Selected Acquisition Report (SAR)

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

GBS

As of December 31, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

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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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References

SAR Baseline (Development Estimate)

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

Approved APB

Defense Acquisition Executive (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 Remotely Piloted Aircraft [RPA]), 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 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) continues to provide critical information to the warfighter with little to no delay and with minimal interruption. This information includes news, weather, unclassified imagery, and other products to users both stationary and on the move. Coordinating with the GBS Satellite Broadcast Managers (SBMs), GBS maintains connectivity with mobile users as they traverse the globe.

GBS supported relief efforts following the March 2011 earthquake/tsunami disaster in Japan. GBS provided a host of information to the deployed user - United States Forces Japan, Marines, and Naval forces - in support of Operation Tomodachi.

Additionally, the GBS team responded to a quick-response tasking mid-summer to add additional intelligence, surveillance and reconnaisance (ISR) full-motion video (FMV) support over Libya. They also stood up data and video feeds to support missions in the Central Command (CENTCOM) and Africa Command (AFRICOM) theatres of operation. These dynamic activities were accomplished by reconfiguring the existing system and did not require additional funding or contract changes.

Transportable Ground Receive Suite (TGRS):
The sole-source production contract to Raytheon for fiscal year (FY) 2009-2010 procurement activities was extended into 2011. The final delivery order was placed on August 18, 2011 and brought the contract value to the ceiling of $30M. As of December 31, 2011, 226 of the 257 TGRSs ordered have been delivered. The final deliveries are due in March 2012.

A new TGRS Production contract was awarded to General Dynamics on August 22, 2011. Four TGRS qualification units, TGRS qualification retrofit kits, and six TGRSs for Government testing purposes have been ordered. Delivery of these items is expected in the third quarter of FY 2012. The current contract value is $9.3M and has a $900M ceiling. The Order Quantity Sheets/B-Tables extend through FY 2015.

Navy Production for Ship & Sub-Surface Receive Suites:
The Navy contract for shipboard and sub-surface receive suites executed on March 23, 2010 continues. As of December 31, 2011, 35 of 40 ordered have been delivered.

Portable Receive Suites:
Development of the Rucksack Portable Receive Suite (RPRS) continues at Windmill International, Inc. Windmill completed Environmental Quality Testing (EQT) on November 7, 2011 and is currently completing the test reports. The next delivery order to establish the RPRS production baseline will be placed in the second quarter of FY 2012.

Test Support for Operational Testing:
The GBS follow-on Test Asset Support Request (TASR) was signed on January 28, 2011, assigning the 17th Test Squadron (TS) as the Operational Test Agency (OTA) for the GBS end-to-end operational test event. This event will test capabilities associated with new/modified GBS equipment such as the RPRS, TGRSs outfitted with Joint Internet Protocol Modems (JIPM), and Transportable Satellite Broadcast Manager (TSBM) outfitted with a mini-JIPM hub, via Defense Enterprise Computing Center (DECC) broadcast. The event is required in order for GBS to transition these new/modified items to operations and sustainment.

Operations and Maintenance:
On June 10, 2011, the GBS sustainment organization received notice from the Designated Approving Authority

(DAA) that the SBM Authority to Operate (ATO) received last December was rescinded due to the system having category II (CAT II) discrepancies that could not be corrected within six months of receiving the ATO. These discrepancies should be rectified with hardware upgrades to servers and software upgrades to the operating system. The GBS sustainment organization is working to mitigate and resolve the CAT II issues and expects to receive an ATO in June 2012.

The GBS sustainment team received a three-year Authority to Operate (ATO) for the Transportable Satellite Broadcast Manager (TSBM) on October 17, 2011.

Software:
There are no significant software-related issues with this program at this time.

