Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Information Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long-Haul Communications - DCS*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	36.598	21.619	26.164	-	26.164	21.694	12.033	11.025	11.151	Continuing	Continuing
PC01: *Presidential and National Voice Conferencing*	1.000	4.140	18.902	-	18.902	14.180	4.398	3.389	3.427	Continuing	Continuing
T82: *DISN Systems Engineering Support*	35.598	17.479	7.262	-	7.262	7.514	7.635	7.636	7.724	Continuing	Continuing

Note
   *The FY 2012 total includes $10.500 million in OCO funding.
   **The FY 2011 total included $23.125 million in OCO funding.

A. Mission Description and Budget Item Justification
   The Defense Information Systems Network (DISN) is the Department of Defense (DoD) consolidated worldwide telecommunications capability that provides secure, end-to-end information transport for DoD operations. It also provides the warfighter and the Combatant Commands (COCOMs) with robust Command, Control, Communications, Computing, and Intelligence (C4I) infrastructure to support DoD netcentric missions and business requirements. The Defense Red Switch Network (DRSN) is a DoD Secure Voice, Command and Control Network that is controlled and directed by the Joint Staff and the Office of the Secretary of Defense. It provides multilevel secure, rapid, ad hoc, voice calling and conferencing capability to senior leaders including the President, Secretary of Defense, Services, COCOMs, subordinate organizations (military and civilian) and allies. DRSN also supports the National Emergency Action Decision Network (NEADN)/Presidential and National Voice Conferencing (PNVC) and the Enhanced Pentagon Capability/Survivable Emergency Conferencing Network (EPC/SECN).

   DISN Systems Engineering Support: This effort includes: engineering for Internet Protocol (IP) and Optical transport capabilities to ensure the essential operations of a robust and secure DISN; refreshment of operational systems and network operating systems that instrument and automate the operations, administration, maintenance and provisioning functions and creating a single DISN-wide view for network managers and operators; and the peripheral and component design in support of the DRSN to sustain continued highly classified, critical senior leadership communications capabilities.   In addition, Integrated SATCOM-GIG Operations & Management (ISOM): The ISOM is a JCTD project that includes all activities necessary to develop a scalable and policy-based management system that enables dynamic allocations and provisioning of satellite communications (SATCOM) resources. Project activities include developing system architecture, producing and conducting a functional evaluation of the ISOM prototype.

   Integrated Waveform (IW): The IW program consists of the development, testing, fielding, and initial operations of the IW system.

   NEADN/PNVC: The NEADN provides selected system engineering for continued development and testing of the Presidential and National Voice Conferencing (PNVC) equipment for senior leaders. The PNVC system provides a military satellite-based, survivable, secure, and near toll-quality voice conferencing capability for the President, Secretary of Defense, Chairman, Joint Chiefs of Staff, and other senior national/military leaders anywhere in the world as needed. Specifically, the project funding supports the acquisition activities for the PNVC baseband equipment, including critical and essential engineering required to develop new vocoder and

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2013 Defense Information Systems Agency	**DATE:** February 2012
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cryptographic and audio-summing equipment. Lack of sufficient funding will significantly impact the implementation of an enhanced, survivable voice conferencing capability to the President and other decision makers.

Distributed Tactical Communications System (DTCS): The DTCS is a variation of the Iridium Satellite Phone used by the warfighter under the Enhanced Mobile Satellite Service. The variation improves Iridium's capability to network and sub-network users to improve performance, reduce end-to-end latency and improve data handling to the handset. New handsets and software modifications will be required to utilize the improved service and allow Iridium satellites to "relay" information between the satellites. A separate Network Management capability will be required because the new service cannot leverage the standard commercial Iridium Network Manager. Funding provides engineering, development and testing resources for continued improvement to the Naval Surface Weapons Center's (NSWC) Technology Prototype to a fully fielded operational capability. Handsets are already fielded as part of a Central Command (CENTCOM) Joint Urgent Operational Needs Statement. Follow-on Research and Development effort includes two additional Handset Variants (Command and Control and Secret Command and Control), Network Management System, User Control Interface, and Satellite Software Modifications. Failure to fully fund would have severe negative impacts on the warfighter in the field in the Southwest Asia area of responsibility (SWA AOR).

