

UNCLASSIFIED

PE NUMBER: 0603840F
 PE TITLE: Global Broadcast Service (GBS)

Exhibit R-2, RDT&E Budget Item Justification	DATE February 2004
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BUDGET ACTIVITY 05 System Development and Demonstration (SDD)	PE NUMBER AND TITLE 0603840F Global Broadcast Service (GBS)
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Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	20.910	37.823	33.447	9.685	2.441	2.229	5.506	0.000	146.076
4887 Global Broadcast Service (GBS)	20.910	37.823	33.447	9.685	2.441	2.229	5.506	0.000	146.076

(U) A. Mission Description and Budget Item Justification

Global Broadcast Service provides DoD with efficient, high data rate broadcast of information provided by many distributed information sources to dispersed warfighters who will receive the broadcast directly on small, inexpensive user terminals in accordance with the GBS Operational Requirements Document (ORD) validated by the Joint Requirements Oversight Council in Apr 1997 and updated (with limits) in May 01. GBS broadcast data includes imagery, logistics and weather data, maps, operational orders, and video. GBS space segment includes packages on Navy operational satellites UFO 8, 9, and 10 providing near-worldwide service, augmentation by commercial leased Ku-band packages, and throughput on future wideband satellites. GBS Broadcast Management and Terminal segments include uplink sites and receive equipment which integrate with Service fixed- and tactical-network equipment through standard commercial interfaces. Service production Receive Suite and integration into service networks are funded in other PEs.

The program has been rebaselined to incorporate a commercial-off-the-shelf (COTS)-based Internet Protocol (IP) architecture that will facilitate satisfaction of IOC 2 and 3 requirements. The IP architecture will provide enhanced throughput (capacity), and greatly reduce operational and maintainability liabilities that would have resulted from continuation of the previous architecture that required significant use of obsolete and proprietary software and computer hardware boards.

Funding is in Budget Activity 5, System Development and Demonstration, since program is fielding pre-production equipment.

(U) B. Program Change Summary (\$ in Millions)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Previous President's Budget	22.253	38.147	33.490
(U) Current PBR/President's Budget	20.910	37.823	33.447
(U) Total Adjustments	-1.343	-0.324	
(U) Congressional Program Reductions		-0.324	
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer	-1.343		
(U) <u>Significant Program Changes:</u>			
None			

Exhibit R-2a, RDT&E Project Justification

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Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total	
4887 Global Broadcast Service (GBS)	20.910	37.823	33.447	9.685	2.441	2.229	5.506	0.000	146.076	
Quantity of RDT&E Articles	0	0	0	0	0	0	0			

(U) **A. Mission Description and Budget Item Justification**

Global Broadcast Service provides DoD with efficient, high data rate broadcast of information provided by many distributed information sources to dispersed warfighters who will receive the broadcast directly on small, inexpensive user terminals in accordance with the GBS Operational Requirements Document (ORD) validated by the Joint Requirements Oversight Council in Apr 1997 and updated (with limits) in May 01. GBS broadcast data includes imagery, logistics and weather data, maps, operational orders, and video. GBS space segment includes packages on Navy operational satellites UFO 8, 9, and 10 providing near-worldwide service, augmentation by commercial leased Ku-band packages, and throughput on future wideband satellites. GBS Broadcast Management and Terminal segments include uplink sites and receive equipment which integrate with Service fixed- and tactical-network equipment through standard commercial interfaces. Service production Receive Suite and integration into service networks are funded in other PEs.

The program has been rebaselined to incorporate a commercial-off-the-shelf (COTS)-based Internet Protocol (IP) architecture that will facilitate satisfaction of IOC 2 and 3 requirements. The IP architecture will provide enhanced throughput (capacity), and greatly reduce operational and maintainability liabilities that would have resulted from continuation of the previous architecture that required significant use of obsolete and proprietary software and computer hardware boards. Funding is in Budget Activity 5, System Development and Demonstration, since program is fielding pre-production equipment.

(U) **B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Continue System Development and Test	13.653	23.750	18.104
(U) Continue Phase 2 Government System Integration	3.371	10.457	11.096
(U) Continue System Test & Evaluation Support	0.980	1.342	1.116
(U) Continue Program Office and other related support activities	2.906	2.274	3.131
(U) Total Cost	20.910	37.823	33.447

(U) **C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2003</u> <u>Actual</u>	<u>FY 2004</u> <u>Estimate</u>	<u>FY 2005</u> <u>Estimate</u>	<u>FY 2006</u> <u>Estimate</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY 2008</u> <u>Estimate</u>	<u>FY 2009</u> <u>Estimate</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>
(U) Other APPN									
(U) OPAF, PE 0303600F, WGS PIPs	15.142	11.776	0.000	0.000	0.000	0.000	0.000	0.000	26.918
(U) OPAF, PE 0303601F, Receive Suites/TIPs	14.801	15.898	11.662	14.682	0.423	2.600	1.570	Continuing	TBD

(U) **D. Acquisition Strategy**

Exhibit R-2a, RDT&E Project Justification

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(GBS)**

PROJECT NUMBER AND TITLE

4887 Global Broadcast Service (GBS)

The acquisition strategy has been revised to a spiral development/incremental build approach using Integrated Product Development (IPD)/Integrated Product Team (IPT) approach. Program will maintain a single integration contractor for the GBS Phase 2 system while incorporating cross program/system IPTs for total system performance.

