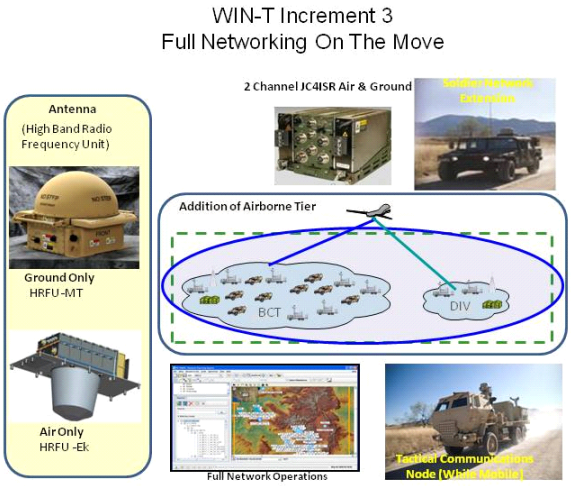
Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-350



WIN-T INCREMENT 3

As of December 31, 2011

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

Warfighter Information Network-Tactical Increment 3 (WIN-T Inc 3)

DoD Component

Army

Responsible Office

Responsible Office

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Date Assigned September 29, 2011

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated May 18, 2009.

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 22, 2010

Mission and Description

WIN-T Inc 3 is the Army's communications system for reliable, secure, and seamless video, data, imagery, and voice services that enables decisive combat actions. WIN-T Inc 3 is key to the Army's Network Modernization program. It will be focused on moving information in a manner that supports commanders, staffs, functional units, and capabilities-based formations - all mobile, agile, lethal, sustainable, and deployable. It will be optimized for offensive and Joint operations so that the theater combatant commander will have the capability to perform multiple missions simultaneously. Inc 3 will provide the Commander/user within the tactical area of responsibility a mobile infrastructure that passes relevant information effectively and efficiently for combined arms capabilities in all required terrain and environmental conditions. WIN-T is implementing the Global Information Grid (GIG) NetCentric Vision including Information Assurance and Network Centric Enterprise Services. In addition, WIN-T is a key component of the tactical GIG. WIN-T provides dynamic bandwidth and enabling formations On-The-Move (OTM). Inc 3 develops the mature technologies which will be inserted into Inc 2. Inc 3 introduces the aerial tier to complete the 3-tier objective architecture.

Executive Summary

Engineering and Manufacturing Developments are ongoing. In the past year, General Dynamics has continued the development, integration, and test of Inc 3 Configuration Items. Component level Preliminary Design Reviews were successfully completed on the Tactical Communications Node- Lite (TCN-L) and the WIN -T Communications Payload (WCP). In addition, the TCN-L successfully completed its development and confidence testing and is being prepared as a technical insert to Inc 2. The Highband Networking Waveform (HNW) radio, and the Radio Platform Software have completed Build 2.2, with the associated Network Operations (NetOps) software, and all are on schedule with development of Build 3.0. Initial Airborne test of the transmission systems and Airborne Communication WIN-T Communications Payload (WCP) is on schedule to begin in March 2012.

The Inc 3 Capabilities Production Document (CPD) is currently being drafted by the Training and Doctrine Command Capabilities Management (TCM) directorate. Discussions between TCM and the Product Manager are on-going to ensure the alignment of the CPD and the contract requirements.

The PM plans to award a new contract in 1Q FY 2013 to complete the Engineering and Manufacturing Development (EMD) phase. The Inc 3 Justification and Approval (J&A) and Acquisition Plan for the Follow-on Engineering and Manufacturing Development (EMD) contract were approved by the Army Acquisition Executive (AAE) on November 17, 2011. PM WIN-T is currently working with the Acquisition Center to award the Follow-On Engineering and Manufacturing Development contract by December 2012.

An Army Configuration Steering Board (CSB) was held on October 31, 2011. The CSB de-scoped the Inc 3 program with reductions in fielding and technical performance while identifying technology inserts to Inc 2. The procurement requirement was reduced such that Inc 3 is no longer required to replace Inc 2 units. The requirement for the Expeditionary Signal Battalion (ESB) Platoons was also eliminated. Inc 3 will now field a total of 65 units (Company through Divisions). Inc 3 will enhance the Inc 2 with technology inserts, including the Joint Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (JC4ISR) radio and antenna retrofit, an additional Modular Communication Node- Top Secret, and an insertion of the Air Tier capability, based on a package of the WCP and NetOps and Transmission system upgrades. The CSB descoped the technical requirements of the JC4ISR radios and for the Global Broadcast System (GBS) waveform capability.

