to-end interoperability, compatibility, and integration; conduct Defense 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 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	3.408	3.324	3.977	3.857

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.

Risk Mitigation Network	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	4.142	0	0	0

Continue to implement the Risk Mitigation Network (RMN), which will provide DoD with an off-line, life cycle support capability for DoD's tactical and strategic networks and their interfaces. This includes the capability to replicate multi-service tactical communication systems/networks, the DISN, and the GIG-BE. The RMN 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. In compliance with Section 232 of the FY 2003 National Defense Authorization Act (NDAA), these costs were moved to Project Major Range and Test Facility Base/T40 in FY 2005 through FY 2007.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER		
RDT&E, Defense-Wide/07			C4I Interoperability/PE 0208045K			Test and Evaluation/T30		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	30.837	25.816	27.704	27.138	27.656	28.104	28.587	29.141
Joint Distributed Engineering Plant	<u>FY 04</u>			<u>FY 05</u>		<u>FY 06</u>		<u>FY 07</u>
Subtotal Cost	3.128			3.695		4.365		4.387
<p>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 will include coordination of test events, systems, network and 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. Funding increase in FY 2005 through FY 2007 is due to increase in event-based testing.</p>								
Combined Interoperability Testing	<u>FY 04</u>			<u>FY 05</u>		<u>FY 06</u>		<u>FY 07</u>
Subtotal Cost	3.125			2.952		3.455		3.463
<p>Provide combined Command, Control, Communications, Computers, and Intelligence (C4I) interoperability test support to Combatant Commanders and NATO to ensure successfully combined operations with our Allies and Coalition partners. This includes Combined exercise support, Tactical Digital Information Link (TADIL) and Communications Command and Control Interoperability Boards (CCIB) support, TADIL testing support, Coalition Network migration; NATO CCIB and testing support, NATO Secondary Imagery Format and motion picture imagery certification testing, and US/Coalition communications equipment testing.</p>								
System of Systems Engineering Center	<u>FY 04</u>			<u>FY 05</u>		<u>FY06</u>		<u>FY 07</u>
Subtotal Cost	3.400			2.550		0		0
<p>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.</p>								

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT C4I Interoperability/PE 0208045K			PROJECT NAME AND NUMBER Test and Evaluation/T30		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	30.837	25.816	27.704	27.138	27.656	28.104	28.587	29.141

C. Other Program Funding Summary:

	<u>FY 04</u>	<u>FY05</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>	<u>To</u> <u>Complete</u>	<u>Total</u> <u>Cost</u>
O&M, DW	0	5.391	6.545	6.851	6.919	7.076	7.183	7.299	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 on assignment of tasks for cost and technical effectiveness, and allow 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 Exercise were interoperability and standards conformance certifications, and timely, accurate solutions to all Hotline calls. As part of DISA's Balanced Scorecard Initiative, we refined these metrics to begin collecting data against them. Our start point of workload counts (181 certification/assessment memoranda and 218 Hotline calls) for FY 2004 will allow us to address customer satisfaction through measurement of providing them factual, accurate, independent, timely, and value-added information. Our metrics in FY 2005 will be measured against these baselines.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/07			C4I Interoperability / PE 0208045K				Test and Evaluation / T30					
Test & Evaluation												
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Engineering/Technical Services	FFP/LOE	NGMS Ft. Hua, AZ	10.109	3.481	10/04	4.425	10/05	4.376	10/06	10.940	33.331	33.331
	FFP/LOE	Interop Ft. Hua, AZ	12.636	3.692	10/04	4.692	10/05	4.640	10/06	11.600	37.260	37.260
	FFP/LOE	NGIT Ft. Hua, AZ	8.844	2.392	10/04	3.041	10/05	3.006	10/06	7.515	24.798	24.798
	CPFF	CTC Arlington, VA	6.800	2.550								
Subtotal Contracts				12.115		12.158		12.022				
In-House				13.701		15.546		15.116				
Total Project				25.816		27.704		27.138				

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/07													Program Element Number and Name C4I Interoperability / PE 0208045K													Project Number and Name Test and Evaluation / T30												
Fiscal Year	2004				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	4	1	2	3	4						
Provide Operational Test & Evaluation (OT&E) of DISA acquired systems.									Continuing >																													
Conduct joint interoperability test and certification on DoD C4I systems									Continuing >																													
Establish system of systems engineering center (2nd year cost)																																						
Implement Risk Mitigation Network (RMN) Phase III					Reprogrammed to T40 in consideration of Sec 232 of 2003 National Defense Authorization Act																																	

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/07													Program Element Number and Name C4I Interoperability / PE 0208045K													Project Number and Name Test and Evaluation / T30												
Fiscal Year	2004				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	4	1	2	3	4						
Manage Joint Distributed Engineering Plant (JDEP)	[Shaded]												Continuing >																									
On-site exercise support for ~ 8 exercises per year	[Shaded]												Continuing >																									
Operate 24/7 hotline	[Shaded]												Continuing >																									
Publish quarterly Lessons Learned reports	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲						
Combined Interoperability Test support to combatant commanders	[Shaded]												Continuing >																									

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07	C4I Interoperability / PE 0208045K	Test and Evaluation / T30						
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Provide Operational Test & Evaluation (OT&E) of DISA acquired systems (e.g, GCCS, DMS, DVS-G)	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Conduct joint interoperability test and certification on DoD C4I systems such as TADIL Link 11 & Link 16 tests, VMF, MILSTAR, etc., including planning and conducting Defense Interoperability Communications Exercise (DICE)	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Establish System of Systems Engineering Center	2-4Q	1-4Q						
Implement Risk Mitigation Network (RMN) Phase III	1-4Q							
Manage Joint Distributed Engineering Plant (JDEP), including development of core documents, technical framework, node installations and event planning & support	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
On-site exercise support for up to eight exercises per year, e.g. TANDEM THRUST, COBRA GOLD, ROVING SANDS, COMBINED ENDEAVOR	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Operate 24/7 hotline & Publish quarterly Lessons Learned reports	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Provide Combined Interoperability Test support to Combatant Commanders	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER		
RDT&E, Defense-Wide/07			C4I Interoperability / PE 0208045K			Major Range Test Facility Base / T40		
Cost (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	12.020	14.890	37.813	38.792	39.883	40.858	42.366	44.063

A. Mission Description and Budget Item Justification: This project provides Institutional funds for DISA's Joint Interoperability Test Command (JITC), which functions as the only non-Service member of DoD's Major Range and Test Facility Base (MRTFB), in accordance with DoD Directive 3200.11. Adjustments for FY 2006 and beyond are due to a Congressional action directed by Section 232 of P.L. 107-314 that states that the institutional and overhead costs of DoD T&E facilities within the MRTFB must be funded through the major T&E investment accounts. Funding migrations from Defense Acquisition Programs coincide with an associated decrease in MRTFB reimbursable funding, resulting in a net effect of zero.

B. Accomplishments/Planned Program:

Interoperability Test Support	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	12.020	11.835	30.041	30.633

Interoperability Test Support - Includes institutional and overhead costs associated with operating the Joint Interoperability Test Command (JITC) under the guidelines established for the MRTFB. This includes the costs of maintaining and operating JITC's base operations, testbed operations and maintenance, contract management support and award fee costs, communications support, automation support, travel, supplies, and associated civilian salary costs. Program details support JITC's interoperability, operational, and conformance testing missions at Indian Head, MD and Fort Huachuca, AZ; development, implementation, and maintenance of JITC's interoperability testing tools to enhance the capability to conduct testing of National Security Systems/Information Technology Systems (NSS/ITS); and development and maintenance of the JITC Project and Accounting System to provide project and financial management capability to meet the requirements imposed by designation as an MRTFB.

Risk Mitigation Network	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0	3.055	7.772	8.159

Continue to implement the Risk Mitigation Network (RMN), which will provide DoD with an off-line, life-cycle support capability for DoD's tactical and strategic networks and their interfaces. This includes the capability to replicate multi-service tactical communication systems/networks, the DISN, and the GIG-BE. The RMN 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. FY 2004 costs for this effort are reflected under Project Test and Evaluation/T30, but to comply with Section 232 of the FY 2003 National Defense Authorization Act (NDAA), these costs

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER		
RDT&E, Defense-Wide/07			C4I Interoperability / PE 0208045K			Major Range Test Facility Base / T40		
Cost (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	12.020	14.890	37.813	38.792	39.883	40.858	42.366	44.063

were moved to Project Major Range and Test Facility Base/T40 in FY 2005 through FY 2007.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: Three prime contracts, with multiple sub-contracts, support this project. These competitively awarded, non-personal-services contracts provide maximum flexibility on assignment of tasks for cost and technical effectiveness, and allow for expansion and contraction of staff years as workload expands and contracts.

E. Performance Metrics:

This project is only those Institutional funds necessary to operate and maintain the Major Range Test Facility Base and cannot be passed to customers. The only output associated with this project is the availability of testbeds for customer testing. In the past year, there were no down days for JITC testbeds.

UNCLASSIFIED

Exhibit R-3 Cost Analysis				DATE: February 2005								
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					
<u>Test and Evaluation</u>	<u>Contract</u>	<u>Performing</u>	<u>Total</u>	<u>FY 05</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 06</u>	<u>FY 07</u>	<u>FY 07</u>	<u>Cost to</u>	<u>Total</u>	<u>Target</u>
<u>Cost Category</u>	<u>Method &</u>	<u>Activity &</u>	<u>PYs</u>	<u>FY 05</u>	<u>Award</u>	<u>FY 06</u>	<u>Award</u>	<u>FY 07</u>	<u>Award</u>	<u>Complete</u>	<u>Cost</u>	<u>Value of</u>
	<u>Type</u>	<u>Location</u>	<u>Cost</u>	<u>Cost</u>	<u>Date</u>	<u>Cost</u>	<u>Date</u>	<u>Cost</u>	<u>Date</u>			<u>Contract</u>
Engineering/Technical Services	FFP/LOE	NGMS Ft. Hua, AZ	4.329	.795	10/04	5.652	10/05	5.849	10/06	14.622	31.247	31.247
	FFP/LOE	Interop Ft. Hua, AZ	5.412	3.000	10/04	12.739	10/05	13.167	10/06	32.917	67.235	67.235
	FFP/LOE	NGIT Ft. Hua, AZ	3.786	1.538	10/04	6.404	10/05	6.618	10/06	16.545	34.891	34.891
Subtotal Contracts				5.333		24.795		25.634				
In-House				9.557		13.018		13.158				
Total Project				14.890		37.813		38.792				

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/07													Program Element Number and Name C4I Interoperability / PE 0208045K													Project Number and Name MRTFB / T40												
Fiscal Year	2004				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	4	1	2	3	4						
Provide interoperability test support to warfighter																																						
																	Continuing >																					
Provide Base Operations support																																						
																	Continuing >																					
Operate test beds at Ft. Huachuca, AZ and Indianhead, MD																																						
																	Continuing >																					
Implement Risk Mitigation Network (RMN)																																						
																	Reprogrammed from T30 in consideration of Sec 232 of 2003 National Defense Authorization Act Continuing >																					

UNCLASSIFIED

Exhibit R-4a Schedule Detail				DATE: February 2005				
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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Develop & implement Interoperability test systems to support warfighters	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Provide base operations support to test mission	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Operate testbeds at Ft. Huachuca, AZ & Indianhead, MD	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Implement Risk Mitigation Network (RMN)		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE National Military Command System (NMCS) / PE 0302016K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
NMCS Command Center Engineering / S32	1.076	1.209	.659	.711	.711	.619	.578	.528

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	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	1.076	1.209	.659	.711

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE National Military Command System (NMCS) / PE 0302016K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
NMCS Command Center Engineering / S32	1.076	1.209	.659	.711	.711	.619	.578	.528

Specific accomplishments in FY 2004 include 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 to include the Site R Integration Program (SRIP), and configuration management of NMCS systems and facilities. The continuations of these efforts are planned outputs for FY 2005-FY 2011.

B. Program Change Summary:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	1.116	1.240	1.264	1.288
Current Submission	1.076	1.209	0.659	0.711
Total Adjustments	-.040	-.031	-.605	-.577

Change Summary Explanation:

FY 2004 change due to below threshold reprogramming.

FY 2005 change is due to undistributed Congressional reductions to the Defense-wide RDT&E appropriation.

FY 2006 and FY 2007 changes due to increased need for sustainment, using operation and maintenance funds, for existing systems developed in previous years.

C. Other Program Funding Summary:

	<u>FY 04</u>	<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>	<u>To Complete</u>	<u>Total Cost</u>
O&M DW	3.290	3.257	3.742	3.795	3.972	4.142	4.240	4.349	Contg	Contg

D. Acquisition Strategy:

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

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE National Military Command System (NMCS) / PE 0302016K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
NMCS Command Center Engineering / S32	1.076	1.209	.659	.711	.711	.619	.578	.528

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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07			National Military Command System (NMCS) / PE 0302016K			NMCS Command Center Engineering / S32						
<u>Cost Category</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total PYs Cost</u>	<u>FY 05 Cost</u>	<u>FY 05 Award Date</u>	<u>FY 06 Cost</u>	<u>FY 06 Award Date</u>	<u>FY 07 Cost</u>	<u>FY 07 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>Support Costs</u>												
Engineering/ Tech Services	CPFF/C	Raytheon E-Sys Arlington, VA	0.769	0.400	01/05	0.312	04/06	0.365	04/07	Contg	Contg	1.846
Systems Engineering	CPFF/C	SRA Farifax, VA	1.363	0.809	01/05	0.347	04/06	0.346	04/07	Contg	Contg	2.865
Total Cost			2.132	1.209		0.659		0.711				

UNCLASSIFIED

Exhibit R-4 Schedule Profile														Date: February 2005																											
Appropriation/Budget Activity RDT&E, Defense-Wide/07														Program Element Number and Name National Military Command System (NMCS) PE 0302016K														Project Number and Name NMCS Command Center Engineering/S32													
Fiscal Year	2004				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	4	1	2	3	4									
Update Info Resource Mgt Sys			△				△				△				△				△				△				△				△										
Revise Master Ref Guide/Info Portal		△	△			△	△			△	△			△	△			△	△			△	△			△	△			△	△										
Tech Insertion Evaluations	△				△				△				△				△				△				△				△												
NMCC/Site R Conf Mgt Reviews	△		△		△		△		△		△		△		△		△		△		△		△		△		△		△		△										
Site R Integration Prog Assessments		△		△		△		△		△		△		△		△		△		△		△		△		△		△		△		△									
Command Center Engineering Analysis		△				△				△				△				△				△				△				△											

UNCLASSIFIED

Exhibit R-4a Schedule Detail				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/07	National Military Command System (NMCS) PE 0302016K			NMCS Command Center Engineering / S32				
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Update Info Resource Mgt System	3Q	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	3Q,4Q
Tech Insertion Evals	1Q	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	1Q, 3Q
Site R Integration Program Assessments	2Q, 4Q	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	2Q

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration / PE 0302019K

COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element	2.337	2.437	5.466	5.545	5.765	8.051	9.147	9.458
Global Information Grid Systems Engineering & Support/T62	2.337	2.437	2.608	2.682	2.743	2.817	2.922	3.030
Modeling and Simulation/E65*	0	0	2.858	2.863	3.022	5.234	6.225	6.428

A. Mission Description and Budget Item Justification: 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 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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE Defense Information Infrastructure Engineering & Integration / PE 0302019K

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

* Modeling and Simulation was formerly titled Technical Integration Services and was funded under PE 0303149K. 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. Program Change Summary:

	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Previous President's Budget	2.423	2.517	2.581	2.652
Current Submission	2.337	2.437	5.466	5.545
Total Adjustments	-0.086	-0.080	2.885	2.893

Change Summary Explanation:

FY 2004 changes are due to below threshold reprogramming.

