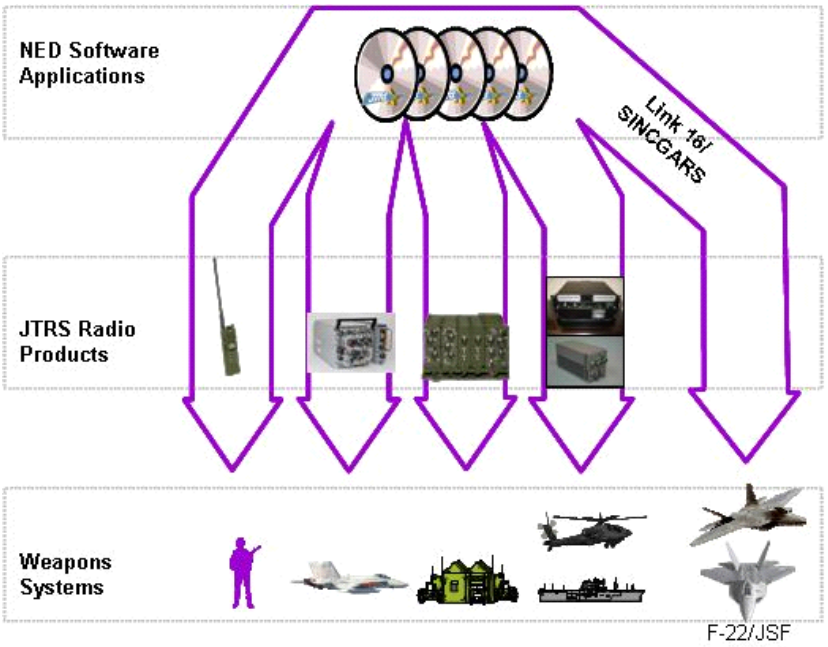
Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-284



JTRS NED

As of September 30, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

Joint Tactical Radio System Network Enterprise Domain

DoD Component

DoD

Joint Participants

Army, Navy, Air Force, Marine Corps. Army is the lead per SECDEF Memo dated August 31, 2009.

Responsible Office

Responsible Office

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Date Assigned September 15, 2011

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 24, 2002

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated December 21, 2009

Mission and Description

The Joint Tactical Radio System (JTRS) Network Enterprise Domain (NED) (formerly Joint Waveform Program) Program Office manages the development and sustainment of three categories of products or software applications: legacy waveforms, networking waveforms, and Network Enterprise Services (NES). These NED software applications are components of JTRS radios and support net-centric operational warfare at sea, in the air, and on the ground. Legacy waveforms, when instantiated on a JTRS radio, produce radio performance qualities consistent and interoperable with corresponding DoD radio systems. Legacy waveform acquisition is based on developing products that mimic legacy radio performance through software, as defined by increments by the Joint Capabilities Integration and Development System process in the JTRS Operational Requirements Document and follow-on Capability Development Documents. Networking waveforms, when integrated on JTRS radios, provide Internet Protocol (IP) based networked communications that can extend the Global Information Grid (GIG) to the last tactical mile.

Networked radios in the tactical environment will provide the capability to relay and share voice, data and video transmissions. NES software products are those software applications that are essential to networking waveforms to establish and manage IP networks and achieve IP-based interoperability. Networking waveforms with their NES products are new capabilities that will evolve in terms of functionality, performance, and security throughout their life cycle in response to changing warfighter needs for networked voice, video and data communications, changing technology and GIG standards, and new security vulnerabilities or threats.

Executive Summary

Pursuant to 10 U.S.C. 2432, this quarterly exception SAR is submitted to report a threshold schedule breach for the completion of the Mobile User Objective System (MUOS) Software Formal Qualification Testing (FQT), which is now scheduled to be completed six (6) months later than the Network Enterprise Domain (NED) Acquisition Program Baseline (APB) schedule threshold.

The Joint Tactical Radio System (JTRS), NED, is an Acquisition Category (ACAT) ID program responsible for the development of waveforms and Network Enterprise Services software applications. These products are developed using an evolutionary, incremental strategy and are instantiated as components/software applications on the JTRS radios as developed by the other JTRS ACAT ID product lines. Network Managers are instantiated on ruggedized notebook computers.

NED products are not systems or end items. They are components of JTRS radios. Accordingly, the NED Program has no unit quantities and no stand-alone Milestone C decision points. NED products are altered during integration with the JTRS radios and will not be delivered directly to combat users. Consequently, the fielding decision on each NED product will be made concurrent with the fielding decision for the first JTRS radio containing that product. NED products are delivered when they complete FQT and they are ready to be integrated with JTRS radios. Once a NED product has completed FQT, maintenance, enhancements or upgrades are achieved via a Software In-Service Support (SwISS) Indefinite Delivery/Indefinite Quantity (ID/IQ) contract that was developed/awarded in accordance with the JTRS Enterprise Business Model.

Waveform Development Status:

Mobile User Objective System (MUOS): The MUOS Waveform Developer, General Dynamics C4 Systems (GDC4S), experienced cost and schedule growth as a result of underestimating the level of effort required to integrate the blackside waveform (v1.3) into the Handheld, Manpack, Small Form Fit (HMS) hardware development environment, including the integration of both black and red side components to create the fully Software Communications Architecture (SCA) and Unified INFOSEC Criteria (UIC) compliant red/black MUOS waveform (WF v3.1). A program deep dive was conducted June 20 - July 1, 2011 by JPEO JTRS, PEO Soldier Systems (SS), NED, HMS and PMW 146 personnel focusing on a bottoms-up resource/schedule analysis. As a result of this deep dive, the MUOS waveform developer modified the remaining waveform development approach to provide incremental capability that can be delivered to HMS/Airborne and Maritime/Fixed Station (AMF) for integration and fielding as needed/desired to support their program schedules and users. These changes resulted in an acceptable risk schedule with v3.1 FQT projected to occur in August 2012.

GDC4S rebalanced resources to drive to a July 30, 2012 FQT completion, which would provide GDC4S with three (3) weeks of schedule margin to the Government commitment date of August 22, 2012.

The USD (AT&L) directed a JTRS Red Team be established in August to validate the revised development plan, including assessment of the plans for waveform integration into HMS and AMF terminals. The Red Team review is ongoing and any outcomes from that review will be reflected in future reports.

Wideband Networking Waveform (WNW): WNW successfully completed FQT in a laboratory environment in December 2009, transitioning to SwISS. WNW was evaluated as “working well” by Brigade Modernization Command soldiers conducting the Army Network Integration Evaluation (NIE) 11.2 at White Sands Missile Range in June/July 2011. During NIE 12.1 (October/November 2011), WNW will form the backbone of the Objective Architecture Assessment in support of 1/35 Armor Battalion. The WNW SwISS contract was awarded to GDC4S on September 20, 2011; the contract value is $64.6M. A maintenance release (version 4.0.6) is on track for delivery in December 2011 (in support of NIE 12.2).