B. Program Change Summary ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	32.255	21.824	25.890	-	25.890
Current President's Budget	36.598	21.619	26.164	-	26.164
Total Adjustments	4.343	-0.205	0.274	-	0.274
• Congressional General Reductions	-	-0.205			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	4.343	-	0.274	-	0.274

Change Summary Explanation

The FY 2011 increase of +$4.343 in base funding is due to one-time costs associated with ISOM and IW development.

The FY 2012 decrease of -$0.205 in base funding is due to contractor efficiencies.

The FY 2013 increase of +$0.274 in FY 2013 base funding is due to inflationary adjustments.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency									DATE: February 2012	

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COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
PC01: *Presidential and National Voice Conferencing*	1.000	4.140	18.902	-	18.902	14.180	4.398	3.389	3.427	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The National Emergency Action Decision Network (NEADN) provides system engineering, development and testing of the Presidential and National Voice Conferencing (PNVC) equipment for senior leaders. The PNVC system provides a military satellite-based, world-wide, survivable, secure, and near toll-quality voice conferencing capability for the President, Secretary of Defense, Chairman, Joint Chiefs of Staff, and other senior national/military leaders. By implementing new technology capabilities (e.g. Ethernet-Framing and higher data rate), this project provides improved performance to the survivable voice conferencing capability. This project supports the acquisition activities for the PNVC baseband equipment, including engineering required to develop new vocoder and cryptographic and audio-summing equipment. PNVC baseband development and production schedule is synchronized with the fielding of military Advanced Extremely High Frequency (AEHF) satellite communications (SATCOM) terminals.

PNVC is STRATCOM's highest priority for the NC2 mission and lack of sufficient funding will significantly delay DISA's delivery of the baseband equipment leaving the enhanced, survivable voice conferencing capability for the national decision makers at risk.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: National Emergency Action Decision Network (NEADN) *Description:* Description: NEADN/PNVC Systems Engineering - Conducts analyses for continuity of NEADN voice conferencing for national/military leaders through the PNVC deployment. Continue engineering, technical analysis, development and coordination to ensure terminal, baseband, and satellite synchronization for voice conferencing amongst senior leaders. *FY 2011 Accomplishments:* The PNVC Capabilities Production Document was updated and the Concept of Operations (CONOPS) for PNVC was defined to fully utilize the enhanced capabilities provided by the system. Funding initiated the development of Multi-stream Summing Device (MSD)-III and other Defense Red Switch Network (DRSN) interface equipment, which continued into FY 2012. Delivered PNVC Baseband Interface Group (BIG) updated technical specifications. *FY 2012 Plans:*	1.000	4.140	18.902	-	18.902

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency		DATE: February 2012
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
In FY 2012, contract preparations continue, with the National Security Agency as the acquisition agent, including the technical and acquisition documentation leading to a PNVC BIG contract award in FY 2013. The increase of +$3.140 from FY 2011 to FY 2012 funds the development of the MSD-III PNVC/DRSN interface equipment, completion of Clinical Data Repository (CDR) and the initiation of factory testing for these components. *FY 2013 Base Plans:* The expected two year development contract for the BIG will be awarded. The DRSN interface equipment will undergo development testing and evaluation to support FY 2013 procurement decisions. A single enclosure will be developed to contain all PNVC baseband equipment for the PNVC special users; plus coordination for platform integration and developmental testing for the end to end PNVC capability. The +$14.762 increase from FY 2012 to FY 2013 develops the PNVC baseband equipment to support an Initial Operational Capability (IOC) in FY 2015.					
Accomplishments/Planned Programs Subtotals	1.000	4.140	18.902	-	18.902

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• Procurement, DW/PE 0303126K: *Procurement, Defense-Wide*	0.000	0.000	3.100		3.100	7.400	10.700	1.800	1.820	Continuing	Continuing

D. Acquisition Strategy

Engineering support for the NEADN is provided by existing DoD contracts and FFRDC support.

