Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*					R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*							
COST ($ in Millions)	**All Prior Years**	**FY 2012**	**FY 2013#**	**FY 2014 Base**	**FY 2014 OCO ##**	**FY 2014 Total**	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**Cost To Complete**	**Total Cost**
Total Program Element	-	11.765	15.756	18.197	-	18.197	18.428	10.635	10.054	16.000	Continuing	Continuing
253: *Dscs-Dcs (Phase II)*	-	5.607	5.730	5.559	-	5.559	5.509	5.325	5.402	5.515	Continuing	Continuing
456: *MILSATCOM System Engineering*	-	6.158	10.026	12.638	-	12.638	12.919	5.310	4.652	10.485	Continuing	Continuing

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 OCO Request will be submitted at a later date

Note

Change Summary Explanation: FY14 Increase supports Protected Comm On The Move (COTM).

A. Mission Description and Budget Item Justification

Military Satellite Communication (MILSATCOM) systems are joint program/project efforts to satisfy ground mobile requirements for each Service, the Joint Chiefs of Staff (JCS), the National Command Authority, the combatant commanders, the Office of the Secretary of Defense, and other governmental, non-DoD users. The worldwide MILSATCOM systems are: the Super High Frequency (SHF) Defense Satellite Communications System (DSCS); the Wideband Global SATCOM (WGS); the MILSTAR Extremely High Frequency (EHF) Low Data Rate (LDR) and Medium Data Rate (MDR); the Advanced Extremely High Frequency (AEHF); and future MILSATCOM capabilities. All of these systems are required to support legacy, interim and emerging communication space architectures and Future Force requirements. The Army is responsible for materiel development, acquisition, product improvement, testing, fielding and integrated logistics support of ground satellite terminals and SATCOM control subsystems and all associated equipment used to provide range extension of Mission Command Networks and Systems. The Army also participates in the development of MILSATCOM programs, including architectures, payloads, waveforms, antennas and terminal developments to ensure US Army equities are appropriately addressed with our sister services. This includes technology assessment efforts associated with the integration of MILSATCOM components to US Army Landwarnet. This responsibility also includes maintaining the life cycle logistics support required to achieve end-to-end connectivity and interoperability, satisfying JCS network operations in support of the President, JCS, combatant commanders, Military Departments, Department of State, and other government Departments and Agencies.

This program is designated as a DoD Space Program.

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army					DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*			R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*		
B. Program Change Summary ($ in Millions)	**FY 2012**	**FY 2013**	**FY 2014 Base**	**FY 2014 OCO**	**FY 2014 Total**
Previous President's Budget	12.085	15.756	16.616	-	16.616
Current President's Budget	11.765	15.756	18.197	-	18.197
Total Adjustments	-0.320	0.000	1.581	-	1.581
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.320	-			
• Adjustments to Budget Years	-	-	1.581	-	1.581

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: April 2013
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COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
253: *Dscs-Dcs (Phase II)*	-	5.607	5.730	5.559	-	5.559	5.509	5.325	5.402	5.515	Continuing	Continuing
Quantity of RDT&E Articles												

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

This project provides funds to develop Satellite Communication (SATCOM) ground subsystem equipment and software in support of Joint Chiefs of Staff (JCS) validated Mission Command Network and Systems requirements for the worldwide Defense Enterprise Wideband SATCOM System (DEWSS). DEWSS is composed of the Super High Frequency (SHF) Defense Satellite Communications System (DSCS) and Wideband Global SATCOM (WGS) programs, which are required to support legacy, interim and emerging communication space architectures and future Force requirements. Expansion of the WGS constellation and upgrades to both DSCS and WGS are vital to support the Army's emerging power projection and rapid deployment role. DSCS and WGS provide multiple channels of tactical end-to-end connectivity and interoperability with strategic networks and national decision-makers, satisfying JCS network operations in support of the President, JCS, combatant commanders, military departments, Department of State and other government departments and agencies.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Netcentric System Engineering and Analysis	5.607	5.730	2.017
Articles:	0	0	
Description: Funding is provided for the following effort:			
FY 2012 Accomplishments: Conduct Netcentric System Engineering and Analysis			
FY 2013 Plans: Continue to conduct Netcentric System Engineering and Analysis			
FY 2014 Plans: Fund analysis for Netcentric System Engineering			
Title: Jam Resistant Secure Communications (JRSC)	0.000	0.000	1.970
Description: Funding is provided for the following effort:			
FY 2014 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*	PROJECT 253: *Dscs-Dcs (Phase II)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Fund Jam Resistant Secure Communications (JRSC risk mitigation modem pilot program to address Anti-Jam (AJ) and Anti-Scintillation (AS) for the WGS constellation.			
Title: Future analysis of Wideband SATCOM Operational Management System (WSOMS) database consolidation effort. ***Description:*** Funding is provided for the following effort: ***FY 2014 Plans:*** WSOMS database consolidation effort to evaluate existing database schemas (structure) for each independent Wideband Control subsystem. The result of the analysis will be to define a structure of a consolidated database along with a transition plan. The desired impact will be to reduce total cost of ownership for multiple subsystems in terms of recurring annual licensing costs and shorten logistics trail with associated database storage equipment.	0.000	0.000	1.572
Accomplishments/Planned Programs Subtotals	5.607	5.730	5.559