Soldier Radio Waveform (SRW): SRW successfully completed FQT in a laboratory environment in January 2009, transitioning to SwISS. The SRW 1.1 Telemetry Operations (TeleOps) enhancement Design Verification Test (DVT)

was successfully completed in June 2011. SRW was validated in the Rifleman Radio and Manpack Low Rate Initial Production approval as part of the HMS Milestone C, and the National Security Agency (NSA) certified the Harris AN/PRC-117G for deployed SRW operations in July 2011. Furthermore, SRW will support the bridge architecture assessment during NIE 12.1 as well as the upcoming HMS Rifleman Radio Initial Operational Test and Evaluation (RR IOT&E).

Ultra High Frequency (UHF) SATCOM: UHF SATCOM successfully completed FQT in a laboratory environment in March 2007, transitioning to SwISS. The UHF SATCOM Full Duplex capability was delivered on April 1, 2011 and a maintenance delivery order (DO) is planned for award in October 2011 to correct identified Information Assurance (IA) deficiencies.

Enhanced Position Location Reporting System (EPLRS): EPLRS successfully completed FQT in a laboratory environment in December 2007, transitioning to SwISS. In December 2010, a Joint Configuration Steering Board endorsed the NED proposal to eliminate planned maintenance and enhancements of the JTRS EPLRS waveform as a requirement for JTRS Increment 1. This endorsement was further supported by a Joint Capabilities Board action and Joint Requirements Oversight Council decision in April 2011. As a result, an EPLRS SwISS contract is not being planned at this time.

Link-16: Link-16 successfully completed FQT in a laboratory environment in April 2009, transitioning to SwISS. The Link-16 crypto modernization enhancement task (CMET) development effort is on track for delivery in February 2012. A maintenance DO was awarded on September 26, 2011 that will correct baseline waveform problems identified during the Multifunctional Information Distribution System (MIDS) IOT&E.

JTRS BOWMAN Waveform (JBW): JBW successfully completed FQT in a laboratory environment in July 2007, transitioning to SwISS. A maintenance DO was definitized on June 27, 2011 to implement current SCA, Application Program Interfaces (API) and UIC standards, and is on track for delivery in March 2012.

Single Channel Ground and Airborne Radio System (SINCGARS): SINCGARS successfully completed FQT in a laboratory environment in December 2005, transitioning to SwISS. The SINCGARS packet mode upgrade, version 1.5.0, was delivered in July 2011. No SINCGARS maintenance efforts are underway.

Very High Frequency (VHF)/Ultra High Frequency (UHF) Line of Sight (VULOS): VULOS successfully completed FQT in a laboratory environment in September 2005. VULOS is currently undergoing maintenance upgrades to implement current SCA, API and UIC standards. VULOS (with Air Traffic Control (ATC)) FQT is on track for November 2011. Follow-on IA, SCA and API assessments are scheduled after conclusion of the FQT (December 2011).

HAVEQUICK II (HQII): HQII successfully completed FQT in a laboratory environment in August 2006. A maintenance upgrade is currently underway to implement SCA, API, and UIC upgrades. The HQII Critical Design Review (CDR) was completed on June 2, 2011 and the HQII FQT for version 2.1 is scheduled to complete August 2012. A follow-on IA assessment by NSA is scheduled for September 2012.

High Frequency (HF): HF successfully completed FQT in a laboratory environment in December 2009, transitioning to SwISS. An HF IA maintenance DO was awarded on September 1, 2011 to correct post-FQT IA deficiencies as well as support JTRS Test & Evaluation Laboratory (JTEL) and NSA accreditation.

Network Management and Planning Status:

SRW Network Manager (SRWNM): SRWNM successfully completed FQT in January 2011, transitioning to SwISS. SRWNM was used to plan and monitor SRW interoperability testing between multiple Programs of Record (POR) and Commercial radios in a laboratory environment in May 2011. Also, during NIE 12.1, SRWNM will participate as a System Under Test (SUT) with version 1.0.3 planned to support the HMS RR IOT&E.

JTRS WNW Network Manager (JWNM): JWNM successfully completed FQT in a laboratory environment in March 2010, transitioning to SwISS. A maintenance update (version 4.1.6) was delivered in July 2011. JWNM was used by Army personnel to plan and monitor the WNW network during NIE 11.2 at White Sands Missile Range in June/July 2011. JWNM Software Anomaly Reports (SARs) have been corrected, and transitioned into JENM v1.0.2. A GMR Delta-Security Verification Testing (SVT) which included JWNM within its security boundary successfully completed on September 21, 2011.

JTRS Enterprise Network Manager (JENM): JENM was officially accepted as a System Under Evaluation (SUE) for NIE 12.1. Moreover, a test-event support DO was awarded on August 30, 2011 to provide field support for NIE 12.1. JENM Phase 1 version 1.0.2 was delivered on September 9, 2011 and will support SRW Interoperability Quicklook Testing in September 2011 and the NIE 12.1 in October/November 2011. A maintenance DO was awarded on September 20, 2011 and will correct software anomaly reports in advance of NIE 12.2 (March 2012). The final release of JENM Phase 2 is being reviewed for alignment with NIE 13.1.

Enterprise Network Services (ENS): Both ENS Phase 1 (Software Internet Controller (SoftINC)) and ENS Phase 1 (Tactical Data Controller (TDC)) FQTs were successfully completed in April 2011. Both products have successfully completed NSA IA assessments, and JTEL SCA 2.2.2 evaluations. ENS Phase 1 (SoftINC and (TDC) have transitioned to SwISS. No maintenance efforts are currently underway.

With the exception of MUOS as discussed in this report, there are no major software-associated issues with this program.

