

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2008

BUDGET ACTIVITY		PE NUMBER AND TITLE							
7 - Operational system development		0303142A - SATCOM Ground Environment (SPACE)							
COST (In Thousands)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	31790	107092	106327	131771	69560	104167	121437	Continuing	Continuing
253 DSCS-DCS (PHASE II)	11742	7799	7885	7197	6614	8542	8737	Continuing	Continuing
384 SMART-T	5397								25866
456 MILSATCOM SYSTEM ENGINEERING	7322	26592	16214	8478	8800	8030	8061	Continuing	Continuing
562 MBAND INT SAT TERM MIST	7329	72701	82228	116096	33791	23079	24518	Continuing	Continuing
563 HC3 BLOCK 2 TSAT DEVELOPMENT					20355	64516	80121		164992

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 National Security Agency, the Office of the Secretary of Defense, and other governmental, non-DoD users. The worldwide MILSATCOM systems are: Ultra High Frequency (UHF) Follow-On Satellite System; Air Force Satellite (FLTSAT/AFSAT) system; the Mobile User Objective System (MUOS); the Super High Frequency (SHF) Defense Satellite Communications System (DSCS); the Wideband Gapfiller System (WGS), the Extremely High Frequency (EHF) and Advanced Extremely High Frequency (AEHF) Mission Planning Element (AMPE); the Joint SATCOM Planning and Tools; and the Transformation Communication System (TCS), all of these systems are required to support legacy, interim and emerging communication space architectures and Objective Force requirements. The Army is responsible for developing and procuring satellite terminals, satellite control subsystems, communication subsystems, and all related equipment. This responsibility also includes maintaining the life cycle logistics support required to achieve end-to-end connectivity and interoperability, satisfying JCS Command, Control, Communications and Intelligence (C3I) 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.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2008

BUDGET ACTIVITY	PE NUMBER AND TITLE		
7 - Operational system development	0303142A - SATCOM Ground Environment (SPACE)		
<u>B. Program Change Summary</u>	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008/2009)	32420	107849	106999
Current BES/President's Budget (FY 2009)	31790	107092	106327
Total Adjustments	-630	-757	-672
Congressional Program Reductions		-757	
Congressional Rescissions			
Congressional Increases			
Reprogrammings	224		
SBIR/STTR Transfer	-854		
Adjustments to Budget Years			-672

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0303142A - SATCOM Ground Environment (SPACE)						PROJECT 253	
COST (In Thousands)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
253 DSCS-DCS (PHASE II)	11742	7799	7885	7197	6614	8542	8737	Continuing	Continuing

A. Mission Description and Budget Item Justification: This project provides funds to develop strategic and tactical Ground Subsystem equipment in support of Joint Chiefs of Staff (JCS) validated Command, Control, Communications and Intelligence (C3I) requirements for the worldwide Defense Enterprise Wideband SATCOM Systems. It is composed of the Super High Frequency (SHF) Defense Satellite Communications System (DSCS) and Wideband Global SATCOM (WGS) SATCOM programs. Continuing upgrades for the DSCS and WGS are vital to support the emerging power projection and rapid deployment role of the Armed Forces. DSCS and WGS provide warfighters multiple channels of tactical connectivity as well as interfaces with strategic networks and national decision-makers.

<u>Accomplishments/Planned Program:</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Continue the development of the DSCS Integrated Management System (DIMS) Interface Software program	4307	4228	4035
Continue the development of the Common Network Planning Software (CNPS) program	3760	262	
Netcentric Systems Engineering	1319	1100	1565
Continue SATCOM Engineering Lab (SEL), PM Admin, and Systems Engineering Technical Assistance (SETA) efforts	2356	2015	2285
Small Business Innovative Research/Small Business Technology Transfer Programs (SBIR/STTR)		194	
Total	11742	7799	7885

<u>B. Other Program Funding Summary</u>	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
DSCS Other Procurement Army	72092	124525	88286	164646	130061	127065	129574	Continuing	Continuing

Comment:

