Exhibit R-2, RDT&E Budget Item Justification	Da	Date: February 2006					
APPROPRIATION/BUDGET ACTIVITY			1 ITEM NOMEN	CLATURE			
RDT&E, Defense-Wide/07	C4	C4I Interoperability/PE 0208045K					
COST (in millions)	FY 05	FY 06	FY07	FY08	FY09	FY10	FY11
Total Program Element	40.706	66.257	84.313	91.583	93.542	95.798	96.985
Test and Evaluation/T30	25.816	28.444	21.961	22.284	22.548	22.857	22.839
Major Range Test Facility Base	14.890	37.813	62.352	69.299	70.994	72.941	74.146
(MRTFB)/T40							

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

B. Program Change Summary:

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

Change Summary Explanation:

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

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

Exhibit R-2, RDT&E Budget Item Justification	D	Date: February 2006					
APPROPRIATION/BUDGET ACTIVITY			-1 ITEM NOMEN	CLATURE			
RDT&E, Defense-Wide/07	C	C4I Interoperability/PE 0208045K					
COST (in millions)	illions) FY 05 FY			FY08	FY09	FY10	FY11
Total Program Element	40.706	66.257	84.313	91.583	93.542	95.798	96.985
Test and Evaluation/T30	25.816	28.444	21.961	22.284	22.548	22.857	22.839
Major Range Test Facility Base	14.890	37.813	62.352	69.299	70.994	72.941	74.146
(MRTFB)/T40							

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

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

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

B. Accomplishments/Planned Program:

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

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

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

Joint Interoperability Testing	FY 05	FY 06	FY 07
Subtotal Cost	10.637	12.286	$\frac{11.92}{1}$

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

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

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

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

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

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

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

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

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

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

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

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

C. Other Program Funding Summary:

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

D. Acquisition Strategy:

Three prime contracts, with multiple sub-contracts, support this project. These competitively awarded, non-personal-services contracts provide maximum flexibility for JITC supporting its' numerous customers for cost and technical effectiveness, and allows for expansion and contraction of staff years as workload expands and contracts.

E. Performance Metrics:

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

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

Appropriation/Budget Activ RDT&E, Defense-Wide/07	ity					P	rog C4I	ram Inte	Elei rope	men erab	t Nu pility	ımb / P	er ar E 020	nd N 0804	Nam 45K	e				P	Proje Test	ct N and	um Eva	ber a alua	and tion	Naı / T	me 30	
Fiscal Year		2	2005	5		20	006			20	07			20	800			20	09			20	10			2	011	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	2 3	3 4
Provide Operational Test & Evaluation (OT&E) of DISA acquired systems.																												
Conduct joint interoperability test and certification on DoD C4I systems																									<u> </u>			
System of systems engineering center																												

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Exhibit R-4 Schedule Profile																	Da	ıte:	Fel	orua	ry 20	006								
Appropriation/Budget Activity RDT&E, Defense-Wide/07						Pi	rogr C4I	ram Inte	Elei	mer erak	nt Nu bility	umb //P	er a E 02	nd 080	Na)45	ame 5K	•				F	Proje Test	ect N and	lum d Ev	ber alua	and atio	d N on /	lam T3(e)	
Fiscal Year		20	005			20	06			20	007			2	200	08			20	09			2	010				20	11	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	:	3	4	1	2	3	4	1	2	3	4		1	2	3	4
Manage Joint Distributed Engineering Plant (JDEP)]																					
On-site exercise		<u>: :</u>				<u>: </u>	<u>:</u>	<u>: </u>		<u>: </u>	:	:		<u>: </u>						<u> </u>	<u> </u>		<u>: </u>	<u>:</u>	<u>:</u>					<u>:</u>
support for ~ 6-8 exercises per year																														
Operate 24/7 hotline																										_		_		
Publish quarterly Lessons Learned							<u> </u>	<u> </u>		<u>!</u>		<u>!</u>		<u> </u>									<u> </u>		<u>!</u>					
reports																														
Combined Interoperability Test		<u> </u>		<u> </u>		<u>:</u>		<u>i </u>		<u> </u>	<u>!</u>	-		<u>:</u>						<u>i </u>	<u>: </u>		<u>:</u>	-	<u>:</u>					<u> </u>
support to combatant commanders																														

