



Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-237



GBS

As of December 31, 2010

Defense Acquisition Management
Information Retrieval
(DAMIR)

UNCLASSIFIED

Table of Contents

Program Information	3
Responsible Office	3
References	3
Mission and Description	4
Executive Summary	5
Threshold Breaches	7
Schedule	8
Performance	10
Track To Budget	12
Cost and Funding	13
Low Rate Initial Production	24
Nuclear Cost	25
Foreign Military Sales	25
Unit Cost	26
Cost Variance	29
Contracts	32
Deliveries and Expenditures	33
Operating and Support Cost	34

Program Information

Designation And Nomenclature (Popular Name)

Global Broadcast Service (GBS)

DoD Component

Air Force

Joint Participants

Army; Navy; Marine Corp

Responsible Office

Responsible Office

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Date Assigned July 19, 2010

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated November 14, 1997

Approved APB

DAE Approved Acquisition Program Baseline (APB) dated September 15, 2006

Mission and Description

The Global Broadcast Service (GBS) is an extension of the Global Information Grid that provides worldwide, high capacity, one-way transmission of video (especially from Unmanned Aerial Vehicles [UAV]), imagery and geospatial intelligence products, and other high-bandwidth information supporting the nation's command centers and joint combat forces in garrison, in transit, and deployed within global combat zones. It employs readily available satellite-based commercial technologies that are relatively inexpensive and easily integrated into existing systems and processes, yet are not so unwieldy as to be unusable by smaller and more mobile units. To this end, GBS currently uses broadcast payloads on two Ultra-High Frequency Follow-On (UFO) satellites and three leased commercial satellite transponders. GBS is now broadcasting over the first three Wideband Global SATCOM satellites. Theater Injection Point (TIP) terminals provide a deployable Ka-band uplink capability that can operate directly from a Combatant Commander's (COCOM's) Area of Responsibility (AOR). Information sources deliver products for daily broadcast to two Satellite Broadcast Managers (SBMs) based on defined mission profiles approved by COCOM Theater Information Managers (TIMs). At the SBM, the Planning and Management application schedules broadcasts to users as well as keeps users, products, and mission profiles current.

Executive Summary

Support to the Warfighter:

The Global Broadcast Service (GBS) program continues to receive positive feedback from the warfighter. Feedback includes, "The meteorological data provided by Navy Operational Global Atmospheric Prediction System (NOGAPS) ensures that artillery rounds are as accurate as is humanly possible, hitting the intended target and significantly reducing the risk of collateral damage; the Biometrics data ensures that we have the timely information to detain suspicious personnel, rather than releasing them to fight us another day. This is just a small part of what you've accomplished, but it has had a significant impact on us." Additionally, GBS supported recovery efforts in Haiti in January 2010. GBS was used by Marine Expeditionary Forces, the 82nd Airborne Division in-country and on the Navy ships USS Carl Vinson and the USS Bataan.

Current Receive Suite (RS) Production:

The sole-source production contract to Raytheon for fiscal year (FY) 2009-2010 Transportable Ground Receive Suite (TGRS) procurement continues. The contract was awarded on September 30, 2009 and has a \$30M contract ceiling. The order period has been extended until March 31, 2011 until a new production contract is established. As of December 31, 2010, 156 of the 207 TGRSs ordered have been delivered.

Navy Production for Ship & Sub-Surface Receive Suites:

The Navy executed a contract on March 23, 2010 for 17 shipboard and sub-surface receive suites. As of December 31, 2010, 8 of the 17 have been delivered.

Future Production Contract:

The FY 2010-2015 TGRS Production effort is currently in source selection. The Request for Proposal was released to industry on April 19, 2010. A Usability/Suitability Demo by each offeror was completed in July 2010 as part of the source selection process. A Notification of the Competitive Range Determination was released to offerors on September 15, 2010. Due to agency protest (now resolved) and delayed availability of key personnel, anticipated contract award has moved from the first quarter of FY 2011 to June 2011.

Portable Receive Suites:

Development of the Rucksack Portable Receive Suite (RPRS) continues at Windmill International, Inc. The RPRS failed a 48-inch Drop Test on April 20-21, 2010. Some of the components were fractured in the test and required redesign. Environmental Qualification Testing (EQT) is now scheduled for January 2011.

The Mini-Integrated Receiver/Decoder contracted by Scientific Research Corporation for use with the RPRS successfully completed Operational Testing November 5, 2010 in Carlsbad, California. This will provide transmission security capability for the RPRS.

Acquisition Program Baseline (APB) Production Breach:

In the FY 2011 President's Budget the Army, Navy and Air Force procurement budgets were increased to procure additional receive suites. These increases caused a procurement cost breach against the September 15, 2006 Acquisition Program Baseline. A Program Deviation Report was submitted to the Secretary of the Air Force on April 23, 2010 and to USD(AT&L) August 31, 2010. In their letter USD(AT&L) states, "The Services decision to obligate funding to procure over 1000 additional GBS RS systems is a hallmark of a well run program, a validation of the war fighters' vote of confidence."

Operations and Maintenance:

The Central Command request for additional Full Motion Video feeds has been fulfilled. A near-term solution to increase feeds was fielded by May 2010. On July 7, 2010 the GBS sustainment team received final Authorized Service Interruption approval to complete the install of the long term solution. The upgrade was completed August 6, 2010.