C. Acquisition Strategy The DSCS Integrated Management System (DIMS) and Common Network Planning Software (CNPS) are software programs. DIMS provides the capability to electronically disseminate network plans to the monitoring and controlling DSCS Operations Control System (DOCS) subsystems, and retrieve and display subsystem monitoring data. It also provides a comprehensive view of network operations at Wideband Operations Centers and DISA management sites. CNPS will plan strategic and Ground Mobile Forces (GMF) satellite communication networks for DSCS, Wideband Global SATCOM, and commercial satellites. DIMS and CNPS will be installed at Wideband Operations Centers and DISA Management Sites at worldwide locations. PM DCATS will employ Netcentric Systems Engineering to develop the technology for new ground segment equipments which will include paper studies, risk mitigation, system integration and advanced demonstrations for Netcentric Baseband and Policy Based Control to accomodate a multi-cast environment, technology insertion, data sharing, remote operations, architecture efforts and use of commercial technology to conform to Department of

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0303142A - SATCOM Ground Environment (SPACE)

PROJECT

253

Defense (DoD) requirements.

ARMY RDT&E COST ANALYSIS (R3)

February 2008

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
7 - Operational system development			0303142A - SATCOM Ground Environment (SPACE)							253		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
DIMS Software	C / CPFF	JHU/APL, Laurel, MD	29540	3840	1-2Q	3803	1-2Q	3545	1-2Q	Cont.	Cont.	Cont.
CNPS	C / FFP	Northrop Grumman, Winter Park, FL	28221	2906	2Q					Cont.	Cont.	Cont.
MET	S/CPFF	Hypres, Elmsford, NY	1069								1069	
Subtotal:			58830	6746		3803		3545		Cont.	Cont.	Cont.

Remarks: JHU/APL - John Hopkins University/Applied Physics Laboratory

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Matrix Support	MIPR	Fort Monmouth, NJ	6071	1074	1-2Q	409	1-2Q	640	1-2Q	Cont.	Cont.	Cont.
SETA Support	C / CPFF	Fort Monmouth, NJ	2844	499	1-2Q	318	1-2Q	110	1-2Q	Cont.	Cont.	Cont.
Engineering Support	C / CPFF	Fort Monmouth, NJ	1760	1319	1-2Q	1100	1-2Q	1565	1-2Q	Cont.	Cont.	Cont.
Core Support	Various	Fort Monmouth, NJ	3358	675	1-4Q	675	1-4Q	700	1-4Q	Cont.	Cont.	Cont.
Subtotal:			14033	3567		2502		3015		Cont.	Cont.	Cont.

III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
JSEC	MIPR	Fort Monmouth, NJ	7237	718	2Q	700	2Q	700	2Q	Cont.	Cont.	Cont.
Subtotal:			7237	718		700		700		Cont.	Cont.	Cont.

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract

ARMY RDT&E COST ANALYSIS (R3)

February 2008

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
7 - Operational system development			0303142A - SATCOM Ground Environment (SPACE)							253		
	Type				Date		Date		Date			Contract
PM Admin	Various	Fort Monmouth, NJ	4784	711	1-4Q	600	1-4Q	625	1-4Q	Cont.	Cont.	Cont.
SBIR/STTR					1-4Q	194					194	
Subtotal:			4784	711		794		625		Cont.	Cont.	Cont.
Project Total Cost:			84884	11742		7799		7885		Cont.	Cont.	Cont.

Schedule Profile (R4 Exhibit)

February 2008

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0303142A - SATCOM Ground Environment (SPACE)

PROJECT
253

Event Name	FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13			
	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
CNPS Testing V2.0	V2.0																											
(1) CNPS Materiel Release V2.0							▲ 1																					
(2) DIMS Materiel Release V5.1	▲ 2																											
DIMS Testing V5.2							V5.2																					
(3) DIMS Materiel Release V5.2								▲ 3																				
DIMS Testing V6.0											V6.0																	
(4) DIMS Materiel Release V 6.0												▲ 4																
Netcentric System Engineering, Conduct System Engineering Studies/Analysis																												
Advanced Demonstrations for Baseband and Policy Based Control																												

Schedule Detail (R4a Exhibit)