Threshold Breaches

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

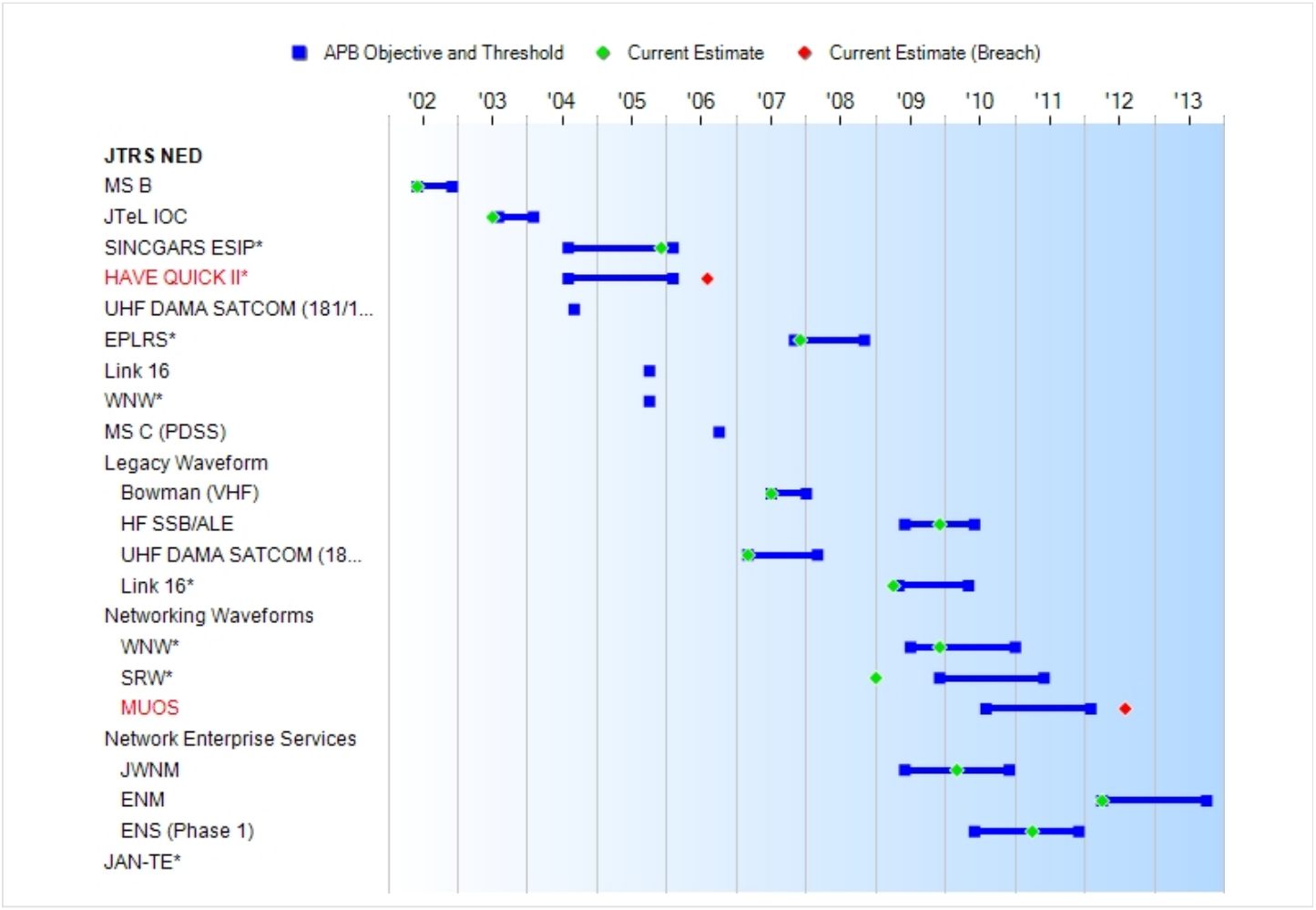
Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Explanation of Breach

The Have Quick II Formal Qualification Testing (FQT) was completed on August 22, 2006 which was past the Acquisition Program Baseline (APB) Threshold. This breach was reported in the DEC 2006 SAR.

Since the Mobile User Objective System (MUOS) FQT will not take place before February 2012, the program will breach the identified development threshold date. The MUOS FQT is slated to be completed in August 2012. A Program Deviation Report was sent through the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)) to the Under Secretary of Defense for Acquisition, Technology, and Logistics on September 15, 2011. Finally, the revised APB is in the drafting stage.

Schedule


APB Objective and Threshold
Current Estimate
Current Estimate (Breach)
'02
'03
'04
'05
'06
'07
'08
'09
'10
'11
'12
'13
JTRS NED
MS B
JTeL IOC
SINCGARS ESIP*
HAVE QUICK II*
UHF DAMA SATCOM (181/1...
EPLRS*
Link 16
WNW*
MS C (PDSS)
Legacy Waveform
Bowman (VHF)
HF SSB/ALE
UHF DAMA SATCOM (18...
Link 16*
Networking Waveforms
WNW*
SRW*
MUOS
Network Enterprise Services
JWNM
ENM
ENS (Phase 1)
JAN-TE*

Milestones	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	
MS B	JUN 2002	JUN 2002	DEC 2002	JUN 2002	
JTeL IOC	AUG 2003	AUG 2003	FEB 2004	JUL 2003	
SINCGARS ESIP*	AUG 2004	AUG 2004	FEB 2006	DEC 2005	
HAVE QUICK II*	AUG 2004	AUG 2004	FEB 2006	**AUG 2006**[1]	
UHF DAMA SATCOM (181/182/183)*	SEP 2004	N/A	N/A	N/A	
EPLRS*	MAR 2005	NOV 2007	NOV 2008	DEC 2007	
Link 16	OCT 2005	N/A	N/A	N/A	
WNW*	OCT 2005	N/A	N/A	N/A	
MS C (PDSS)	OCT 2006	N/A	N/A	N/A	
Legacy Waveform					
Bowman (VHF)	N/A	JUL 2007	JAN 2008	JUL 2007	
HF SSB/ALE	N/A	JUN 2009	JUN 2010	DEC 2009	
UHF DAMA SATCOM (181/182/183/184)*	N/A	MAR 2007	MAR 2008	MAR 2007	
Link 16*	N/A	MAY 2009	MAY 2010	APR 2009	
Networking Waveforms					
WNW*	N/A	JUL 2009	JAN 2011	DEC 2009	
SRW*	N/A	DEC 2009	JUN 2011	JAN 2009	
MUOS	N/A	AUG 2010	FEB 2012	**AUG 2012**[1]	(Ch-1)
Network Enterprise Services					
JWNM	N/A	JUN 2009	DEC 2010	MAR 2010	
ENM	N/A	APR 2012	OCT 2013	APR 2012	
ENS (Phase 1)	N/A	JUN 2010	DEC 2011	APR 2011	(Ch-2)
JAN-TE*	N/A	TBD	TBD	N/A	

[1] *APB Breach*

Acronyms And Abbreviations

ALE - Automatic Link Establishment
CE - Current Estimate
DAMA - Demand Assigned Multiple Access
ENM - Enterprise Network Manager
ENS - Enterprise Networking Services
EPLRS - Enhanced Position Location Reporting System
ESIP - Enhanced System Improvement Program
HF - High Frequency
HQ - HAVE QUICK
JAN-TE - Joint Airborne Network - Tactical Edge
JTeL IOC - JTRS Technology Lab Initial Operational Capability
JTR - Joint Tactical Radio
JTRS - Joint Tactical Radio System
JWNM - JTRS WNW Network Manager
KPP - Key Performance Parameter
MS - Milestone

MUOS - Mobile User Objective System
ORD - Operational Requirements Document
PCE - Previous Current Estimate
PDSS - Post Deployment Sustainment Support
SATCOM - Satellite Communications
SINCGARS - Single Channel Ground and Airborne Radio System
SRW - Soldier Radio Waveform
SSB - Single Side Band
TTNT - Tactical Targeting Network Technology
UHF - Ultra High Frequency
VHF - Very High Frequency
WNW - Wideband Networking Waveform

Change Explanations

(Ch-1) Mobile User Objective System (MUOS) Formal Qualification Testing (FQT) Current Estimate changed from December 2011 to August 2012. The change in estimate is due to additional level of effort required to integrate the Navy MUOS Program blackside waveform (v1.3) into the JTRS Handheld, Manpack, Small, Form-Fit (HMS) hardware development environment for continued development of the red plus blackside integrated waveform (v3.1).

(Ch-2) Enterprise Network Services (ENS) Phase 1 Current Estimate changed from June 2011 to April 2011. The change resulted because the Tactical Data Controller completed FQT earlier than planned.

Memo

A star (*) denotes a Key Performance Parameter (KPP).

