

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2007

BUDGET ACTIVITY		PE NUMBER AND TITLE							PROJECT	
4 - Advanced Component Development and Prototypes		0603850A - Integrated Broadcast Service (JMIP/DISTP)							472	
COST (In Thousands)	FY 2006 Actual	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
472	INTEGRATED BROADCAST SERVICE (JMIP/DISTP)	2723	1123	38213	11238	1500	1000			55797

A. Mission Description and Budget Item Justification: The Joint Tactical Terminal (JTT) Product Management Office (PMO) supports all Joint services and Special Operations Command (SOCOM). The Integrated Broadcast Service (IBS) is the worldwide Department of Defense (DoD) standard network for transmitting tactical and strategic intelligence and targeting data to all echelons of Joint Service operational users. The JTT PMO_s role is to consolidate and replace existing IBS terminal functionality and capability with a "common family" of Integrated Broadcast Service-Modules (CIBS-M) - both hardware and software - and to expedite execution of the IBS Technical Transition Plan (TTP). The JTT family of systems currently consists of the JTT-Senior, JTT-Briefcase, JTT-IBS and ENTR CIBS-M IBS broadcast receiver/transceiver devices. The TTP is a comprehensive refresh effort of the entire IBS network focused on rearchitecting the broadcast from its current multi-broadcast, multi-data format structure, to a single broadcast (Common Interactive Broadcast - CIB) and single data format (Common Message Format - CMF). The JTT/CIBS-M family of systems is a critical component of the TTP as these systems are the only IBS receiver/transceiver devices in the DoD being modernized to support both the new consolidated broadcast architecture and the National Security Agencies (NSA) crypto modernization mandate. Failure to upgrade the JTT family of systems would result in an inability to execute the over-the-air broadcast portion of the TTP in the near term, and ultimately lead to a complete cessation of IBS data flow via the existing over-the-air IBS broadcast networks. The JTT program leverages early tech-based efforts initiated by organizations such as the National Reconnaissance Office (NRO) for the ENTR CIBS-M. Management control for JTT/CIBS-M efforts that contribute to increased value in performance or sustainment will transition to the JTT PMO. These capabilities will be integrated into the JTT/CIBS-M family of hardware and software modules. The JTT/CIBS-M family of modules will be the "sole" IBS provider, ensuring continued IBS interoperability to a variety of tactical receivers across DoD and the services throughout the TTP implementation period and beyond. This program funds the design, development, test and evaluation of JTT/CIBS-M hardware and software modules, as well as implementing performance enhancements to the family of JTT equipment. This is necessary to ensure crypto modernization compliance and to facilitate migration to a rearchitected CIB and CMF-based IBS broadcast structure. Funds also support JTT/CIBS-M training, equipping and supporting the Warfighter with improved Joint Readiness and Interoperability.

FY08 Funds support the development of the Common Interactive Broadcast (CIB) waveform for migration to the IBS Worldwide standard DoD Network. Development for JTT Sr upgrade kit (COMSEC and SBC). Development of objective ENTR.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Develop and test modules for Software Communications Architecture (SCA) compliant legacy waveforms for JTRS.	200			
Develop Integrated Broadcast Service (IBS) Common Message Format (CMF) to support migration to the IBS Worldwide standard DOD Network.	2523	1123		
Sierra Chip COMSEC Algorithms Integration (NRE)			5213	738
COMSEC Refresh JTT Sr (NRE-CDR)			7000	1500
Objective ENTR Development			10000	2000

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JTT Sr CIB Network Refresh Devel & Integration			2500	2500
JTT IBS CIB Network Refresh Devel & Integration			2500	2500
SBC NRE Redesign (JTT Sr)			11000	2000
Total	2723	1123	38213	11238

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<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2007)	2723	1135		
Current BES/President's Budget (FY 2008/2009)	2723	1123	38213	11238
Total Adjustments		-12	38213	11238
Congressional Program Reductions		-12		
Congressional Rescissions				
Congressional Increases				
Reprogrammings				
SBIR/STTR Transfer				
Adjustments to Budget Years			38213	11238

Change Summary Explanation: Funding - FY 2007: Funds support testing of the Integrated Broadcast Service (IBS) Common Message Format (CMF) to support migration to the IBS Worldwide standard DoD Network. Funding - FY 2008/09: Funds support the development of the Common Interactive Broadcast (CIB) waveform for migration to the IBS Worldwide standard DoD Network. Development for JTT Sr upgrade kit (COMSEC and SBC). Development of objective ENTR.