Threshold Breaches

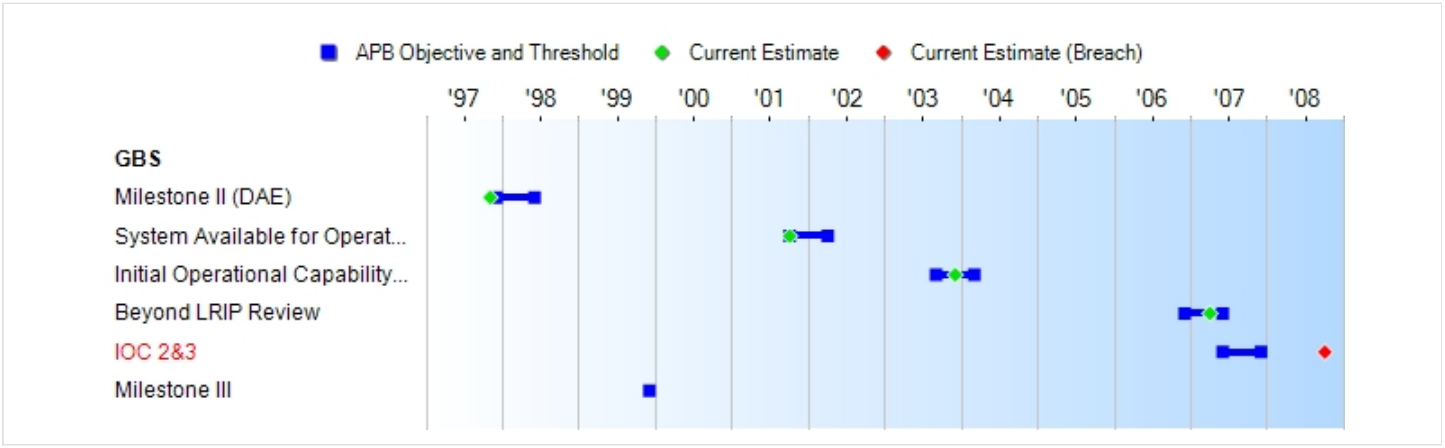
APB Breaches		
Schedule		☑
Performance		☐
Cost	RDT&E	☐
	Procurement	☑
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☐
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Explanation of Breach

The Schedule and Procurement breaches shown here were reported in the December 2010 SAR.

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 2008**[1]
Milestone III	DEC 1999	N/A	N/A	N/A

[1] *APB 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 toTS/SCI traffic	Pass unclassified toTS/SCI traffic	Pass unclassified to TS/SCI traffic	Pass unclassified toTS/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 2013

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) Updated current estimate for JIPM fielding from FY 2012 to FY 2013 to coincide with current program schedule.

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)	(Sunk)
APPN 0300	BA 02	PE 2500000X	(DoD)	
	ICN 00000X	GBS	(Shared)	(Sunk)

Program received $15M in APPN 0300 to procure 40 receive suites for the Army National Guard.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY1997 $M			BY1997 $M	TY $M		
Appropriation	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	395.7	439.2	450.5	418.3
Procurement	53.9	361.3	397.4	**529.4**[1]	57.9	412.3	652.0
Flyaway	48.5	--	--	503.1	52.1	--	619.9
Recurring	48.5	--	--	397.3	52.1	--	491.7
Non Recurring	0.0	--	--	105.8	0.0	--	128.2
Support	5.4	--	--	26.3	5.8	--	32.1
Other Support	4.3	--	--	6.4	4.7	--	7.1
Initial Spares	1.1	--	--	19.9	1.1	--	25.0
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	925.1	497.1	862.8	1070.3

[1] ***APB Breach***

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	221	136	136
Procurement	125	1085	1780
Total	346	1221	1916

The Research, Development, Test, & Evaluation 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 three Primary Injection Points (PIPs).