Performance

Characteristics	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Demonstrated Performance	Current Estimate
SINCGARS ESIP*	30-88MHz 25KHz 1 6Kbps	30-88MHz 25KHz 16Kbps	30-88MHz 25KHz 16Kbps	30-88MHz 25KHz 16Kbps	30-88MHz 25KHz 16Kbps
HAVE QUICK II*	225-400 MHz 25KH z 16Kbps	225-400 MHz 25KHz 16Kbps	225-400 MHz 25KHz 16Kbps	225-400 MHz 25KHz 16Kbps	225-400 MHz 25KHz 16Kbps
UHF DAMA SATCOM (181/182/183)*	225-400 MHz 5 and 25KHz 64Kbps	N/A	N/A	N/A	N/A
EPLRS*	420-450 MHz 3MHz (57Kbps VHSIC SIP 114Kbps VECP)	420MHz - 450MHz; 3MHz; (57Kbps, VHSIC SIP 228Kbps VECP)	420MHz - 450MHz; 3MHz; (57Kbps, VHSIC SIP 228Kbps VECP)	420MHz- 450MHz; 3MHz; (57Kbps, VHSIC SIP 228Kbps VECP)	420MHz- 450MHz; 3MHz; (57Kbps, VHSIC SIP 228Kbps VECP)
WNW*	2M-2GHz Scalable BW,BPS	N/A	N/A	N/A	N/A
Link 16	(960-121 5MHz) 3 MHz 118/236 Kbps w/FEC	N/A	N/A	N/A	N/A
Legacy Waveforms					
Bowman (VHF)	N/A	30MHz - 80MHz; 25KHz; 156Kbps	30MHz - 80MHz; 25KHz; 156Kbps	30MHz- 80MHz; 25KHz; 156Kbps	30MHz- 80MHz; 25KHz; 156Kbps
HF SSB/ALE	N/A	1.5MHz - 30MHz; 3Khz; VOICE: (A&D) DATA: 75, 150, 300, 600, 1200, 2400, 3200, 4800, 6400, 8000, 9600 bps per SSB channel	2.0MHz - 30MHz; 3KHz; VOICE: (A&D) DATA: 75, 150, 300, 600, 1200, 2400, 3200, 4800, 6400, 8000, 9600 bps per SSB channel	2.0MHz- 30MHz; 3KHz; VOICE: (A&D) DATA: 75, 150, 300, 600, 1200, 2400, 3200, 4800, 6400, 8000, 9600 bps per SSB channel	2.0MHz- 30MHz; 3KHz; VOICE: (A&D) DATA: 75, 150, 300, 600, 1200, 2400, 3200, 4800, 6400, 8000, 9600 bps per SSB channel
Link 16*	N/A	960MHz - 1215MHz;	960MHz - 1215MHz;	960MHz- 1215MHz ;	960MHz- 1215MHz ;

		3MHz; 118/1137Kbps, w/FEC	3MHz; 118/1137Kbps, w/FEC	3MHz; 118/ 1137K bps, w/FEC	3MHz; 118/ 1137K bps, w/FEC
UHF DAMA SATCOM (181/182/183/184)*	N/A	225MHz - 400MHz; 5KHz & 25KHz; 75bps - 64Kbps	225MHz - 400MHz; 5KHz & 25KHz; 75bps - 56Kbps	225MHz- 400MHz; 5KHz & 25KHz; 75bps- 56Kbps	225MHz- 400MHz; 5KHz & 25KHz; 75bps- 56Kbps
Networking Waveforms					
WNW (Throughput) *	N/A	5Mbps	2Mbps	7Mbps	7Mbps
SRW (Network Throughput)*	N/A	1200Kbps	600Kbps	600Kbps	600Kbps
MUOS	N/A	240MHz - 320MHz; 5KHz & 25KHz; 2.4, 9.6, 16, 32, 64 Kbps	240MHz - 320MHz; 5KHz & 25KHz; 2.4, 9.6, 16, 32, 64 Kbps	240MHz- 320MHz; 5KHz & 25KHz; 2.4, 9.6, 16, 32, 64 Kbps	240MHz- 320MHz; 5KHz & 25KHz; 2.4, 9.6, 16, 32, 64 Kbps
Network Enterprise Services					
JWNM	N/A	Reconfigure 150 sets operating WNW in 5 min	Reconfigure 35 sets operating WNW in 10 min	TBD	Reconfigure 35 sets operating WNW in 10 minutes
ENM	N/A	Provide network planning, management, and control of WNW, SRW, and MUOS on all Increment 1 form factors	Provide network planning, management, and control of WNW, SRW, and MUOS on all Increment 1 form factors	TBD	Provide network planning, management, and control of WNW, SRW and MUOS on all Increment 1 form factors
ENS	N/A	SINCGARS R/R IP data w/WNW, SRW and EPLRS on all applicable Increment 1 form factors (HF and UHF) SATCOM DAMA R/R IP data w/all applicable Increment 1	SINCGARS R/R IP data w/WNW, SRW and EPLRS on the GMR; SINCGARS R/R IP data with SRW and EPLRS on the HMS MANPACK; WNW R/R IP data with HF and UHF SATCOM	TBD	SINCGARS R/R IP data w/WNW, SRW on the GMR; SINCGARS R/R IP data with SRW on the HMS MANPACK; WNW R/R IP data with HF and UHF SATCOM DAMA on the GMR

		waveforms and form factors	DAMA on the GMR		
JAN-TE (Network Throughput)*	N/A	TBD	TBD	TBD	Deferred

Requirements Source: JTRS Operational Requirements Document (ORD) 3.2/3.2.1 (Increment 1), dated August 28, 2006.

Acronyms And Abbreviations

A&D - Analog & Digital
ALE - Automatic Link Establishment
BPS - Bits Per Second
BW - Bandwidth
DAMA - Demand Assigned Multiple Access
ENM - Enterprise Network Manager
ENS - Enterprise Networking Services
EPLRS - Enhanced Position Location Reporting System
ESIP - Enhanced System Improvement Program
FEC - Forward Error Correction
GHz - Gigahertz
GMR - Ground Mobile Radio
HF - High Frequency
HMS - Handheld, Manpack and Small Form Fit
IP - Internet Protocol
JAN-TE - Joint Airborne Network - Tactical Edge
JTEL - JTRS Test and Evaluation Laboratory
JWNM - JTRS WNW Network Manager
Kbps - Kilo Bits Per Second
KHz - Kilohertz
MHz - Megahertz
MUOS - Mobile User Objective System
R/R - Routing/Retransmit
SATCOM - Satellite Communications
SINCGARS - Single Channel Ground and Airborne Radio System
SRW - Soldier Radio Waveform
SSB - Single Side Band
TTNT - Tactical Targeting Network Technology
UHF - Ultra High Frequency
VECP - Value Engineering Change Proposal
VHF - Very High Frequency
VHSIC - Very High Speed Integrated Circuit
WNW - Wideband Networking Waveform

Change Explanations

None

Memo

Asterisk (*) Denotes Key Performance Parameter (KPP). The JTRS Increment 1 focuses on initial near-term waveform software capability development of the KPP waveforms.