The GBS sustainment team received a 3-year Authority to Operate (ATO) for the Norfolk and Wahiawa Satellite

Broadcast Manager (SBM) facilities on December 2, 2010.

The GBS sustainment team is in the process of updating Air Force DoD Information Assurance Certification and Accreditation Process (DIACAP) packages for the Transportable Satellite Broadcast Manager (TSBM). The TSBM DIACAP package will be submitted to the Operations and Acquisition Security organization for SMC, SMC/MCO, in March 2011 for review and to Air Force Space Command Designated Approval Authority in April 2011 for approval. This package is required in order to obtain an ATO for the TSBM.

Program Designation:

On December 16, 2010, GBS was redesignated from an Acquisition Category (ACAT) ID program to an ACAT IC program with the Air Force Service Acquisition Executive as the Milestone Decision Authority.

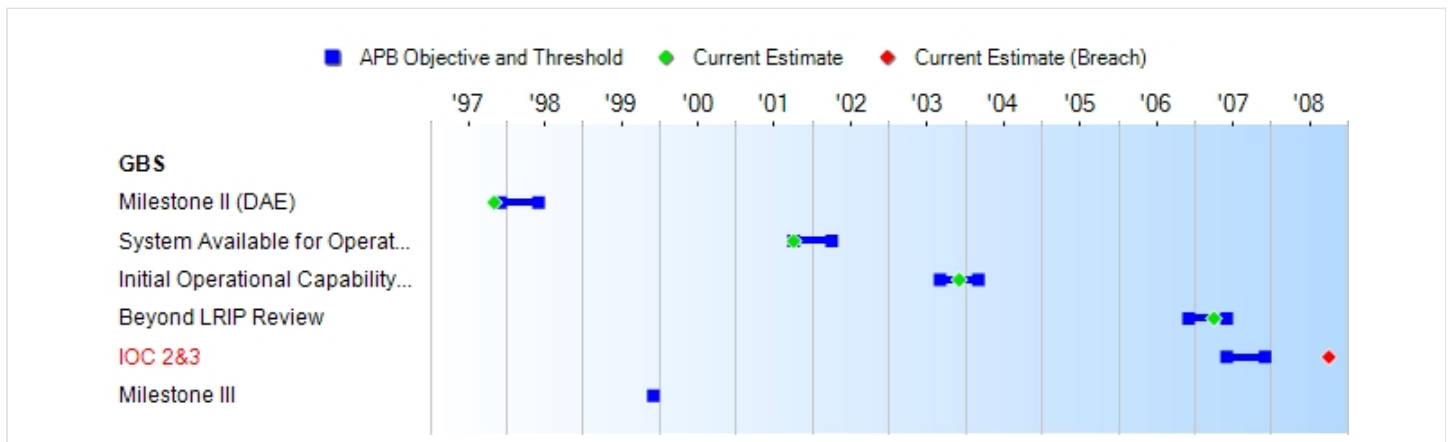
Software:

There are no significant software issues with this program at this time.

Threshold Breaches

APB Breaches			Explanation of Breach	
Schedule		<input checked="" type="checkbox"/>	<p>Schedule Completion of the Initial Operational Capability (IOC) 2/3 milestone was delayed because of changes in reporting procedures and evaluation criteria at Air Force Operational Test & Evaluation Center (AFOTEC) while this milestone was under evaluation. As a result, the final report from AFOTEC was delayed. A Program Deviation Report (PDR) was issued on January 30, 2008. The Acquisition Program Baseline (APB) was in a breach status until declaration of IOC 2/3 on October 22, 2008.</p>	
Performance		<input type="checkbox"/>		
Cost	RDT&E	<input type="checkbox"/>		
	Procurement	<input checked="" type="checkbox"/>		
	MILCON	<input type="checkbox"/>		
	Acq O&M	<input type="checkbox"/>		
Unit Cost	PAUC	<input type="checkbox"/>		
	APUC	<input type="checkbox"/>		
Nunn-McCurdy Breaches				Procurement
Current UCR Baseline				<p>In the FY 2011 President's Budget the Army, Navy and Air Force procurement budgets were increased, and the program office was directed procure additional receive suites. This increase caused a procurement cost breach against the APB. A PDR was submitted to the Secretary of the Air Force on April 23, 2010 and to USD(AT&L) August 31, 2010.</p>
	PAUC	None		
	APUC	None		
Original UCR Baseline				
	PAUC	None		
	APUC	None		

Schedule



Milestones	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate
Milestone II (DAE)	DEC 1997	DEC 1997	JUN 1998	NOV 1997
System Available for Operational Use	JUN 1999	OCT 2001	APR 2002	OCT 2001
Initial Operational Capability (IOC)	DEC 1999	SEP 2003	MAR 2004	DEC 2003
Beyond LRIP Review	N/A	DEC 2006	JUN 2007	APR 2007
IOC 2&3	N/A	JUN 2007	DEC 2007	OCT 2008¹
Milestone III	DEC 1999	N/A	N/A	N/A

¹APB Breach

Acronyms And Abbreviations

DAE - Defense Acquisition Executive
 LRIP - Low Rate Initial Production

Change Explanations

None

Memo

An incremental IOC approach was approved by the Joint Requirements Oversight Council (JROCM) memo 111-00, dated June 27, 2000. GBS Phase II requirements are grouped into IOC 1, 2 and 3. The following summarizes the threshold requirements associated with each IOC:

IOC 1:

- Primary Injection Point (PIPs) operational on Ultra High Frequency Follow-On (UFO) satellites 8, 9, 10.
- Full Satellite Broadcast Manager capability.
- Field 20% of Joint Program Office (JPO) Receive Suites (19 units).
- Personnel training in operations and maintenance of fielded equipment.
- Logistically support the system to effectively sustain GBS.
- Independently assess system capabilities.