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Exhibit R-3, RDT&E Project Cost Analysis										DATE February 2004		
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)					PE NUMBER AND TITLE 0603840F Global Broadcast Service (GBS)					PROJECT NUMBER AND TITLE 4887 Global Broadcast Service (GBS)		
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2003</u> <u>Cost</u>	<u>FY</u> <u>2003</u> <u>Cost</u>	<u>FY</u> <u>2003</u> <u>Award</u> <u>Date</u>	<u>FY</u> <u>2004</u> <u>Cost</u>	<u>FY</u> <u>2004</u> <u>Award</u> <u>Date</u>	<u>FY</u> <u>2005</u> <u>Cost</u>	<u>FY</u> <u>2005</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total</u> <u>Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
(U) <u>Product Development</u>												
Raytheon System Corp	CPAF		25.807	13.653		23.750		18.104		14.674	95.988	
Phase 2 Government System Integration	Various		2.668	3.371		10.457		11.096		2.098	29.690	
Subtotal Product Development			28.475	17.024		34.207		29.200		16.772	125.678	0.000
Remarks:												
(U) <u>Support</u>												
Program Support - Various			2.480	2.906		2.274		3.131		1.999	12.790	
Fielding - Various			1.200								1.200	
Sustainment (Vendor TBD)			0.000								0.000	
Subtotal Support			3.680	2.906		2.274		3.131		1.999	13.990	0.000
Remarks:												
(U) <u>Test & Evaluation</u>												
Various System Test & Evaluation Support			1.880	0.980		1.342		1.116		1.090	6.408	
Subtotal Test & Evaluation			1.880	0.980		1.342		1.116		1.090	6.408	0.000
Remarks:												
(U) <u>Management</u>												
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			34.035	20.910		37.823		33.447		19.861	146.076	0.000

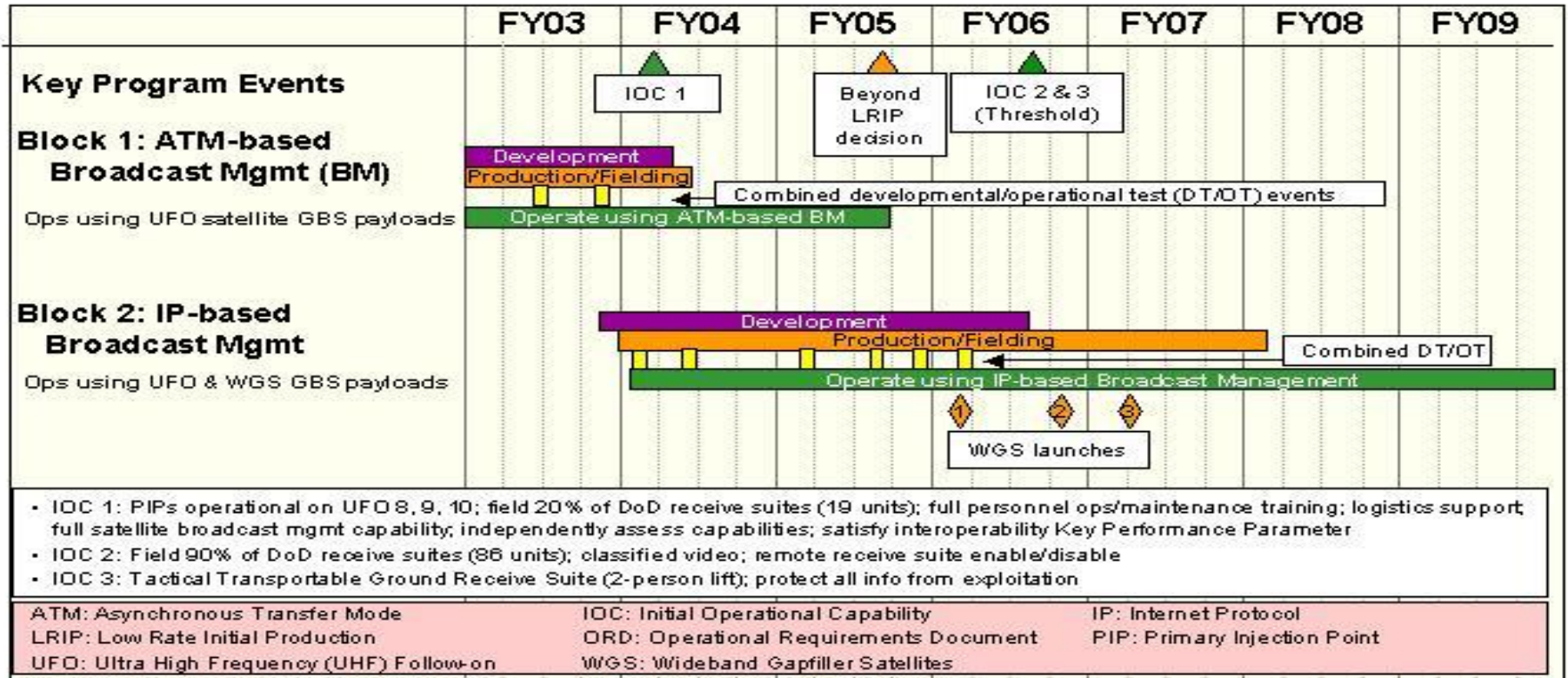
Exhibit R-4, RDT&E Schedule Profile

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- Concept activities
- Design / development
- Production / fielding
- Operations / sustainment
- Integration / test
- Key events

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Exhibit R-4a, RDT&E Schedule Detail		DATE February 2004
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(U) <u>Schedule Profile</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Previous effort performed under PE0603854F			
(U) Initial Operational Capability (IOC) 1		1Q	
(U) Beyond Low Rate Initial Production (LRIP) decision			3Q