Track To Budget

General Memo

The total JTRS development funding is managed out of three Military Department (MILDEP) Program Elements (PEs) [0604280A (shared), 0604280F (shared), and 0604280N] across the Future Years Defense Program (FYDP), but realigned in the budget year for execution under the Navy RDT&E PE [0604280N].

RDT&E

APPN 1319	BA 05	PE 0604280N	(Navy)
	Project X3076	JTRS Network Enterprise Domain (JNED)	
APPN 2040	BA 05	PE 0604280A	(Army)
	Project D162	Joint Tactical Radio System/JTRS	(Shared)
APPN 3600	BA 05	PE 0604280F	(Air Force)
	Project 655068	Air Force JTRS Waveform System/JTRS	(Shared)

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2002 $M			BY2002 $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	812.9	1743.2	1917.5	1718.2	914.4	1961.8	1988.4
Procurement	0.0	0.0	--	0.0	0.0	0.0	0.0
Flyaway	0.0	--	--	0.0	0.0	--	0.0
Recurring	0.0	--	--	0.0	0.0	--	0.0
Non Recurring	0.0	--	--	0.0	0.0	--	0.0
Support	0.0	--	--	0.0	0.0	--	0.0
Other Support	0.0	--	--	0.0	0.0	--	0.0
Initial Spares	0.0	--	--	0.0	0.0	--	0.0
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	812.9	1743.2	N/A	1718.2	914.4	1961.8	1988.4

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	0	0	0
Procurement	0	0	0
Total	0	0	0

The NED program has no unit quantities.

Cost and Funding

Funding Summary

Appropriation and Quantity Summary
SEP 2011 Exception SAR (TY $M)

Appropriation	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
RDT&E	1501.5	117.6	94.2	56.0	29.4	15.6	8.1	166.0	1988.4
Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
SEP 2011 Total	1501.5	117.6	94.2	56.0	29.4	15.6	8.1	166.0	1988.4
PB 2012 Total	1501.5	117.6	94.2	56.0	29.4	15.6	8.1	166.0	1988.4
Delta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Quantity	Undistributed	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	0	0	0	0	0	0	0	0	0
SEP 2011 Total	0	0	0	0	0	0	0	0	0	0
PB 2012 Total	0	0	0	0	0	0	0	0	0	0
Delta	0	0	0	0	0	0	0	0	0	0

FY2012 President's Budget / December 2010 SAR (TY$ M)

Appropriation	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
RDT&E	1501.5	117.6	94.2	56.0	29.4	15.6	8.1	166.0	1988.4
Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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 2012 Total	1501.5	117.6	94.2	56.0	29.4	15.6	8.1	166.0	1988.4
PB 2011 Total	1501.5	117.6	80.7	33.6	15.9	15.3	8.4	166.0	1939.0
Delta	0.0	0.0	13.5	22.4	13.5	0.3	-0.3	0.0	49.4

Quantity	Undistributed	Prior	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	0	0	0	0	0	0	0	0	0
PB 2012 Total	0	0	0	0	0	0	0	0	0	0
PB 2011 Total	0	0	0	0	0	0	0	0	0	0
Delta	0	0	0	0	0	0	0	0	0	0

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY$
1319 | RDT&E | Research, Development, Test, and Evaluation, 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
2007	--	--	--	--	--	--	221.5
2008	--	--	--	--	--	--	241.5
2009	--	--	--	--	--	--	207.5
2010	--	--	--	--	--	--	198.1
2011	--	--	--	--	--	--	117.6
2012	--	--	--	--	--	--	94.2
2013	--	--	--	--	--	--	18.6
2014	--	--	--	--	--	--	9.8
2015	--	--	--	--	--	--	5.2
2016	--	--	--	--	--	--	2.7
2017	--	--	--	--	--	--	2.8
2018	--	--	--	--	--	--	2.9
2019	--	--	--	--	--	--	2.9
2020	--	--	--	--	--	--	2.9
2021	--	--	--	--	--	--	3.0
2022	--	--	--	--	--	--	3.0
2023	--	--	--	--	--	--	3.1
2024	--	--	--	--	--	--	3.1
2025	--	--	--	--	--	--	3.3
2026	--	--	--	--	--	--	3.3
2027	--	--	--	--	--	--	3.4
2028	--	--	--	--	--	--	3.5
2029	--	--	--	--	--	--	3.5
2030	--	--	--	--	--	--	3.6
2031	--	--	--	--	--	--	3.6
2032	--	--	--	--	--	--	3.7
2033	--	--	--	--	--	--	3.8
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**1172.1**

Annual Funding BY$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2002 $M	Non End Item Recurring Flyaway BY 2002 $M	Non Recurring Flyaway BY 2002 $M	Total Flyaway BY 2002 $M	Total Support BY 2002 $M	Total Program BY 2002 $M
2007	--	--	--	--	--	--	194.4
2008	--	--	--	--	--	--	208.2
2009	--	--	--	--	--	--	176.7
2010	--	--	--	--	--	--	166.8
2011	--	--	--	--	--	--	97.7
2012	--	--	--	--	--	--	77.0
2013	--	--	--	--	--	--	15.0
2014	--	--	--	--	--	--	7.8
2015	--	--	--	--	--	--	4.0
2016	--	--	--	--	--	--	2.1
2017	--	--	--	--	--	--	2.1
2018	--	--	--	--	--	--	2.1
2019	--	--	--	--	--	--	2.1
2020	--	--	--	--	--	--	2.1
2021	--	--	--	--	--	--	2.1
2022	--	--	--	--	--	--	2.1
2023	--	--	--	--	--	--	2.1
2024	--	--	--	--	--	--	2.1
2025	--	--	--	--	--	--	2.2
2026	--	--	--	--	--	--	2.1
2027	--	--	--	--	--	--	2.2
2028	--	--	--	--	--	--	2.2
2029	--	--	--	--	--	--	2.2
2030	--	--	--	--	--	--	2.2
2031	--	--	--	--	--	--	2.1
2032	--	--	--	--	--	--	2.2
2033	--	--	--	--	--	--	2.2
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**986.1**

The total JTRS developmental funding is managed out of three Military Department (MILDEP) Program Elements (PEs) [0604289A (shared), 0604280F (shared), and 0604280N] across the Future Years Defense Program (FYDP), but realigned in the budget year for execution under the Navy RDT&E PE [0604280N].