FY 2005 changes are due to undistributed Congressional Reductions to the Defense-Wide RDT&E appropriation.

FY 2006 and FY 2007 changes are due to the realignment of the modeling and simulation portion of Technical Integration Services (Project E62) from PE 0303149K.

Exhibit R-2a, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		DII Engineering & Integration / PE 0302019K			Global Information Grid (GIG) Systems Engineering and Support/ T62			
COST (in millions)	FY04	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Project Cost	2.337	2.437	2.608	2.682	2.743	2.817	2.922	3.030

A. Mission Description and Budget Item Justification: Efforts under this project will strengthen critical Global Information Grid (GIG) foundation technologies and programs through application of precise, short-term, technical, engineering and integration expertise. Provides transformational support in the evolution of the major GIG components, which include: GIG Enterprise Services, DoD Data Emporium, Defense Information System Network (DISN), Net-Centric Enterprise Services (NCES), Global Combat Support System (GCSS), Global Command and Control System (GCCS), DoD Directory Services (e.g., global directory services to locate people and equipment across the Department), enterprise management, Information Assurance (IA), and other related components. This project supports the definition and implementation of various aspects of evolving the GIG. The evolution of the GIG requires coordinated implementation of the GIG components to form a coherent global information grid. This project supports definition of the common environments, developing system architecture constructs for the GIG and components, providing engineering design and guidance for component evolution, including incorporation of new technology from industry and implementing the infrastructure capability. Subtasks are assigned based on need to address specific technical problems, mitigate risks, and take advantage of cross-program synergies.

B. Accomplishments/Planned Program:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	2.337	2.437	2.608	2.682

GIG Component Support specific tasks include technical research and analysis on wireless technologies, security, IPv6, and application frameworks; quick response on assessments of technology such as persistent technology; identification of new state-of-the-art technologies that have promising applications such as semantic Web. GIG Integration technology enhancement activities include individual tasks such as end-to-end systems engineering for GIG Enterprise Services (ES), developing ES definitions and identifying the integration between services and mission applications; continued technical support to the Chief Engineers Panel (CEP); and providing analysis related to integration within the GIG components and among GIG and Service/Agency-level components. Cross Program Integration Engineering tasks include the continued collaboration with Air Force, Army, and Navy programs to coordinate interoperable solutions; continued 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.

Exhibit R-2a, RDT&E Budget Item Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		DII Engineering & Integration / PE 0302019K			Global Information Grid (GIG) Systems Engineering and Support/ T62			
COST (in millions)	FY04	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Project Cost	2.337	2.437	2.608	2.682	2.743	2.817	2.922	3.030

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

<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>
0.820	0.544	0.805	0.809	0.811	0.816	0.817	0.818

D. Acquisition Strategy: 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), Shared Data Engineering (SHADE), Defense Information Systems Network (DISN), Satellite Communications (SATCOM), GIG Directory Service, Global Combat Support System (GCSS), 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 evolving 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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis				DATE: February 2005								
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER							
RDT&E, Defense-Wide/07		DII Engineering & Integration/PE 0302019K			Global Information Grid (GIG) Systems Engineering and Support / T62							
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY05 Cost	FY05 Award Date	FY06 Cost	FY06 Award Date	FY07 Cost	FY07 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Engineering /Tech Services	Other Than Full & Open CPFF	MITRE McLean, VA	8.558	2.437	Various	2.608	Various	2.682	Various	Contg	Contg	16.285

UNCLASSIFIED

Exhibit R-4 Schedule Profile						Date: February 2005																										
Appropriation/Budget Activity RDT&E, Defense-Wide/07						Program Element Number and Name DII Engineering & Integration/PE 0302019K						Project Number and Name Global Information Grid (GIG) Systems Engineering and Support/T62																				
Fiscal Year	2004				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	4	1	2	3	4
Technical Direction Agent (TDA)	△																												△			

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT DII Engineering & Integration/ PE 0302019K	PROJECT NAME AND NUMBER Global Information Grid (GIG) Systems Engineering and Support / T62

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Technical Direction Agent (TDA)	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/07		DII Engineering & Integration /PE 0302019K			Modeling & Simulation / E65				
COST (in Millions)		FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost *		0	0	2.858	2.863	3.022	5.234	6.225	6.428

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:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0	0	1.050	1.081

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.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/07		DII Engineering & Integration /PE 0302019K			Modeling & Simulation / E65				
COST (in Millions)		FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost *		0	0	2.858	2.863	3.022	5.234	6.225	6.428

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.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0	0	1.808	1.782

FY 2006 - Modeling and Simulation Applications will provide final net-centric transitional designs for the seamless convergence of all DISN customers/services onto the new GIG Bandwidth Expansion (GIG-BE) project, which will provide a ubiquitous, secure, and robust network, scheduled to be fully operational by early FY 2006. 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 04</u>	<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>FY11</u>	<u>To Complete</u>	<u>Total Cost</u>
RDT&E, DW (PE0303149K)	10.880	9.522	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.402
O&M, DW	20.575	25.805	33.235	35.298	36.399	45.394	46.172	47.110	Contg	Contg

D. Acquisition Strategy: 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

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		DII Engineering & Integration /PE 0302019K			Modeling & Simulation / E65			
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost *	0	0	2.858	2.863	3.022	5.234	6.225	6.428

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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis							DATE: February 2005					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/07			DII Engineering & Integration / PE 0302019K				Modeling & Simulation / E65					
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 05 Cost	FY 05 Award Date	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	N/A	0.725	02/06	0.729	02/07	Contg	Contg	1.454
Com modeling and simulation	CPFF	OPNET Tech, Inc. Bethesda, MD	0	0	N/A	0.457	01/06	0.460	01/07	Contg	Contg	0.917
	CPFF	Pragmatics, McLean, Va	0	0	N/A	0.675	01/06	0.679	01/07	Contg	Contg	1.354
	CPFF/8A	CNS, Inc Springfield, Va	0	0	N/A	0.400	01/06	0.400	01/07	Contg	Contg	0.800
	CPFF	Booz, Allen & Hamilton, McLean, VA	0	0	N/A	0.501	03/06	0.495	03/07	Contg	Contg	0.996
		Various Contracts	0	0	N/A	0.100	Various	0.100	Various	Contg	Contg	0.200
TOTAL			0	0		2.858		2.863				5.721

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07													PROGRAM ELEMENT DII Engineering & Integration / PE 0302019K													Project Number and Name Modeling a& Simulation/E65												
Fiscal Year	2004				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	4	1	2	3	4						
Horizontal Engineering									△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△				△	△	△	△	△	△	△	△		
Modeling and Simulation Applications									△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△				△	△	△	△	△	△	△	△		

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT						PROJECT NAME AND NUMBER	
RDT&E, Defense-Wide/07	DII Engineering & Integration / PE 0302019K						Modeling and Simulation / E65	
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Horizontal Engineering			1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Modeling and Simulation			1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Applications								

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005																								
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE																								
RDT&E, Defense-Wide/07				Long Haul Communications PE 0303126K																								
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11																				
Total Program Element	1.373	10.789	1.470	1.502	1.535	1.576	1.636	1.695																				
DISN Systems Engineering Support/T82	1.373	1.380	1.470	1.502	1.535	1.576	1.636	1.695																				
Presidential and National Voice Conferencing/PC01	0	9.409	0	0	0	0	0	0																				
<p>A. <u>Mission Description and Budget Item Justification:</u> This Program Element (PE) funds system engineering for the Defense Information Systems Network (DISN) and the Global Information Grid (GIG) 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, supports the transition of Service and DoD Agency connections into the GIG, and supports the evolution engineering of 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.</p> <p>B.</p> <table border="0"> <thead> <tr> <th><u>Program Change Summary:</u></th> <th><u>FY04</u></th> <th><u>FY05</u></th> <th><u>FY06</u></th> <th><u>FY07</u></th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget</td> <td>1.380</td> <td>11.401</td> <td>1.455</td> <td>1.485</td> </tr> <tr> <td>Current Submission</td> <td>1.373</td> <td>10.789</td> <td>1.470</td> <td>1.502</td> </tr> <tr> <td>Total Adjustments</td> <td>-.007</td> <td>-.612</td> <td>.015</td> <td>.017</td> </tr> </tbody> </table> <p>Change Summary Explanation:</p> <p>FY 2004 change is due to below threshold reprogramming.</p> <p>FY 2005 change is due to undistributed Congressional adjustment to Defense-Wide RDT&E appropriation.</p> <p>FY 2006 and FY 2007 changes are due to revised fiscal guidance.</p>									<u>Program Change Summary:</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	Previous President's Budget	1.380	11.401	1.455	1.485	Current Submission	1.373	10.789	1.470	1.502	Total Adjustments	-.007	-.612	.015	.017
<u>Program Change Summary:</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>																								
Previous President's Budget	1.380	11.401	1.455	1.485																								
Current Submission	1.373	10.789	1.470	1.502																								
Total Adjustments	-.007	-.612	.015	.017																								

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Long Haul Communications/PE 0303126K				
COST (in millions)	FY04	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
DISN Systems Engineering Support/T82	1.373	1.380	1.470	1.502	1.535	1.576	1.636	1.695

A. Mission Description and Budget Item Justification: This Program Element (PE) funds system engineering for the Defense Information Systems Network (DISN) and the Global Information Grid (GIG) 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, supports the transition of Service and DoD Agency connections into the GIG, supports the convergence of Service and Agency network services (i.e. telephony, video, etc) into the GIG, and supports the evolution engineering of 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:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	.714	.684	.718	.736

Systems Engineering - Provide ongoing systems engineering to reduce the risks and delays of inserting new communications technologies into the DISN/GIG 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/GIG 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.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Long Haul Communications/PE 0303126K				
COST (in millions)	FY04	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
DISN Systems Engineering Support/T82	1.373	1.380	1.470	1.502	1.535	1.576	1.636	1.695

Subtotal Cost	<u>FY 04</u> .659	<u>FY 05</u> .696	<u>FY 06</u> .752	<u>FY07</u> .766
---------------	----------------------	----------------------	----------------------	---------------------

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 Global Information Grid (GIG)/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. Acquisition Strategy: 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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07			Long Haul Communications / PE 0303126K			DISN Systems Engineering Support / T82						
Cost Category	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY05 Cost	FY05 Award Date	FY06 Cost	FY06 Award Date	FY07 Cost	FY07 Award Date	Cost To Complete	Total Cost	Target Value of Contract
System Engineering	FFP	SETA, McLean, VA	.714	.684	06/05	.718	06/06	.736	06/07	Contg	Contg	2.852
	CFFF	OPNET, Bethesda, MD	.659	.696	04/05	.752	04/06	.766	05/07	Contg	Contg	2.873
			1.373	1.380		1.470		1.502				

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/07													Program Element Number and Name Long Haul Communications/PE 0303126K													Project Number and Name DISN Systems Engineering Support/T82												
Fiscal Year	2004				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	4	1	2	3	4						
DISN Global Services Task Order Award			△				△				△				△				△				△				△				△							
On-going DISN Technology Insertion (WDM/gigabit routers), etc.	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△						
OPNET Contract/Task Order Award			△				△				△				△				△				△				△				△							

UNCLASSIFIED

Exhibit R-4a Schedule Detail				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/07	Long Haul Communications/ PE 0303126K			DISN Systems Engineering Support/ T82				
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
DISN Global Services Task Order Award	3Q	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	1-4Q
OPNET Task Order Award	3Q	3Q	3Q	3Q	3Q	3Q	3Q	3Q
On-going Development and Application of Network Design, Analysis, Modeling & Simulation Tools	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07	Long Haul Communications / PE 0303126K				Presidential and National Voice Conferencing/PC01			
Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Presidential and National Voice Conferencing/PC01	0	9.409	0	0	0	0	0	0

A. Mission Description and Budget Item Justification: 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 will 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:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0	9.409	0	0

The primary effort in FY 2005 will be the 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 complete 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. Acquisition Strategy: 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

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07	Long Haul Communications / PE 0303126K				Presidential and National Voice Conferencing/PC01			
Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Presidential and National Voice Conferencing/PC01	0	9.409	0	0	0	0	0	0

will be 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 will be used for the acquisition of support through existing DISA contracts.

E. Performance Metrics: Since this is the initiation of the PNVC Program, initial metrics will 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)) will be 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 will also use the funding obligation rate (planned vs. actual) and financial reporting requirements as metrics throughout the life cycle of the program.

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER								
RDT&E, Defense-Wide/07			Long Haul Communications / PE 0303126K			Presidential and National Voice Conferencing (PNVC)/PC01								
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY04 Cost	FY04 Award Date	FY05 Cost	FY05 Award Date	FY06 Cost	FY06 Award Date	FY07 Cost	FY07 Award Date	Cost To Complete	Total Cost	Target Value of Contract
FFRDC Engineering /Technical Spt	C/CPAF	Aerospace Fld Ofc Falls Church, VA	0			1.000	10-04	0	N/A	0	N/A	0	1.000	1.000
System Engineering & Technical Assistance (SETA) Support	C/TBD	TBD	0			0.300	10/04	0	N/A	0	N/A	0	0.300	0.300
NSA Engineering/Technical Support	C/TBD	NSA	0			8.109	10/04	0	N/A	0	N/A	0	8.109	8.109
Total			0			9.409		0		0		0	9.409	9.409

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/07													Program Element Number and Name Long Haul Communications / PE 0303126K													Project Number and Name Presidential and National Voice Conferencing (PNVC)/PC01												
Fiscal Year	2004				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	4	1	2	3	4						
Program (Project) Management Plan					△																																	
CONOPS						△																																
System Design Description					△																																	
Test & Evaluation Master Plan (TEMP)										△																												
Crypto Development (NRE)						△	△	△	△	△	△	△																										
Vocoder Development (NRE)							△	△	△	△	△	△																										

Note: NRE = Non Recurring Engineering

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT Long Haul Communications / PE 0303126K	PROJECT NAME AND NUMBER Presidential and National Voice Conferencing (PNVC)/PC01

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
MIPR funds to NSA		1Q						
MIPR funds to SMC (Aerospace Support)		1Q						
NexGen SETA Task order Award		1Q						
MOU/MOA with NSA for crypto/vocoder development		1Q						
Crypto & Vocoder Systems Requirements Reviews (SRP)		2Q						
Crypto & Vocoder Trade Studies		3Q						
Crypto & Vocoder Critical Design Reviews (CDR)			2Q					
PNVC Test and Evaluation Master Plan (TEMP)			2Q					
Crypto & Vocoder Design Specification Delivery			3Q					

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE						
RDT&E, Defense-Wide/07		Minimum Essential Emergency Communications Network (MEECN) / PE 0303131K						
Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element	7.644	7.789	7.438	7.586	7.759	7.969	8.268	8.570
Strategic C3 Support / T70	2.604	2.540	2.590	2.636	2.805	2.992	3.103	3.213
Special Projects / T64	5.040	5.249	4.848	4.950	4.954	4.977	5.165	5.357

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 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	7.089	7.261	7.360	7.502
Current Submission	7.644	7.789	7.438	7.586
Total Adjustments	0.555	.528	0.078	0.084

Change Summary Explanation:

FY 2004 and FY 2005 changes are due to below threshold reprogramming.