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• 24: *Defense Enterprise Wideband SATCOM Systems (DEWSS) (BB8500)*	123.859	151.636	137.047		137.047	117.430	132.994	145.308		Continuing	Continuing

Remarks

D. Acquisition Strategy

FY14 funding finances Project Manager, Defense Communications and Army Transmission Systems (PM DCATS) netcentric systems engineering, modem risk mitigation, and DoD Information Assurance Certification Accreditation Process (DIACAP) support. Funding provides for SATCOM terminal upgrades, enhancement of baseband throughput capabilities, technology insertion and upgrades which enhance decision support capabilities, allowing for full utilization of Wideband Global SATCOM (WGS) capabilities. Both the Wideband SATCOM Operational Management System (WSOMS) and the Enterprise Wideband SATCOM Terminal System (EWSTS) Capability Production Documents (CPDs) contain Netcentric-Ready Key Performance Parameters (NR-KPPs) as required by CJCSI 6212.01C. Netcentric efforts are required to facilitate the migration from the current trunk-based communications systems to Internet Protocol (IP) based systems and to engineer, test and integrate IP based capabilities into EWSTS and WSOMS systems. Studies, risk mitigation, system integration and advanced demonstrations for netcentric baseband and policy based control will accommodate technology insertion, data sharing, remote operations, architecture efforts and use of commercial technology, thus ensuring the life of the Defense Enterprise Wideband System (DEWSS) terminal family beyond 2025 and reducing lifecycle costs and enterprise requirements on the WGS and Defense Satellite Communication System (DSCS) satellites in the future.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
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E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*	PROJECT 253: *Dscs-Dcs (Phase II)*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PM Admin	C/IDIQ	TBD:TBD	8.622	0.662	Feb 2012	1.107		0.310		-		0.310	Continuing	Continuing	Continuing
		Subtotal	8.622	0.662		1.107		0.310		0.000		0.310			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
RMCE Integration	C/IDDQ	Johns Hopkins University/Applied Physics Laboratory (JHU/APL):Laurel, MD	2.900	-		-		-		-		-	Continuing	Continuing	Continuing
RMCE GSCCE	C/IDDQ	The Boeing Company:Anaheim, CA	4.600	-		-		-		-		-	Continuing	Continuing	Continuing
Software/Prototypes	C/IDIQ	TBD:TBD	0.000	0.541	Feb 2012	1.283		2.154		-		2.154	0.000	3.978	0.000
		Subtotal	7.500	0.541		1.283		2.154		0.000		2.154			

Remarks

JHU/APL - John Hopkins University/Applied Physics Laboratory

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Netcentric Systems Engineering and Program Mgmt	C/IDIQ	TBD:TBD	13.808	3.162	Feb 2012	1.556		1.256		-		1.256	Continuing	Continuing	Continuing
Core Government Support	Allot	PM Defense Communication and Army Tranmission Systems:Ft. Belvoir, VA	7.753	0.850	Dec 2011	0.884		0.939		-		0.939	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army			DATE: April 2013
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	21.561	4.012		2.440		2.195		0.000		2.195			

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint SATCOM Engineering Center (Government Facility)	IA	Communications-Electronics Research Development and Engineering Center (CERDEC):APG, MD	11.670	0.392	Feb 2012	0.900		0.900		-		0.900	Continuing	Continuing	Continuing
		Subtotal	11.670	0.392		0.900		0.900		0.000		0.900			

	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	49.353	5.607		5.730		5.559		0.000		5.559			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*	PROJECT 253: *Dscs-Dcs (Phase II)*