- Augment UFO GBS with leased commercial satellite services to cover gaps over continental United States (CONUS).

(Note: IOC 1 is based on the performance of the currently fielded Asynchronous Transfer Mode (ATM) based system.)

IOC 2:

- Field 90% of JPO Receive Suites (86 units).
- Provide classified video capability.
- Remote Receive Suite enable/disable.

IOC 3:

- Tactically suitable Ground Receive Suite (two-person lift).
- Protect all information from exploitation.

Performance

Characteristics	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Demonstrated Performance	Current Estimate
System Coverage	65 deg South to 65 deg North	65 deg South to 65 deg North	65 deg South to 65 deg North	65 deg South to 65 deg North	65 deg South to 65 deg North
Space Segment Resources	N/A	WGS with UFO GBS	WGS with UFO GBS	WGS with UFO GBS	WGS with UFO GBS
Spot Beams	Two 500nm steerable, one 2000 nm steerable	Two 500nm steerable, one 2000 nm steerable	Two 500nm steerable, One 2000 nm steerable	Two 500nm steerable, One 2000 nm steerable	Two 500nm steerable, One 2000 nm steerable
Simultaneous Uplinks	One PIP and up to 3 TIPs simultaneous-ly	One PIP and up to 3 TIPs simultaneous-ly	One PIP and one TIP	One PIP and one TIP	One PIP and one TIP
Security	Pass unclassified to TS/SCI traffic	Pass unclassified to TS/SCI traffic	Pass unclassified to TS/SCI traffic	Pass unclassified to TS/SCI traffic	Pass unclassified to TS/SCI traffic
Receive Frequency Band	20.2-21.2 GHz UFO GBS, one or more commercial satellite frequency bands	N/A	N/A	N/A	N/A
Support operations with multiple satellite beams and terminal types (i.e., Receive Variable Data Rates)	2000nm: add SSRS and ART 500nm: add ART	2000nm: add SSRS and ART 500nm: Add ART	2000nm: FGRS, TGRS and SRS 500nm: FGRS, TGRS, SRS and SSRS	2000nm: FGRT, TGRT and SRT 500nm: FGRT, TGRT, SRT and SSRT	2000nm: FGRT, TGRT and SRT 500nm: FGRT, TGRT, SRT and SSRT
Pointing of Steerable Spot Beam Antenna	Frequent	Frequent	Frequent	Frequent	Frequent
Steerable Antenna Tasking	SBM Primary means	SBM Primary Means	SBM Primary Means	SBM Primary Means	SBM Primary Means
Interoperability	N/A	100% IERs satisfied	100% critical IERs satisfied	100% IERs satisfied	100% IERs satisfied
Network Ready	N/A	TBD	TBD	All but JIPM accom-	JIPM-enabled

(Ch-1)

				plished	TGRS to be fielded beginning FY 2012
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Requirements Source: Operational Requirements Document (ORD), dated January 12, 2005

Acronyms And Abbreviations

ART - Airborne Receive Terminal
deg - Degrees
FGRS/FGRT - Fixed Ground Receive Suite/Terminal
GBS - Global Broadcast Service
GHz - Gigahertz
IER - Information Exchange Requirements
JIPM - Joint Integrated Protocol Modem
nm - Nautical Miles
PIP - Primary Injection Point
SBM - Satellite Broadcast Manager
SRS/SRT - Shipboard Receive Suite/Terminal
SSRS/SSRT - SubSurface (submarine) Receive Suite/Terminal
TGRS/TGRT - Transportable Ground Receive Suite/Terminal
TIP - Theater Injection Point
TS/SCI - Top Secret/Sensitive Compartmented Information
UFO - UHF Follow-on Satellite
WGS - Wideband Global Satellite

Change Explanations

(Ch-1) Receive Frequency Band has been removed from the Performance Characteristics list because it was deleted in the September 15, 2006 Acquisition Program Baseline. The program did demonstrate the following performance: 20.2-21.2 GHz UFO GBS and 11.7 to 12.2 GHz Frequency Sub-Band (Ku) Commercial.

Track To Budget

General Memo

The Defense Emergency Response Funds (DERF) are located in appropriation 97X0833.0200; Reference Air Force Manual 65-604, October 1, 2006, Page 13. Department of Defense appropriation for DERF is 97X0833. The 0200 is the designator for the Air Force. GBS received \$7M in FY 2002; no Program Element is assigned. These funds were part of a supplemental funding measure. DERF funds are not reported in this Selected Acquisition Report.