Annual Funding TY$
2040 | RDT&E | Research, Development, Test, and Evaluation, 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	--	--	--	--	--	--	11.0
1999	--	--	--	--	--	--	13.4
2000	--	--	--	--	--	--	35.5
2001	--	--	--	--	--	--	59.8
2002	--	--	--	--	--	--	72.7
2003	--	--	--	--	--	--	62.9
2004	--	--	--	--	--	--	105.6
2005	--	--	--	--	--	--	140.3
2006	--	--	--	--	--	--	131.7
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	18.7
2014	--	--	--	--	--	--	9.8
2015	--	--	--	--	--	--	5.2
2016	--	--	--	--	--	--	2.7
2017	--	--	--	--	--	--	2.8
2018	--	--	--	--	--	--	2.9
2019	--	--	--	--	--	--	2.9
2020	--	--	--	--	--	--	2.9
2021	--	--	--	--	--	--	3.0
2022	--	--	--	--	--	--	3.0
2023	--	--	--	--	--	--	3.1
2024	--	--	--	--	--	--	3.1
2025	--	--	--	--	--	--	3.3
2026	--	--	--	--	--	--	3.3
2027	--	--	--	--	--	--	3.4
2028	--	--	--	--	--	--	3.5
2029	--	--	--	--	--	--	3.5
2030	--	--	--	--	--	--	3.6
2031	--	--	--	--	--	--	3.6
2032	--	--	--	--	--	--	3.7
2033	--	--	--	--	--	--	3.7
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**724.6**

Annual Funding BY$
2040 | RDT&E | Research, Development, Test, and Evaluation, Army

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2002 $M	Non End Item Recurring Flyaway BY 2002 $M	Non Recurring Flyaway BY 2002 $M	Total Flyaway BY 2002 $M	Total Support BY 2002 $M	Total Program BY 2002 $M
1998	--	--	--	--	--	--	11.4
1999	--	--	--	--	--	--	13.8
2000	--	--	--	--	--	--	36.0
2001	--	--	--	--	--	--	59.8
2002	--	--	--	--	--	--	71.9
2003	--	--	--	--	--	--	61.1
2004	--	--	--	--	--	--	100.2
2005	--	--	--	--	--	--	129.3
2006	--	--	--	--	--	--	118.1
2007	--	--	--	--	--	--	--
2008	--	--	--	--	--	--	--
2009	--	--	--	--	--	--	--
2010	--	--	--	--	--	--	--
2011	--	--	--	--	--	--	--
2012	--	--	--	--	--	--	--
2013	--	--	--	--	--	--	15.0
2014	--	--	--	--	--	--	7.7
2015	--	--	--	--	--	--	4.0
2016	--	--	--	--	--	--	2.1
2017	--	--	--	--	--	--	2.1
2018	--	--	--	--	--	--	2.1
2019	--	--	--	--	--	--	2.1
2020	--	--	--	--	--	--	2.1
2021	--	--	--	--	--	--	2.1
2022	--	--	--	--	--	--	2.1
2023	--	--	--	--	--	--	2.1
2024	--	--	--	--	--	--	2.1
2025	--	--	--	--	--	--	2.2
2026	--	--	--	--	--	--	2.1
2027	--	--	--	--	--	--	2.2
2028	--	--	--	--	--	--	2.2
2029	--	--	--	--	--	--	2.1
2030	--	--	--	--	--	--	2.2
2031	--	--	--	--	--	--	2.1
2032	--	--	--	--	--	--	2.2
2033	--	--	--	--	--	--	2.1
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**666.6**

The total JTRS developmental funding is managed out of three Military Department (MILDEP) Program Elements (PEs) [0604289A (shared), 0604280F (shared), and 0604280N] across the Future Years Defense Program

(FYDP), but realigned in the budget year for execution under the Navy RDT&E PE [0604280N].

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
2013	--	--	--	--	--	--	18.7
2014	--	--	--	--	--	--	9.8
2015	--	--	--	--	--	--	5.2
2016	--	--	--	--	--	--	2.7
2017	--	--	--	--	--	--	2.8
2018	--	--	--	--	--	--	2.9
2019	--	--	--	--	--	--	2.9
2020	--	--	--	--	--	--	2.9
2021	--	--	--	--	--	--	3.0
2022	--	--	--	--	--	--	3.0
2023	--	--	--	--	--	--	3.1
2024	--	--	--	--	--	--	3.1
2025	--	--	--	--	--	--	3.3
2026	--	--	--	--	--	--	3.3
2027	--	--	--	--	--	--	3.4
2028	--	--	--	--	--	--	3.5
2029	--	--	--	--	--	--	3.5
2030	--	--	--	--	--	--	3.6
2031	--	--	--	--	--	--	3.6
2032	--	--	--	--	--	--	3.7
2033	--	--	--	--	--	--	3.7
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**91.7**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2002 $M	Non End Item Recurring Flyaway BY 2002 $M	Non Recurring Flyaway BY 2002 $M	Total Flyaway BY 2002 $M	Total Support BY 2002 $M	Total Program BY 2002 $M
2013	--	--	--	--	--	--	15.1
2014	--	--	--	--	--	--	7.8
2015	--	--	--	--	--	--	4.1
2016	--	--	--	--	--	--	2.1
2017	--	--	--	--	--	--	2.1
2018	--	--	--	--	--	--	2.2
2019	--	--	--	--	--	--	2.1
2020	--	--	--	--	--	--	2.1
2021	--	--	--	--	--	--	2.1
2022	--	--	--	--	--	--	2.1
2023	--	--	--	--	--	--	2.1
2024	--	--	--	--	--	--	2.1
2025	--	--	--	--	--	--	2.2
2026	--	--	--	--	--	--	2.1
2027	--	--	--	--	--	--	2.2
2028	--	--	--	--	--	--	2.2
2029	--	--	--	--	--	--	2.2
2030	--	--	--	--	--	--	2.2
2031	--	--	--	--	--	--	2.1
2032	--	--	--	--	--	--	2.2
2033	--	--	--	--	--	--	2.1
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**65.5**

The total JTRS developmental funding is managed out of three Military Department (MILDEP) Program Elements (PEs) [0604289A (shared), 0604280F (shared), and 0604280N] across the Future Years Defense Program (FYDP), but realigned in the budget year for execution under the Navy RDT&E PE [0604280N].

Low Rate Initial Production

There is no Low Rate Initial Production (LRIP) for the JTRS NED program.

Foreign Military Sales

None

Nuclear Cost

None

Unit Cost

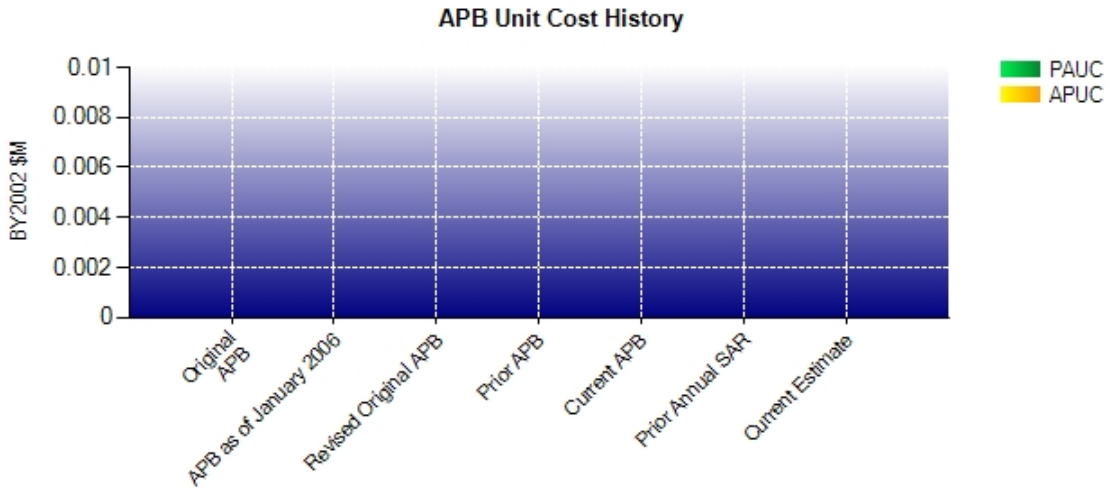
Unit Cost Report

Unit Cost	BY2002 $M Current UCR Baseline (DEC 2009 APB)	BY2002 $M Current Estimate (SEP 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	1743.2	1718.2	
Quantity	0	0	
Unit Cost	--	--	--
Average Procurement Unit Cost (APUC)			
Cost	0.0	0.0	
Quantity	0	0	
Unit Cost	--	--	--