February 2008

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0303142A - SATCOM Ground Environment (SPACE)					PROJECT 253	
<u>Schedule Detail</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	
CNPS Testing V1.0								
CNPS Training Release V1.0								
CNPS Testing V2.0	1Q - 4Q	1Q - 2Q						
CNPS Materiel Release V2.0		3Q						
DIMS System Testing V5.1								
DIMS Materiel Release V5.1	1Q							
DIMS Testing V5.2		2Q - 3Q						
DIMS Materiel Release V5.2		4Q						
DIMS Testing V6.0			3Q - 4Q					
DIMS Materiel Release V 6.0			4Q					
Netcentric System Engineering	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Conduct System Engineering Studies/Analysis	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Advanced Demonstrations for Baseband and Policy Based Control				2Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0303142A - SATCOM Ground Environment (SPACE)						PROJECT 456	
COST (In Thousands)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
456 MILSATCOM SYSTEM ENGINEERING	7322	26592	16214	8478	8800	8030	8061	Continuing	Continuing

A. Mission Description and Budget Item Justification: MILSATCOM System Engineering provides centralized funding for advanced systems engineering, product support and analysis, and experimentation of new and emerging communication / network architectures and technologies. It also supports the end to end system engineering and technology assessment efforts associated with the integration of network systems (WIN-T) with the SATCOM Roadmap in support of Transformational Communications for Army Land WarNet and the Joint Warfighter. Supporting documentation and requirements are SATCOM CRD, GIG CRD, TSAT CDD/ICDs/TRDs, WIN-T, AEHF, MUOS and WGS ORDs/CDDs. In addition FY09 funds the continued development of Soldier Network Extension (SNE) which reduces both projected SATCOM On The Move (SOTM) antenna and Inertial Navigation Unit (INU) costs.

Accomplishments/Planned Program:	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Conduct various developmental efforts or analysis and trades to protect Army interests and enhanced system/network capability and joint interoperability in support of Transformational Communications and Joint Interoperability	2178	2897	2966
System Engineering in support of technology assessment and transision for WIN-T network / communication systems	1075	1389	1361
Experimentation and prototyping of critical communication and network technologies	2004	2640	2559
AEHF, WGS, TC, MUOS System Engineering in support of network system / terminal acquisition and joint interoperability	2065	2375	2328
Soldier Network Extension (SNE) SATCOM Terminal development in support of WIN-T Increment 2 Communications Network		16564	7000
Small Business Innovative Research/Small Business Technology Transfer Programs		727	
Total	7322	26592	16214

B. Other Program Funding Summary	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
373142/562 MIST/HC3 (RDTE)	7329	72701	82228	116096	33791	23079	24518	Continuing	Continuing

Comment:

C. 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.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

7 - Operational system development

0303142A - SATCOM Ground Environment (SPACE)

456

ARMY RDT&E COST ANALYSIS (R3)

February 2008

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
7 - Operational system development			0303142A - SATCOM Ground Environment (SPACE)							456		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Terminal Upgrades	TBD	TBS	1524			17300	2Q	7000	2Q		25824	
Advanced Wideband/TCS	Various	Various	19351								19351	
Subtotal:			20875			17300		7000			45175	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Engineering (In-House)	MIPR	Various	13445	1181	2Q	1238	2Q	1300	2Q	Cont.	Cont.	
Engineering (Contract)	Various	Various	17099	2080	2Q	3669	2Q	3282	2Q	Cont.	Cont.	
System Architecture & Analysis	Various	MIT Lincoln Labs, Lexington, MA; MITRE	10033	1500	2Q					Cont.	Cont.	
Subtotal:			40577	4761		4907		4582		Cont.	Cont.	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Test Support	MIPR	MIT Lincoln Labs, Lexington, MA	4469	578	2Q	763		942		Cont.	Cont.	Cont.
Test Support	Various	Various	10099	1039	1Q	1334		1240		Cont.	Cont.	Cont.
Subtotal:			14568	1617		2097		2182		Cont.	Cont.	Cont.
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract

ARMY RDT&E COST ANALYSIS (R3)

February 2008

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
7 - Operational system development			0303142A - SATCOM Ground Environment (SPACE)							456		
Advanced Architecture	MIPR	MIT Lincoln Labs Lexington, MA	7140	434	2Q	667		750		Cont.	Cont.	
Advanced Wideband System Architecture	MIPR	Various	3560	510	2Q	1621		1700		Cont.	Cont.	
Subtotal:			10700	944		2288		2450		Cont.	Cont.	
Project Total Cost:			86720	7322		26592		16214		Cont.	Cont.	Cont.