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

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
FY2013 President's Budget / December 2011 SAR (TY$ M)

Appropriation	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
RDT&E	418.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	418.3
Procurement	415.5	97.3	50.8	44.6	17.6	24.5	1.7	0.0	652.0
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 2013 Total	833.8	97.3	50.8	44.6	17.6	24.5	1.7	0.0	1070.3
PB 2012 Total	850.0	43.5	37.1	54.1	22.1	30.0	0.0	0.0	1036.8
Delta	-16.2	53.8	13.7	-9.5	-4.5	-5.5	1.7	0.0	33.5

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	136	0	0	0	0	0	0	0	0	136
Production	0	1218	257	94	169	15	23	4	0	1780
PB 2013 Total	136	1218	257	94	169	15	23	4	0	1916
PB 2012 Total	136	1317	69	15	180	75	125	0	0	1917
Delta	0	-99	188	79	-11	-60	-102	4	0	-1

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	--	--	--	--	--	--	34.0
2003	--	--	--	--	--	--	20.8
2004	--	--	--	--	--	--	35.8
2005	--	--	--	--	--	--	21.8
2006	--	--	--	--	--	--	17.9
2007	--	--	--	--	--	--	23.1
2008	--	--	--	--	--	--	0.5
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	1.8
2011	--	--	--	--	--	--	3.5
Subtotal	**136**	**--**	**--**	**--**	**--**	**--**	**418.3**

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	--	--	--	--	--	--	32.0
2003	--	--	--	--	--	--	19.3
2004	--	--	--	--	--	--	32.4
2005	--	--	--	--	--	--	19.2
2006	--	--	--	--	--	--	15.3
2007	--	--	--	--	--	--	19.3
2008	--	--	--	--	--	--	0.4
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	1.4
2011	--	--	--	--	--	--	2.7
Subtotal	**136**	**--**	**--**	**--**	**--**	**--**	**395.7**

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 Officer for Space level. 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 Research, Development, Test, & Evaluation 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 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	13	2.4	--	--	2.4	0.6	3.0
2012	18	3.6	1.0	0.2	4.8	--	4.8
2013	--	--	--	1.5	1.5	--	1.5
2014	--	--	--	1.6	1.6	--	1.6
2015	--	--	--	1.6	1.6	--	1.6
2016	--	--	--	1.6	1.6	--	1.6
Subtotal	**115**	**17.2**	**1.0**	**15.5**	**33.7**	**0.6**	**34.3**

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	13	1.8	--	--	1.8	0.5	2.3
2012	18	2.7	0.7	0.2	3.6	--	3.6
2013	--	--	--	1.1	1.1	--	1.1
2014	--	--	--	1.2	1.2	--	1.2
2015	--	--	--	1.1	1.1	--	1.1
2016	--	--	--	1.1	1.1	--	1.1
Subtotal	**115**	**13.9**	**0.7**	**12.2**	**26.8**	**0.5**	**27.3**

Annual Funding TY$
0300 | Procurement | Procurement, Defense-Wide

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
2011	40	4.5	--	--	4.5	0.5	5.0
Subtotal	**40**	**4.5**	**--**	**--**	**4.5**	**0.5**	**5.0**

Annual Funding BY$
0300 | Procurement | Procurement, Defense-Wide

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
2011	40	3.5	--	--	3.5	0.4	3.9
Subtotal	**40**	**3.5**	**--**	**--**	**3.5**	**0.4**	**3.9**

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	4	0.5	--	6.3	6.8	--	6.8
2011	--	--	--	4.6	4.6	--	4.6
2012	177	65.9	--	7.0	72.9	0.5	73.4
2013	87	40.2	--	3.9	44.1	3.0	47.1
2014	162	37.2	--	--	37.2	3.0	40.2
2015	--	--	--	6.9	6.9	--	6.9
2016	--	--	--	6.1	6.1	--	6.1
Subtotal	**1162**	**308.6**	**--**	**41.3**	**349.9**	**23.9**	**373.8**