RDT&E

APPN 3600	BA 07	PE 0303601F	(Air Force)	
	Project 2487	MILSATCOM Terminals/Global Broadcast Service	(Shared)	(Sunk)
APPN 3600	BA 05	PE 0603840F	(Air Force)	
	Project 4887	Global Broadcast Service/Global Broadcast Service	(Shared)	(Sunk)
APPN 3600	BA 04	PE 0603854F	(Air Force)	
	Project 2679	Global Broadcast Service/Global Broadcast Service		(Sunk)

Procurement

APPN 1109	BA 04	PE 0206313M	(Navy)	
	ICN 463300	GBS	(Shared)	
APPN 1810	BA 02	PE 0303109N	(Navy)	
	ICN 321500	GBS	(Shared)	
APPN 2035	BA 02	PE 0310703A	(Army)	
	ICN BC4120	GBS	(Shared)	
APPN 3080	BA 03	PE 0303601F	(Air Force)	
	ICN 83678V	GBS	(Shared)	

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY1997 \$M			BY1997 \$M	TY \$M		
	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	SAR Baseline Dev Est	Current APB Development Objective	Current Estimate
RDT&E	397.5	423.5	465.9	396.3	439.2	450.5	418.9
Procurement	53.9	361.3	397.4	506.5 ¹	57.9	412.3	617.9
Flyaway	48.5	--	--	480.3	52.1	--	586.3
Recurring	48.5	--	--	370.2	52.1	--	454.2
Non Recurring	0.0	--	--	110.1	0.0	--	132.1
Support	5.4	--	--	26.2	5.8	--	31.6
Other Support	4.3	--	--	5.3	4.7	--	5.7
Initial Spares	1.1	--	--	20.9	1.1	--	25.9
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	451.4	784.8	N/A	902.8	497.1	862.8	1036.8

¹ APB Breach

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E		221	136
Procurement		125	1781
Total		346	1917

The RDT&E quantity of 136 is comprised of 10 First Generation Increment One (I1E) Air Force Receive Suites (RS), 27 I1E Shipboard RS, 96 Joint Program Office funded Air Force RS, and 3 Primary Injection Points (PIPs).

The Procurement quantity includes 3 Army Theater Injection Points (TIPs) and 2 Air Force TIPs; all others are RS.

Cost and Funding

Funding Summary

Appropriation and Quantity Summary FY2012 President's Budget / December 2010 SAR (TY\$ M)

Appropriation	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
RDT&E	415.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	418.9
Procurement	381.0	50.1	43.5	37.1	54.1	22.1	30.0	0.0	617.9
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2012 Total	796.4	53.6	43.5	37.1	54.1	22.1	30.0	0.0	1036.8
PB 2011 Total	802.2	39.1	120.7	42.4	6.2	6.3	0.0	0.0	1016.9
Delta	-5.8	14.5	-77.2	-5.3	47.9	15.8	30.0	0.0	19.9

Quantity	Undistributed	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
Development	136	0	0	0	0	0	0	0	0	136
Production	0	1130	187	69	15	180	75	125	0	1781
PB 2012 Total	136	1130	187	69	15	180	75	125	0	1917
PB 2011 Total	136	1102	180	452	344	6	6	0	0	2226
Delta	0	28	7	-383	-329	174	69	125	0	-309

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY\$

3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
1996	--	--	--	--	--	--	14.0
1997	--	--	--	--	--	--	37.9
1998	--	--	--	--	--	--	70.2
1999	--	--	--	--	--	--	64.3
2000	--	--	--	--	--	--	41.1
2001	--	--	--	--	--	--	31.6
2002	--	--	--	--	--	--	33.6
2003	--	--	--	--	--	--	20.9
2004	--	--	--	--	--	--	35.9
2005	--	--	--	--	--	--	21.8
2006	--	--	--	--	--	--	18.6
2007	--	--	--	--	--	--	23.2
2008	--	--	--	--	--	--	0.5
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	1.8
2011	--	--	--	--	--	--	3.5
Subtotal	136	--	--	--	--	--	418.9

Annual Funding BY\$**3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force**

Fiscal Year	Quantity	End Item Recurring Flyaway BY 1997 \$M	Non End Item Recurring Flyaway BY 1997 \$M	Non Recurring Flyaway BY 1997 \$M	Total Flyaway BY 1997 \$M	Total Support BY 1997 \$M	Total Program BY 1997 \$M
1996	--	--	--	--	--	--	14.1
1997	--	--	--	--	--	--	37.7
1998	--	--	--	--	--	--	69.4
1999	--	--	--	--	--	--	62.9
2000	--	--	--	--	--	--	39.6
2001	--	--	--	--	--	--	30.0
2002	--	--	--	--	--	--	31.6
2003	--	--	--	--	--	--	19.4
2004	--	--	--	--	--	--	32.5
2005	--	--	--	--	--	--	19.2
2006	--	--	--	--	--	--	15.9
2007	--	--	--	--	--	--	19.4
2008	--	--	--	--	--	--	0.4
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	1.4
2011	--	--	--	--	--	--	2.8
Subtotal	136	--	--	--	--	--	396.3

In accordance with Space and Missile Systems Center Commander (SMC/CC) Memorandum dated March 27, 2008, the Defense Enterprise Computing Center (DECC) transition has been designated an ACAT III program and approval authority resides at the Program Executive for Space. Therefore, the DECC program status will no longer be reported as part of the ACAT IC program. The funding associated with the ACAT III program was realigned in FY 2008 into a separate account in program element (PE) 63840F.

The RDT&E funds starting in FY 2010 are associated with terminal (receive suite) functionality. These funds are considered part of the ACAT I program and are within PE 33601F. The FY 2010 funds are associated with portable receive suite development.