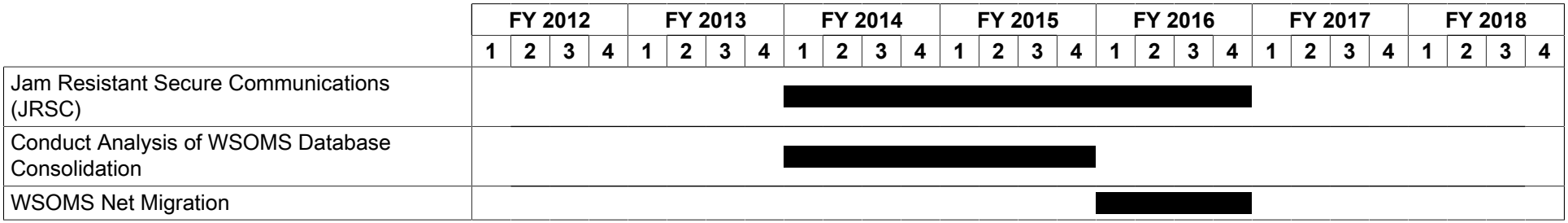

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303142A: *SATCOM Ground Environment (SPACE)*	**PROJECT** 253: *Dscs-Dcs (Phase II)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Jam Resistant Secure Communications (JRSC)	1	2014	4	2016
Conduct Analysis of WSOMS Database Consolidation	1	2014	4	2015
WSOMS Net Migration	1	2016	4	2016

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*	PROJECT 456: *MILSATCOM System Engineering*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
456: *MILSATCOM System Engineering*	-	6.158	10.026	12.638	-	12.638	12.919	5.310	4.652	10.485	Continuing	Continuing
Quantity of RDT&E Articles												

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 OCO Request will be submitted at a later date

Note

Protected Communications on the Move (COTM) Terminal Prototype:
Continue development/testing of Protected COTM terminal prototype using Advanced Extremely High Frequency (AEHF) Extreme Data Rate (XDR) waveform. Leverages/transitions Communications-Electronics Research Development and Engineering Center (CERDEC) investment in low profile COTM Ka/Q band antenna technology. Provides technology maturation and risk reduction for a protected COTM capability that can be inserted into Project Manager Warfighter Informtaion Network-Tactical (PM WIN-T).

Low Size Weight and Power (SWaP) Ku/Ka SATCOM Antenna for Wideband Global SATCOM (WGS) :
-Multiband low cost low profile Ku/Ka antenna development - invests in and leverages tech base development efforts to provide smaller and lower cost antennas suitable for both existing and future combat vehicles such as M-1/Bradley and Ground Combat Vehicle (GCV). Reduces technical programmatic risk for integration into WIN-T.

A. Mission Description and Budget Item Justification

Military Satellite Communications (MILSATCOM) System Engineering (SE) provides centralized funding for US Army participation in the joint development of MILSATCOM programs. This includes engineering, technical and costs related analyses supporting architecture, payloads, network and terminal requirement and design decisions across all MILSATCOM programs.

MILSATCOM System Engineering also supports experimentation and/or development of new and emerging SATCOM related technologies and standards. This includes prototyping efforts to address technology gaps identified by US Army Programs of Record (POR) in the US Army Technology Transition Matrix.

Transportable Tactical Command Communications (T2C2) supports company-sized early entry units with robust voice and data communications capabilities in the early phases of joint operations. T2C2 also provides transportable communication systems to enable integration into a higher capacity network. T2C2 transitions Global Rapid Response Information Package (AN/PSC-15 GRRIP systems), Secret Internet Protocol Router Network (SIPRNet)/Non-Secure Internet Protocol Routing Network (NIPRNet) Access Point (SNAP), Very Small Aperture Terminal (VSAT) capabilities procured through operational needs statements to a formal Army program. T2C2 Variant 1 enables situational awareness for early entry and initial phases of Joint operations. The T2C2 Variant 2 supports the small command post in phases three through five of Joint operations.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*	PROJECT 456: *MILSATCOM System Engineering*