FY 2006 and 2007 changes due to revised fiscal guidance.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		PROGRAM ELEMENT Minimum Essential Emergency Communications Network (MEECN)/ PE 0303131K			PROJECT NAME AND NUMBER Strategic C3 Support/T70			
COST (in millions)	FY04	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Strategic C3 Support/T70	2.604	2.540	2.590	2.636	2.805	2.992	3.103	3.213

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:

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
Subtotal Cost	0.651	0.550	0.601	0.616

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					Date: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		PROGRAM ELEMENT Minimum Essential Emergency Communications Network (MEECN)/ PE 0303131K			PROJECT NAME AND NUMBER Strategic C3 Support/T70			
COST (in millions)	FY04	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Strategic C3 Support/T70	2.604	2.540	2.590	2.636	2.805	2.992	3.103	3.213

Provide NC3 Review Report and Systems Analysis Documents.
Update Emergency Conferencing and Action Plans and Procedures.

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
Subtotal Cost	1.302	1.314	1.303	1.317

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.

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
Subtotal Cost	.651	.676	.686	.703

Provide Aircraft and Command Center Engineering.

C. Other Program Funding Summary:

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	To <u>Complete</u>	Total <u>Cost</u>
O&M, DW	3.776	3.960	3.657	3.881	4.147	4.222	4.253	4.296	Contg	Contg

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.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				Date: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		PROGRAM ELEMENT Minimum Essential Emergency Communications Network (MEECN)/ PE 0303131K			PROJECT NAME AND NUMBER Strategic C3 Support/T70			
COST (in millions)	FY04	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Strategic C3 Support/T70	2.604	2.540	2.590	2.636	2.805	2.992	3.103	3.213

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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/07			Minimum Essential Emergency Communications Network/PE 0303131K				Strategic C3 Support / T70					
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Systems Engineering	CPAF	Science Applications International Corporation McLean, VA	1.298	.550	06/05	.601	06/06	.616	06/07	Cont	Cont	3.214
	CPAF	Raytheon Company Arlington, VA	2.597	1.314	02/05	1.303	02/06	1.317	02/07	Cont	Cont	6.429
	CPFF	Booz Allen & Hamilton Falls Church, VA	1.298	.676	10/04	.686	10/05	.703	10/06	Cont	Cont	3.213
		Total	5.193	2.540		2.590		2.636				

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/07													Program Element Number and Name Minimum Essential Emergency Communications Network PE 0303131K													Project Number and Name Strategic C3 Support/T70												
Fiscal Year	2004				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	4	1	2	3	4						
NC3 Review Report		△	△			△	△			△	△			△	△			△	△			△	△			△	△			△	△			△	△			
Systems Analysis Documents		△	△	△		△	△	△		△	△	△		△	△	△		△	△	△		△	△	△		△	△	△		△	△	△						
Conf/Actions Plans and Procedure	△		△		△		△		△		△		△		△		△		△		△		△		△		△		△		△							
Operational Assessments	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△						
Staff Assistance Visits			△				△				△				△				△				△				△				△							
Aircraft/Command Center Engineering	△			△	△			△		△	△			△	△			△	△			△	△			△	△			△	△							
Award NC3 Contract											△																											

UNCLASSIFIED

Exhibit R-4a Schedule Detail				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/07	Minimum Essential Emergency Communications Network (MEECN) / PE 0303131K			Strategic C3 Support / T70				
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
NC3 Review Report	2-3Q	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	2-4Q
Plans and Procedures	1,3Q	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	1-4Q
Staff Assistance Visits	3Q	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	1,4Q
Award NC3 Contract			3Q					
Operation Assessment Contract			2Q					

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		PROGRAM ELEMENT Minimum Essential Emergency Communications Network (MEECN)/PE 0303131K			PROJECT NAME AND NUMBER Special Projects / T64			
Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	5.040	5.249	4.848	4.950	4.954	4.977	5.165	5.357

A. Mission Description & Budget Item Justification: The mission is performing classified work. All aspects of this project are classified and require special access. Detailed information on this project is not contained in this document, but is available to individuals having special access to program details.

B. Other Program Funding Summary: N/A

C. Acquisition Strategy: Information requires special access.

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT					PROJECT NAME AND NUMBER				
RDT&E, Defense-Wide/07			Minimum Essential Emergency Communications Network / PE 0303131K					Special Projects/T64				
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs <u>Cost</u>	FY05 <u>Cost</u>	FY05 Award <u>Date</u>	FY06 <u>Cost</u>	FY06 Award <u>Date</u>	FY07 <u>Cost</u>	FY07 Award <u>Date</u>	Cost To <u>Complete</u>	Total <u>Cost</u>	Target Value of <u>Contract</u>
Systems Engineering and Integration	SS/C CPAF MIPR	Multiple Performing Activities	10.092	5.249	Various	4.848	Various	4.950	Various	Contg	Contg	N/A

UNCLASSIFIED

Exhibit R-4 Schedule Profile														Date: February 2005																											
Appropriation/Budget Activity RDT&E, Defense-Wide/07														Program Element Number and Name Minimum Essential Emergency Communications Network PE 0303131K														Project Number and Name Special Projects/T64													
Fiscal Year	2004				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	4	1	2	3	4									
All aspects of this project are classified and require special access.																																									

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT Minimum Essential Emergency Communications Network (MEECN) PE 0303131K	PROJECT NAME AND NUMBER Special Projects/T64

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
<p>All aspects of this project are classified and require special access.</p>								

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE DISA Mission Support Operations/PE 0303148K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Enterprise Accounting and Management System/DE01	0	0	3.426	1.207	0	1.204	1.239	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	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.000	0.000	3.426	1.207

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 - Computing Services (FAMIS-CS); 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.

UNCLASSIFIED

Exhibit R-2, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE DISA Mission Support Operations/PE 0303148K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Enterprise Accounting and Management System/DE01	0	0	3.426	1.207	0	1.204	1.239	0

B. Program Change Summary:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	0	0	0	0
Current Submission	0	0	3.426	1.207
Total Adjustments	0	0	3.426	1.207

Change Summary Explanation:

FY 2006 and FY 2007 changes represent a new start to accomplish implementation of a new accounting system.

C. Other Program Funding Summary:

	<u>FY 04</u>	<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>	<u>To Complete</u>	<u>Total Cost</u>
Procurement, DW	0	0	3.641	0.820	0	0	0	0	4.461	4.461
O&M, DW	0	0	1.440	2.000	1.280	1.280	1.280	1.280	Contg	Contg

D. Acquisition Strategy: 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.

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

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER							
RDT&E, Defense-Wide/07		DISA Mission Support Operations/ PE 0303148K			Defense Enterprise Accounting and Management System/DE01							
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Testing	TBD	TBD	0	0	N/A	1.814	TBD	0.805	TBD	0.000	2.619	2.619
Certification	TBD	TBD	0	0	N/A	0.806	TBD	0.000	N/A	0.000	0.806	0.806
Interface Development	TBD	TBD	0	0	N/A	0.806	TBD	0.402	TBD	0.000	1.208	1.208
TOTAL			0	0	N/A	3.426	TBD	1.207	TBD	0.000	4.633	4.633

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07													Program Element Number and Name DISA Mission Support Operations/PE 0303148K													Project Number and Name Defense Enterprise Accounting and Management System/DE 01												
Fiscal Year	2004				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	4	1	2	3	4						
Testing											▲	▲	▲	▲	▲	▲																						
Certification											▲	▲																										
Interface Development									▲	▲	▲	▲	▲	▲	▲	▲																						
System Upgrade																					▲	▲							▲	▲								

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
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

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Testing			3Q - 4Q	1Q - 4Q				
Certification			3Q - 4Q					
Interface Development			2Q - 4Q	1Q - 4Q				
System Upgrade						3Q - 4Q	3Q - 4Q	

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE C4I for the Warrior/PE 0303149K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element (PE)	34.601	23.526	6.311	6.462	6.569	6.711	6.910	7.162
Information Dissemination Management/IM01 *	9.539	9.244	0	0	0	0	0	0
Command and Control Infrastructure Modernization (C2IM)/T55 **	14.182	4.760	0	0	0	0	0	0
Network Warfare Simulation (NETWARS)/E62 ***	10.880	9.522	6.311	6.462	6.569	6.711	6.910	7.162

A. Mission Description and Budget Item Justification: 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 will be under the Net-Centric Enterprise Services (NCES) Program, PE 0303170K.

** Beginning in FY 2006, Command and Control Infrastructure Modernization will be 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 has been 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 based 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 will be

Exhibit R-2, RDT&E Budget Item Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE					
RDT&E, Defense-Wide/07			C4I for the Warrior/PE 0303149K					
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element (PE)	34.601	23.526	6.311	6.462	6.569	6.711	6.910	7.162
Information Dissemination Management/IM01 *	9.539	9.244	0	0	0	0	0	0
Command and Control Infrastructure Modernization (C2IM)/T55 **	14.182	4.760	0	0	0	0	0	0
Network Warfare Simulation (NETWARS)/E62 ***	10.880	9.522	6.311	6.462	6.569	6.711	6.910	7.162

engineered and implemented to provide continued interoperability between existing legacy systems and pending messaging system interfaces (such as 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 will be 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:	FY04	FY05	FY06	FY07
Previous President's Budget	36.489	24.712	30.784	34.100
Current Submission	34.601	23.526	6.311	6.462
Total Adjustments	-1.888	-1.186	-24.473	-27.638

Change Summary Explanation:

FY 2004 change is due to below threshold reprogramming.
FY 2005 change is due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation.
FY 2006 and FY 2007 changes are due to the realignment of Command and Control Infrastructure Modernization to

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE					
RDT&E, Defense-Wide/07			C4I for the Warrior/PE 0303149K					
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element (PE)	34.601	23.526	6.311	6.462	6.569	6.711	6.910	7.162
Information Dissemination Management/IM01 *	9.539	9.244	0	0	0	0	0	0
Command and Control Infrastructure Modernization (C2IM)/T55 **	14.182	4.760	0	0	0	0	0	0
Network Warfare Simulation (NETWARS)/E62 ***	10.880	9.522	6.311	6.462	6.569	6.711	6.910	7.162
<p>the Joint Command and Control Program in PE 0303158K as well as future developmental efforts for IDM moving under the auspices of the Net-Centric Enterprise Services Program in PE 0303170K. Also, the NETWARS (formerly Technical Integration Services) is now a separate project in PE 0303149K. The Technical Integration Services segment has been realigned to PE 0302019K and retitled Modeling and Simulation due to the direct engineering support that this project provides to the GIG infrastructure.</p>								

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		Information Dissemination Management /PE 0303149K			IDM/IM01			
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Dissemination Management/IM01	9.539	9.244	0.000	0.000	0.000	0.000	0.000	0.000

A. Mission Description and Budget Item Justification: 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 is being incrementally developed and fielded as tools and services, providing a rapid insertion of technology capability to the warfighter. IDM directs end-to-end information flows throughout the info-structure in accordance with command policy. 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.

This RDT&E project continues development and integration of Feature Packs. Capabilities will address such improved and additional functionality as enhanced search and awareness features, alert notifications, message routing enhancements, improved ability to advertise information holdings, enhanced smart pull capabilities for mission information, and other features that support the Combatant Commander. Patches and fixes will be incorporated into maintenance releases as needed. Future requirements for additional or improved functionality will be gathered at regularly scheduled user conferences and evaluated at configuration control boards.

B. Accomplishments/Planned Program:

	FY04	FY05	FY06	FY07
Subtotal Cost	9.539	9.244	0.00	0.00

Content Staging - Continue to establish an initial Content Staging (CS) capability baseline to support information

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		Information Dissemination Management /PE 0303149K			IDM/IM01			
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Dissemination Management/IM01	9.539	9.244	0.000	0.000	0.000	0.000	0.000	0.000

sharing of service and agency information products by providing an awareness of and access to that information. Continue 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 will have initial/pilot IDM capabilities, with at least some presence in their AORs. Continue the integration of information sources into the IDM infrastructure to make their information holdings available to the IDM user community. Provide logistics support and sustainment of operations. Maintain 24X7 Help Desk/Environment. Assist in implementation and operationalizing of new and enhanced IDM capabilities contained in releases 4.x, 5.x, and 6.x and incremental bands of capabilities. Provide reachback, onsite technical engineering assistance, information assurance assistance to establish a local accreditation baseline, refresher training, and Mobile Training Team (MTT) support to the fielded locations. Further, by the end of FY 2005 the initial transition framework from content staging to NCES will be in place.

Development and Integration - Continue development and integration of improved capabilities through feature packs and maintenance releases capabilities. Feature packs will address such improved and additional functionality 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. Incorporate patches and fixes into maintenance releases as needed. Future requirements for additional or improved functionality will be gathered at regularly scheduled IDM User Conferences and evaluated at configuration control boards. Development of enhanced capabilities beyond FY 2005 will be under the auspices of the Net-Centric Enterprise Services (NCES) Program.

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

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		Information Dissemination Management /PE 0303149K			IDM/IM01			
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Dissemination Management/IM01	9.539	9.244	0.000	0.000	0.000	0.000	0.000	0.000

C. Other Program Funding Summary:

	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>To</u> <u>Complete</u>	<u>Total</u> <u>Cost</u>
Operations and Maintenance, DW	1.587	4.622	7.702	2.498	3.801	0.000	0	19.940
Procurement, DW		1.256						1.256

D. Acquisition Strategy: All RDT&E work will be contracted out or funded using MIPRs.

E. Performance Metrics: 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 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, but 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 will be compiled both as a realtime barometer as to how well IDM is doing in satisfying the needs of present customers, but also to predict success in meeting future IDM objectives. The nature of this compiled data will permit objective assessments and predictions as to the quality and reliability of IDM support to its customers. To demonstrate the utility and benefit of the system, notional information products such as Air Tasking Orders (ATO) and intelligence summaries were used for testing and benchmarks were developed as part of IDM evaluations. In an IDM System Assessment Evaluation Report dated 30 June 2003, for example, ATOs were delivered in 71 minutes using IDM Frontline compared to a benchmark of 307 minutes without IDM. Using IDM Publish/Subscribe the ATOs were delivered in 4 seconds, compared to 307 minutes. The summary stated in part: "...IDM can significantly improve the information distribution and management capabilities of USCENTCOM. These systems satisfied all functional requirements and substantially improved the bandwidth use, timeliness, and accuracy of information distribution..." Some specific performance measures include:

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		Information Dissemination Management /PE 0303149K			IDM/IM01			
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Dissemination Management/IM01	9.539	9.244	0.000	0.000	0.000	0.000	0.000	0.000

- Security Performance Improvement Goal- At IOC provides the necessary interfaces to enable IDM directory, security, and format management operations (Resource, Status, Scheme, Directory, Security, Operations, and Administration). Provide system and user administrative controls. Planned Performance Metric - Does the IDM 4.1 architecture provide the necessary security precautions to protect the military operations and national objectives.

- 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. Metric: 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 FOC provide 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.

- Integration Performance Improvement Goal: At FOC integrate IDM/CS services with appropriate data guards, PKI, server certificates, and Virtual Private Networks (VPNs). Metric: Does the IDM 4.1 architecture provide the necessary security precautions to protect the military operations and national objectives. 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, directory structure and segment identification requirements, and undergo graphical user interface functional testing and regression 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 or difficulties. It provides an extensive historical record, along with future projections. On a micro level, the Milestone Schedule is a measure for performance for

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		Information Dissemination Management /PE 0303149K			IDM/IM01			
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Information Dissemination Management/IM01	9.539	9.244	0.000	0.000	0.000	0.000	0.000	0.000

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. Documents are color coded with the traditional red (difficulty with performance or schedule), yellow (warning of potential difficulty), blue (in testing), and green (tested and ready for release). 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, in addition to the people involved in the established structure. Customers know what is included in each release. 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. The customer base is realistic and cooperative when trade-offs must be made in performance or schedule.