<u>C. Other Program Funding Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
V29600 Other Procurement, Army - JTT/CIBS-M (Tiara),	9862	981	3560	8632	2900	1430			Continuing	27365

Comment:

D. Acquisition Strategy Modifications for the design, development and delivery to JTRS JPO of JTRS SCA compliant legacy IBS waveforms has been awarded to Boeing under an existing Air Force contract, to complete ongoing work funded by USAF Airborne Intelligence System Program Office. The CMF development has been awarded to the JTT Original Equipment Manufacturer (OEM). As the broadcast networks continue to evolve and modify their formats and protocols, the JTT program will support IBS and various existing and future radios and host systems. Funds support the development of the Common Interactive Broadcast (CIB) waveform for migration to the IBS Worldwide standard DoD Network. Development for JTT Sr upgrade kit (COMSEC and SBC). Development of objective ENTR.

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
4 - Advanced Component Development and Prototypes			0603850A - Integrated Broadcast Service (JMIP/DISTP)									472		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
JTRS SCA/IBS Modules	MIPR	Air Force/Boeing	3981	200									4181	4181
Common Message Format	T&M	Raytheon, St. Petersburg, FL	2223	2123	1-4Q								4346	4346
Common Interactive Broadcast Sr	CP/FF	Raytheon, St. Petersburg, FL						2500	1-2Q	2500	1-2Q		5000	5000
Common Interactive Broadcast IBS	CP/FF	DRS, Dayton, OH						2500	1-2Q	2500	1-2Q		5000	5000
COMSEC Refresh JTT Sr	CP/FF	Raytheon, St. Petersburg, FL						7000	1-2Q	1500	1-2Q		8500	8500
Sierra Chip COMSEC Algorithms Integration	MIPR	NRO/L3 West, San Diego, CA						5213	1-2Q	738	1-2Q		5951	5836
SBC NRE Redesign JTT Sr	CP/FF	Raytheon, St. Petersburg, FL						11000	1-2Q	2000	1-2Q		13000	13000
Objective ENTR Development	MIPR	NRO/L3 West, San Diego, CA						10000	1-2Q	2000	1-2Q		12000	12000
Subtotal:			6204	2323				38213		11238			57978	57863
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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	CECOM/RDCOM, Ft. Monmouth, NJ	960		1Q	205	1Q						1165	
Subtotal:			960			205							1165	
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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

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IOT&E support	MIPR	Various	1402				242	1Q							1644	
JITC DAMA Certification of JTT	MIPR	JITC	400				231	1Q							631	
Certification of CMF	MIPR	Various		200	4Q		250	1Q							450	
JTEL Certification of SCA	MIPR	SPAWAR, CA	200												200	
Subtotal:			2002	200			723								2925	

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	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
Program Management	In House	PM JTT, Ft. Monmouth, NJ	982	200	1Q	195	1Q							
Subtotal:			982	200		195								

Project Total Cost:	10148	2723		1123		38213		11238					62068	57863
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Schedule Profile (R4 Exhibit)

February 2007

BUDGET ACTIVITY	PE NUMBER AND TITLE																PROJECT																											
4 - Advanced Component Development and Prototypes	0603850A - Integrated Broadcast Service (JMIP/DISTP)																472																											
Event Name	FY 06				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	1	2	3	4												
(1) Delivery for JTEL Certification of SCA Modules																																												
CMF Development																																												
(2) Certification of CMF																																												
(3) CMF testing for migration to Objective IBS																																												
CIB Development Sr																																												
CIB Development IBS																																												
SBC NRE Redesign Sr																																												
Objective ENTR Development																																												
Sierra Chip Comsec Algorithms Integration (NRE)																																												
COMSEC Refresh JTT Sr																																												

Schedule Detail (R4a Exhibit)

February 2007

BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes		PE NUMBER AND TITLE 0603850A - Integrated Broadcast Service (JMIP/DISTP)					PROJECT 472		
<u>Schedule Detail</u>	<u>FY 2006</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>	
JTRS SCA Compliant Legacy Waveforms									
Delivery for JTEL Certification of SCA Modules	2Q								
CMF Development	1Q - 4Q	1Q - 3Q							
Certification of CMF		2Q							
CMF testing for migration to Objective IBS		3Q							
CIB Development Sr			1Q - 4Q	1Q - 4Q	1Q - 4Q				
CIB Development IBS			1Q - 4Q	1Q - 4Q	1Q - 4Q				
SBC NRE Redesign Sr			1Q - 4Q	1Q - 4Q	1Q - 2Q				
Objective ENTR Development			1Q - 4Q	1Q - 4Q	1Q				
Sierra Chip Comsec Algorithms Integration (NRE)			1Q - 4Q	1Q - 4Q	1Q				
COMSEC Refresh JTT Sr			1Q - 4Q	1Q - 4Q	1Q - 2Q				