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	2.8	40.6
2009	188	27.5	--	--	27.5	2.7	30.2
2010	4	0.4	--	4.9	5.3	--	5.3
2011	--	--	--	3.5	3.5	--	3.5
2012	177	50.0	--	5.2	55.2	0.4	55.6
2013	87	29.9	--	3.0	32.9	2.2	35.1
2014	162	27.2	--	--	27.2	2.2	29.4
2015	--	--	--	5.0	5.0	--	5.0
2016	--	--	--	4.3	4.3	--	4.3
Subtotal	**1162**	**247.1**	**--**	**32.0**	**279.1**	**20.2**	**299.3**

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	12.1	--	--	12.1	0.1	12.2
2006	65	13.1	--	--	13.1	0.1	13.2
2007	--	--	--	0.7	0.7	--	0.7
2008	--	--	--	1.1	1.1	--	1.1
2009	2	1.7	--	--	1.7	--	1.7
2010	10	1.4	--	4.9	6.3	0.5	6.8
2011	6	2.1	--	10.5	12.6	--	12.6
2012	55	12.6	--	3.0	15.6	0.5	16.1
Subtotal	**283**	**77.2**	**--**	**34.0**	**111.2**	**1.3**	**112.5**

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	10.7	--	--	10.7	0.1	10.8
2006	65	11.2	--	--	11.2	0.1	11.3
2007	--	--	--	0.6	0.6	--	0.6
2008	--	--	--	0.9	0.9	--	0.9
2009	2	1.4	--	--	1.4	--	1.4
2010	10	1.1	--	3.9	5.0	0.4	5.4
2011	6	1.6	--	8.3	9.9	--	9.9
2012	55	9.7	--	2.3	12.0	0.4	12.4
Subtotal	**283**	**66.9**	**--**	**28.8**	**95.7**	**1.1**	**96.8**

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	13	6.0	--	1.0	7.0	--	7.0
2011	16	8.9	--	1.0	9.9	0.9	10.8
2012	7	2.6	--	--	2.6	0.4	3.0
2013	7	2.1	--	--	2.1	0.1	2.2
2014	7	2.2	--	--	2.2	0.6	2.8
2015	15	8.0	--	--	8.0	1.1	9.1
2016	23	14.6	--	--	14.6	2.2	16.8
2017	4	1.2	--	--	1.2	0.5	1.7
Subtotal	**180**	**83.2**	**--**	**37.4**	**120.6**	**5.8**	**126.4**

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	--	--	--	6.8	6.8	--	6.8
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	20.8	--	--	20.8	--	20.8
2010	13	4.7	--	0.8	5.5	--	5.5
2011	16	6.9	--	0.7	7.6	0.7	8.3
2012	7	2.0	--	--	2.0	0.3	2.3
2013	7	1.6	--	--	1.6	--	1.6
2014	7	1.6	--	--	1.6	0.4	2.0
2015	15	5.8	--	--	5.8	0.7	6.5
2016	23	10.3	--	--	10.3	1.6	11.9
2017	4	0.8	--	--	0.8	0.4	1.2
Subtotal	**180**	**65.2**	**--**	**32.8**	**98.0**	**4.1**	**102.1**