Annual Funding TY\$

1109 | Procurement | Procurement, Marine Corps

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2004	--	--	--	2.4	2.4	--	2.4
2005	48	5.7	--	--	5.7	--	5.7
2006	20	3.1	--	3.4	6.5	--	6.5
2007	--	--	--	0.1	0.1	--	0.1
2008	--	--	--	2.4	2.4	--	2.4
2009	--	--	--	0.7	0.7	--	0.7
2010	16	2.4	--	--	2.4	--	2.4
2011	45	4.8	--	--	4.8	--	4.8
2012	12	3.2	--	--	3.2	--	3.2
Subtotal	141	19.2	--	9.0	28.2	--	28.2

Annual Funding BY\$

1109 | Procurement | Procurement, Marine Corps

Fiscal Year	Quantity	End Item Recurring Flyaway BY 1997 \$M	Non End Item Recurring Flyaway BY 1997 \$M	Non Recurring Flyaway BY 1997 \$M	Total Flyaway BY 1997 \$M	Total Support BY 1997 \$M	Total Program BY 1997 \$M
2004	--	--	--	2.1	2.1	--	2.1
2005	48	4.9	--	--	4.9	--	4.9
2006	20	2.6	--	2.8	5.4	--	5.4
2007	--	--	--	0.1	0.1	--	0.1
2008	--	--	--	1.9	1.9	--	1.9
2009	--	--	--	0.6	0.6	--	0.6
2010	16	1.9	--	--	1.9	--	1.9
2011	45	3.7	--	--	3.7	--	3.7
2012	12	2.4	--	--	2.4	--	2.4
Subtotal	141	15.5	--	7.5	23.0	--	23.0

Annual Funding TY\$

1810 | Procurement | Other Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
1997	11	0.6	--	--	0.6	--	0.6
1998	--	--	--	--	--	--	--
1999	20	4.2	--	--	4.2	--	4.2
2000	8	0.8	--	--	0.8	--	0.8
2001	13	1.1	--	--	1.1	--	1.1
2002	16	2.1	--	--	2.1	--	2.1
2003	--	--	--	5.5	5.5	--	5.5
2004	--	--	--	19.3	19.3	--	19.3
2005	--	--	--	7.9	7.9	--	7.9
2006	--	--	--	2.7	2.7	--	2.7
2007	2	0.9	--	--	0.9	--	0.9
2008	1	1.8	--	--	1.8	--	1.8
2009	17	26.1	--	--	26.1	--	26.1
2010	14	6.0	--	1.0	7.0	--	7.0
2011	6	3.0	--	7.9	10.9	--	10.9
2012	6	3.0	--	--	3.0	--	3.0
2013	5	2.1	--	--	2.1	--	2.1
2014	5	2.1	--	--	2.1	--	2.1
2015	5	2.1	--	--	2.1	--	2.1
Subtotal	129	55.9	--	44.3	100.2	--	100.2

Annual Funding BY\$

1810 | Procurement | Other Procurement, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 1997 \$M	Non End Item Recurring Flyaway BY 1997 \$M	Non Recurring Flyaway BY 1997 \$M	Total Flyaway BY 1997 \$M	Total Support BY 1997 \$M	Total Program BY 1997 \$M
1997	11	0.6	--	--	0.6	--	0.6
1998	--	--	--	--	--	--	--
1999	20	4.1	--	--	4.1	--	4.1
2000	8	0.8	--	--	0.8	--	0.8
2001	13	1.0	--	--	1.0	--	1.0
2002	16	2.0	--	--	2.0	--	2.0
2003	--	--	--	5.0	5.0	--	5.0
2004	--	--	--	17.2	17.2	--	17.2
2005	--	--	--	6.9	6.9	--	6.9
2006	--	--	--	2.3	2.3	--	2.3
2007	2	0.7	--	--	0.7	--	0.7
2008	1	1.5	--	--	1.5	--	1.5
2009	17	20.9	--	--	20.9	--	20.9
2010	14	4.7	--	0.8	5.5	--	5.5
2011	6	2.3	--	6.2	8.5	--	8.5
2012	6	2.3	--	--	2.3	--	2.3
2013	5	1.6	--	--	1.6	--	1.6
2014	5	1.6	--	--	1.6	--	1.6
2015	5	1.5	--	--	1.5	--	1.5
Subtotal	129	45.6	--	38.4	84.0	--	84.0

Annual Funding TY\$

2035 | Procurement | Other Procurement, Army

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
1998	1	3.0	--	2.2	5.2	2.1	7.3
1999	8	4.3	--	--	4.3	1.5	5.8
2000	17	9.4	--	4.0	13.4	1.5	14.9
2001	--	--	--	--	--	0.2	0.2
2002	27	7.6	--	--	7.6	0.8	8.4
2003	13	4.9	--	--	4.9	1.0	5.9
2004	24	13.6	--	0.3	13.9	0.1	14.0
2005	1	12.2	--	--	12.2	1.2	13.4
2006	59	12.1	--	--	12.1	1.0	13.1
2007	62	16.7	--	--	16.7	1.2	17.9
2008	332	46.6	--	--	46.6	3.5	50.1
2009	188	34.4	--	--	34.4	3.3	37.7
2010	--	--	--	6.8	6.8	--	6.8
2011	--	--	--	4.6	4.6	--	4.6
2012	10	13.7	--	7.0	20.7	0.5	21.2
2013	10	22.0	--	10.0	32.0	3.0	35.0
2014	175	45.0	--	4.0	49.0	3.0	52.0
2015	70	14.4	--	4.1	18.5	1.5	20.0
2016	125	25.0	--	3.0	28.0	2.0	30.0
Subtotal	1122	284.9	--	46.0	330.9	27.4	358.3