E. Performance Metrics

PNVC project metrics track the development of various documents: Project Management Plan (PMP), Concept of Operations (CONOPs), Acquisition Strategy, Capability Production Document (CPD), and other documents needed to manage the project. Data metrics based on cost, schedule, and performance are used for the NEADN development and certification efforts.

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

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering	C/CPFF	Booz Allen Hamilton:McLean, VA	-	0.600	Oct 2011	0.600	Oct 2012	-		0.600	Continuing	Continuing	N/A
Systems Engineering	FFRDC	Mitre:McLean, VA	0.223	0.100	Oct 2011	0.100	Oct 2012	-		0.100	Continuing	Continuing	N/A
BIG Development Preparation	MIPR	NSA:Various	0.180	0.200	Apr 2012	12.400	Feb 2013	-		12.400	Continuing	Continuing	N/A
MSD-III Development	C/T&M	Raytheon:Largo, FL	2.900	2.800	Oct 2011	3.878	Oct 2012	-		3.878	Continuing	Continuing	N/A
		Subtotal	3.303	3.700		16.978		-		16.978			

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	-		-		-		-	0.000	0.000	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Certification Testing	MIPR	Various:Various	-	0.345		1.624		-		1.624	Continuing	Continuing	Continuing
		Subtotal	-	0.345		1.624		-		1.624			

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services	FFRDC	Aerospace Corporation:Falls Church, VA	0.250	0.095	Nov 2011	0.300	Oct 2012	-		0.300	Continuing	Continuing	Continuing
		Subtotal	0.250	0.095		0.300		-		0.300			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency								DATE: February 2012	

APPROPRIATION/BUDGET ACTIVITY
0400: *Research, Development, Test & Evaluation, Defense-Wide*
BA 7: *Operational Systems Development*

R-1 ITEM NOMENCLATURE
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PROJECT
PC01: *Presidential and National Voice Conferencing*

	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	3.553	4.140	18.902	-	18.902			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Defense Information Systems Agency		DATE: February 2012
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	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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
Systems Engineering for NEADN/PNVC																												
Systems Engineering for NEADN/PNVC																												
Acquisition Documentation for PNVC																												
Acquisition Documentation for PNVC																												
PNVC CONOPS																												
PNVC CONOPS																												
PNVC Capabilities Production Doc																												
PNVC Capabilities Production Doc																												
PNVC/DRSN Spec Dev																												
PNVC/DRSN Spec Dev																												
PNVC/DRSN Interface Equip Dev																												
PNVC/DRSN Interface Equip Dev																												
Special Users Requirements Doc																												
Special Users Requirements Doc																												
PNVC Development Contract Preps																												
PNVC Development Contract Preps																												
Command and Control Secure Handset																												
Command and Control Secure Handset																												
Increased Push to talk time to .7 seconds																												
Improved Network Architecture																												

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

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Systems Engineering for NEADN/PNVC				
Systems Engineering for NEADN/PNVC	1	2011	4	2016
Acquisition Documentation for PNVC				
Acquisition Documentation for PNVC	1	2011	2	2012
PNVC CONOPS				
PNVC CONOPS	4	2011	2	2012
PNVC Capabilities Production Doc				
PNVC Capabilities Production Doc	3	2011	3	2011
PNVC/DRSN Spec Dev				
PNVC/DRSN Spec Dev	1	2011	2	2011
PNVC/DRSN Interface Equip Dev				
PNVC/DRSN Interface Equip Dev	4	2011	3	2014
Special Users Requirements Doc				
Special Users Requirements Doc	1	2011	1	2011
PNVC Development Contract Preps				
PNVC Development Contract Preps	1	2011	4	2011
Command and Control Secure Handset				
Command and Control Secure Handset	2	2011	1	2012
Increased Push to talk time to .7 seconds	4	2011	3	2012
Improved Network Architecture	4	2011	3	2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency									DATE: February 2012	

APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0303126K: *Long-Haul Communications -* *DCS*				PROJECT T82: *DISN Systems Engineering Support*		

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
T82: *DISN Systems Engineering Support*	35.598	17.479	7.262	-	7.262	7.514	7.635	7.636	7.724	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Internet Protocol (IP) and Optical Transport Technology Refresh (TR): Provides the engineering technical expertise necessary to support and integrate newer, more efficient technologies required to replace the current end of lifecycle equipment and to achieve more efficient IP and optical technologies. These new technologies provide protected and assured services for mobility; high-quality information sharing and collaboration capabilities provide critical support to the warfighter as well as other DoD and federal customers.

Element Management System (EMS): Provides operational and network operating systems that instrument and automate the operations, administration, maintenance and provisioning functions creating a single DISN-wide view for network managers and operators. EMS is a component of the DISN Operational Support Systems (OSS).

Secure Voice Switches: This equipment satisfies unique military requirements for multilevel security (i.e., extensive conferencing/conference management capabilities and features, and gateway functions) that are not available in commercial products. Due to the proprietary multi-level security and conferencing solutions embedded in Secure Voice Switch equipment, the only alternative to wholesale replacement is the Engineering Change Proposal (ECP) process which is used to identify and manage the development of replacement parts and peripherals necessary to ensure the continued support of the system.

Distributed Tactical Communications System (DTCS): This system is a tactical and scalable over-the-horizon, on-the-move, and beyond line of sight voice communications system for the small unit disadvantaged user.

• Phase 1 supported CENTCOM Joint Urgent Operational Needs CC-0278 by fielding 500 radios with basic functionality for 100 mile communications in an austere environment. This provided basic functionality with the initial development and fielding of the Radio Only handset.

• Phase 2 supported basic CENTCOM Joint Urgent Operational Needs CC-0368 requirements by fielding more than 5,000 handsets to the CENTCOM Area of Operation. Improvements to DTCS were increased in range from 100 miles to 250 miles, improved network capacity from 250 to 16,000, user operated management tool, color screen command and control handset with NSA approved encryption, and tactical vehicle integration.

• Phase 3 supports improving CENTCOM Joint Urgent Operational Needs CC-0368 requirements. DTCS improvements include architecture that enables self management and monitoring, alternate supplier development, interoperability interfaces, and internet protocol infrastructure.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency		DATE: February 2012
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The Integrated SATCOM-GIG Operations & Management (ISOM) JCTD project will include all activities necessary to develop a scalable and policy-based management system that enables dynamic allocation and provisioning of satellite communications (SATCOM) resources. Project activities will include developing system architecture, producing and conducting a functional evaluation of the ISOM prototype.

The Integrated Waveform (IW) program consists of the development, testing, fielding and initial operations of the IW systems necessary to update technical capabilities.

Major Range and Test Facility funding for test facility equipment and installation.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: IP & Optical Transport (a component of Tech Refresh)	10.501	3.715	3.883	-	3.883

FY 2011 Accomplishments:
Completed Phase III of the DSS-2A Switch modification for the DRSN. Phase III is the completion phase of the DSS-2A large switch replacement development project. Initiated effort to IP enable the DRSN DSS-2A switch for improved interworking with classified Voice over IP systems. This initial step included defining requirements and beginning design.

FY 2012 Plans:
The focus of FY2012 RDT&E funds is on the secure voice offerings to support Unified Capabilities. The DRSN voice switches, High-Altitude Electromagnetic Pulse HEMP and NORTHCOM conferencing are all initiatives that are at or near the end of life cycle for existing capabilities. Research activities are required to ensure continued technology refreshment to support these important DISN mission functions. FY 2012 Tech Refresh (TR) funding will continue the effort started in FY2011 to IP enable the DRSN DSS-2A switch. In FY2012, funds will be used for the first part of a two part development of a replacement (HEMP) phone for survivable secure voice NC2 systems. Additionally, FY12 TR funding is bieng used to develop and test a NORTHCOM Conferencing solution that supports large, multi-node distributed conferences for critical Homeland Security missions which provides conference controller with: the capability of remote call status across the conference; authorized control of remote switch functionality; and post-conference analysis capability.