Schedule Profile (R4 Exhibit)

February 2008

Event Name	FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13							
	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				
	BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0303142A - SATCOM Ground Environment (SPACE)																												PROJECT 456		
Transformational Communication Architecture (TCA)	[Redacted]																															
AEHF, AMPE, WGS, Ka band Sys Eng and Analysis	[Redacted]																															
Advanced Component Experimentation/Prototyping	[Redacted]																															
Joint Interoperability Test	[Redacted]																															
Technology Assessment	[Redacted]																															
Soldier Network Extension SATCOM Terminal development	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]											

Schedule Detail (R4a Exhibit)

February 2008

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0303142A - SATCOM Ground Environment (SPACE)					PROJECT 456	
<u>Schedule Detail</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	
Transformational Communication Architecture (TCA)	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
AEHF, AMPE, WGS, Ka band Sys Eng and Analysis	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Advanced Component Experimentation/Prototyping	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Joint Interoperability Test	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Technology Assessment	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Soldier Network Extension SATCOM Terminal development		1Q - 4Q	1Q - 4Q					
AEHF System Engineering and Analysis	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Wideband Gapfiller and Ka Band System Engineering	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Advanced Component Experimentation / prototyping	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Technology Assessment /MUOS	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Joint Interoperability Tests	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Support AEHF AEST 8000 (System Test)			1Q - 4Q					
Transformational Communication Architecture (TCA)	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
Conduct Transformational Communication (TC) System Engineering Studies/Analysis	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	
TC Technical Requirement Document / Interface Control Document Development	1Q - 4Q	1Q - 4Q						
TC Design Review SDR / PDR / CDR	1Q - 4Q	1Q - 4Q	1Q					

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0303142A - SATCOM Ground Environment (SPACE)						PROJECT 562	
COST (In Thousands)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
562 MBAND INT SAT TERM MIST	7329	72701	82228	116096	33791	23079	24518	Continuing	Continuing

A. Mission Description and Budget Item Justification: Multi-band Integrated Satellite Terminal (MIST) funds will develop the high capacity communications capability (HC3).

The HC3 will provide high data rate communications capabilities that will be pervasively integrated into the Army's Future Modular Force communication architecture, as well as other Service and Joint communication architectures. HC3 will break traditional terminal architecture paradigms by developing a modular, open systems architecture that supports hardware and software module reuse across HC3 platforms, as well as other Joint Service applications. HC3 will be a family of tactical Multi-band, modular, communications terminals that will provide inter-network and reach back communications services across the Army's Future Modular Force tactical networks.

HC3 will develop a high capacity, multi-band, protected Communications-At-The-Halt (CATH) satellite solution to replace end-of-life multi-band tactical terminals in the 2020 timeframe. These HC3 capabilities satisfy Army high capacity protected communication requirements. The HC3 program will also develop the greatly enhanced Transformational Satellite (TSAT) capability that will be an upgrade to the Warfighter Information Network-Tactical (WIN-T). WIN-T will leverage TSAT capabilities as a technology insertion program, as part of WIN-T Increment 4. HC3 will be developing the Transformational Communications Architecture (TCA) technology insertion in the JC4ISR radio for both WIN-T Comm-at-the Halt and Comm-at-the Move. This upgrade will provide higher capacity, as well as low, near zero, probability of detection, interception (LPD/LPI), anti-jam (AJ), anti-scintillation, and exploitation capabilities.

As a result of recent Department of Defense (DoD) initiatives to reduce technical, cost, and schedule risk in large development programs, the HC3 program has been restructured. The restructured program will be initiated at Milestone A, (Technology Development) in FY11 and will be implemented with 2 competing contractors each building prototypes. Various risk mitigation studies and analyses will be executed in FY08 and FY09 with tri-service participation in order to further lower risk prior to MS A.

FY09 funds will continue the risk reduction studies and analyses, as well as support the detailed studies and analyses of the requirements process.