Annual Funding BY\$**2035 | Procurement | Other Procurement, Army**

Fiscal Year	Quantity	End Item Recurring Flyaway BY 1997 \$M	Non End Item Recurring Flyaway BY 1997 \$M	Non Recurring Flyaway BY 1997 \$M	Total Flyaway BY 1997 \$M	Total Support BY 1997 \$M	Total Program BY 1997 \$M
1998	1	2.9	--	2.1	5.0	2.1	7.1
1999	8	4.1	--	--	4.1	1.5	5.6
2000	17	9.0	--	3.7	12.7	1.5	14.2
2001	--	--	--	--	--	0.2	0.2
2002	27	7.1	--	--	7.1	0.7	7.8
2003	13	4.5	--	--	4.5	0.9	5.4
2004	24	12.1	--	0.3	12.4	0.1	12.5
2005	1	10.6	--	--	10.6	1.0	11.6
2006	59	10.2	--	--	10.2	0.9	11.1
2007	62	13.8	--	--	13.8	1.0	14.8
2008	332	37.8	--	--	37.8	2.9	40.7
2009	188	27.6	--	--	27.6	2.7	30.3
2010	--	--	--	5.4	5.4	--	5.4
2011	--	--	--	3.6	3.6	--	3.6
2012	10	10.5	--	5.4	15.9	0.4	16.3
2013	10	16.6	--	7.5	24.1	2.3	26.4
2014	175	33.4	--	3.0	36.4	2.2	38.6
2015	70	10.5	--	3.0	13.5	1.1	14.6
2016	125	17.9	--	2.2	20.1	1.4	21.5
Subtotal	1122	228.6	--	36.2	264.8	22.9	287.7

Annual Funding TY\$

3080 | Procurement | Other Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2000	5	2.9	--	--	2.9	--	2.9
2001	16	4.5	--	--	4.5	--	4.5
2002	28	6.7	--	--	6.7	--	6.7
2003	6	1.0	--	13.8	14.8	--	14.8
2004	88	19.1	--	--	19.1	0.1	19.2
2005	2	12.0	--	--	12.0	0.1	12.1
2006	65	14.3	--	--	14.3	0.1	14.4
2007	--	--	--	0.7	0.7	--	0.7
2008	--	--	--	1.1	1.1	--	1.1
2009	2	1.7	--	--	1.7	--	1.7
2010	--	--	--	7.2	7.2	--	7.2
2011	136	15.9	--	10.0	25.9	3.9	29.8
2012	41	12.4	3.7	--	16.1	--	16.1
Subtotal	389	90.5	3.7	32.8	127.0	4.2	131.2

Annual Funding BY\$**3080 | Procurement | Other Procurement, Air Force**

Fiscal Year	Quantity	End Item Recurring Flyaway BY 1997 \$M	Non End Item Recurring Flyaway BY 1997 \$M	Non Recurring Flyaway BY 1997 \$M	Total Flyaway BY 1997 \$M	Total Support BY 1997 \$M	Total Program BY 1997 \$M
2000	5	2.7	--	--	2.7	--	2.7
2001	16	4.2	--	--	4.2	--	4.2
2002	28	6.1	--	--	6.1	--	6.1
2003	6	0.9	--	12.8	13.7	--	13.7
2004	88	17.3	--	--	17.3	0.1	17.4
2005	2	10.6	--	--	10.6	0.1	10.7
2006	65	12.3	--	--	12.3	--	12.3
2007	--	--	--	0.6	0.6	--	0.6
2008	--	--	--	0.9	0.9	--	0.9
2009	2	1.4	--	--	1.4	--	1.4
2010	--	--	--	5.8	5.8	--	5.8
2011	136	12.5	--	7.9	20.4	3.1	23.5
2012	41	9.6	2.9	--	12.5	--	12.5
Subtotal	389	77.6	2.9	28.0	108.5	3.3	111.8

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	11/14/1997	6/21/2006
Approved Quantity	500	628
Reference	ADM	MFR
Start Year	1997	1997
End Year	1999	2007

Acquisition Decision Memorandum (ADM), November 1997, approved the GBS Phase II entry into Engineering and Manufacturing Development and a Low Rate Initial Production (LRIP) of up to 500 Receive Suites (RS) and 140 shipboard antennas.

Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) Memorandum For Record (June 2006) authorized an LRIP increase of 128 RS to an approved quantity of 628. This exceeds the 10% threshold.

On April 13, 2007, USD(AT&L) signed an ADM that authorized the Joint Program Office (JPO) to procure Beyond Low-Rate Initial Production (BLRIP) quantity of RS.

