

Exhibit R-2, RDT&E Budget Item Justification								DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07				R-1 ITEM NOMENCLATURE Long Haul Communications/PE 0303126K					
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Total Program Element (PE)	1.205	1.346	10.744					Contg	Contg
DISN Systems Engineering Support/T82	1.205	1.346	1.379					Contg	Contg
Information Dissemination Management/IM01	0	0	9.365*					Contg	Contg

A. Mission Description and Budget Item Justification: This program element funds system engineering for the Defense Information Systems Network (DISN) which provides defense-wide communications for the day-to-day operations of the DOD and serves as the core of DOD wartime communications for the National Command Authority (NCA), the Joint Chiefs of Staff (JCS), the Commanders-in Chief (CINCs), and other critical users. It provides for the engineering to consolidate the operational communications networks into DISN. This PE funds the critical and essential engineering required to use commercial equipment and service offerings, to implement the rapidly advancing communications technology, and to update the network design tools so as to continue providing tremendous 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). The program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

* This project is not a new start nor does it reflect unexpected program growth. Beginning in FY 2002, funding has been realigned from the O&M to the RDT&E appropriation due to Congressional (HAC) direction and subsequent Departmental guidance regarding Information Technology budgeting.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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B. <u>Program Change Summary:</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	
Previous President's Budget (FY 2001)	1.306	1.416	1.440	
Appropriated Value	1.316	1.416		
Adjustments to Appropriated Value	-.111	-.070		
Adjustments to Budget Year since FY 2001 President's Budget			+9.304	
Current Budget Submission/President's Budget (FY 2002)	1.205	1.346	10.744	
Change Summary Explanation:				
FY 00 changes due to below threshold reprogramming.				
FY 01 decrease due to congressional rescission and below threshold reprogramming.				
FY 02 change is due primarily to Congressional direction concerning Departmental Information Technology budgeting guidance in that funding is being realigned from the O&M to the RDT&E appropriation.				
Page 2 of 10				

Exhibit R-2a, RDT&E Project Justification								DATE: June 2001	
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 (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	1.205	1.346	1.379					Contg	Contg
<p>A. <u>Mission Description and Budget Item Justification:</u> This project funds the critical and essential engineering to continue providing cost savings and to offer valuable new cost-effective information technology capabilities and services to customers. It funds systems engineering to reduce the risks and delays of implementing new communications technologies by performing assessments and proof of concept implementations. It also provides engineering to develop/enhance computer-aided network topology design, analysis and modeling tools to: (a) improve performance and/or reduce cost of operational networks to satisfy customer requirements at lowest cost, (b) analyze/solve problems in operational networks and (c) produce cost-efficient designs for future networks using new technologies.</p> <p><u>FY00 Accomplishments:</u></p> <ul style="list-style-type: none"> o Engineer the insertion of technology into the DISN (e.g., wave division multiplexing, optical switching, and ATM cell encryption). (1st Qtr - 4th Qtr; \$369K). o Engineering support for the Network Engineering Assessment Facility which provides the testbed for performing risk-reduction, integration assessments of enhanced network technologies and transitioning those capabilities into the DISN. (1st Qtr - 4th Qtr; \$198K). o Upgrade a portion of workstations, LAN, and WAN hardware & system software as requirements/technology dictate. - Provides the information systems platform for operational and planned DISN voice, video, data and transport networks. (1st Qtr - 4th Qtr; \$100K). o Develop network topology design algorithms, heuristics and software based on a government prioritized list of enhancements (e.g., specific DISN Service Delivery Nodes (SDN) and Edge devices) (1st Qtr - 4th Qtr; \$538K). o Total \$1.205M <p><u>FY01 Plans:</u></p> <ul style="list-style-type: none"> o Engineer the insertion of advanced network technology into the DISN (e.g., wave division multiplexing, optical switching, ATM cell encryption, and gigabit/terabit routing) (1st Qtr - 4th Qtr; \$408K). 									

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Project Cost	1.205	1.346	1.379						Contg	Contg
<p>FY01 Plans (cont'd):</p> <ul style="list-style-type: none"> o Engineering support for the Network Engineering Assessment Facility which provides the testbed for performing risk-reduction, integration assessments of enhanced network technologies and transitioning those capabilities into the DISN. (1st Qtr - 4th Qtr; \$225K). o Upgrade a portion of workstations, LAN, and WAN hardware & system software as requirements/technology dictate. - Provides the information systems platform for operational and planned DISN voice, video, data and transport networks. (1st Qtr - 4th Qtr; \$100K). o Develop network topology design algorithms, heuristics and software based on a government prioritized list (1st Qtr - 4th Qtr; \$613K). o Total \$1.346M <p>FY02 Plans:</p> <ul style="list-style-type: none"> o Engineer the insertion of technology into the DISN (e.g., wave division multiplexing, optical switching, ATM cell encryption, and gigabit/terabit routing) (1st Qtr - 4th Qtr; \$398K). o Engineering support for the Network Engineering Assessment Facility which provides the testbed for performing risk-reduction, integration assessments of enhanced network technologies and transitioning those capabilities into the DISN. (1st Qtr - 4th Qtr; \$250K). o Upgrade a portion of workstations, LAN, and WAN hardware & system software as requirements/technology dictate. - Provides the information systems platform for operational and planned DISN voice, video, data and transport networks. (1st Qtr - 4th Qtr; \$100K). o Develop network topology design algorithms, heuristics and software based on a government prioritized list (1st Qtr - 4th Qtr; \$631K). o Total \$1.379M 										