FY 2014 funds support efforts in the area of both Wideband/Commercial and Protected Communications related efforts.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Protected Advanced EHF (AEHF) Communications System Engineering	1.870	2.075	2.075
Articles:	0	0	
Description: Protected Advanced EHF (AEHF) Communications System Engineering ***FY 2012 Accomplishments:*** Protected Advanced EHF (AEHF) Communications System Engineering ***FY 2013 Plans:*** Protected Advanced EHF (AEHF) Communications System Engineering ***FY 2014 Plans:*** Protected Advanced EHF (AEHF) Communications System Engineering			
Title: Wideband Global SATCOM (WGS) Communications System Engineering	1.650	1.901	1.725
Articles:	0	0	
Description: Wideband Global SATCOM (WGS) Communications System Engineering ***FY 2012 Accomplishments:*** Wideband Global SATCOM (WGS) Communications System Engineering and Intelligence, Surveillance, Reconnaissance (ISR) Migration ***FY 2013 Plans:*** Wideband Global SATCOM (WGS) Communications System Engineering and Intelligence, Surveillance, Reconnaissance (ISR) Migration ***FY 2014 Plans:*** Wideband Global SATCOM (WGS) Communications System Engineering to improve Ku/Ka antenna SWAP			
Title: Experimentation, development, testing and certification of critical SATCOM and Satellite-On-The-Move (SOTM) communication and network technologies.	1.438	1.538	2.553
Articles:	0	0	
Description: Experimentation, development, testing and certification of critical SATCOM and SOTM communication and network technologies.			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Experimentation, development, testing and certification of critical SATCOM and SOTM communication and network technologies. ***FY 2013 Plans:*** Experimentation, development, testing and certification of critical SATCOM and SOTM communication and network technologies. ***FY 2014 Plans:*** Experimentation, development, testing and certification of critical SATCOM and SOTM communication and network technologies.			
Title: Federal Communications Commission/ International Telecommunciations Union (FCC/ITU) Satellite Communications On the Move (SOTM) Regulatory Proposals/Analyses/Modifications ***Articles:*** ***Description:*** Federal Communications Commission/ International Telecommunciations Union (FCC/ITU) SOTM Regulatory Proposals/Analyses/Modifications ***FY 2012 Accomplishments:*** Federal Communications Commission/ International Telecommunciations Union (FCC/ITU) SOTM Regulatory Proposals/ Analyses/Modifications ***FY 2013 Plans:*** Federal Communications Commission/ International Telecommunciations Union (FCC/ITU) SOTM Regulatory Proposals/ Analyses/Modifications ***FY 2014 Plans:*** Federal Communications Commission/ International Telecommunciations Union (FCC/ITU) SOTM Regulatory Proposals/ Analyses/Modifications	0.700 0	0.605 0	0.600
Title: Protected Terminal COTM and Wide Area Network (WAN) Prototyping ***Articles:*** ***Description:*** Protected Wide Area Network (WAN) and Terminal Prototyping ***FY 2012 Accomplishments:*** Protected Terminal COTM and Wide Area Network (WAN) Prototyping ***FY 2013 Plans:*** Protected Terminal COTM and Wide Area Network (WAN) Prototyping ***FY 2014 Plans:***	0.500 0	0.425 0	1.475

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Protected Terminal COTM and Wide Area Network (WAN) Prototyping			
Title: Transportable Tactical Command Communications (T2C2) ***Articles:*** ***Description:*** T2C2 Development: Achieve Materiel Development Decision (MDD), Conduct Analysis of Alternatives (AoA), Preparation for Milestone C, procure Low Rate Initial Production (LRIP), conduct Initial Operational Testing and Evaluation (IOT&E), Support Full Rate Production Decision ***FY 2013 Plans:*** T2C2 Development: Achieve Material Development Decision (MDD), Conduct Analysis of Alternatives (AoA), Preparation for Milestone C, Support Full Rate Production Decision ***FY 2014 Plans:*** T2C2: Preparation for Milestone C, procure Low Rate Initial Production (LRIP), conduct Initial Operational Testing and Evaluation (IOT&E), Support Full Rate Production Decision	0.000	3.482 0	4.210
Accomplishments/Planned Programs Subtotals	6.158	10.026	12.638

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

This project funds advanced systems engineering, research, development, test and evaluation of new and emerging technologies to optimize terminal performance and communications control. Once the technologies are mature and deemed feasible, funding and management responsibility for implementation of the technology will transition to Army PORs.