Foreign Military Sales

None

Nuclear Cost

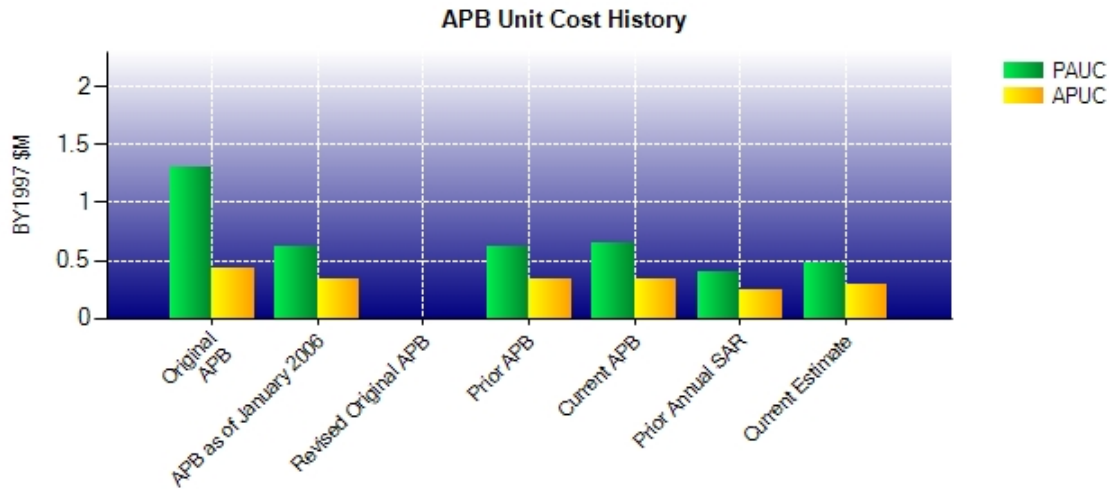
None

Unit Cost**Unit Cost Report**

	BY1997 \$M	BY1997 \$M	
Unit Cost	Current UCR Baseline (SEP 2006 APB)	Current Estimate (DEC 2010 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	784.8	902.8	
Quantity	1221	1917	
Unit Cost	0.643	0.471	-26.75
Average Procurement Unit Cost (APUC)			
Cost	361.3	506.5	
Quantity	1085	1781	
Unit Cost	0.333	0.284	-14.71

	BY1997 \$M	BY1997 \$M	
Unit Cost	Original UCR Baseline (NOV 1997 APB)	Current Estimate (DEC 2010 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	451.4	902.8	
Quantity	346	1917	
Unit Cost	1.305	0.471	-63.91
Average Procurement Unit Cost (APUC)			
Cost	53.9	506.5	
Quantity	125	1781	
Unit Cost	0.431	0.284	-34.11

Unit Cost History



	Date	BY1997 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	NOV 1997	1.305	0.431	1.437	0.463
APB as of January 2006	FEB 2003	0.614	0.333	0.673	0.380
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	FEB 2003	0.614	0.333	0.673	0.380
Current APB	SEP 2006	0.643	0.333	0.707	0.380
Prior Annual SAR	DEC 2009	0.400	0.237	0.457	0.287
Current Estimate	DEC 2010	0.471	0.284	0.541	0.347

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY \$M)

Initial PAUC Dev Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
1.437	-0.006	-0.976	0.056	0.090	-0.074	0.000	0.014	-0.896	0.541

Current SAR Baseline to Current Estimate (TY \$M)

Initial APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.463	0.002	-0.212	0.060	0.060	-0.041	0.000	0.015	-0.116	0.347

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone I	N/A	N/A	N/A	N/A
Milestone II	N/A	DEC 1997	N/A	NOV 1997
Milestone III	N/A	DEC 1999	N/A	N/A
IOC	N/A	DEC 1999	N/A	DEC 2003
Total Cost (TY \$M)	N/A	497.1	N/A	1036.8
Total Quantity	N/A	346	N/A	1917
Prog. Acq. Unit Cost (PAUC)	N/A	1.437	N/A	0.541

Cost Variance**Cost Variance Summary**

Summary Then Year \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	439.2	57.9	--	497.1
Previous Changes				
Economic	-14.6	+3.4	--	-11.2
Quantity	-2.7	+418.8	--	+416.1
Schedule	--	+77.2	--	+77.2
Engineering	+65.6	+79.4	--	+145.0
Estimating	-70.4	-54.7	--	-125.1
Other	--	--	--	--
Support	--	+17.8	--	+17.8
Subtotal	-22.1	+541.9	--	+519.8
Current Changes				
Economic	--	-0.5	--	-0.5
Quantity	--	-30.2	--	-30.2
Schedule	--	+30.4	--	+30.4
Engineering	--	+28.0	--	+28.0
Estimating	+1.8	-17.9	--	-16.1
Other	--	--	--	--
Support	--	+8.3	--	+8.3
Subtotal	+1.8	+18.1	--	+19.9
Total Changes	-20.3	+560.0	--	+539.7
CE - Cost Variance	418.9	617.9	--	1036.8
CE - Cost & Funding	418.9	617.9	--	1036.8

Summary Base Year 1997 \$M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	397.5	53.9	--	451.4
Previous Changes				
Economic	--	--	--	--
Quantity	-2.6	+349.6	--	+347.0
Schedule	--	+61.5	--	+61.5
Engineering	+57.0	+61.2	--	+118.2
Estimating	-57.0	-45.3	--	-102.3
Other	--	--	--	--
Support	--	+14.7	--	+14.7
Subtotal	-2.6	+441.7	--	+439.1
Current Changes				
Economic	--	--	--	--
Quantity	--	-22.5	--	-22.5
Schedule	--	+19.9	--	+19.9
Engineering	--	+21.2	--	+21.2
Estimating	+1.4	-13.8	--	-12.4
Other	--	--	--	--
Support	--	+6.1	--	+6.1
Subtotal	+1.4	+10.9	--	+12.3
Total Changes	-1.2	+452.6	--	+451.4
CE - Cost Variance	396.3	506.5	--	902.8
CE - Cost & Funding	396.3	506.5	--	902.8