The decrease of -$6.786 between FY 2011 and FY 2012 is due to the completion of Phase III of the DSS-2A modification and a new focus on secure voice offerings to support unified capabilities including IP enabling of the DRSN DSS-2A switch. Also included in FY11 funding was a onetime cost associated with ISOM and IW development.

FY 2013 Base Plans:

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
FY 2013 funds will be used to complete the effort to IP Enable the DRSN DSS-2A switch, complete the HEMP Phone development and continue developing and testing a NORTHCOM conferencing solution that supports large, multi-node distributed conferences for critical Homeland Security missions. The increase of +$0.168 from FY 2012 to FY 2013 is due to the more extensive scope of the final phase of the IP enabling of the DSS-2A switch, which includes testing and accreditation.					
Title: Elements Management System (a component of DISN OSS) ***FY 2011 Accomplishments:*** In FY 2011, the funding continued providing a standardized capability for all data sharing interfaces for network management data and the implementation of a shared data model on service oriented architecture for all EMS applications. Specific activities included the development of additional "out-of-the-box" data translations as well as additional data protocols for pulling data to and pushing data from the Common Communications Vehicles (CCV) which is near completion in one security domain in the production environment. Information Sharing Services for Voice - In FY 2011, funding supported data sharing of systems providing management of DISN voice services. The capability includes the development of data standards, data sharing interfaces, web services for legacy voice and Real Time Services (RTS) network management systems. Funding will decrease response time to problems and provisioning of voice services. Network Management Solutions for New DISN Technologies – In FY 2011, this capability is fundamental in providing network management support for new DISN catalogue services. FY 2011 activities included research on network management solutions for Secure Voice over IP and RTS technologies. In addition, funding supported the development of a DISA Integrated Incident Management System as well as an operations portal supporting the DISA Command Center (DCC). Providing network management in parallel with the deployment of new DISN services and technologies is vital to supporting network operations and the changing missions of the warfighter. Information Sharing Services for Voice – Funding supported data sharing of systems providing management of DISN voice services. The capability includes the development of data standards, data sharing interfaces, web services for legacy voice and Real Time Services (RTS) network management systems. Funding will decrease response time to problems and provisioning of voice services.	1.169	1.336	1.338	-	1.338

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

Network Management Solutions for New DISN Technologies – This capability was fundamental in providing network management support for new DISN catalogue services. FY 2011 activities included research on network management solutions for Secure Voice over IP and RTS technologies. Funding supported the development of a DISA Integrated Incident Management System as well as an operations portal supporting the DISA Command Center (DCC). Providing network management in parallel with the deployment of new DISN services and technologies is vital to supporting network operations and the changing missions of the warfighter.

FY 2012 Plans:
In FY 2012, the funding will focus on network management integration of RTS and future DISN services.

Data Integration for RTS - For RTS, emphasis includes a standardized capability for all data sharing interfaces for network management data and the implementation of a shared data model on service oriented architecture. This effort supports the information sharing and network operations objectives of a unified view and situational awareness through a common user interface for obtaining information about the DISN, specifically related to DISN RTS.

Network Management Solutions for New DISN Technologies – It is critical to provide network management support for future DISN catalogue services requirements. FY 2012 activities include research on network management solutions for Secure Voice over IP and RTS technologies. Providing network management in parallel with the deployment of new DISN services and technologies is vital to supporting network operations and the changing missions of the warfighter.

The increase of +$.167 from FY 2011 to FY 2012 is due to growth in DISN services and network elements which expand network management requirements for the OSS.