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Exhibit R-3 Cost Analysis								DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			PROGRAM ELEMENT Long Haul Communications/PE 0303126K				PROJECT NAME AND NUMBER DISN Systems Engineering Support/T82			
<u>Support Costs:</u>										
<u>Cost Category</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Pys Cost</u>	<u>FY01 Cost</u>	<u>FY01 Award Date</u>	<u>FY 02 Cost</u>	<u>FY 02 Award Date</u>	<u>Cost To Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Systems Engineering	CPAF/ CPFF	Multiple	1.205	1.346	10/00	1.379	10/01	Contg	Contg	N/A

Exhibit R-2a, RDT&E Project Justification								DATE: June 2001	
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RDT&E, Defense-Wide/07		Long Haul Communications/ PE 0303126K				Information Dissemination Management/IM01			
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	0	0	9.365*					Contg	Contg

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 IDM Services are defined by the "Framework for Information Dissemination Management" document distributed by ASD (C3I) 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. The IDM Core Services are implemented as Defense Information Infrastructure Common Operating Environment (DII COE) compliant segments. Rather than being developed as a "system", IDM is being incrementally developed as tools and services that will be incorporated into and fielded as integral parts of other host systems. This RDT&E project continues the developmental efforts that produced Releases 1, 2 and 3, with the incremental development and integration of IDM tools and services via an evolving IDM Toolbox planned for FY02 and beyond.

* This project is not a new start nor does it reflect unexpected program growth. Beginning in FY 2002, funding has been realigned from the O&M to the RDT&E appropriation due to Congressional (HAC) direction and subsequent departmental guidance regarding Information Technology budgeting.

FY 2002 Plans:

o Make the Awareness and Delivery capabilities of IDM (IDM A&D) available for fielding as a part of GCCS version 3.4 (1st Qtr - 1st Qtr; \$150K).

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COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost										
Project Cost	0	0	9.365*					Contg	Contg										
<p>o Field IDM A&D broadly to operational units. Emphasis will be on fielding to CINC locations. (1st Qtr - 4th Qtr; \$350K).</p> <p>o Integrate the Access 1 (A1) capability into IDM tools and services (1st Qtr - 2nd Qtr; \$1,250K).</p> <p>o Begin the design and integration of the Operations Support (OPS) and Access 2 and Control (A2&C) capabilities of IDM (1st Qtr - 4th Qtr; \$2,719K).</p> <p>o Award competitive contract for continued incremental development of IDM tools and core services (1st Qtr - 3rd Qtr; \$1,350K).</p> <p>o Begin the evolution of the IDM Toolbox (3rd Qtr - 4th Qtr; \$3,546K).</p> <p>o Total \$9.365M</p> <p>B. <u>Other Program Funding Summary:</u></p> <table border="0"> <tr> <td></td> <td><u>FY00</u></td> <td><u>FY01</u></td> <td><u>FY02</u></td> <td><u>To Complete</u></td> </tr> <tr> <td>Operation and Maintenance, DW</td> <td>3.647</td> <td>5.529</td> <td>0.608</td> <td>Contg</td> </tr> </table> <p>C. <u>Acquisition Strategy:</u> All RDT&E work will be contracted out or funded using MIPRs. Product Development (Evolving IDM Toolbox): Full and Open Small Business Competition; Management Support: MITRE, GSA Schedule; Test and Evaluation: Joint Interoperability Test Command (JITC).</p>											<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>To Complete</u>	Operation and Maintenance, DW	3.647	5.529	0.608	Contg
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Page 8 of 10																			

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Project Cost	0	0	9.365*					Contg	Contg
<p>D. <u>Schedule Profile:</u></p> <p>FY 2002</p> <ul style="list-style-type: none"> o IDM A&D incorporated into GCCS version 3.4 and installed at various CINCs o IDM A1 integrated into available IDM tools and services o Award development contract for continued development and maintenance of IDM Toolbox 									
Page 9 of 10									

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RDT&E, Defense-Wide/07			Long Haul Communications/PE 0303126K				Information Dissemination Management/IM01			
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Product Integration	C/CPAF	TBD	0	0	N/A	3.421	TBD	0	3.421	3.421
Product Development	C/CPAF	TBD	0	0	N/A	3.546	TBD	28.369	36.014	36.014
Management Support	Various	Various	0	0	N/A	1.850	Various	Contg	Contg	N/A
Test & Evaluation	MIPR	Various	0	0	N/A	0.548	Various	Contg	Contg	N/A
Totals						9.365				

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