UNCLASSIFIED

Exhibit R-3 Cost Analysis				DATE: February 2005								
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				PROGRAM ELEMENT Information Dissemination Management /PE 0303149K				PROJECT NAME AND NUMBER/ IDM/IM01				

<u>Cost Category</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total PYs Cost</u>	<u>FY05 Cost</u>	<u>FY05 Award Date</u>	<u>FY06 Cost</u>	<u>FY06 Award Date</u>	<u>FY07 Cost</u>	<u>FY07 Award Date</u>	<u>Cost To Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Product Development	Various	Various	3.512	3.025	Various	0.000	N/A	0.00	N/A	0	6.637	N/A
Product Fielding	Various	Various	5.292	5.180	Various	0.00	N/A	0.00	N/A	0	10.698	N/A
Test & Evaluation	Various	Various	.735	1.039	Various	0.00	N/A	0.00	N/A	0	1.774	N/A
Totals			9.539	9.244		0.00		0.00				

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/07													Program Element Number and Name Information Dissemination Mgmt /PE 0303149K													Project Number and Name IDM/IM01												
Fiscal Year	2004				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	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					△																																	
Deploy IDM 4.1.3 NCES Transition Messaging Release						△																																
Develop IDM 4.1.3 Feature Pack 2 Discovery						△	△																															
Test IDM 4.1.3 Feature Pack 2 Discovery							△																															
Deploy IDM 4.1.3 Feature Pack 2 Discovery								△																														

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT Information Dissemination Management /PE 0303149K	PROJECT NAME AND NUMBER/ IDM / IM01

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Develop IDM 4.1.3	1-2Q							
Testing of IDM 4.1.3	2-3Q							
Deploy IDM 4.1.3	3-4Q							
Develop IDM 4.1.3 NCES Transition Messaging	4Q	1Q						
Testing of IDM 4.1.3 NCES Transition Messaging Release		1Q						
Deploy IDM 4.1.3 NCES Transition Messase Release		2Q						
Develop IDM 4.1.3 Feature Pack 2 Discovery		2-3Q						
Testing of IDM 4.1.3 Feature Pack2 Discovery		3Q						
Deploy IDM 4.1.3 Feature Pack 2 Discovery		4Q						

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT C4I for the Warrior/PE 0303149K			PROJECT NAME AND NUMBER Command and Control Infrastructure Modernization (C2IM)/T55		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	14.182	4.760	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 will utilize the Net-Centric Enterprise Services (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). Based on DoD Transformation objectives, these components will provide for 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 will develop interoperability pilots, demonstrate them in appropriate evaluations or exercises (e.g., 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 will be 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 will evolve to support new commercial operating systems (with increased emphasis on security). In addition to supporting integrated information operations within the SIPRNET environment, components will be developed for the exchange of information with allies, coalition partners and the Homeland Defense communities.

During FY 2004 - 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 will provide a tailored, relevant, and correlated operational picture that will enable the edge user to share that view with a collaborative COI. Capabilities will be realized within a Services-Oriented Architecture (SOA) that leverages 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 will determine 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 will provide increased agility for the user by generating a picture on demand as opposed to a hierarchal COP generated by a single command authority.

Initial C2 COI UDOP spirals were demonstrated in late FY 2004 in Horizontal Fusion's Quantum Leap 2, and support the

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT C4I for the Warrior/PE 0303149K			PROJECT NAME AND NUMBER Command and Control Infrastructure Modernization (C2IM)/T55		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	14.182	4.760	0	0	0	0	0	0

C2 COI Global Strike and Situational Awareness ECMs to be showcased in early FY 2005 as part of Net-Centric Capability Pilot's (NCCP) Oktoberfest demonstration. C2 COI ECMs are made available to users on the SIPRNET for evaluation, maturation, and limited operational use. Additionally, they will support concept exploration and technical risk reduction for the next generation of C2I (e.g., JC2). In FY 2005, funding requirements for high priority operational activities reduced available funds for this effort. As a result, C2IM's FY 2005 efforts will focus on hardening and maturing previously developed capabilities. Beginning in FY 2006, C2IM will be realigned to the Joint Command and Control Program in PE 0303158K.

B. Accomplishments/Planned Program:

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

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	4.020	1.198	0	0

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 funding will be used to harden and mature UDOP and associated interfaces to the NCCP ECMs/services developed in FY 2004 and FY 2005.

FY 2004 and FY 2005 funds are used for:

- 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

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER		
RDT&E, Defense-Wide/07			C4I for the Warrior/PE 0303149K			Command and Control Infrastructure Modernization (C2IM)/T55		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	14.182	4.760	0	0	0	0	0	0

- Net-centric Joint Warfighter portal supporting integration of C2, CS, and Intel information repositories

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	3.112	1.444	0	0

Common Edge Services and Warfighter Visualizations:

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 will be 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 will enable the integration of real-time situational awareness information from multiple sensors and data sources. FY 2005 funding will be used to harden and mature the common Edge User pilot services developed during FY 2004 and FY 2005.

FY 2004 and FY 2005 funds are used to:

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

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	1.973	0.706	0	0

Web Enabling Legacy Applications:

This effort supports the integration of existing information system components into the next generation C2I capability. FY 2005 funds will be used to integrate web-enabled legacy applications with the Net-Centric pilot services developed in FY 2004 and FY 2005.

FY 2004 and FY 2005 funds are used to:

- Integrate functionality from GCCS, GCSS, and relevant Advanced Concept Technology Demonstrations (ACTDs) into JTF headquarters capability.

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		C4I for the Warrior/PE 0303149K			Command and Control Infrastructure Modernization (C2IM)/T55			
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	14.182	4.760	0	0	0	0	0	0

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	3.216	0.952	0	0

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 will provide engineering support for the piloting of net-centric services developed during FY 2003 and FY 2004.

FY 2004 and FY 2005 funds will be used for:

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

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	1.861	0.460	0	0

Information Interoperability and Security for Homeland Defense and Coalition Partners:

This effort provides the tools needed for the integration of information between security domains and supports the secure transfer of information between SIPRNET and other external networks as required by the JTFs. FY 2005 funding will be used to provide assessments of effectiveness and military utility of the security and information exchange pilot services developed during FY 2003 and FY 2004.

FY 2004 and FY 2005 funds will be used for:

- 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

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER		
RDT&E, Defense-Wide/07			C4I for the Warrior/PE 0303149K			Command and Control Infrastructure Modernization (C2IM)/T55		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	14.182	4.760	0	0	0	0	0	0

C. Other Program Funding Summary: N/A

D. Acquisition Strategy:

Will make use of MITRE support.
DISA Next Generation Contractual vehicle will be used.

E. Performance Metrics: The performance metrics for the software include capacity (number of messages communicated), portability, extensibility, and architectural scalability (number of clients and number of track objects).

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/07			C4I for the Warrior / PE 0303149K				Command and Control Infrastructure Modernization (C2IM) / T55					
<u>Cost Category</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total PYs Cost</u>	<u>FY 05 Cost</u>	<u>FY 05 Award Date</u>	<u>FY 06 Cost</u>	<u>FY 06 Award Date</u>	<u>FY 07 Cost</u>	<u>FY 07 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
System Engineering	OTF&O	MITRE, FFRDC McLean, VA	1.548	0.700	Oct-04	0	N/A	0	N/A	0	2.248	2.248
Engineering Support	MOA	JPL, FFRDC San Diego, CA	1.450	0.300	Jan-05	0	N/A	0	N/A	0	1.750	1.750
NCCP / (UDOP) Pilot Integration	TBD	TBD Norfolk, Va	0.200	0.650	Mar-05	0	N/A	0	N/A	0	0.850	0.850
C2IM UDOP JDEP Testing	MOA	SSC-SD GOVT San Diego, CA	0.650	0.240	Feb-05	0	N/A	0	N/A	0	0.890	0.890
UDOP SW Dev & Tech Suppt	F&O	NGMS, FGM, Polexis Reston, VA	12.197	1.594	Oct-04	0	N/A	0	N/A	0	13.791	13.947
UDOP Visualization/Portal SW	F&O	NGMS, FGM, Polexis Reston, VA	3.000	0.425	Oct-04	0	N/A	0	N/A	0	3.425	3.425
UDOP Engineering Support	F&O	NextGen/TBD	2.500	0.450	Mar-05	0	N/A	0	N/A	0	2.950	2.950
UDOP Architecture/Engineering	F&O	S&T Assoc. Reston, Va	3.799	0.401	Mar-05	0	N/A	0	N/A	0	4.200	4.200
Engineering/Tech Svcs	Various	Various	2.650	0.000	N/A	0	N/A	0	N/A	0	2.650	2.650
	Total		27.994	4.760								

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/07													C4I for the Warrior/PE 0303149K													Command and Control Infrastructure Modernization(C2IM)/T55												
Fiscal Year	2004				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	4	1	2	3	4						
Architecture/Integ/ Dev.																																						
UDOP/NCCP Integration &Test	△	△	△	△	△																																	
UDOP SW Dev V2		△	△	△	△																																	
UDOP Portlet Dev v2		△	△	△	△																																	
Pilots / Demonstrations																																						
NCCP/UDOP Spring Demonstration			△	△	△																																	
NCCP/UDOP Fall Demonstration				△	△	△	△	△																														

UNCLASSIFIED

Exhibit R-4a Schedule Detail		Date: February 2005							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER							
RDT&E, Defense-Wide/07	C41 for the Warrior/PE 0303149K	Command and Control Infrastructure Modernization (C2IM)/T55							
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	
Architecture / Integr / Development UDOP/NCCP Integration Test	1Q-4Q	1Q							
UDOP SW Development V2	2Q-4Q	1Q							
UDOP Portlet Development V2 Pilots / Demonstrations	2Q-4Q	1Q							
NCCP/UDOP Spring Demonstration	3Q-4Q	1Q							
NCCP/UDOP Fall Demonstration Architecture, Development, Integration & Test Demo/Pilot Exercise	4Q	1Q-3Q							

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT C4IFTW/PE 0303149K			PROJECT NAME AND NUMBER NETWARS (Formerly Technical Integration Services) /E62		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	10.880	9.522	6.311	6.462	6.569	6.711	6.910	7.162

A. Mission Description and Budget Item Justification: The mission of the DISA Technical Integration Services effort is to support 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.

B. Accomplishments/Planned Program:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	1.657	0	0	0

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT C4IFTW/PE 0303149K			PROJECT NAME AND NUMBER NETWARS (Formerly Technical Integration Services) /E62		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	10.880	9.522	6.311	6.462	6.569	6.711	6.910	7.162

FY 2004 - Support to DISA Network Operations continued to improve operational effectiveness, assess performance management tools, and end-to-end visibility through network instrumentation, near-real-time prediction capability, capacity planning, and visualization tools.

	<u>FY 04</u>		<u>FY 05</u>		<u>FY 06</u>		<u>FY 07</u>
Subtotal Cost	.861		1.900		0		0

FY 2004 - Warfighter & Combatant Commands Support provided: (a) wartime performance and vulnerability assessments of the DoD networks for the Combatant Commands (COCOMs) through instrumentation, visualization, and troubleshooting (b) assessments of the impact of new technology programs on existing or planned DoD networks, and (c) assessments of operations and technical impact of the Combatant Commands' ability to support communications during peacetime and wartime escalations.

FY 2005 - Warfighter & Combatant Commands Support will provide network traffic analysis for warfighter architecture capable of analyzing end-to-end system engineering issues.

	<u>FY 04</u>		<u>FY 05</u>		<u>FY 06</u>		<u>FY 07</u>
Subtotal Cost	6.035		4.779		6.311		6.462

FY 2004 - C3 Community Support will provide assessments of impact on C4ISR (surveillance and reconnaissance) networks during combat for use by the Joint Staff, the Office of the Secretary of Defense (OSD), and the Combatant Commands, by: (1) Enhancing M&S capability, (2) Developing an integrated M&S tool based on COTS products end-to-end, (3) Providing modeling for the JWARS for design of "Blue" communication scenarios and (4) Continuing configuration management support, and verification and validation review of the NETWARS.

FY 2005 - C3 Community Support will continue 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.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT C4IFTW/PE 0303149K			PROJECT NAME AND NUMBER NETWARS (Formerly Technical Integration Services) /E62		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	10.880	9.522	6.311	6.462	6.569	6.711	6.910	7.162

FY 2007 - Provide DoD decision makers with the impact of NCES services prior to conflict or war.

	<u>FY 04</u>		<u>FY 05</u>		<u>FY 06</u>		<u>FY 07</u>
Subtotal Cost	1.377		1.646		0		0

FY 2004 - DISA Program Support: (1) Continued Defense Information System Network (DISN) performance assessments for existing and transitioning networks, applications, technology, and develop recommendations for network performance improvements; (2) Conducted end-to-end system performance assessment for DISN and GCCS, and built new capability into models/tools to support these assessments; (3) Performed modeling and traffic engineering to support DISN/GIG network; (4) Performed topological design in support of the GIG Bandwidth Expansion Initiative; (5) Supported modeling and design of the NCES; and (6) Lead the Telecommunication Services Management (TSM) initiative to improve the DISA telecommunications service process. The TSM is an end-to-end improvement for accurate and timely customer billing, improved services delivery time, enhanced customer service and satisfaction, and a timelier cost recovery period.

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

	<u>FY 04</u>		<u>FY 05</u>		<u>FY 06</u>		<u>FY 07</u>
Subtotal Cost	.950		1.197		0		0

FY 2004 - Key Interface Point Architectures established the architecture baselines for key DISA communication interfaces for the convergence of network services and capabilities to support warfighter needs in net-centric warfare environment and aiding in the achievement of information superiority in emerging, complex military scenarios.