FY 2013 Base Plans:
Activities for FY13 include support for DISA emerging technologies and capabilities to enable warfighters to consume data and services. Areas will include service assurance for DISA catalogue services and requirements as they converge across a collaborative environment in support of a full spectrum of operations. From a network management standpoint, this includes providing a full set of services, end-to-end across an infrastructure that includes integrated satellite communications and real time services through IP convergence. For FY13, the network management capability operated in parallel with DISN capabilities that are projected for that time.

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
The increase of +$.002 from FY 2012 to FY 2013 is due to the growth in DISN services and network elements which expands network management requirements for the OSS.					
Title: Peripheral and Component Design (formerly Engineering Change Proposals (ECP) DRSN Components)	0.803	1.928	2.041	-	2.041

FY 2011 Accomplishments:
FY 2011 continued the effort to develop and produce a replacement for the Secure Telephone Equipment-Remote (STE-R) based Channel Encryption Unit (CEU) to support future gateways for STEs and secure wireless devices using the Secure Communications Interoperability Protocol (SCIP). FY2011 funds also were used in develop a modified Multifunction Digital Adapter to support remote DRSN phone connections over IP networks.

FY 2012 Plans:
FY 2012 funding for DRSN component refresh develops specifications and Engineering Change Proposals (ECP) for replacement of the Dual Narrowband Interface (DNI) card used in the DSS-2A switch. It is anticipated that current parts will be obsolete and the user interface software on the Command Center Consoles will require update. If not funded, the effort to replace the DNI card will be halted and the efforts to deal with obsolete parts and aging software will not go forward. This will adversely affect the mid and long term viability of the DRSN and other systems (EPC/SECN) that use these switch systems. To the extent that funding is reduced, these efforts will take longer to complete and development costs are likely to increase as work would be stretched out over a longer period.

The increase of +$1.125 from FY 2011 to FY 2012 is due to a minor change in the rate of development of the DNI card.

FY 2013 Base Plans:
FY 2013 funding will continue the DNI replacement development effort and the Console User Interface update effort initiated in FY 2012. Due to the level of funding, it is expected that these efforts will occur over several years. Depending on final costs and funding availability, an ECP for refresh of other components or peripheral that have obsolete parts or EOL software issues would be initiated.

The increase of +$.113 from FY 2012 to FY 2013 is due to a change in the mix of items being developed.

	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Distributed Tactical Communications System	23.125	10.500	-	-	-

FY 2011 Accomplishments:

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Information Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long-Haul Communications - DCS*	**PROJECT** T82: *DISN Systems Engineering Support*

B. Accomplishments/Planned Programs ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**
Planned improvements to JUON CC-0368 requirements included software updates to the gateway infrastructure and user management tools and fielding of the command and control handset. Prototype and design of the secure command and control handset, interoperability improvements and integration into tactical vehicles were accomplished. *FY 2012 Plans:* OCO: Funding of $10.500 million is for Phase 3 implementation and completion of JUON CC-0368. This includes the fielding of the secure command and control handset, web compatible architecture that expands network management functionality, and an increased response time for push-to-talk from ~ 2 seconds to ~ .7 seconds. The decrease of -$12.625 between FY 2011 and FY 2012 is due to several of the system development tasks being completed and the amount of the development dollars being lowered as the system approaches completion. *FY 2013 Base Plans:* The reduction of -$10.500 from FY 2012 is due to the completion of JUON CC-0368 in FY 2012 and the transition of DTCS capability to Enhanced Mobile Satellite Service (EMSS) for sustainment from the customer base.					
Accomplishments/Planned Programs Subtotals	35.598	17.479	7.262	-	7.262

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• O&M/PE0303126K: *Operation & Maintenance, Defense-Wide*	156.515	157.778	61.762	91.257	153.019	66.830	65.765	61.281	62.374	Continuing	Continuing
• Procurement/PE0303126K: *Procurement, Defense-Wide*	95.856	84.932	116.801		116.801	122.657	100.240	91.379	118.463	Continuing	Continuing

D. Acquisition Strategy

Products acquired for EMS requirements are professional services, network management software, supporting hardware, and development tools. Professional services will be procured through existing contracts available to DISA. For hardware and software, the DISA Computing Services group will be utilized for leased managed services, as well as the NASA enterprise equipment contracting vehicle when necessary and applicable.

