

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force	Date: March 2014
--	-------------------------

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>					R-1 Program Element (Number/Name) PE 0603850F / <i>Integrated Broadcast Service - Dem/Val</i>							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	18.216	-	-	-	-	-	-	-	-	-	18.216
644778: <i>Integrated Broadcast Service</i>	-	18.216	-	-	-	-	-	-	-	-	-	18.216
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

Note

A. Mission Description and Budget Item Justification

The Integrated Broadcast Service (IBS) fulfills the warfighter's requirements for worldwide threat warning and situational awareness information with timely production and simultaneous dissemination of Intelligence, Surveillance, and Reconnaissance (ISR) derived combat information. It also provides target tracking data to support threat avoidance, targeting, force protection, and situational awareness. This information is continually refined in near real time by strategic, operational and tactical sensors.

This PE funds/have previously funded IBS system development as described below:

- A Common Interactive Broadcast (CIB) on UHF satellite channel using a Common Message Format (CMF) and a MIL-STD Demand Assigned Multiple Access (DAMA) compliant waveform and Line of Sight (LOS) using the Wideband Networking Waveform (WNW) and Joint Tactical Terminal (JTT).

- IBS-Network Services (IBS-NS) includes two Global IBS Network Servers (GINS) and four Theater Interface Nodes (TINs) to support the geographic Combatant Commanders, all built to validated warfighter requirements.

- Two GINS receive data from each theater and integrate this data into a worldwide picture available to all network/broadcast users.

- Four regional TINs, allow local and out-of-theater users (not directly receiving the broadcast) to receive the CIB information broadcast. Additionally, the TIN will receive and inject data into the CIB for producers without access to the theater CIB.

- An XML-based Common Message Format (CMF) Data Element Dictionary (DED) that defines IBS messages for broadcast of IBS information over available communications paths including the CIB and other Global Information Grid (GIG) networks.

- A Modular Advanced TRanslation Interchange with XML (MATRIX) Reformatter that provides a modular, platform-independent, multi-use translator to support migration with legacy radios and provide a long term solution for IBS Full Operational Capability (FOC) radio users.

Funds development of evolving suite of interoperable planning and decision support capabilities comprised of software, hardware and communication products. This project will identify and implement an open, scalable system architecture that will accommodate growth as the virtual world grows and cyber operations change.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force				Date: March 2014		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 Program Element (Number/Name) PE 0603850F I Integrated Broadcast Service - Dem/Val				
This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.						
B. Program Change Summary (\$ in Millions)		FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget		19.938	-	-	-	-
Current President's Budget		18.216	-	-	-	-
Total Adjustments		-1.722	-	-	-	-
• Congressional General Reductions		-0.026	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Other Adjustments		-1.696	-	-	-	-
Change Summary Explanation In FY13, -\$1.696M Sequestration Reduction.						
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2013	FY 2014	FY 2015
Title: IBS-NS (GINS/TINs) Development				14.620	-	-
Description: Continue the Phase II/System Development and Demonstration of the GINS and TINs efforts.						
FY 2013 Accomplishments: Completed the integration and testing of the Spiral 4 release of the GINS and TINs efforts and transitioning Spiral 4 IBS-NS capability to sustainment.						
Continued advanced development of Spiral 4 release of GINS and TINs.						
FY 2014 Plans: N/A						
Title: Test & Evaluation				1.396	-	-
Description: Continue Test & Evaluation of the IBS system.						

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force								Date: March 2014				
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603850F I Integrated Broadcast Service - Dem/Val							
C. Accomplishments/Planned Programs (\$ in Millions)								FY 2013	FY 2014	FY 2015		
FY 2013 Accomplishments: Continued Test and Evaluation of the IBS System.												
FY 2014 Plans: N/A												
Title: Enterprise Systems Eng Description: Enterprise Systems Engineering/CMF Integration/CIB Integration								0.700	-	-		
FY 2013 Accomplishments: Continued Enterprise Systems Engineering/CMF Integration/CIB Integration efforts.												
FY 2014 Plans: N/A												
Title: CIB Failover to IBS Alternate Communications Path using the Common Message Format (CMF) in A2AD Environment Description: Develop Common Interactive Broadcast (CIB) Failover to Alternate Communications Path using the Common Message Format (CMF) in Anti-Access/Anti-Denial (A2/AD) Environment.								1.000	-	-		
FY 2013 Accomplishments: Developed Common Interactive Broadcast (CIB) Failover to Alternate Communications Path using the Common Message Format (CMF) in Anti-Access/Anti-Denial (A2/AD) Environment.												
Title: Integrated Waveform Modifications to Support the CIB Description: Modify Integrated Waveform to support the CIB.								0.500	-	-		
FY 2013 Accomplishments: Modified the Integrated Waveform to support the CIB.												
Accomplishments/Planned Programs Subtotals								18.216	-	-		
D. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• RDTE: BA07: 0305179F: Integrated Broadcast Service	-	6.954	8.592	-	8.592	8.556	8.606	8.623	8.787	Continuing	Continuing	