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

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT C4IFTW/PE 0303149K			PROJECT NAME AND NUMBER NETWARS (Formerly Technical Integration Services) /E62		
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Project Cost	10.880	9.522	6.311	6.462	6.569	6.711	6.910	7.162

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

	<u>FY 04</u>	<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>	<u>Total Complete</u>	<u>Total Cost</u>
RDT&E, DW (PE0302019K)	0	0	2.858	2.863	3.022	5.234	6.225	6.428	Contg	Contg
O&M, DW	11.399	1.095	0.327	0.724	0.857	0.911	0.933	0.953	Contg	Contg

D. Acquisition Strategy: Uses a number of contractors for modeling support with SAIC 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 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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/07			C4IFTW /PE 0303149K				NETWARS (Formerly Technical Integration Services) /E62					
Cost Category	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Technical Integration Services System Engineering and Integration	CPFF	OPNET Tech, Inc. Bethesda, MD	4.070	3.319	01/05	3.551	01/06	3.635	01/07	Contg	Contg	Contg
Com modeling and simulation	FFRDC	RAND Tyson Corner, VA	.555	0	N/A	0	N/A	0	N/A	N/A	.555	.555
	CPFF/	Northrop Comp Grumman Reston, VA	.950	.800	11/04	0	N/A	0	N/A	N/A	1.750	1.750
	CPFF/Comp	SAIC Seven Corners, VA	1.444	.160	11/04	0	N/A	0	N/A	N/A	1.604	1.604
	FFRDC	MITRE Seven Corners, VA	0	.397	12/04	0	N/A	0	N/A	N/A	.397	.397
	CPFF/Comp	Verizon/BBNT McLean, Va	0	.753	2/05	0	N/A	0	N/A	N/A	.753	.753
	CPFF/8A	CNS, Inc Springfield, Va	.400	.400	1/05	0	N/A	0	N/A	N/A	.800	.800
	CPFF/Comp	Pragmatics, McLean, Va	0	.633	11/04	0	N/A	0	N/A	N/A	.633	.633
	CPFF/Comp	Booz, Allen & Hamilton, McLean, Va	3.082	2.840	12/04	2.760	12/05	2.827	12/06	Contg	Contg	Contg
		Various Contracts	.379	.220	N/A	0	N/A	0	N/A	N/A	.599	.599
Subtotal Product Development			10.880	9.522		6.311		6.462				
TOTAL			10.880	9.522		6.311		6.462				

UNCLASSIFIED

Exhibit R-4 Schedule Profile														Date: February 2005																		
Appropriation/Budget Activity RDT&E, Defense-Wide/07								Program Element Number and Name C4IFTW / PE 0303149K								Project Number and Name NETWARS (Formerly Technical Integration Services)/E62																
Fiscal Year	2004				2005				2006				2007				2008				2008				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	1	2	3	4
Support to DISA Ops	△	△	△	△	△	△	△	△																								
Warfighter Support	△	△	△	△	△	△	△	△																								
C3 Community Support	△	△	△	△	△	△	△	△	△				△				△				△				△				△			
DISA Program Support	△	△	△	△	△	△	△	△																								
KIP architectures			△			△																										

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT C4IFTW /PE 0303149K	PROJECT NAME AND NUMBER NETWARS (Formerly Technical Integration Services) /E62

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Support to DISA Ops	1-4Q	1-4Q						
Warfighter Support	1-4Q	1-4Q						
C3 Community Support	1-4Q	1-4Q	2Q	2Q	2Q	2Q	2Q	2Q
DISA Program Support	1-4Q	1-4Q						
KIP architectures	3Q	1Q						

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				
RDT&E, Defense-Wide/07				Global Command and Control System (GCCS) / PE 0303150K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Total Program Element	52.191	62.944	52.331	51.950	43.286	43.597	46.098	47.947
Global Command and Control System-Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	0.000	10.401	2.500	0.000	0.000	0.000	0.000	0.000
<p>A. <u>Mission Description and Budget Item Justification:</u> The GCCS-J is the Department of Defense (DoD) Joint Command and Control (C2) System of Record and is an essential component for successfully accomplishing 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 the Joint Chiefs of Staff validated and prioritized 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 over 650 sites around the world, supporting more than 10,000 joint and coalition workstations. GCCS-J is a DoD major Information Technology (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. GCCS-J Block V version releases will continue to address outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities in support of the following mission areas: Intelligence; Situational Awareness; Readiness; and Force Planning, Employment, Protection, and Deployment. The system 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 the DoD Transformation efforts in the area of Strategic and Operational Command and Control. In FY 2005, GCCS-J will continue accelerated evolution towards a more net-centric, web-based, open system standards approach to providing C2 capabilities and services that will evolve GCCS-J into the basis of a single integrated Joint C2 architecture. It will provide incremental improvements that incorporate cutting edge hand held technologies, web-based, networked applications that can quickly access many sources of data and application logic. Specifically, in the Situational Awareness mission area, this funding will finance the development of candidate mission applications and integration of Advance Concept Technology Demonstrations (ACTDs) to improve information warfare</p>								

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
RDT&E, Defense-Wide/07	Global Command and Control System (GCCS) / PE 0303150K

visualization and display. Situation awareness enhancement tools (as the output) will directly enhance the capabilities of the Deployable Joint Command and Control (DJC2), a tailorable system addressing Joint Force Commanders' needs for air-, land-, and sea-based operations and the material solution for the 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 collaborative planning capability toolset will continue to adapt as required to support the Joint Planning and Execution Community (JPEC). CFAST is designed to meet the challenges in DoD planning doctrine in support of ongoing operations such as the Global War on Terrorism (GWOT) and future contingencies. The current version of CFAST is being utilized by the U.S. Pacific Command (USPACOM), U.S. European Command (USEUCOM), and other combatant commands. The requested RDT&E funding is needed to advance the current CFAST system and enable it to support the Joint Staff's expanding rapid deployment mission. The enhanced CFAST system will provide the Joint Staff with 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 end-state described by the Secretary of Defense's Adaptive Planning Initiative strives for rapidly produced, near-execution ready campaign plans that provide multiple courses of action; these virtual "living" plans must be adaptive to the changing regional and global environment. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

B.

<u>Program Change Summary:</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
Previous President's Budget	50.400	43.693	50.520	52.862
Current Submission	52.191	62.944	52.331	51.950
Total Adjustments	+1.791	+19.251	+1.811	-0.912

Change Summary Explanation:

FY 2004 change is due to below threshold reprogramming.

FY 2005 change is due to transfer of Collaborative Force Analysis, Sustainment and Transportation System to DISA funding, a Congressional add for Joint Information Technology Center Initiative, and undistributed Congressional

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification	DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K

reductions to the Defense-wide RDT&E appropriation.
FY 2006 changes are due to funds added for CFAST and revised fiscal guidance.
FY 2007 changes are due to revised fiscal guidance.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

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 an essential component for successfully accomplishing 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 the Joint Chiefs of Staff validated and prioritized 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 over 650 sites around the world, supporting more than 10,000 joint and coalition workstations. GCCS-J is a DoD major Information Technology (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. GCCS-J Block V version releases will continue to address outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities in support of the following mission areas: Intelligence; Situational Awareness; Readiness; and Force Planning, Employment, Protection, and Deployment. The system 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 the DoD Transformation efforts in the area of Strategic and Operational Command and Control. In FY 2005, GCCS-J will continue accelerated evolution towards a more net-centric, web-based, open system standards approach to providing C2 capabilities and services that will evolve GCCS-J into the basis of a single integrated Joint C2 architecture. It will provide incremental improvements that incorporate cutting edge hand held technologies, web-based, networked applications that can quickly access many sources of data and application logic. Specifically, in the Situational Awareness mission area, this funding will finance the development of candidate mission applications and integration of Advance Concept Technology Demonstrations (ACTDs) to improve information warfare visualization and display. Situation awareness enhancement tools (as the output) will directly enhance the capabilities of the Deployable Joint Command and Control (DJC2), a tailorable system addressing Joint Force Commanders' needs for air-, land-, and sea-based operations and the material solution for the Standing Joint Force Headquarters.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

B. Accomplishments/Planned Program:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	31.677	33.821	39.647	41.691

Development and Strategic Planning: GCCS-J is executing Block IV (FY 2002 through FY 2005) and Block V (FY 2004 through FY 2006). Block IV contains three spiral releases (v3.4, v3.5, v3.6) on the v3.x baseline and one spiral release (v4.0) that implements a new infrastructure and migrates all v3.x capabilities to this new infrastructure. Three of the four planned spiral releases (v3.4, v3.5, and v3.6) have been fielded. GCCS-J v4.0 is an essential prerequisite to implementing greatly expanded net-centric solutions. GCCS-J v4.0 introduces a more sophisticated "n-tier" architecture supporting dynamic infrastructure resources, thin browser-based clients, and enterprise-wide services. The current GCCS-J Block IV system expands the system's previous capabilities by accelerating development of selected intelligence capabilities. This acceleration, due to the program's requirement to provide increased support to operational requirements for the Global War on Terrorism (GWOT), expedited the development of the 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 - incorporates 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.
- Global Status of Resources and Training System (GSORTS) Enhancements - Force Readiness enhancements which will provide the capability to track Service units and partial unit deployment/employment.
- Joint Operational Planning & Execution System (JOPES) - incorporates functional changes to a reengineered, modernized

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

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) - upgraded COP is highlighted by track amplifications, including the ability to differentiate and segregate simulated, exercise, and real tracks, and selectively display each group. Upgrades also included the initial implementation of a community process developed Web COP.

GCCS-J Block V contains three spiral releases (v4.1, v4.2, and v4.3), incorporating 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. Major Block V capabilities include:

- Common Operational Picture (COP) - upgraded COP 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)- will provide common target and weapon information across all component commanders and workflow management tools to enable common consistent deconflicted prosecution of targets.
- 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.
- Joint Network Management System (JNMS) - 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 with fully implementing 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

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

process using current business rules.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	10.314	7.522	10.184	10.259

Integration and Test (I&T): GCCS will employ an incremental spiral I&T methodology. A spiral approach permits an earlier start of integration testing since all new segments will not be available at the beginning of integration testing and it allows the Program Manager (PM) to accomplish risk reduction by testing in smaller, more manageable increments. The level of testing necessary for the Block V releases is commensurate to the operational and technical complexity of the release. In accordance with DOT&E guidelines, level two testing is applied to increments that provide only minor system improvements and present minor risk. As determined through an initial risk assessment conducted by the GCCS-J PMO, v4.1, v4.2, and v4.3 are lower risk releases having minimal potential to (1) impact other system applications and (2) disrupt the basic system's ability to support the mission. Therefore, the GCCS-J PM recommends level two testing for the Block V spiral releases.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	10.200	10.200	0.000	0.000

Joint Information Technology Center Initiative: The Joint Information Technology Center Initiative funding will utilize the Pacific-based Information Technology Center (ITC) in Alaska. This center will allow DoD to integrate and implement the many successful logistics and personnel initiatives underway throughout the Department of Defense (DoD). The center will process the wide range and volume of information essential for the day-to-day operations of our military personnel and defense civilians. The center will allow DoD to eliminate legacy systems and to upgrade to more capable and more flexible information technology tools.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.000	1.000	0.000	0.000

National Information Assurance and Training:
Funding for this effort is to be executed by the National Security Agency.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

C. Other Program Funding Summary:

	<u>FY 04</u>	<u>FY05</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>	<u>To Complete</u>	<u>Total Cost</u>
O&M	57.616	65.487	83.686	81.032	74.943	74.567	75.552	76.640	Contg	Contg
Procurement	7.199	4.691	5.498	5.767	5.165	5.173	5.519	5.888	Contg	Contg

D. Acquisition Strategy: GCCS-J development, integration, and migration efforts are primarily supported through Cost Reimbursable Task Orders (TO) issued under competitively awarded contracts. Since FY 2002, GCCS-J has increased its performance-based contract awards from zero (0) to 16, while reducing its Time and Material (T&M) contracts to one. The GCCS-J Acquisition Strategy is structured to retain contractors capable of satisfying cost, schedule, and performance objectives. The PMO maximizes use of competitively awarded IDIQ contracts and requires contractors to establish and manage specific earned value data. The PMO's strategy mitigates risk by conducting monthly Contract Performance Reviews (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance.

E. Performance Metrics:

Capabilities Provided: The Joint Staff revalidated the GCCS-J Phase Block IV RID, dated 6 October 2000, as the requirements baseline for Block V. Each Block V version release will continue to address outstanding high priority requirements, while continuing to implement enhancements to fielded capabilities. These enhancements may take the form of enhancements 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 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

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Global Command and Control System (GCCS) / PE 0303150K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Global Command and Control System- Joint/CC01	52.191	52.543	49.831	51.950	43.286	43.597	46.098	47.947

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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07			Global Command and Control System (GCCS) PE 0303150K			Global Command and Control System-Joint / CC01						
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	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	CPAF	NGMS, Reston, VA	9.525	8.243	May-05	9.982	May -06	10.520	May -07	Contg	Contg	38.270
Product Development	CPAF	NGMS, Reston, VA	5.608	7.468	Feb-05	10.042	Feb-06	10.286	Feb-07	Contg	Contg	33.404
Product Development	CPFF	NGMS, Reston, VA	0.135	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.135	0.135
Product Development	CPAF	AB Floyd, Alexandria, VA	2.840	3.310	May-05	3.688	May-06	4.751	May-07	Contg	Contg	14.589
Product Development	CPFF	SAIC, Falls Church, VA	3.800	0.000	N/A	0.000	N/A	0.000	N/A	0.000	3.800	3.800
Product Development	CPAF	Pragmatics, McLean, VA	0.000	2.263	Apr-05	3.325	Apr -06	3.359	Apr -07	Contg	Contg	8.947
Product Development	CPFF	SAIC, Falls Church, Va	0.255	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.255	0.255
Product Development	CPFF	SAIC, Falls Church, Va	0.417	1.673	Jan 05	2.719	Jan 06	2.744	Jan 07	Contg	Contg	7.553
Product Development	FFP	Dynamic Systems, Los Angeles, CA	0.484	0.426	Feb-05	0.438	Feb-06	0.444	Feb-07	Contg	Contg	1.792
Product Development	CPFF	Pragmatics, McLean, VA	3.191	2.156	Jul-05	3.227	Jul -06	3.273	Jul-07	Contg	Contg	11.847
Product Development	MIPR	Booze Allen Hamilton, McLean, VA	0.564	3.208	Mar-05	0.000	N/A	0.000	N/A	0.000	3.772	3.772
Product Development	MIPR	JDISS, Suitland, MD	3.691	3.665	Dec-04	4.272	Dec-05	4.333	Dec-06	Contg	Contg	15.961

UNCLASSIFIED

Exhibit R-3 Cost Analysis					DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07			Global Command and Control System (GCCS) PE 0303150K			Global Command and Control System-Joint / CC01						
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 05 Cost	FY 05 Award Date	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	MIPR	SPAWAR, Charleston, SC	0.000	0.405	Jun-05	0.922	Jun-06	0.935	Jun-07	Contg	Contg	2.262
Product Development	FFRDC	MITRE, McLean, VA	1.167	1.004	Oct-04	1.032	Oct-05	1.046	Oct-06	Contg	Contg	4.249
Product Development	FFP	Joint Info Technology Center Initiative	10.200	10.200	TBD	0.000	N/A	0.000	N/A	0.000	20.400	20.400
Product Development	TBD	National IA & Training	0.000	1.000	TBD	0.000	N/A	0.000	N/A	0.000	1.000	1.000
Test & Evaluation	CPAF	SAIC, Falls Church, VA	5.393	5.005	Feb-05	7.149	Feb-06	7.230	Feb-07	Contg	Contg	24.777
Test & Evaluation	MIPR	JITC, Ft Huachuca, AZ	3.350	1.800	Oct-04	2.529	Oct-05	2.524	Oct-06	Contg	Contg	10.203
Test & Evaluation	MIPR	SSC, San Diego, CA	1.571	0.717	Nov-04	0.506	Nov-05	0.505	Nov-06	Contg	Contg	3.299
Total			52.191	52.543		49.831		51.950				

UNCLASSIFIED

Exhibit R-4 Schedule Profile					Date: February 2005																											
Appropriation/Budget Activity RDT&E, Defense-Wide/07					Program Element Number and Name Global Command and Control System/PE 0303150K					Project Number and Name Global Command and Control/CC01																						
Fiscal Year	2004				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	4	1	2	3	4
Development and Strategic Planning	△ Blocks IV/V				△ Blocks IV/V				△ Block V				△ Block V				△ Block V				△ Block V				△ Block V				△ Block V			
Integration and Testing	△ Blocks IV/V				△ Blocks IV/V				△ Blocks V				△ Block V				△ Block V				△ Block V				△ Block V				△ Block V			

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. 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).

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07	Global Command and Control System (GCCS) / PE 0303150K	Global Command and Control System-Joint / CC01						
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Development and Strategic Planning	1-4Q	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	1-4Q
<p>Block IV (GCCS-J) Block V (GCCS-J)</p> <p>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.</p> <p>GCCS-J will transition to the JC2 capability. 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).</p>								

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		PROGRAM ELEMENT Global Command and Control System / PE 0303150K			PROJECT NAME AND NUMBER Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02			
Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	0.000	10.401	2.500	0.000	0.000	0.000	0.000	0.000

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 collaborative planning capability toolset will continue to adapt as required to support the Joint Planning and Execution Community (JPEC). CFAST is designed to meet the challenges in DoD planning doctrine in support of ongoing operations such as the Global War on Terrorism (GWOT) and future contingencies. The current version of CFAST is being utilized by the U.S. Pacific Command (USPACOM), U.S. European Command (USEUCOM), and other combatant commands. The RDT&E funds are needed to advance the current CFAST system and enable it to support the Joint Staff's expanding rapid deployment mission. The enhanced CFAST system will provide the Joint Staff with 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 end-state strives for rapidly produced, near-execution ready campaign plans that provide multiple courses of action; these virtual "living" plans must be adaptive to the changing regional and global environment.