Unit Cost	BY2002 $M Original UCR Baseline (JUN 2002 APB)	BY2002 $M Current Estimate (SEP 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	812.9	1718.2	
Quantity	0	0	
Unit Cost	--	--	--
Average Procurement Unit Cost (APUC)			
Cost	--	0.0	
Quantity	--	0	
Unit Cost	--	--	--

The JTRS NED Program contains Research, Development, Test and Evaluation (RDT&E), and Operations and Maintenance (O&M) funding only. NED products are not systems or end items. They are components of JTRS radios. Accordingly, the NED Program has no unit quantities.

Unit Cost History



		BY2002 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	JUN 2002	N/A	N/A	N/A	N/A
APB as of January 2006	JUN 2002	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	JAN 2008	N/A	N/A	N/A	N/A
Current APB	DEC 2009	N/A	N/A	N/A	N/A
Prior Annual SAR	DEC 2010	N/A	N/A	N/A	N/A
Current Estimate	SEP 2011	N/A	N/A	N/A	N/A

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	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	JUN 2002	N/A	JUN 2002
Milestone C	N/A	OCT 2006	N/A	N/A
IOC	N/A	N/A	N/A	N/A
Total Cost (TY $M)	N/A	914.4	N/A	1988.4
Total Quantity	N/A	0	N/A	0
Prog. Acq. Unit Cost (PAUC)	N/A	N/A	N/A	N/A

Cost Variance

Cost Variance Summary

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	914.4	--	--	914.4
Previous Changes				
Economic	+15.9	--	--	+15.9
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	+725.3	--	--	+725.3
Estimating	+332.8	--	--	+332.8
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+1074.0	--	--	+1074.0
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	--	--	--
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Total Changes	+1074.0	--	--	+1074.0
CE - Cost Variance	1988.4	--	--	1988.4
CE - Cost & Funding	1988.4	--	--	1988.4

Summary Base Year 2002 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	812.9	--	--	812.9
Previous Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	+648.1	--	--	+648.1
Estimating	+257.2	--	--	+257.2
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+905.3	--	--	+905.3
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	--	--	--
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Total Changes	+905.3	--	--	+905.3
CE - Cost Variance	1718.2	--	--	1718.2
CE - Cost & Funding	1718.2	--	--	1718.2

Previous Estimate: December 2010

Contracts

Appropriation: RDT&E

Contract Name	**MUOS RRDD**
Contractor	Lockheed Martin Space Systems
Contractor Location	Sunnyvale, CA 94089
Contract Number, Type	N00039-04-C-2009/1, CPAF/CPIF
Award Date	December 05, 2008
Definitization Date	December 28, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
87.3	N/A	N/A	117.6	N/A	N/A	161.3	161.3

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	-15.7	+0.4
Previous Cumulative Variances	-0.9	-0.2
Net Change	-14.8	+0.6

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to less than expected software productivity results as a result of unplanned performance issues on the wavefrom development environment (WDE) platform, greater than expected effort to meet security requirements, schedule compression inefficiencies, and unanticipated complexity of Black Side software porting and integration. Efforts associated with Waveform Integration Point-3 (WIP-3) Design Readiness Review (DRR) and Waveform Integration Point-2 (WIP-2) were also underestimated.

The favorable net change in the schedule variance is due to early progress made against the revised baseline for Waveform Integration Point-3.3 (WIP-3.3) design and WFv3 code and unit test, following implementation of the Over Target Schedule (OTS).

An OTS was implemented in July 2011 which resulted in all cumulative schedule variances being reset to zero (BCWS = BCWP). A similar request from the Mobile User Objective System (MUOS) contractor for Over Target Baseline (OTB) has been denied.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to the fact that the MUOS contract was undefinitized with an initial Not-to-Exceed (NTE) price of $87.3M in December 2008. The contract was definitized at $117.6M in December 2010.

The estimated price at completion (EPC) is $161.3M, and is based on the weighted value of program level risks for information assurance (IA) assessment efforts, End Item Demonstration On-Orbit (EID-2) termination proposal, and the Common Load Line (CLL) effort. Growth to the EPC is due to a waveform development plan that resulted from an assessment and Deep Dive of the remaining CLL effort. The $161.3M is based on the weighted value of program level risks.

Appropriation: RDT&E

Contract Name	**SINCGARS SwISS**
Contractor	ITT Corp.
Contractor Location	FORT WAYNE, IN 46818
Contract Number, Type	N00039-09-D-0020/1, IDIQ/CPFF/CPIF
Award Date	May 15, 2009
Definitization Date	May 15, 2009

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
62.0	N/A	N/A	62.0	N/A	N/A	62.0	62.0

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this IDIQ/CPFF/CPIF contract.

Contract Comments

At time of contract award, Delivery Order (DO) 1 (SoftINC) was also awarded, and because the value was greater than $20M, a monthly Cost Performance Report (CPR) Contract Data Requirements List (CDRL) was required for upload to the Defense Cost and Resource Center (DCARC) Earned Value Metrics (EVM) repository. The SoftINC Formal Qualification Test (FQT) was completed in April 2011 and thus the monthly CPR CDRL is no longer required.

The Single Channel Ground and Airborne Radio System (SINCGARS)/Enterprise Network Services Phase 1 (Software Internet Controller (SoftINC)) Software In-Service Support (SwISS) contract is a hybrid Indefinite Delivery/Indefinite Quantity (ID/IQ) cost type contract. This contract provides for technical/general support (Cost Plus Fixed Fee (CPFF)), upgrades/maintenance (Cost Plus Incentive Fee (CPIF)) as well as enhancements (CPIF) for the waveform/net services. The contract was awarded to ITT in May 2009 with a contract price of $62.0M and a five (5) year period of performance. Furthermore, DO's 2, 3 and 4 have also been completed. A follow-on DO for General Support is in the process of being awarded.

Deliver Order	Effort	Value	Period Of Performance	EVMS
1	ENS Phase 1: SoftINC	$26.0M	Complete	Yes
2	Technical Support	$0.133M	Complete	No
3	General Support	$0.530M	Complete	No
4	Packet Mode	$1.6M	Complete	No

Appropriation: RDT&E

Contract Name	**UHF/HF SwISS**
Contractor	Rockwell Collins, Inc.
Contractor Location	CEDAR RAPIDS, IA 52406
Contract Number, Type	N00039-09-D-0021, IDIQ/CPFF/CPIF
Award Date	June 19, 2009
Definitization Date	June 19, 2009

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
45.4	N/A	N/A	45.4	N/A	N/A	45.4	45.4

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this IDIQ/CPFF/CPIF contract.