Previous Estimate: December 2009

RDT&E	\$M	
	Base Year	Then Year
Current Change Explanations		
Funding adjusted to align with program requirements (Estimating)	+1.4	+1.8
RDT&E Subtotal	+1.4	+1.8
Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-0.5
Total Quantity variance resulting from a decrease of 77 receive suites from 466 to 389 (Air Force). (Subtotal)	-7.5	-9.6
Quantity variance resulting from a decrease of 77 receive suites from 466 to 389 (Air Force). (Quantity)	(-8.4)	(-10.8)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+0.7)	(+0.9)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(+0.6)	(+0.7)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-0.4)	(-0.4)
Additional Quantity variance for purchase of four qualification receive suites (quantities included in net decrease of 77 receive suites above) (Air Force). (Quantity)	+7.2	+9.1
Total Quantity variance resulting from a decrease of 299 receive suites from 1421 to 1122 (Army). (Subtotal)	-2.8	-4.4
Quantity variance resulting from a decrease of 299 receive suites from 1421 to 1122 (Army). (Quantity)	(-28.7)	(-38.0)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+19.2)	(+24.9)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(+19.7)	(+25.6)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-13.0)	(-16.9)
Quantity variance resulting from an increase of 73 receive suites from 68 to 141 (Marines). (Quantity)	+8.0	+10.4
Quantity variance resulting from a decrease of 6 receive suites from 135 to 129 (Navy). (Quantity)	-0.6	-0.9
Stretch-out of procurement buy profile (Army). (Schedule)	0.0	+4.5
Stretch-out of procurement buy profile (Air Force). (Schedule)	0.0	+0.1
Adjustment for Joint Internet Protocol Modem modifications (Navy). (Engineering)	+0.9	+1.7
Adjustments in appropriation funding (Air Force). (Estimating)	-0.8	-1.0
Adjustments in appropriation funding (Navy). (Estimating)	+0.1	+0.1
Adjustments in appropriation funding (Army). (Estimating)	+0.3	+0.3
Adjustment for current and prior escalation. (Support)	+0.1	+0.1
Increase in Initial Spares (Army). (Support)	+6.0	+8.1
Increase in Initial Spares (Air Force). (Support)	0.0	+0.1
Procurement Subtotal	+10.9	+18.1

(QR) Quantity Related

Contracts

General Contract Memo

There are currently no active contracts over \$40M. The next contract action will be for FY 2010-2015 Transportable Ground Receive Suite Production. This contract will have a \$900M ceiling. Contract award is planned for June 2011.

No contracts

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	136	136	136	100.00%
Production	985	1012	1781	56.82%
Total Program Quantities Delivered	1121	1148	1917	59.89%

Expenditures and Appropriations (TY \$M)			
Total Acquisition Cost	1036.8	Years Appropriated	16
Expenditures To Date	792.8	Percent Years Appropriated	76.19%
Percent Expended	76.47%	Appropriated to Date	850.0
Total Funding Years	21	Percent Appropriated	81.98%

Operating and Support Cost

Assumptions And Ground Rules

There is no antecedent system.

Operations and Support costs include all costs for operating, maintaining and supporting the GBS assets for an assumed life of ten years (2010-2019) for all services. Assets include: Transmit Suites (TS), Receive Suites (RS), and Theater Injection Points (TIP). The costs include all Depot Level Repairables (DLR) costs for GBS assets as well as the operating, logistics and personnel support costs associated with operating the transmit sites.

The costs in the table below are based on an estimate prepared in March 2010. From the estimate an average annual cost was calculated for the system by cost element. Some of the cost elements listed in the table encompass more than one task. Unit Operations encompasses all Petroleum, Oil and Lubricants costs for the TIPs, and transportation costs for sending defective items back to the depot as well as Organic DLR for the RSs. Maintenance includes organic software maintenance, Primary Injection Point (PIP) hardware, and technical orders. Indirect Support encompasses all the contracted operating costs at the TS sites. In May 2009 efforts began to transfer broadcast capabilities from the current Satellite Broadcast Manager (SBM) locations to the Defense Enterprise Computing Centers (DECC). This change in architecture has been considered in this estimate, the estimate assumes simultaneous support of facilities during FY 2011 and FY 2012, after which the legacy SBM will be decommissioned. Sustaining Support encompasses sustaining engineering support costs for all GBS assets. Other includes the cost for continental United States (CONUS) Kurtz-under band (Ku) satellite lease and Cable News Network (CNN) Broadcast.

Costs BY1997 \$M		
Cost Element	GBS Avg Annual Cost Total System	Antecedent N/A
Unit-Level Manpower	0.0	--
Unit Operations	2.0	--
Maintenance	4.8	--
Sustaining Support	0.6	--
Continuing System Improvements	0.0	--
Indirect Support	19.3	--
Other	1.7	--
Total Unitized Cost (Base Year 1997 \$)	28.4	--

Total O&S Costs \$M	GBS	Antecedent
Base Year	284.2	--
Then Year	386.8	--