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

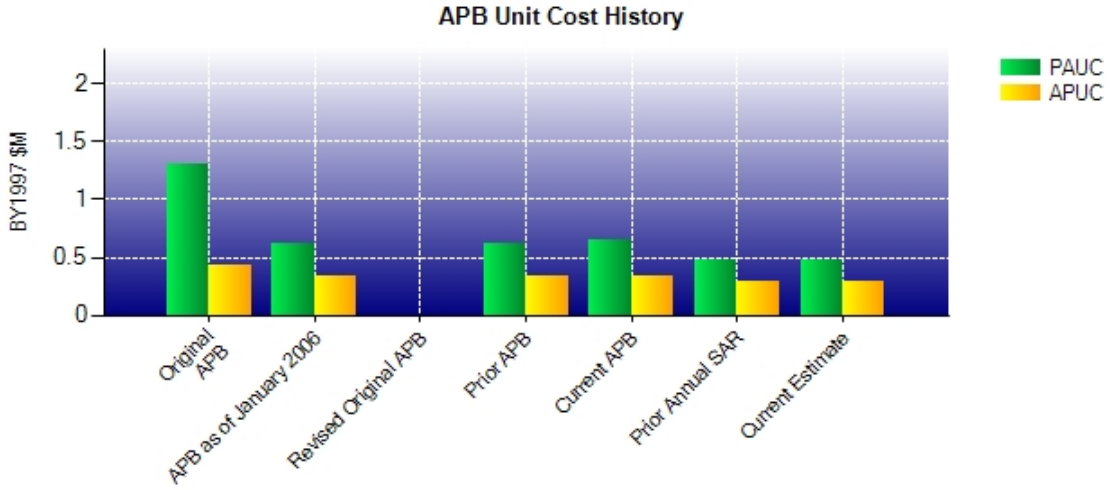
Unit Cost

Unit Cost Report

Unit Cost	BY1997 $M Current UCR Baseline (SEP 2006 APB)	BY1997 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	784.8	925.1	
Quantity	1221	1916	
Unit Cost	0.643	0.483	-24.88
Average Procurement Unit Cost (APUC)			
Cost	361.3	529.4	
Quantity	1085	1780	
Unit Cost	0.333	0.297	-10.81

Unit Cost	BY1997 $M Original UCR Baseline (NOV 1997 APB)	BY1997 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	451.4	925.1	
Quantity	346	1916	
Unit Cost	1.305	0.483	-62.99
Average Procurement Unit Cost (APUC)			
Cost	53.9	529.4	
Quantity	125	1780	
Unit Cost	0.431	0.297	-31.09

Unit Cost History



		BY1997 $M		TY $M	
	Date	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 2010	0.471	0.284	0.541	0.347
Current Estimate	DEC 2011	0.483	0.297	0.559	0.366

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	-0.004	-0.979	0.064	0.099	-0.072	0.000	0.014	-0.878	0.559

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	0.004	-0.215	0.069	0.070	-0.039	0.000	0.015	-0.097	0.366

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	1070.3
Total Quantity	N/A	346	N/A	1916
Prog. Acq. Unit Cost (PAUC)	N/A	1.437	N/A	0.559

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	+2.9	--	-11.7
Quantity	-2.7	+388.6	--	+385.9
Schedule	--	+107.6	--	+107.6
Engineering	+65.6	+107.4	--	+173.0
Estimating	-68.6	-72.6	--	-141.2
Other	--	--	--	--
Support	--	+26.1	--	+26.1
Subtotal	-20.3	+560.0	--	+539.7
Current Changes				
Economic	+0.1	+3.6	--	+3.7
Quantity	--	-4.6	--	-4.6
Schedule	--	+15.1	--	+15.1
Engineering	--	+16.4	--	+16.4
Estimating	-0.7	+3.1	--	+2.4
Other	--	--	--	--
Support	--	+0.5	--	+0.5
Subtotal	-0.6	+34.1	--	+33.5
Total Changes	-20.9	+594.1	--	+573.2
CE - Cost Variance	418.3	652.0	--	1070.3
CE - Cost & Funding	418.3	652.0	--	1070.3

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	+327.1	--	+324.5
Schedule	--	+81.4	--	+81.4
Engineering	+57.0	+82.4	--	+139.4
Estimating	-55.6	-59.1	--	-114.7
Other	--	--	--	--
Support	--	+20.8	--	+20.8
Subtotal	-1.2	+452.6	--	+451.4
Current Changes				
Economic	--	--	--	--
Quantity	--	-5.6	--	-5.6
Schedule	--	+13.2	--	+13.2
Engineering	--	+14.0	--	+14.0
Estimating	-0.6	+1.2	--	+0.6
Other	--	--	--	--
Support	--	+0.1	--	+0.1
Subtotal	-0.6	+22.9	--	+22.3
Total Changes	-1.8	+475.5	--	+473.7
CE - Cost Variance	395.7	529.4	--	925.1
CE - Cost & Funding	395.7	529.4	--	925.1