Exhibit R-2A, **RDT&E Project Justification:** PB 2013 Defense Information Systems Agency		**DATE:** February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long-Haul Communications - DCS*	**PROJECT** T82: *DISN Systems Engineering Support*

The DSS-2A large switch modification and DRSN components will use an existing Air Force Command and Control Switching Systems (CCSS) Depot Support contract with the DSS-2A manufacturer (Raytheon) to perform the development and modification work, system integration and testing support.

E. Performance Metrics

	FY 2011	FY 2012	FY 2013
	Execute within	Execute within	Execute
Network Management Solutions	5% of Plan	5 % of Plan	5% of Plan
Network Solutions – New DISN Technologies	Execute within	Execute within	Execute within
	5% of Plan	5% of Plan	5% of Plan
DSS-2A Switch Replacement	100% of Plan	Complete	N/A

DTCS tracks performance through competition of requirements for JUON CC-0368

- FY 2011 Increase the number of available networks from 250 to 16,000
- FY 2011 Develop the NSA approved Secure Command and Control Handset
- FY 2012 Increase the push to talk speed from 2 seconds to .7 seconds
- FY 2012 Improve network architecture to integrate internet management of the network

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency												DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*					**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long-Haul Communications - DCS*						**PROJECT** T82: *DISN Systems Engineering Support*			

Product Development ($ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total				
Cost Category Item	**Contract Method & Type**	**Performing Activity & Location**	**Total Prior Years Cost**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Award Date**	**Cost**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Systems Engineering for DSRN Components & Peripherals	Various	Raytheon:Florida	3.729	1.928	Feb 2011	2.041	Apr 2013	-		2.041	Continuing	Continuing	Continuing
Systems Engineering for DSS-2A Secure Voice Switch Replacement	Various	Raytheon:Florida	21.440	-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering for IP and Optical Technology Refresh	Various	DITCO:Various	1.912	3.715	Feb 2011	3.883		-		3.883	Continuing	Continuing	Continuing
Engineering & Technical Services for Web Based Mediation	C/T&M	Apptis:VA	1.168	-		-		-		-	Continuing	Continuing	Continuing
Engineering & Technical Services for Information Sharing Services for Voice	C/T&M	SAIC:VA	2.128	0.546	Jan 2012	0.546	Jan 2013	-		0.546	Continuing	Continuing	Continuing
Engineering & Technical Services for Network Mgmt Solutions for New DISN Element Technologies	C/T&M	SAIC:VA	0.795	0.790	Jun 2012	0.792	Jun 2013	-		0.792	Continuing	Continuing	Continuing
Single Sign On	C/T&M	SAIC:Various	1.397	-		-		-		-	Continuing	Continuing	Continuing
System Engineering for VoSIP	C/T&M	Various:Various	1.218	-		-		-		-	Continuing	Continuing	Continuing
Space Vehicle Upload	SS/CPFF	Iridium:McLean, VA	11.585	1.050		-		-		-	Continuing	Continuing	Continuing
Gateway Improvement	SS/CPFF	Iridium:McLean, VA	9.810	3.755		-		-		-	Continuing	Continuing	Continuing
Field Application Tool	MIPR	NSWC:Dahlgren	5.015	1.620		-		-		-	Continuing	Continuing	Continuing
DTCS Handset	SS/CPFF	Iridium:McLean, VA	5.700	0.150		-		-		-	Continuing	Continuing	Continuing
Command and Control Handset	SS/CPFF	Iridium:McLean, VA	6.750	0.525		-		-		-	Continuing	Continuing	Continuing
Alt. Supplier Development	MIPR	NSWC:Dahlgren, VA	2.900	0.550		-		-		-	Continuing	Continuing	Continuing
Radio Only Interface	MIPR	NSWC:Dahlgren, VA	2.180	0.345		-		-		-	Continuing	Continuing	Continuing
Remote Control Unit	SS/CPFF	Iridium:McLean, VA	2.100	-		-		-		-	Continuing	Continuing	Continuing
Type 1 Security	SS/CPFF	Iridium:McLean, VA	6.100	0.355		-		-		-	Continuing	Continuing	Continuing
Vehicle Integration	MIPR	NSWC:Dahlgren, VA	2.255	0.930		-		-		-	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Defense Information Systems Agency												DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*				**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long-Haul Communications - DCS*					**PROJECT** T82: *DISN Systems Engineering Support*			