B. Accomplishments/Planned Program:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0	9.201	2.212	0

Development and Strategic Planning: CFAST Version 2.0 was initially provided as a prototype to enhance deliberate planning capability. CFAST Version 3.0 was enhanced to include upgrades to Version 2.0 and begin an approach to develop tools for Crisis Action Planning and Adaptive Planning capabilities. CFAST is now executing Version 3.1 (FY 2004 through FY 2005) and Block 3.X (FY 2005 through FY 2006) following receipt of final user requirements NLT Feb 2005.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER			
RDT&E, Defense-Wide/07		Global Command and Control System / PE 0303150K			Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02			
Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	0.000	10.401	2.500	0.000	0.000	0.000	0.000	0.000

Version 3.X will be broken into spiral releases as the final work requirement is identified. CFAST Version 3.X introduces a more sophisticated planning capability and the ability to do near execution planning/re-planning during crisis and execution.

CFAST Version 3.x capabilities are anticipated to include the following after receipt of final, vetted, user defined 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 will 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 their "below the line" Combat Support and Combat Service Support (CS/CSS) capability based on rules of allocation for each service. Provides a "one click" process for building large force requirements in support of the published Concept of Operations (CONOPS).
- *Plan Builder* - Generates decision logs and reports.
- *AmmoGen* - Generates ammo sustainment requirements during the building of a plan.
- *PerGen* - Personnel Generator allows 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.

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0	1.200	0.288	0

Integration and Test (I&T): CFAST will employ an incremental spiral I&T methodology. Focus will be on rapidly fielding capability to users to evaluate during actual planning events. A spiral approach permits an earlier start of

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		PROGRAM ELEMENT Global Command and Control System / PE 0303150K			PROJECT NAME AND NUMBER Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02			
Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	0.000	10.401	2.500	0.000	0.000	0.000	0.000	0.000

integration testing since all new segments will not be available at the beginning of integration testing and it allows the Program Manager (PM) to accomplish risk reduction by testing in smaller, more manageable increments. The level of testing necessary for the Version 3.X release is commensurate to the operational and technical complexity of the release. In accordance with DOT&E guidelines, level two testing is applied to increments that provide only minor system improvements and present minor risk. As determined through an initial risk assessment conducted by the CFAST PMO, Version 3.X is a lower risk release having minimal potential to (1) impact other system applications and (2) disrupt the basic system's ability to support the mission. Therefore, level two testing for the Version 3.X spiral releases is anticipated.

C. Other Program Funding Summary:

	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>To Complete</u>	<u>Total Cost</u>
Procurement, DW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
O&M, DW	0.000	0.000	4.500	0.000	0.000	0.000	0.000	0.000	0.000	4.500

D. Acquisition Strategy:

The 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 conducting monthly Contract Performance Reviews (CPR) and utilizes Award Fee contracts where appropriate to incentivize performance.

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		PROGRAM ELEMENT Global Command and Control System / PE 0303150K			PROJECT NAME AND NUMBER Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02			
Cost (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Collaborative Force Analysis, Sustainment, and Transportation System (CFAST)/CC02	0.000	10.401	2.500	0.000	0.000	0.000	0.000	0.000

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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07			Global Command and Control System (GCCS) PE 0303150K			Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) / CC02						
<u>Cost Category</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total PYs Cost</u>	<u>FY 05 Cost</u>	<u>FY 05 Award Date</u>	<u>FY 06 Cost</u>	<u>FY 06 Award Date</u>	<u>FY 07 Cost</u>	<u>FY 07 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Product Development	MIPR	ORNL, Oak Ridge, TN	0.000	7.201	Feb-05	1.731	Feb-06	0.000	N/A	Contg	Contg	8.932
Product Development	CPAF	TBD	0.000	2.000	Feb-05	0.481	Feb-06	0.000	N/A	Contg	Contg	2.481
Test and Evaluation	TBD	TBD	0.000	1.200	TBD	0.288	TBD	0.000	N/A	Contg	Contg	1.488
Total			0.000	10.401		2.500		0.000				

UNCLASSIFIED

Exhibit R-4 Schedule Profile																	Date: February 2005															
Appropriation/Budget Activity RDT&E, Defense-Wide/07					Program Element Number and Name Global Command and Control System/PE 0303150K										Project Number and Name CFAST / CC02																	
Fiscal Year	2004				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	4	1	2	3	4
Development and Strategic Planning					▲	▲	▲	▲	▲	▲	▲	▲																				
					CFAST v3.0 to 3.X Transition																											
Integration and Testing					▲	▲	▲	▲	▲	▲	▲	▲																				
					CFAST v3.0 to v3.X Transition																											

CFAST Version 2.0 was initially provided as a prototype to enhance deliberate planning capability. CFAST Version 3.0 was enhanced to include upgrades to several modules in Version 2.0 and begin an approach to develop tools for Crisis Action Planning and Adaptive Planning capabilities. CFAST is now executing Version 3.1 (FY 2004 through FY 2005) and Block 3.X (FY 2005 through FY 2006) following receipt of final user requirements NLT Feb 05. Version 3.X will be broken into spiral releases as the final work requirement is identified. CFAST Version 3.x introduces a more sophisticated planning capability and the ability to do near-execution planning/re-planning during crisis and execution.

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT Global Command and Control System (GCCS) / PE 0303150K	PROJECT NAME AND NUMBER Collaborative Force Analysis, Sustainment, and Transportation System / CC02

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Development and Strategic Planning	N/A	1-4Q	1-4Q	N/A	N/A	N/A	N/A	N/A
Integration and Test	N/A	1-4Q	1-4Q	N/A	N/A	N/A	N/A	N/A

Collaborative Force Analysis, Sustainment, and Transportation System (CFAST) Version 2.0 was initially provided as a prototype to enhance deliberate planning capability. CFAST Version 3.0 was enhanced to include upgrades to several modules in Version 2.0 and begin an approach to develop tools for Crisis Action Planning and Adaptive Planning capabilities. CFAST is now executing Version 3.1 (FY 2004 through FY 2005) and Block 3.X (FY 2005 through FY 2006) following receipt of final user requirements NLT Feb 05. Version 3.X will be broken into spiral releases as the final work requirement is identified. CFAST Version 3.x introduces a more sophisticated planning capability and the ability to do near-execution planning/re-planning during crisis and execution.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Joint Spectrum Center /PE 0303153K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Spectrum Center /JS1	15.239	17.839	14.097	14.279	14.610	15.322	15.896	16.477

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	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	6.876	6.703	6.761	6.832

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

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Joint Spectrum Center /PE 0303153K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Spectrum Center /JS1	15.239	17.839	14.097	14.279	14.610	15.322	15.896	16.477

spectrum administrations and by ensuring that a common operating picture of the spectrum is available to the warfighter. SPECTRUM XXI Version 4.1 was released in FY 2004, and Version 4.2 is planned for FY 2005 with periodic releases thereafter.

Electromagnetic Environmental Effects (E3)	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	1.655	2.994	2.636	2.747

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)	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	6.708	8.142	4.700	4.700

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,

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Joint Spectrum Center /PE 0303153K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Spectrum Center /JS1	15.239	17.839	14.097	14.279	14.610	15.322	15.896	16.477

and measurement tools for use in analyzing ultra-wideband technologies, software defined radios, and high-power and 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. In FY 2004 an initial Cosite Modeling Capability was developed to allow simulation of interference issues related to spectrum dependent equipment that resides on the same platform. The FY 2005 Program includes 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 2005 through FY 2007 are the EST Testbed Prototype Demo and an Adaptive Networks Assessment. 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 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	16.565	18.941	14.253	14.423
Current Submission	15.239	17.839	14.097	14.279
Total Adjustments	-1.326	-1.102	-.156	-.144

Change Summary Explanation: FY 2004 funding changes are due to below threshold reprogramming. FY 2005 decreases are due to undistributed Congressional reductions to the Defense-wide RDT&E appropriation as well as below threshold

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Joint Spectrum Center /PE 0303153K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Joint Spectrum Center /JS1	15.239	17.839	14.097	14.279	14.610	15.322	15.896	16.477

reprogramming. FY 2006 and FY 2007 funding changes are due to revised fiscal guidance.

C. Other Program Funding Summary:

	<u>FY 04</u>	<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>	<u>To</u>	<u>Total</u>
									<u>Complete</u>	<u>Cost</u>
O&M, DW	13.880	12.971	13.463	14.006	14.382	15.436	15.625	15.832	Contg	Contg

D. Acquisition Strategy: 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. Preparation has begun for recompetition of this work in FY 2005.

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).

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07			Joint Spectrum Center / PE 0303153K			Joint Spectrum Center / JS1						
Cost Category	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	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	1.730	.475	Var	.475	Var			0	2.680	2.680
Contractor Engineering/Technical Spt	C/CPRR	Various	1.619							0	1.619	1.619
Contractor Engineering/Technical Spt	C/CPAF	ALION Annapolis, MD	43.486	16.494	10/04					0	59.849	59.849
GFE	C/CPAF	ALION Annapolis, MD	3.569	.870	10/04					0	4.439	4.439
Contractor Engineering Technical/Spt	C/TBD	TBD				13.622	10/05	14.279	10/06	0	27.901	27.901
Subtotal Test & Evaluation			64.968	17.839		14.097		14.279	10/06			
Total			64.968	17.839		14.097		14.279				
Remarks: Current JSC contract with ALION was a competitive acquisition and began on 24 August 2000 (2 year basic with 3 option years) and will be re-competed during FY 2005.												

UNCLASSIFIED

Exhibit R-4 Schedule Profile																Date: February 2005																															
Appropriation/Budget Activity RDT&E, Defense-Wide/07																Program Element Number and Name Joint Spectrum Center/PE 0303153K																Project Number and Name Joint Spectrum Center/JS1															
Fiscal Year	2004				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	4	1	2	3	4															
Spectrum XXI Version 4.1 Release	△																																														
Contract Option Year 3 Award				△																																											
Recompete Current Engineering Support Services Contract (ESSC)				△																																											
New ESSC Contract Award								△																																							
Spectrum XXI Versions 4.2,4.3,4.4 Develop and Test		△	△	△	△				△	△	△	△	△				△	△	△	△	△					△	△	△	△	△																	
Spectrum XXI Versions 4.2,4.3,4.4 Released								△					△				△					△								△																	

UNCLASSIFIED

Exhibit R-4 Schedule Profile																Date: February 2005																															
Appropriation/Budget Activity RDT&E, Defense-Wide/07																Program Element Number and Name Joint Spectrum Center/PE 0303153K																Project Number and Name Joint Spectrum Center /JS1															
Fiscal Year	2004				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	4	1	2	3	4															
High-power High-energy Assessment								▲																																							
Adaptive Networks Assessments								▲																																							
Cosite Modeling Capability			▲																																												
Software Defined Radio Modeling in OPNET												▲																																			
Cosite Capability for EST																▲																															
Testbed Prototype Demo								▲																																							

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT							PROJECT NAME AND NUMBER	
RDT&E, Defense-Wide/07	Joint Spectrum Center / PE 0303153K							Joint Spectrum Center / JS1	
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
SPECTRUM XXI VERSION 4.1 Release	1Q								
Contract Option Year 3 Award	4Q								
Re-compete Current Engineering Support Services Contract (ESSC)		1Q							
New ESSC Contract Award		4Q							
SPECTRUM XXI Versions 4.2, 4.3, 4.4 Development and Testing	2-4Q	1Q 4Q	1-4Q	2-4Q	1-2Q 4Q	1-4Q	2-4Q	1-2Q	
SPECTRUM XXI Versions 4.2, 4.3, 4.4 Released		3Q		1Q	3Q		1Q	3Q	
High-power High-energy assessment		2Q							
Adaptive Networks Assessments		4Q							
Cosite modeling capability	3Q								
Software Defined Radio modeling in OPNET			2Q						
Cosite Capability for EST			3Q						
Testbed Prototype Demo		2Q							

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Defense Collaboration Tool Suite/PE 0303165K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Collaboration Tool Suite/T60	11.969	6.590	0.000	0.000	0.000	0.000	0.000	0.000

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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Defense Collaboration Tool Suite/PE 0303165K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Collaboration Tool Suite/T60	11.969	6.590	0.000	0.000	0.000	0.000	0.000	0.000

Accomplishments/Planned Program:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	11.969	6.590	0.000	0.000

The FY 2005 effort updates the fielded DCTS capability and continues to pilot enterprise collaboration services. It extends the Next Generation Collaboration Services Pilot in order to resolve the technical, operational, and acquisition challenges in fielding an enterprise collaboration service. The FY 2003 and FY 2004 efforts tested 22 collaboration products to verify compliance with the OSD mandate of interoperable collaboration products on DoD Networks. The FY 2005 effort re-tests collaboration products on DoD networks to new, more stringent interoperability criteria under development. The project provides DoD representation to the Internet Engineering Task Force and other standards bodies deliberating on the language of standards for collaboration products. This activity provides DoD a voice in the finalization of standards including Session Initiation Protocol which will define 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 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	12.689	8.503	8.306	5.209
Current Submission	11.969	6.590	0.000	0.000
Total Adjustments	-.720	-1.913	-8.306	-5.209

Change Summary Explanation:

FY 2004 change is due to below threshold reprogramming.

FY 2005 change is due to undistributed Congressional reductions to the Defense-Wide RDT&E appropriation.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Defense Collaboration Tool Suite/PE 0303165K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Defense Collaboration Tool Suite/T60	11.969	6.590	0.000	0.000	0.000	0.000	0.000	0.000

FY 2006 change is due to migration into the collaboration core enterprise service of the Net-Centric Enterprise Services Program.

C. Other Program Funding Summary:

	<u>FY 04</u>	<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>	To Complete	Total Cost
Operation and Maintenance	9.455	10.749	11.312	8.407	3.212	0.607	0.628	0.642	0.000	45.012
Procurement	0.000	2.255	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.255

D. Acquisition Strategy: 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:

Next Generation Collaboration Services (NGCS) is intended to provide a collaborative environment to warfighters and business domains for the Department of Defense that meets or exceeds current capabilities provided by DISA. Metrics will continue to be developed during the ongoing NGCS pilot that will be incorporated into Service Level Agreements (SLAs) between DISA and selected vendor(s). 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.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07			Defense Collaboration Tool Suite/ PE 0303165K			Defense Collaboration Tool Suite / T60						
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Test and Evaluation Interoperability	Various	Various	0.811	3.308	Various	0.000	N/A	0.000	N/A	0.000	1.650	1.650
Test and Evaluation Next Generation Collaboration Services (NGCS)	Various	Various	11.158	3.282	Various	0.000	N/A	0.000	N/A	0.000	6.853	6.853
Total			11.969	6.590		0.000		0.000				

UNCLASSIFIED

Exhibit R-4 Schedule Profile				Date: February 2005																												
Appropriation/Budget Activity RDT&E, Defense-Wide/07				Program Element Number and Name Defense Collaboration Tool Suite / PE0303165K								Project Number and Name Defense Collaboration Tool Suite/ T60																				
Fiscal Year	2004				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	4
Enterprise Collaboration Management and Tool Experimentation	[Bar]																															
Collaboration Interoperability Management	[Bar]																															
Version 3 Development	[Bar]																															
Version 3 Deployment					[Bar]																											

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT Defense Collaboration Tool Suite/ PE 0303165K	PROJECT NAME AND NUMBER Defense Collaboration Tool Suite /T60

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Collaboration Interoperability Management	1Q-4Q	1Q-4Q						
DCTS Developent	3Q-4Q	1Q-2Q						
NGCS Development	4Q	1Q-4Q						

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE 0303170K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	30.267	49.904	79.018	28.241	29.647	25.546	20.340	21.498

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 transformation goals. NCES will eliminate duplicative services within DoD by providing a common set of interoperable services supporting users in the warfighter and business domains. On 4 May 04, NCES received its Milestone A authorizing NCES to enter the Technology Development phase and begin work toward Milestone B, the next phase in the acquisition process. NCES is currently designated as a Pre-Major Automated Information System (MAIS).