Previous Estimate: December 2010

RDT&E	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+0.1
Adjustments in prior year funding (Air Force) (Estimating)	-0.5	-0.6
Adjustment for current and prior escalation. (Estimating)	-0.1	-0.1
RDT&E Subtotal	-0.6	-0.6

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+3.6
Quantity variance resulting from an increase of 40 receive suites from 0 to 40 (DoD). (Quantity)	+3.5	+4.5
Quantity variance resulting from a decrease of 106 receive suites from 389 to 283 (Air Force). (Quantity)	-18.6	-23.6
Quantity variance resulting from a decrease of 26 receive suites from 141 to 115 (Marines). (Quantity)	-2.1	-2.8
Total Quantity variance resulting from an increase of 51 receive suites from 129 to 180 (Navy). (Subtotal)	+14.5	+20.3
Quantity variance resulting from an increase of 51 receive suites from 129 to 180 (Navy). (Quantity)	(+7.1)	(+10.2)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+5.5)	(+7.6)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(+5.6)	(+7.8)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-3.7)	(-5.3)
Total Quantity variance resulting from an increase of 40 receive suites from 1122 to 1162 (Army). (Subtotal)	+14.7	+16.9
Quantity variance resulting from an increase of 40 receive suites from 1122 to 1162 (Army). (Quantity)	(+4.5)	(+7.1)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+7.7)	(+7.5)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(+7.7)	(+7.6)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-5.2)	(-5.3)
Adjustments in prior year funding (Air Force). (Estimating)	-1.0	-1.1
Increase in program support costs from FY 2012 to FY 2016 (Marines). (Estimating)	+5.3	+7.3
Modifications for Joint Internet Protocol Modem (Marines). (Engineering)	+0.7	+1.0
Purchase of four Production Qualification Receive Suites (Air Force). (Estimating)	+7.0	+8.8
Adjustment for current and prior escalation. (Estimating)	-1.2	-1.3
Adjustment for current and prior escalation. (Support)	-0.1	-0.2
Increase in program support costs from FY 2015 to FY 2017 (Navy). (Support)	+1.0	+1.5
Reassessment of program support requirements (Army). (Support)	-0.1	-0.1
Reassessment of Initial Spares requirement (Army). (Support)	-2.5	-3.4
Increase in Initial Spares requirement resulting from an increase of 40 receive suites (DoD). (Support) (QR)	+0.4	+0.5
Reassessment of Initial Spares requirement (Marines). (Support)	+0.5	+0.6
Increase in Initial Spares requirement resulting from an increase of 51 receive suites (Navy). (Support) (QR)	+3.1	+4.4

Decrease in Initial Spares resulting from a decrease of 106 receive suites (Air Force). (Support) (QR)	-2.2	-2.8
Procurement Subtotal	+22.9	+34.1

(QR) Quantity Related

Contracts

General Contract Memo

There are currently no active contracts over $40M. The new Transportable Ground Receive Suite Production contract, awarded to General Dynamics on August 22, 2011, has a current value of $9.3M and has a $900M ceiling. The contract includes pre-negotiated pricing tables that extend through fiscal year 2015.

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	1144	1780	64.27%
Total Program Quantities Delivered	1121	1280	1916	66.81%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	1070.3	Years Appropriated	17
Expenditures To Date	814.3	Percent Years Appropriated	77.27%
Percent Expended	76.08%	Appropriated to Date	931.1
Total Funding Years	22	Percent Appropriated	86.99%

Deliveries and expenditures are as of December 31, 2011.

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 by the program office 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	--

Disposal costs are excluded from the Operating and Support Cost.