The funds provided for T2C2 will be used to conduct an Analysis of Alternatives (AoA),and produce documentation in support of Milestone C decision.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*	PROJECT 456: *MILSATCOM System Engineering*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Oversight	MIPR	PM WIN T:PEO C3T	1.514	0.400		0.500		0.500		-		0.500	Continuing	Continuing	Continuing
Advanced Architecture/ Advanced Wideband System Architecture	MIPR	MIT Lincoln Labs:Lexington , MA	11.474	-		-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	12.988	0.400		0.500		0.500		0.000		0.500			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Protected Advanced EHF and WGS Communications Syststem Engineering	TBD	PEO C3T PM WIN-T:Various	24.820	0.900		1.100		1.050		-		1.050	Continuing	Continuing	Continuing
Experimentation, development , testing & certification of SATCOM & SOTM communciation & networking.	MIPR	PM WIN-T:Various	21.251	0.800		1.150		1.438		-		1.438	Continuing	Continuing	Continuing
FCC/ITU SOTM Regulatory Proposals/ Analyses/Modifications	MIPR	John Hopkins Universtiy Applied Physics Lab:Laurel, MD	0.800	0.650		0.605		0.600		-		0.600	Continuing	Continuing	Continuing
Protected COTM Tactical Reference Terminal Prototyping and Protected Wide Area Network Prototyping	TBD	PEO C3T PM WIN-T:Various	19.200	0.250		0.300		1.000		-		1.000	Continuing	Continuing	Continuing
Purchase of prototype hardware and engineering studies	C/CR	PEO C3T:PM WIN-T	0.000	-		1.200		-		-		-	Continuing	Continuing	Continuing
T2C2 Development Analysis of AoA activity associated with the	TBD	PEO C3T:PM WIN-T	0.000	-		0.750		-		-		-	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army			DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
evaluation and award of T2C2 contract															
Includes conducting market research on T2C2 candidate technologies	TBD	PEO C3T:PM WIN-T	0.000	-		0.100		0.250		-		0.250	0.000	0.350	0.100
T2C2 preparation of Milestone C Documentation	TBD	PEO C3T:PM WIN T	0.000	-		-		1.700		-		1.700	0.000	1.700	0.000
		Subtotal	66.071	2.600		5.205		6.038		0.000		6.038			

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering (In House)	MIPR	PEO C3T PM WIN T:Core, Matrix	22.990	1.048		1.250		1.900		-		1.900	Continuing	Continuing	Continuing
Engineering Contractors Support	C/CPFF	PEO C3T PM WIN-T:Linquest, Janus, Booze Allen Hamilton	37.035	0.600		0.700		0.600		-		0.600	Continuing	Continuing	Continuing
System Architecture & Analysis	Various	CERDEC:PM WIN T	16.663	0.530		0.143		0.165		-		0.165	Continuing	Continuing	Continuing
T2C2 preparation for Milestone C; Request for Proposal and solcitation preparation	TBD	PEO C3T PM WIN T:Various	0.000	-		0.400		0.300		-		0.300	Continuing	Continuing	Continuing
		Subtotal	76.688	2.178		2.493		2.965		0.000		2.965			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*	PROJECT 456: *MILSATCOM System Engineering*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Terminal Testing and Evaluation System Engineering	FFRDC	PEO C3T WIN T:MITRE	1.554	0.150		0.500		0.300		-		0.300	Continuing	Continuing	Continuing
Test Support	MIPR	MATRIX:PM WIN T	21.382	0.380		0.396		0.375		-		0.375	Continuing	Continuing	Continuing
Testing, Certification	MIPR	CERDEC Support Technical Testing:PM WIN T	5.300	0.450		0.400		0.500		-		0.500	Continuing	Continuing	Continuing
Test support to study the feasibility of moving small terminal activity from COMSATCOMO to MILSATCOM	C/CR	PEO C3T:PM WIN-T	0.000	-		0.532		-		-		-	Continuing	Continuing	Continuing
T2C2 complete Intitial Operational Test and Evaluation	TBD	PEO C3T:PM WIN-T	0.000	-		-		1.960		-		1.960	0.000	1.960	0.000
		Subtotal	28.236	0.980		1.828		3.135		0.000		3.135			

	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	183.983	6.158		10.026		12.638		0.000		12.638			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0303142A: *SATCOM Ground Environment (SPACE)*	PROJECT 456: *MILSATCOM System Engineering*

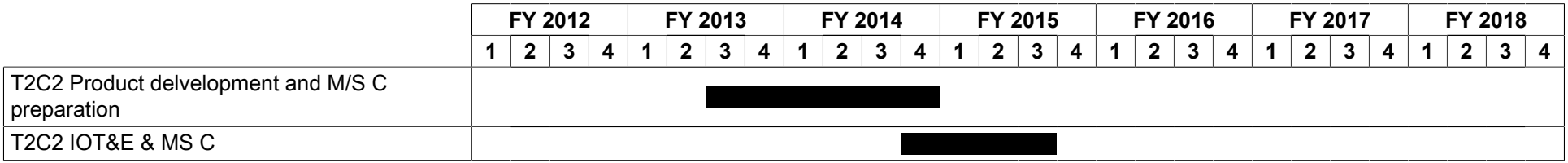

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: *Research, Development, Test & Evaluation, Army* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0303142A: *SATCOM Ground Environment (SPACE)*	**PROJECT** 456: *MILSATCOM System Engineering*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
T2C2 Product delvelopment and M/S C preparation	3	2013	4	2014
T2C2 IOT&E & MS C	4	2014	3	2015