NCES is the acquisition program responsible for enabling the Core Enterprise Service (CES) portion of the Global Information Grid Enterprise Services (GIG ES). As part of the larger GIG ES, NCES will support all joint Functional Concepts including Force Application, Battlespace Awareness, Command and Control, Force Protection, and Focused Logistics. NCES will enable information sharing for the entire DoD to include conventional and nuclear warfighters, warfighter support, military operations other than war, business units, and interface between DoD and non-DoD organizations. NCES will provide the common enterprise-wide services upon which DoD computer applications will rely as the department transforms to Net-Centric Warfare Concepts. NCES capabilities, deployed on Defense networks, will provide a consolidated, services-based Information Technology (IT) infrastructure which reduces overall costs to deploy and maintain IT systems supporting day-to-day business and warfighter operations.

The NCES services-based architecture eliminates costly legacy interfaces between disjointed, disparate, and stove-piped systems by providing a comprehensive set of core enterprise services. These core enterprise services are:

(1) Discovery: the enabling of all users no matter where they are to find the necessary information required no matter where it is or what data structure (xml, metadata, text, video, etc.) it is stored in, to make better decisions, faster. This service includes the discovery of services, persons, content, and metadata, and discovery policies and procedures;

(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

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE 0303170K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	30.267	49.904	79.018	28.241	29.647	25.546	20.340	21.498

provide real-time information sharing and processing anywhere and anytime, by any user with privileges on the DoD network. Collaboration includes web conferencing, audio and video communications, whiteboarding, instant messaging, file sharing and virtual workspace, application sharing, and collaboration policies and procedures;

(3) Mediation: this service will enable users to post and use previously posted data no matter what format in order to support rapid decision-making. This availability of information will enable a more effective speed of execution of command and control within a given theater of operations as well as expanding the services for all users to access the net information whether it is the warfighter or the business management of data in the Department. This service will include the enabling of technology to allow the access of information to a multitude of appliances such as Personal Digital Assistants (PDAs), Cell phones, laptop computers, and desktop computers. This service includes general data access, dissemination by channel, data translation, language translation, and mediation policies and procedures;

(4) Messaging: this service provides a web Browser-Based E-Mail system, secure messaging, notifications and alerts, message boards and newsgroups, mailing and distribution, wireless support, messaging policies and procedures, and interoperable global communications support;

(5) Enterprise Services Management (ESM): this service will provide assured end-to-end service availability, assured information protection, and assured information delivery. Enterprise Services Management (ESM) will provide performance monitoring, configuration management, event correlation and mission impact assessment, problem detection and resolution, as well as enterprise IT resource accounting and addressing;

(6) Application: this service will provide a protected hosting environment consisting of common hardware platforms, operating systems, and applications that will be developed and delivered as Evaluation Capability Modules (ECM). Four Evaluation Capability Module Environments will comprise the Application service. These Evaluation Capability Module Environments are Test and Integration, Pilot, Staging, and Production;

(7) User Assistant: this service provides automated helper capabilities using smart agents and Section 508 compliance which allows service providers across the net to efficiently provide accessible services and content to end-users;

(8) Storage: this service provides the warfighter and business user with enough hard disk storage to store necessary information from using NCES' core enterprise services. The Task-Post-Process-Use (TPPU) paradigm will push today's

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE 0303170K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	30.267	49.904	79.018	28.241	29.647	25.546	20.340	21.498

storage limitations beyond their current capabilities. It includes storage architecture, storage operations and capacity management, and storage policies and procedures; and

(9) Information Assurance/Security (IAS): this service provides authentication, access management, and domain security services. These IAS services enable resistance to non-user system access and interference, in addition to preventing user misuse and security errors. The IAS service interoperates with the other core services to protect the CES as a whole entity. This service relies on the Public Key Infrastructure (PKI) and supports user authentication, validation services, cryptographic functions, IAS policies and procedures.

NCES supports the DoD's transformation goals to achieve rapid decision superiority, streamline business processes, and conduct 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 also supports the following five Defense Information System Agency Strategic Goals:

1. Strategic Goal 1: "Provide flexible, reliable information infrastructure capable of supporting the evolving Global Information Grid required by the warfighter and others to achieve the highest levels of effectiveness in joint and combined operations."
2. Strategic Goal 2: "Support easy sharing of high quality information supporting interoperability among U.S. Forces and Allies."
3. Strategic Goal 3: "Defense information resources are secure."
4. Strategic Goal 4: "Personnel are available, well-qualified, and able to improve their professional skills."
5. Strategic Goal 5: "Information Technology is used to maximum advantage at the least cost to satisfy customers."

As the key enterprise services component of the GIG ES, NCES supports Strategic Goal 1 by extending and securing the warfighters' information domain to enable network-centric operations. NCES supports Strategic Goal 2 by increasing efficiency; enhancing interoperability in joint environments; and providing all users with gained benefits in speed, accuracy, and networked information capabilities. NCES will maximize the utilization of commercial technologies, products, and applications to support the Core Enterprise Services, while fully adhering to the practical strategy of Defense in Depth to achieve information assurance/security goals. In addition, NCES will use in its acquisition

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE 0303170K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	30.267	49.904	79.018	28.241	29.647	25.546	20.340	21.498

strategy competition analysis to control and contain program costs. Therefore, NCES supports Strategic Goals 3 and 5. Finally, NCES supports Strategic Goal 4 through its Staff Net-Centric Education Initiatives, which encourage the demonstration of net-centric behavior and the use of net-centric tools in our daily jobs. Via the Collaboration and User Assistant Enterprise Services, NCES will allow remote training for its personnel and personnel throughout DISA and DoD.

This program element is under Budget Activity 7 because it supports operational systems development.

Accomplishments/Planned Program:

Program Management Support	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	4.555	7.486	6.876	7.095

Program Management Support - This task area supports the market and technology research efforts required to determine the most cost effective implementation strategy for NCES core set of enterprise services. In FY 2004, this task funds the preparation of Milestone A documentation and the initiation of Milestone B documentation support for NCES.

Increment 1. The Milestone A documents included the Analysis of Alternatives (AoA), the Technology Development Strategy (TDS), the Clinger-Cohen Act (CCA) Report, and the Test and Evaluation Strategy (TES). In FY 2005, the requested funds will support the completion of the Milestone B documentation 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 Report (IASR), Acquisition Program Baseline (APB), Acquisition Strategy (AS), Information Support Plan (ISP), Capabilities Development Document (CDD), and Concepts of Operations (CONOPS). In FY 2006, the requested funds support the updating of Milestone B documentation in preparation for a Milestone C decision for NCES Increment 1. In FY 2007, funds are used to update Milestone A documentation for NCES Increment 2.

ECM Pilot Environment	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	1.480	2.894	0.701	0.707

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE 0303170K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	30.267	49.904	79.018	28.241	29.647	25.546	20.340	21.498

ECM Pilot Environment - This task area supports the development of NCES architecture, compliant with the Global Information Grid Enterprise Architecture and Business Management Modernization Program Enterprise Architecture. It also provides funds for technology demonstrations and feasibility analysis to determine which Commercial and Government provided/owned Information Technology capabilities best meet the military requirements for the least cost. The military requirements for NCES are defined in the NCES Capabilities Development Document (CDD).

ECM Pilot Support and Test and Integration Environment	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.000	1.098	0.185	0.187

ECM Pilot Support and Test and Integration Environment - This task supports the development of a Pilot Support ECM Environment prior to Milestone B that provides minimal test and integration support to the ECM Pilot Environment and a full ECM Test and Integration Environment after Milestone B approval. In FY 2005, the ECM Pilot Support Environment will be built and located at a Defense Enterprise Computing Center (DECC), DECC equivalent site within DoD, or a commercial hosting vendor facility. In FY 2005, funds will also be used to perform minor testing and integrating of potential ECMs that will satisfy NCES requirements. In FY 2006, funds will be used to transform the existing ECM Pilot Support Environment into a full ECM Test and Integration Environment and to test and integrate NCES ECMs prior to Milestone C. The ECM Test and Integration Environment will support the test and integration of ECMs to support an Operational Prototype supporting up to 500,000 users. In FY 2007, funds will be used to test and integrate ECMs for the Phase I Production Environment supporting 1.5 million users.

ECM Staging Environment	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	0.000	0.000	0.765	0.114

ECM Staging Environment - This task supports the development of an ECM Staging Environment after a favorable Milestone B decision located at a DECC, DECC equivalent site within DoD, or a commercial hosting vendor facility. In FY 2006, the ECM Staging Environment will be built and will support staging of all ECMs ready for demonstration with the NCES Operational Prototype supporting 500,000 users. In FY 2007, the ECM Staging Environment will support the list of ECMs ready for Phase I Production supporting 1.5 million users.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE 0303170K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	30.267	49.904	79.018	28.241	29.647	25.546	20.340	21.498

ECM Core Enterprise Services Development and Operational Prototype	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Subtotal Cost	24.232	38.427	70.491	20.138

ECM Core Enterprise Services Development and Operational Prototype - This task area supports the development of NCES Core Enterprise Services as Evaluation Capability Modules (ECM). Funding includes development for potential ECM candidates in FY 2004 to support the Pilot Environment. In FY 2005, funding will enable NCES to rapidly incorporate the latest and most technologically advanced commercial product offerings, including outsourced services, along with government developed services and capabilities. Ongoing cost and effectiveness analyses will ensure that the results of technology pilots and incremental fielding of spirals (warfighter demonstrations) are used in the acquisition process to make maximum use of industry capabilities and minimize development of unique or government owned software and services. In FY 2006, funding includes the development of a potential suite of NCES Core Enterprise Services to support an Operational Prototype with a capacity to serve 500,000 users. The Operational Prototype will be built to demonstrate NCES capabilities for a larger number of users before entering into the production phase. In FY 2007 funding will support the first release of NCES as a DoD wide enterprise service supporting 1.5 million users in the Phase I Production environment.

B. Program Change Summary:

	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>
Previous President's Budget	30.364	52.059	65.396	49.994
Current Submission	30.267	49.904	79.018	28.241
Total Adjustments	-0.097	-2.155	13.622	-21.753

Change Summary Explanation:

FY 2004 decrease is due to below threshold reprogramming.

FY 2005 decrease is due to undistributed Congressional reductions to the Defense-wide RDT&E appropriation.

FY 2006 increase is attributed to an expected MS B approval, which will initiate the development of an Scalability Prototype supporting 500,000 users.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE 0303170K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	30.267	49.904	79.018	28.241	29.647	25.546	20.340	21.498

FY 2007 decrease in funds is due to NCES anticipating receiving MS C approval resulting in less RDT&E funding but an increase in Procurement and Operations & Maintenance funding for the NCES Production Environment providing DoD wide enterprise services for Increment 1.

C. Other Program Funding Summary:

	<u>FY 04</u>	<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>	<u>To Complete</u>	<u>Total Cost</u>
Procurement, DW	0.000	0.000	0.000	44.286	52.698	13.230	23.817	28.511	Contg	Contg
O&M, DW	9.298	16.328	14.557	17.442	22.797	65.428	65.508	65.463	Contg	Contg

D. Acquisition Strategy:

The NCES Acquisition Strategy(AS) defines the extensive use of COTS software, the minimization of Government-Off-the-Shelf (GOTS) solutions, the work to be contracted, the hardware acquisition including Edge Servers, the Services Oriented Architecture supporting the NCES Infrastructure, the Best of Breed programs within DoD that will be leveraged to provide certain capability, affordability considerations, the hosting solutions such as deployment in Defense Enterprise Computing Centers (DECCs), current DoD facilities, or new facilities, and the risks associated with the acquisition strategy. The risk analysis includes a mitigation strategy if software vendors that supply critical software were to go out of business, or hardware or software platforms that are no longer supportable by the Original Equipment Manufacturer (OEM) or the software vendor providing upgrades and patches. These end of life issues are clearly delineated in the Acquisition Strategy so that the NCES Program Management Office (PMO) has options if the risk events were to be realized. NCES will use a number of strategies such as business case analyses to select the best managed service provider, use of Statement of Objectives to provide responses to satisfy required services supporting the mission of NCES, Request for Information from various commercial vendors to supply software and hardware necessary to deliver core enterprise service solutions, Request for Proposals (RFP) to control costs through competition, and the use of performance based contracts for development of the core enterprise services. These strategies will be used to

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE 0303170K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	30.267	49.904	79.018	28.241	29.647	25.546	20.340	21.498

acquire the necessary hardware, facilities, and managed services for the four ECM environments as part of the hosting strategy; the purchase of Commercial-Off-the-Shelf (COTS) software along with developed software for ECM development; test and integration support; systems engineering; and modeling and simulation. The NCES acquisition strategies will focus on the following:

1. The extensive use of COTS software to provide the core enterprise services. Enterprise licenses will be obtained for the COTS software to reduce overall costs. Commercial software to provide the NCES capabilities has been identified from the NCES Analysis of Alternatives (AoA). The current software will be augmented with Requests for Information (RFI) to commercial industry to obtain additional software capable of providing NCES capabilities.
2. The use of Statement of Objectives (SOO) to acquire support for Modeling and Simulation, Test and Integration, and Hosting/Managed services. Responses from the NCES SOO will be evaluated by conducting business case analyses on the respondents. The business case analysis will include an Economic Analysis, Competition Analysis, Strength, Weakness, Opportunities, and Threats (SWOT) Analysis, Capacity Analysis, Quality of Service Analysis, Sensitivity Analysis, and a Capability Maturity Model Integrated (CMMI) Analysis. Based on the results from the analyses, service providers will be selected.
3. The use of Performance Based Contracting to acquire Program Management support for the Milestone B documentation, development support for producing, testing, and integrating the Evaluation Capability Modules (ECMs), and systems engineering. All contracts beginning in FY 2004 through FY 2011 will be performance based. Currently, the first two contracts awarded to provide Milestone B document support were performance based.

These contracts were awarded to Langston University/Mathematical Modeling, Inc. and Data Systems Analysts. Contractor Performance Reviews will be conducted on a monthly basis and all data will be put into the NCES Earned Value Management System (EVMS) for performance reporting and assessment.

E. Performance Metrics:

NCES has developed several metrics. These metrics are geared to business process reengineering, improving system performance, and improving communications between users and the Program Management Office. These metrics will insure that the best possible suite of core enterprise services is provided to DoD. The key performance metric definitions and the measures that will be used to access the performance of the internal processes and communications are: (1)

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Net-Centric Enterprise Services (NCES)/PE 0303170K				
COST (in Millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net-Centric Enterprise Services (NCES)/T57	30.267	49.904	79.018	28.241	29.647	25.546	20.340	21.498



























































































































































Requirements Satisfaction: Provide trustworthy enterprise services for customers to dynamically discover, access, and use data that is not constrained by pre-determined flow of information. This metric is measured by the number of enterprise services provided by external system developers, number of users accessing core enterprise services, and the number of Core Enterprise Services (CES) Evaluation Capability Modules (ECM) provided. (2) Customer Satisfaction: Proactively work with our customers to understand their requirements and provide solutions that address their needs within the scope of NCES. This metric is measured by the percentage of projects that meet or exceeds customer expectations as indicated in customer satisfaction surveys. (3) Staff Net-Centric Education Initiatives: Demonstrate net-centric behavior and use net-centric tools in our daily jobs. This metric is measured by the percentage of NCES staff actually using the net-centric tools provided through the NCES portal. A favorable rating of at least a 4 out of a maximum of 5 from the NCES staff is the target performance expected.