Contract Comments

At time of contract award, Delivery Order (DO) 1 Tactical Data Controller (TDC) was also awarded, and because the value was greater than $20M, a monthlyCost Performance Report (CPR) Contract Data Requirements List (CDRL) was required for upload to the Defense Cost and Resource Center (DCARC) Earned Value Metrics (EVM) repository. The TDC Formal Qualification Test (FQT) was completed in April 2011 and thus the monthly CPR CDRL is no longer required.

The High Frequency/Ultra High Frequency SATCOM (HF/UHF SATCOM) Software In-Service Support (SwISS) contract is a hybrid Indefinite Delivery/Indefinite Quantity (ID/IQ) cost type contract. This contract provides for technical/general support (Cost Plus Fixed Fee (CPFF)), upgrades/maintenance (Cost Plus Incentive Fee (CPIF)) as well as enhancements (CPIF) for the waveform/net services. The contract was awarded to Rockwell Collins, Inc. in June 2009 with a contract price of $45.4M and a five (5) year period of performance. Furthermore, DO's 3 and 4 are complete, and DO's 2 and 5 will be completed early 2012.

Deliver Order	Effort	Value	Period Of Performance	EVMS
1	ENS Phase 1: TDC	$22.8M	Complete	Yes
2	Technical Support	$0.549M	Incomplete	No
3	HF IA LSS	$0.361M	Complete	No
4	Full Duplex	$0.351M	Complete	No
5	HF IA Burn-down	$0.153M	Incomplete	No

Appropriation: RDT&E

Contract Name	**Bowman VHF WF**
Contractor	ITT Corp.
Contractor Location	FORT WAYNE, IN 46818
Contract Number, Type	N00039-10-D-0047, IDIQ/CPFF/CPIF
Award Date	September 16, 2010
Definitization Date	September 16, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
49.5	N/A	N/A	49.5	N/A	N/A	0.0	0.0

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this IDIQ/CPFF/CPIF contract.

Contract Comments

This is a hybrid Indefinite Delivery Indefinite Quantity (IDIQ) contract. This contract provides technical support (CPFF) as well as software enhancements, upgrades and maintenance of the BOWMAN waveform (CPIF), e.g., post-production software support (also known as Software In-Service Support (SwISS)). The contract value is $49.5M. There is one delivery order on the contract, valued at $4.9M. This effort does not require Earned Value Metrics (EVMS) data be uploaded to the Defense Cost and Resource Center (DCARC) Central Repository monthly.

Appropriation: RDT&E

Contract Name	**Wideband Networking Waveform**
Contractor	General Dynamics C4 Systems
Contractor Location	Scottsdale, AZ 85257
Contract Number, Type	N65236-11-D-4806, IDIQ/CPFF/CPIF
Award Date	September 20, 2011
Definitization Date	September 20, 2011

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
64.6	N/A	N/A	64.6	N/A	N/A	0.0	0.0

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this IDIQ/CPFF/CPIF contract.

Contract Comments

This is a hybrid Indefinite Delivery Indefinite Quantity (IDIQ) contract. This contract provides technical support (CPFF) as well as software enhancements, upgrades and maintenance of the Wideband Networking Waveform (CPIF), e.g., post-production software support (also known as Software In-Service Support (SwISS)). The contract value is $64.6M. There is one delivery order for technical support on the contract, valued at $1.3M. This effort does not require Earned Value Metrics (EVMS) data be uploaded to the Defense Cost and Resource Center (DCARC) Central Repository monthly.

This is the first SAR report on this contract.

Appropriation: RDT&E

Contract Name	**JENM**
Contractor	Boeing
Contractor Location	Huntington Beach, CA 92806
Contract Number, Type	N66001-10-D-0069, IDIQ/CPFF/CPIF
Award Date	April 16, 2010
Definitization Date	April 16, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
21.5	N/A	N/A	21.5	N/A	N/A	21.5	21.5

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	-0.7	-0.7
Previous Cumulative Variances	--	--
Net Change	-0.7	-0.7

Cost And Schedule Variance Explanations

The unfavorable cumulative cost variance is due to difficulties in software development, information assurance complexities, and the change from Agile to a more hybrid approach to satisfy Pre-Critical Design Review (CDR) Contract Data Requirements Lists (CDRLs).

The unfavorable cumulative schedule variance is due to a delay in Government Furnished Equipment (GFE) radios along with post-CDR tasks and CDRLs which are behind due to CDR completing later than planned.

Contract Comments

The JTRS Enterprise Network Manager (JENM) Software In-Service Support (SwISS) contract is a hybrid Indefinite Delivery/Indefinite Quantity (ID/IQ) cost type contract. This contract provides for technical/general support (Cost Plus Fixed Fee (CPFF)), upgrades/maintenance (Cost Plus Incentive Fee (CPIF)) as well as enhancements (CPIF) for the waveform/net services. The contract was awarded to Boeing in April 2010 with a contract price of $54.9M and a five (5) year period of performance. At time of contract award, Delivery Order (DO) 1 Phase 2 was also awarded, and because the value was greater than $20M, a monthly CPR Cost Performance Report (CPR) Contract Data Requirements List (CDRL) is required for upload to the Defense Cost and Resource Center (DCARC) Earned Value Metrics (EVM) repository. This requirement will expire in April 2012 (the end date of the period of performance for this DO). Furthermore, DO’s 2, 3 and 4 are incomplete, but will be completed in 2012.

Delivery Order	Effort	Value	Period Of Performance	EVMS
1	Phase 2	$22.0M	Incomplete	Yes
2	Technical Support	$0.434M	Incomplete	No
3	Phase 1	$5.6M	Incomplete	No
4	NIE Test Event Support	$0.500M	Incomplete	No
5	Maintenance	$0.988M	Incomplete	No

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	0	0	0	--
Total Program Quantities Delivered	0	0	0	--

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	1988.4	Years Appropriated	14
Expenditures To Date	1555.4	Percent Years Appropriated	38.89%
Percent Expended	78.22%	Appropriated to Date	1619.1
Total Funding Years	36	Percent Appropriated	81.43%

The values in these charts are as of October 20, 2011.

Operating and Support Cost

Assumptions And Ground Rules
There is no antecedent for the JTRS NED program. The JTRS NED Program contains Research, Development, Test and Evaluation (RDT&E), and Operations and Maintenance (O&M) funding only. NED products are not systems or end items. They are components of JTRS radios. The NED O&M funding is for Software In-Service Support (SwISS) of NED products and is based on a cost estimate of January 2008. This cost estimate defines software in-service support from FY09 through FY33 (25 years).

Costs BY2002 $M		
Cost Element	**JTRS NED Average Annual Cost (All Waveforms)**	**No Antecedent**
Unit-Level Manpower	--	--
Unit Operations	--	--
Maintenance	--	--
Sustaining Support	28.73	--
Continuing System Improvements	--	--
Indirect Support	--	--
Other	--	--
Total Unitized Cost (Base Year 2002 $)	28.73	--

Total O&S Costs $M	JTRS NED	No Antecedent
Base Year	718.2	--
Then Year	1195.1	--