Product Development ($ in Millions)

				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total		
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			88.182	16.259		7.262		-		7.262			

Support ($ in Millions)

				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total		
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-	0.000	0.000	0.000

Test and Evaluation ($ in Millions)

				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total		
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Certification Testing	MIPR	JITC:Various	1.230	1.220		-		-		-	Continuing	Continuing	Continuing
Subtotal			1.230	1.220		-		-		-			

Management Services ($ in Millions)

				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total		
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-	0.000	0.000	0.000

	Total Prior Years Cost	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	89.412	17.479	7.262	-	7.262			

Remarks

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

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	PE 0303126K: *Long-Haul Communications - DCS*	T82: *DISN Systems Engineering Support*

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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

Web-Based Mediation Admin
Web-Based Mediation Admin ▮ (FY2011 Q1–Q4)

Tactical Vehicle Integration
Tactical Vehicle Integration ▮ (FY2012 Q1–Q4)

User Management Tool/Field Application Tool
Command and Control Handset ▮ (FY2011 Q1 – FY2012 Q4)

Satellite Software Upgrade
Satellite Software Upgrade ▮ (FY2011 Q1–Q2)

Systems Engineering for DSS-2A Secure Voice Switch Replacement
Systems Engineering for DSS-2A Secure Voice Switch Replacement ▮ (FY2011 Q1–Q4)

Systems Engineering for DRSN Components and Peripherals
Systems Engineering for DRSN Components and Peripherals ▮ (FY2012 Q2 – FY2016 Q4)

Data Integration for Real Time Services
Data Integration for Real Time Services ▮ (FY2012 Q2 – FY2013 Q1)

Network Management Solutions for New DISN Technologies
Network Management Solutions for New DISN Technologies ▮ (FY2011 Q1 – FY2013 Q1)

Information Sharing Services for Voice
Legacy Systems ▮ (FY2012 Q1–Q4)
Real Time Services (RTS) ▮ (FY2011 Q1 – FY2012 Q1)

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

APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303126K: *Long-Haul Communications - DCS*	PROJECT T82: *DISN Systems Engineering Support*

	FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017			
	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
Range Extension																												
Range Extension					▆▆▆																							
Increase number of networks to 16K				▆▆																								

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Defense Information Systems Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303126K: *Long-Haul Communications - DCS*	**PROJECT** T82: *DISN Systems Engineering Support*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Web-Based Mediation Admin				
Web-Based Mediation Admin	1	2011	3	2011
Tactical Vehicle Integration				
Tactical Vehicle Integration	2	2011	4	2011
User Management Tool/Field Application Tool				
Command and Control Handset	1	2011	4	2011
Satellite Software Upgrade				
Satellite Software Upgrade	1	2011	2	2011
Systems Engineering for DSS-2A Secure Voice Switch Replacement				
Systems Engineering for DSS-2A Secure Voice Switch Replacement	1	2011	3	2011
Systems Engineering for DRSN Components and Peripherals				
Systems Engineering for DRSN Components and Peripherals	4	2011	4	2016
Data Integration for Real Time Services				
Data Integration for Real Time Services	1	2012	4	2012
Network Management Solutions for New DISN Technologies				
Network Management Solutions for New DISN Technologies	1	2011	4	2012
Information Sharing Services for Voice				
Legacy Systems	2	2011	4	2011
Real Time Services (RTS)	1	2011	4	2011
Range Extension				
Range Extension	3	2011	2	2012
Increase number of networks to 16K	3	2011	1	2012