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force										Date: March 2014	
Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>					R-1 Program Element (Number/Name) PE 0603850F <i>I Integrated Broadcast Service - Dem/Val</i>						
D. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2015</u>	<u>FY 2015</u>	<u>FY 2015</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Complete</u>	<u>Total Cost</u>
• OPAF: BA03: Line Item # 832070: <i>Intelligence Comm Equipment</i>	13.070	14.121	14.949	-	14.949	13.987	15.221	16.395	16.687	Continuing	Continuing
Remarks											
E. Acquisition Strategy											
IBS uses an evolutionary acquisition approach. The Program Definition/Risk Reduction phase (Spiral 1) was awarded via a full and open competition. A full and open competition award to BTG/Titan/L-3Comm/L-3 National Security Solutions was awarded for the Engineering, Manufacturing and Development (EMD) phase (Spiral 2-4).											
F. Performance Metrics											
Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.											

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force

Date: March 2014

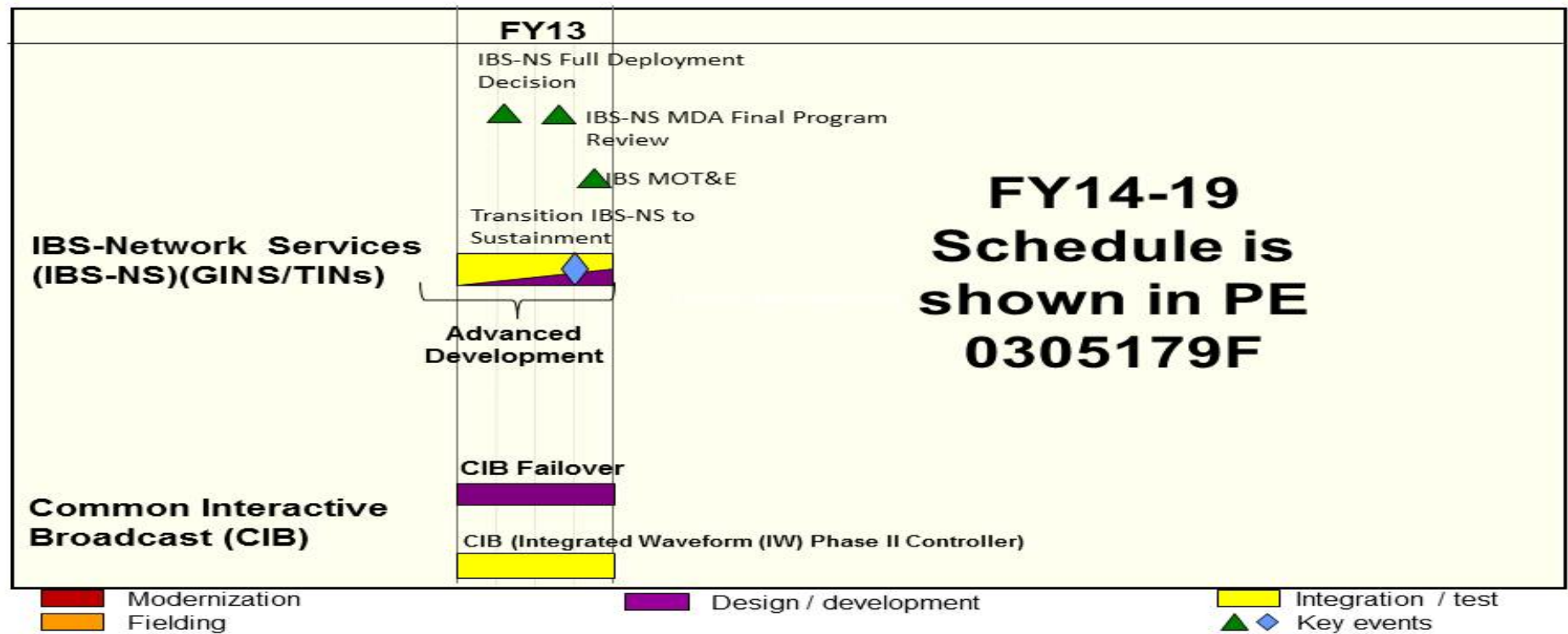
Appropriation/Budget Activity
3600 / 4

R-1 Program Element (Number/Name)
PE 0603850F / Integrated Broadcast
Service - Dem/Val

Project (Number/Name)
644778 / Integrated Broadcast Service



IBS Broadcast Segment Schedule PE 0603850F



FY15 PB