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DATE: February 2006

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APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		ELEMENT eroperability	/ PE 02080		ECT NAME AND I and Evaluati		
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Provide Operational Test & Evaluation (OT&E) of DISA	~	1-4Q tems (e.g, GC	~	~	1-4Q	1-4Q	1-4Q
Conduct joint interoperability test and certifical planning and conducting Defense I	cation on Dol		n as TADIL	Link 11 & L:	~	~	1-4Q including
Establish System of Systems Engineering Center	1-40	1-40					
Manage Joint Distributed Engineering Plant (JDEP), includi: planning & support		1-4Q nt of core do	cuments, te	chnical fram	mework, node	installation	s and event

1-40 1-40 1-40 1-40

support for six to eight exercises per year, e.g. COBRA GOLD, COMBINED ENDEAVOR, PACIFIC ENDEAVOR, RIMPAC

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1-4Q 1-4Q

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Exhibit R-4a Schedule Detail

On-site exercise

Learned reports

Provide Combined

Operate 24/7 hotline &

Publish quarterly Lessons

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

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

B. Accomplishments/Planned Program:

Interoperability Test Support	FY 05	FY 06	FY 07
Subtotal Cost	11.835	30.113	$\overline{54.11}$ 0

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

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

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

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

C. Other Program Funding Summary:

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

D. <u>Acquisition Strategy</u>: Three prime contracts, with multiple sub-contracts, support this project. These competitively awarded, performance-based, non-personal-services contracts provide maximum flexibility for JITC supporting its' numerous customers for cost and technical effectiveness, and allows for expansion and contraction of staff years as workload expands and contracts.

E. Performance Metrics:

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

Exhibit R-3 Cost Anal	lysis			DATE: Februa	ary 200	б				
APPROPRIATION/BUDGET RDT&E, Defense-Wide/O			RAM ELEMENT Interoperability	/ PE 0208045K		ECT NAME r Range		MBER Facility	Base / I	'40
Test and Evaluation										
Cost Category	Contract	Performing	Total		FY 06		FY 07			Target
	Method &	Activity &	PYs	FY 06	Award	FY 07	Award	Cost to	Total	Value o
	Type	Location	Cost	Cost	<u>Date</u>	Cost	<u>Date</u>	Complete	Cost	Contract
Engineering/Technical Services	FFP/LOE	NGMS Ft. Hua, AZ	5.124	5.652	10/05	9.313	10/06	23.283	43.372	43.372
	FFP/LOE	Interop Ft. Hua, AZ	8.412	12.739	10/05	20.650	10/06	51.625	93.426	67.235
	FFP/LOE	NGIT Ft. Hua, AZ	5.324	6.404	10/05	10.528	10/06	26.320	48.576	48.576
Subtotal Contracts				24.795		40.491				
In-House				13.018		21.861				
Total Project				37.813		62.352				

Appropriation/Budget Activ RDT&E, Defense-Wide/07	ity					P	rogr C4I	am Inte	Elei rope	men erab	t Nu pility	ımb / Pi	er ar E 020	nd N 080	Nam 45K	e				F	Proje	ct N MF	lum RTI	nber FB /	and T40	Na	me	
Fiscal Year		2	005)		20	006			20	07			2	800			20	009			20	10				2011	—— I
	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	1	2	3 4
Provide interoperability test support to																												
warfighter																												
Implement Net Readiness												<u>. </u>			<u> </u>								<u> </u>			<u> </u>	<u> </u>	<u></u>
Capabilities Resources																												

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

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