Accomplishments/Planned Program:	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
High capacity communications capability studies/efforts that include Waveform porting issues and high speed/capacity Cryptographic development	4284	7913	12889
Antenna/RF and Modem Analysis and risk mitigation efforts	3045	9444	15036
HC3 requirements process/analysis		3550	7075
Small Business Innovative Research/Small Business Technology Transfer Program		2034	
Allowance for Omnibus Reprogramming/ BES Adjust		49760	47228
Total	7329	72701	82228

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2008

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0303142A - SATCOM Ground Environment (SPACE)

PROJECT

562

B. Other Program Funding Summary Not applicable for this item.

C. Acquisition Strategy A competitive Communications-At-The-Halt (CATH) high capacity communications capability Technology Development (TD) contract will be awarded in FY11 which will have 2 competing contractors, each developing prototypes. Proceeding the TD phase, studies and analyses will be performed to further reduce technical, cost and schedule risk. The subsequent CATH SDD phase may also have competing contractors, dependent on analyses of the benefits to be obtained.

ARMY RDT&E COST ANALYSIS (R3)

February 2008

BUDGET ACTIVITY			PE NUMBER AND TITLE							PROJECT		
7 - Operational system development			0303142A - SATCOM Ground Environment (SPACE)							562		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
System Development	MIPR	MIT Lincoln Labs, Lexington MA	6588	112	1Q	4250	1Q	8326	1-2Q	Cont.	Cont.	
Pre-SDD Study Contracts	T&M	Raytheon, Marlborough, Mass and Boeing, Anaheim, Ca.	8075								8075	
Government Engineering Support	Various	PM WIN-T, Fort Monmouth, NJ	4499	1722	1-2Q	2610	1-2Q	2849	1-2Q	Cont.	Cont.	
Risk Mitigation Efforts/Other Contracts	Various	Various	11374	1633	1-2Q	5014	1-2Q	11550		Cont.	Cont.	
Engineering Services	Various	Various		343	1-2Q	650	1-2Q	1050	1-2Q		2043	
Subtotal:			30536	3810		12524		23775		Cont.	Cont.	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Engineering Services	N/A	Fort Monmouth, NJ	3601	1550	1-2Q	1953	1-2Q	2181	1-2Q	Cont.	Cont.	
Requirement Services/Studies	Various	Various		406	1-2Q	3101	2Q	5300	1Q	Cont.	Cont.	
Subtotal:			3601	1956		5054		7481		Cont.	Cont.	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Engineering (In-House)	N/A	PM WIN-T, Fort Monmouth, NJ	230	34	1-2Q	514	1-2Q	541	1-2Q	Cont.	Cont.	
Subtotal:			230	34		514		541		Cont.	Cont.	

ARMY RDT&E COST ANALYSIS (R3)

February 2008

BUDGET ACTIVITY 7 - Operational system development	PE NUMBER AND TITLE 0303142A - SATCOM Ground Environment (SPACE)	PROJECT 562
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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Government Support	N/A	PM WIN-T, Fort Monmouth, NJ	2349	1318	1-2Q	2815	1-2Q	3203	1-2Q	Cont.	Cont.	
SBIR/STTR				211	1Q	2034					2245	
Provision for Omnibus Reprogramming/BES adjustment	N/A	N/A				49760	3Q	47228	1Q	Cont.	Cont.	
Subtotal:			2349	1529		54609		50431		Cont.	Cont.	
Project Total Cost:			36716	7329		72701		82228		Cont.	Cont.	

Schedule Profile (R4 Exhibit)

February 2008

BUDGET ACTIVITY
7 - Operational system development

PE NUMBER AND TITLE
0303142A - SATCOM Ground Environment (SPACE)

PROJECT
562

Event Name	FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13			
	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
Pre-Milestone A Activities/Risk Mitigation																												
High Capacity Communications Capability Studies																												
(1) CATH RFP Release																												
SSEB																												
(2) MS A- CATH																												
(3) TD Contract Award (CATH-Competitive Protos)																												
Technology Development Contract																												

Schedule Detail (R4a Exhibit)

February 2008

BUDGET ACTIVITY 7 - Operational system development		PE NUMBER AND TITLE 0303142A - SATCOM Ground Environment (SPACE)					PROJECT 562	
<u>Schedule Detail</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	
Pre-Milestone A Activities/Risk Mitigation	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 3Q				
High Capacity Communications Capability Studies	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 3Q				
CATH RFP Release				3Q				
SSEB				4Q	1Q			
MS A- CATH					1Q			
TD Contract Award (CATH-Competitive Protos)					1Q			
Technology Development Contract					1Q - 4Q	1Q - 4Q	1Q - 4Q	
MS B-CATH								
SDD Contract Award						3Q - 4Q	1Q - 4Q	