The system performance metrics that serve as the NCES target for some of the core enterprise services are: (1) Discovery Service: 3,000 queries per second; (2) Messaging service: 2,000,000 secure messages per hour; (3) Collaboration Service: 17,000 audio/video simultaneous point of presence; (4) Mediation Service: 50 pages per second for machine language translation; (5) Storage Service: 1 Gigabyte per user; and (6) Information Assurance/Security Service: 100,000 authentications per second.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07			Net-Centric Enterprise Services (NCES)/ PE 0303170K			Net-Centric Enterprise Services (NCES)/T57						
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYS Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
System Engineering Services	C/FFP	MITRE, McClean, VA	3.500	3.419	OCT-04	3.662	OCT-05	3.724	OCT-06	Contg	Contg	14.305
Engineering/Technical Services	C/FFP	JPL, San Diego, CA	0.400	0.391	OCT-04	0.418	OCT-05	0.425	OCT-06	Contg	Contg	1.634
System Test Services	C/FFP	SSC-SD GOVT, San Diego, CA	0.500	0.959	OCT-04	1.027	OCT-05	1.044	OCT-06	Contg	Contg	3.530
	C/FFP	Various	7.008	14.088	Various	7.160	Various	3.565	Various	Contg	Contg	31.821
ECM Development Services	C/CPFF	SAIC, Fairfax, VA	3.520	3.439	OCT-04	3.685	OCT-05	3.747	OCT-06	Contg	Contg	14.391
	C/CPFF	BAH, Mclean, VA	4.000	3.908	OCT-04	4.187	OCT-05	4.256	OCT-06	Contg	Contg	16.351
	C/CPFF	FGM, Sterling, VA	3.174	3.101	OCT-04	3.322	OCT-05	3.379	OCT-06	Contg	Contg	12.976
NCES Managed Services	C/FFP	DISA, Falls Church, VA	0.000	9.586	Various	44.902	Various	1.006	Various	Contg	Contg	55.494
	C/FFP, SS/CPFF	Various	1.460	6.157	Various	5.452	Various	1.805	Various	Contg	Contg	14.874
Program Management Support	C/CPFF	Pragmatics, Mclean, VA	1.735	0.000	N/A	0.000	N/A	0.000	N/A	N/A	N/A	1.735
	C/CPFF	MMI, Silver Spring, MD	1.360	1.329	OCT-04	1.424	OCT-05	1.448	OCT-06	Contg	Contg	5.561
	C/CPFF	DSA, Fairfax, VA	3.610	3.527	OCT-04	3.779	OCT-05	3.842	OCT-06	Contg	Contg	14.758
Total			30.267	49.904		79.018		28.241				

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																							
Appropriation/Budget Activity RDT&E, Defense-Wide/07					Net-Centric Enterprise Services (NCES)/PE0303170K										Net-Centric Enterprise Services (NCES) / T57																					
Fiscal Year	2004				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	4	1	2	3	4				
Acquisition Milestones	MS A Increment 1 				MS B 				MS:C 				Updated MS A Increment 2 				MS:B 				MS:C 				Updated MS A Increment 3 				MS B 							
Build Evaluation Capability Module (ECM) Environment Pilot																																				
Test & Integration Staging Environment																																				
ECM Delivery																																				
ECM Test & Integration ECM Compliance Test																																				
ECM Integration Test																																				
Operational Test																																				
Operational Prototype																	Transitions to Phase 1 Production																			
Production Environment Phase 1 Production																																				
Phase 2 Production																																				

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07	Net-Centric Enterprise Services (NCES)/ PE 0303170K	Net-Centric Enterprise Services (NCES)/T57						
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Milestone A Decision	3Q							
Milestone B Decision (Inc 1)		4Q						
Milestone C Decision (Inc 1)			4Q					
Update Milestone A Documents (Inc 2)				4Q				
Milestone B Decision (Inc 2)					4Q			
Milestone C Decision (Inc 2)						4Q		
Update Milestone A Documents (Inc 3)							4Q	
Milestone B Decision (Inc 3)								4Q
ECM Pilot Environment								
Identify Sites	1Q							
Purchase Pilot Equipment	1Q							
Set-up Servers on NIPRNET	1-3Q							
Set-up Servers on SIPRNET	1-3Q							
Maintain Environment	4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Build Test & Integraion Environment								
Identify Sites			1Q					
Purchase RDT&E Equipment			1Q					
Set-up Web Portal Servers			2Q					
Set-up Application Servers			2Q					
Build ECM Staging Environment								
Purchase Staging Equipment			1Q					
Set-up Servers on NIPRNET			2Q					
Set-up Servers on SIPRNET			2Q					

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07	Net-Centric Enterprise Services (NCES)/ PE 0303170K	Net-Centric Enterprise Services (NCES)/T57						
<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
ECM Delivery								
ECM Development & Acceptance			1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
ECM Delivery			2-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
ECM Compliance Test								
ECM Configuration Management			1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
ECM Integration Test								
Integration Test			2-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Independent Verification & Validation			2-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
	2-4Q		2-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
	1-4Q							
	1-4Q							
	1-4Q							
	1-4Q							
Performance Stress Test								
Software Trouble Report (STR)								
ECM Operational Test								
Independent Verification & Validation					1Q 4Q			
Operational Test & Evaluation					1Q 4Q			
Certification Test & Evaluation					1Q 4Q			
Performance Stress Test								
Operational Prototype								
Purchase Prototype Equipment			3Q					
Set-up Servers on NIPRNET			4Q	1-3Q				
Set-up Servers on SIPRNET			4Q	1-3Q				
Phase I Production Environment								
Purchase Equipment			3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Set-up Servers on CONUS SIPRNET			3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Set-up Servers on CONUS NIPRNET			3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Set-up Servers on EUCOM SIPRNET			3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Set-up Servers on EUCOM NIPRNET			3-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	PROGRAM ELEMENT Net-Centric Enterprise Services (NCES)/ PE 0303170K	PROJECT NAME AND NUMBER Net-Centric Enterprise Services (NCES)/T57

<u>Schedule Profile</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Phase II Production Environment								
Purchase Equipment					2-4Q	1-4Q	1-4Q	1-4Q
Set-up Servers on CONUS SIPRNET					2-4Q	1-4Q	1-4Q	1-4Q
Set-up Servers on CONUS NIPRNET					2-4Q	1-4Q	1-4Q	1-4Q
Set-up Servers on PACOM SIPRNET					2-4Q	1-4Q	1-4Q	1-4Q
Set-up Servers on PACOM NIPRNET					2-4Q	1-4Q	1-4Q	1-4Q

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Teleport Program / PE 0303610K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Teleport Program /NS01	9.903	9.945	12.180	14.228	6.014	2.153	2.232	2.313

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 Integration (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

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005																						
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE																						
RDT&E, Defense-Wide/07				Teleport Program / PE 0303610K																						
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11																		
Teleport Program /NS01	9.903	9.945	12.180	14.228	6.014	2.153	2.232	2.313																		
<p>(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, 3 and 4 will be completed by September 2006.</p> <p>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 allocation to reduce satellite lease costs and increase overall performance. Generation Two will 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.</p> <p>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.</p> <p><u>Accomplishments/Planned Program:</u></p> <table border="0"> <tr> <td></td> <td style="text-align: center;"><u>FY04</u></td> <td style="text-align: center;"><u>FY05</u></td> <td style="text-align: center;"><u>FY06</u></td> <td style="text-align: center;"><u>FY07</u></td> <td colspan="4"></td> </tr> <tr> <td>Subtotal Cost</td> <td style="text-align: center;">7.309</td> <td style="text-align: center;">7.520</td> <td style="text-align: center;">11.412</td> <td style="text-align: center;">8.080</td> <td colspan="4"></td> </tr> </table> <p><u>Systems Engineering & Program Management (SEPM):</u> In FY 2004 and FY 2005 the SEPM includes requirements analysis, system design, Critical Design Reviews (CDRs), site designs, systems integration issue identification, Acquisition</p>										<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>					Subtotal Cost	7.309	7.520	11.412	8.080				
	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>																						
Subtotal Cost	7.309	7.520	11.412	8.080																						

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				
RDT&E, Defense-Wide/07				Teleport Program / PE 0303610K				
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Teleport Program /NS01	9.903	9.945	12.180	14.228	6.014	2.153	2.232	2.313
Strategy, and Acquisition Program Baseline (APB) development for Generation One. In FY 2006 and FY 2007, Generation Two funding provides SEPM for 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.								
	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>				
Subtotal Cost	2.594	2.425	.768	6.148				
<p><u>Testing:</u> In FY 2004 and FY 2005 Teleport will complete the UHF Follow-On Operational Test and Evaluation (FOT&E). This effort consists of interoperability certification and technical component testing. In FY 2005 and FY 2006 funding will be used to conduct the EHF Development Test & Evaluation (DT&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 engineer site power and facility upgrades and complete modem refresh and UHF DISN testing. In FY 2007, funds will also be used to start Generation Two developmental component testing.</p>								
B. <u>Program Change Summary:</u>								
	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>				
Previous President's Budget	10.304	10.272	3.517	3.382				
Current Submission	9.903	9.945	12.180	14.228				
Total Adjustments	-0.401	-0.327	+8.663	+10.846				
Change Summary Explanation:								
FY 2004 change is due to below threshold reprogramming.								
FY 2005 change is due to undistributed Congressional reductions to the Defense-wide RDT&E appropriation.								
FY 2006 change is due to the requirements of the program's Operational Requirements Document (ORD) dated July 9, 2004.								
FY 2007 change is to meet the requirements of the program's ORD dated July 9, 2004.								

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07					R-1 ITEM NOMENCLATURE Teleport Program / PE 0303610K			
COST (in millions)	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Teleport Program /NS01	9.903	9.945	12.180	14.228	6.014	2.153	2.232	2.313

C. Other Program Funding Summary:

	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	Cost to Complete	Total Cost
Procurement, DW	52.436	41.721	98.320	51.928	42.186	15.525	16.566	17.674	Contg	Contg
O&M	14.350	8.258	3.204	3.389	3.512	3.622	3.628	3.641	Contg	Contg

D. Acquisition Summary:

DISA contractor support will be arranged by the DISA contracting office. 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.

E. Performance Metrics:

Teleport manages and tracks its cost, schedule, and performance parameters using an Earned Value Management (EVM)-like approach, integrating the program plan, the program schedule and Work Breakdown Structure (WBS), and the financial data. Progress is monitored/documentated 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 \$74M, thus meeting the cost goal and it passed its Operational Test and Evaluation, meeting its performance objectives.

UNCLASSIFIED

Exhibit R-3 Cost Analysis						DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NAME AND NUMBER					
RDT&E, Defense-Wide/07			Teleport Program / PE 0303610K				Teleport Program / NS01					
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 05 Cost	FY 05 Award Date	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 PR	Booz Allen & Hamilton Fairfax, VA	13.679	5.195	01/05	6.455	01/06	7.527	01/07	0	32.856	32.856
Contracted SE/PM Support	GSA Sched	Titan	1.882	0.300	08/05	0.414	08/06	0.484	08/07	TBD	3.080	3.080
Contracted Systems Integration and Program Management Support	MIPR DCATS	JHU/APL Baltimore, MD	3.693	1.300	12/04	1.500	12/05	1.807	12/06	0	8.300	8.300
Government Systems Engineering/Program Management Support	MIPR	US Army PM D CATS Fort Monmouth, NJ	6.448	0.950	Various	1.096	Various	1.316	Various	TBD	9.810	9.810
Government Systems Engineering/Program Management Support	MIPR	US Navy - SPAWAR San Diego, CA	5.896	0.900	Various	1.057	Various	1.238	Various	TBD	9.091	9.091
Test Support Government Test and Evaluation Support	MIPR	JITC, Ft. Huachuca	2.633	1.000	Various	1.206	Various	1.409	Various	0	6.248	6.248
Other Government Test Support	MIPR	Various	.640	0.300	Various	0.452	Various	0.447	Various	TBD	1.839	1.839
Total			34.871	9.945		12.180		14.228				

UNCLASSIFIED

Exhibit R-4 Schedule Profile														Date: February 2005																											
Appropriation/Budget Activity RDT&E, Defense-Wide/07														Program Element Number and Name Teleport Program PE 0303610K														Project Number and Name Teleport NS01													
Fiscal Year	2004				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	4	1	2	3	4									
Generation One Implementation Plans:																																									
IOC 1 (C & Ku Band) Eng. And Test		▲																																							
IOC 2 (UHF Band) Eng. and Test						▲																																			
IOC3 (EHF, C, Ku & UHF) Eng. and Test											▲																														
IOC4 (Ka (8 links)) Eng. and Test												▲																													

UNCLASSIFIED

Exhibit R-4 Schedule Profile													Date: February 2005																									
Appropriation/Budget Activity RDT&E, Defense-Wide/07													Program Element Number and Name Teleport Program PE 0303610K													Project Number and Name Teleport NS01												
Fiscal Year	2004				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	4	1	2	3	4						
UHF & Xband Eng. and Test																																						
Modem Refresh Eng. and Test																																						
TMCS Eng. and Test.																																						
DISN Upgrade Sys. Eng and Test																																						
Generation Two: Milestone C DT/OT&E FOT&E																																						
AEHF Eng. and Test																																						
MUOS Eng. & Test																																						
JTRS Eng. & Test																																						
Tech Refresh Eng. and Test																																						

UNCLASSIFIED

Exhibit R-4a Schedule Detail		DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NAME AND NUMBER						
RDT&E, Defense-Wide/07	Teleport Program / PE 0303610K	Teleport / NS01						
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Generation One Implementation Plans IOC1 (C and Ku Band)	2Q							
IOC2 Testing	4Q							
IOC2 (UHF Band)		1Q						
IOC3 Testing			3Q					
IOC3 (IHF, C, Ku, UHF Band)			4Q					
IOC4 Testing			4Q					
IOC4 (Ka 8 Links)			4Q					
DISN Upgrades				2Q				
AEHF Systems Eng.					3Q			
Research MUOS						2Q		
JTRS Systems Eng.							2Q	
Tech Refresh Eng. And Test								2Q
Generation Two Milestone C			1Q					
Generation Two DT/OT&E				2Q				
Generation Two FOT&E					2Q			

UNCLASSIFIED

Defense Information Systems Agency
Fiscal Year (FY) 2006/FY 2007 Budget Estimates
R-5 Exhibit
Termination Liability Funding For Major Defense Acquisition Programs
RDT&E Funding (\$000)

<u>Program</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Defense Message System PE 0303129K	0	0	0	0	0	0	0	0
*Note: The prime DMS contract is an ID/IQ contract for which the guaranteed minimum amount has already been met. There is no termination liability. The current contract will expire and be replaced by a follow-on contract vehicle in FY 2006 and terms/conditions have not yet been established.								
Global Combat Support System PE 0303141K	0	0	0	0	0	0	0	0
Global Command and Control System - Joint (GCCS-J) PE 0303150K	0	0	0	0	0	0	0	0
Net-Centric Enterprise Services (NCES) PE 0303170K	1,518	2,603	3,921	1,404	1,476	1,273	1,014	1,071
Teleport PE 0303610K	0	0	0	0	0	0	0	0

UNCLASSIFIED