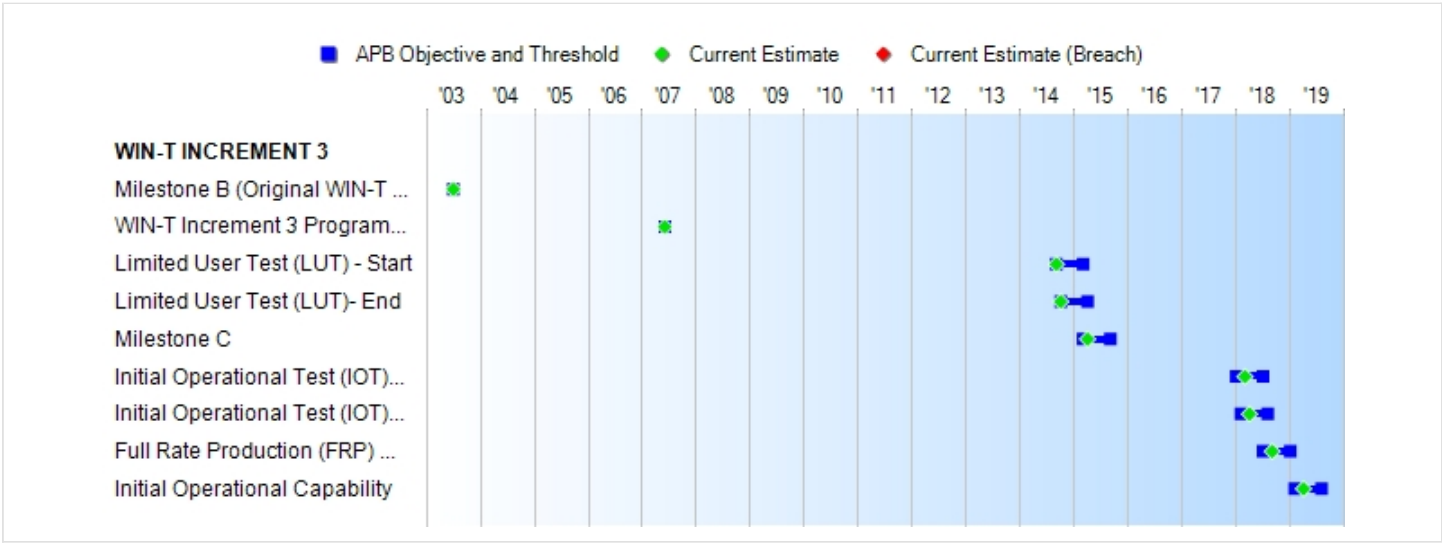
There are no significant software-related issues associated with this program at this time.

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

Schedule



Milestones	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Current Estimate	
Milestone B (Original WIN-T Program)	JUL 2003	JUL 2003	JUL 2003	JUL 2003	
WIN-T Increment 3 Program Restructure Certification	JUN 2007	JUN 2007	JUN 2007	JUN 2007	
Limited User Test (LUT) - Start	NOV 2012	SEP 2014	MAR 2015	SEP 2014	
Limited User Test (LUT)- End	DEC 2012	OCT 2014	APR 2015	OCT 2014	
Milestone C	MAY 2013	MAR 2015	SEP 2015	APR 2015	(Ch-1)
Initial Operational Test (IOT) - Start	MAR 2016	JAN 2018	JUL 2018	MAR 2018	(Ch-1)
Initial Operational Test (IOT) - End	APR 2016	FEB 2018	AUG 2018	APR 2018	(Ch-1)
Full Rate Production (FRP) Decision Review	SEP 2016	JUL 2018	JAN 2019	SEP 2018	(Ch-1)
Initial Operational Capability	APR 2017	FEB 2019	AUG 2019	APR 2019	(Ch-1)

Change Explanations

(Ch-1) The start dates for the following efforts have changed to reflect program alignment with President's Budget FY 2013 (PB13).
The Milestone C (MS C) date has changed from the previous current estimate of March 2015 to April 2015.
The IOT start date has changed from January 2018 to March 2018.
The IOT end date has changed from January 2018 to April 2018.
The FRP Decision Review date has changed from July 2018 to September 2018.
The IOC date has changed from February 2019 to April 2019.

Memo

Performance

Characteristics	SAR Baseline Dev Est	Current APB Development Objective/Threshold		Demonstrated Performance	Current Estimate
Net Ready	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs: KIP 2 – Space to Terrestrial Interface, KIP 3 – JTF to Coalition, KIP4 – JTF Component to JTF Headquarters , KIP 5 – STEP and Teleport,	The system must support Net-Centric military operations. The system must be able to enter and be managed in the network, and exchange data in a secure manner to enhance mission effective-ness. The sytem must continuously provide survivable, interoper-able, secure, and operationally effective information exchanges to enable a Net-Centric military capability. The system must fully support execution of all operational activities identified in the applicable joint and system integrated	The system must support Net-Centric military operations. The system must be able to enter and be managed in the network, and exchange data in a secure manner to enhance mission effective-ness. The sytem must continuously provide survivable, interoper-able, secure, and operationally effective information exchanges to enable a Net-Centric military capability. The system must fully support execution of joint critical operational activities identified in the applicable joint and system integrated	TBD	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity,

	and KIP 7 – DISN Service Delivery Point 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and nonrepudiation, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.	architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and nonrepudiation, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance	architectures and the system must satisfy the technical requirements for transition to Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and nonrepudiation, and issuance of an IATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information		authentication, confidentiality, and nonrepudiation, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.

		attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.	assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.		
Network Management: WIN-T will enable the G6/S6 to implement the commander's priorities by providing the capability and tools to plan, monitor, control, prioritize and visually display (e.g., current network status and connectivity) the various networking components for networks that connect secret and unclass users from a location at the Corps, Division, and Brigade in the AOR (Threshold) and for a location outside the AOR (Objective)	Outside of the AOR.	WIN-T will enable the G6/S6 to implement the Command-er's priorities by providing the capability and tools to plan, monitor, control, prioritize and visually display (e.g., current network status and connectivity) the various networking and internet-working components for networks that connect Secret and Unclass users from a location: Objective:Outside of the AOR.	WIN-T will enable the G6/S6 to implement the Command-er's priorities by providing the capability and tools to plan, monitor, control, prioritize and visually display (e.g., current network status and connectivity) the various networking and internet-working components for networks that connect Secret and Unclass users from a location: Threshold: At the Corps, Division and	TBD	WIN-T will enable the G6/S6 to implement the Command-er's priorities by providing the capability and tools to plan, monitor, control, prioritize and visually display (e.g., current network status and connectivity) the various networking and internet-working components for networks that connect Secret and Unclass users from a location. Objective: Outside of the AOR.

			Brigade in the AOR.		
Information Dissemination Category 1/Category 2	Critical survival information (Category 1) delivery in less than or equal to 0.5 sec. and time sensitive information (Category 2) in less than 1 sec.	WIN-T will provide a transport capability that enables battle command and situational awareness information to be sent/ delivered to ATH manned platforms: Objective: Critical survival information (Category 1) delivery in less than 0.5 seconds and time sensitive information (Category 2) in less than 1 seconds.	WIN-T will provide a transport capability that enables battle command and situational awareness information to be sent/ delivered to ATH manned platforms: Threshold: Critical survival information (Category 1) delivery in less than or equal to 5 seconds and time sensitive information (Category 2) in less than 8 seconds.	TBD	WIN-T will provide a transport capability that enables battle command and situational awareness information to be sent / delivered to At-the-Halt (ATH) manned platforms. Objective: Critical survival information (Category 1) delivery in less than or equal to 0.5 sec. and time sensitive information (Category 2) in less than 1 sec.
Force Protection	Armor required to protect personnel operating WIN-T vehicles employed at BCT, Fires, AVN, BfSB, and select force pooled assets operating within the Division battlespace. WIN-T components at Brigade	Armor required to protect personnel operating WIN-T vehicles employed at BCT, Fires, AVN, BfSB, and select force pooled assets operating within the Division battlespace. WIN-T components at Brigade	Armor required to protect personnel operating WIN-T vehicles employed at BCT, Fires, AVN, BfSB, and select force pooled assets operating within the Division battlespace. WIN-T components at Brigade	TBD	Armor required to protect personnel operating WIN-T vehicles employed at BCT, Fires, AVN, BfSB, and select force pooled assets operating within the Division battlespace. WIN-T components at Brigade

	and below require armor kits for protection of passengers and crew from small arms fire, mines, IED and other anti-vehicle/ personnel threats.	and below require armor kits for protection of passengers and crew from small arms fire, mines, IED and other anti-vehicle/ personnel threats.	and below require armor kits for protection of passengers and crew from small arms fire, mines, IED and other anti-vehicle/ personnel threats		and below require armor kits for protection of passengers and crew from small arms fire, mines, IED and other anti-vehicle / personnel threats.
Mobile Throughput: Traveling Speed (mph) with Bps throughout (ground speed)	Modular Force Ground vehicles: from 0 to 45 miles per hour with 4 Mbps per link available for user data. FCS BCT Ground Vehicles: from 0 to 72 kilometers per hour with 4 Mbps per link available for user data.	WIN-T will enable selected warfighters to conduct decisive operations throughout the battlespace while moving "cros s-country" in a tactical formation utilizing satellite communicat-ions: Objective: Modular Force ground vehicles: from zero to 45 miles per hour with four Mbps per link available for user data. FCS BCT ground vehicles: from zero to 72 kilometers per hour with four Mbps per link	WIN-T will enable selected warfighters to conduct decisive operations throughout the battlespace while moving "cros s-country" in a tactical formation utilizing satellite communicat-ions: Threshold: Modular Force ground vehicles: from zero to 25 miles per hour with 256 Kbps per link available for user data. FCS BCT ground vehicles: from zero to 45 kilometers per hour with 256 Kbps per link	TBD	WIN-T will enable selected warfighters to conduct decisive operations throughout the battlespace while moving "cros s-country" in a tactical formation utilizing satellite communica-tions. Objective: Modular Force Ground vehicles: from 0 to 45 miles per hour with 4 Mbps per link available for user data. FCS BCT Ground Vehicles: from 0 to 72 kilometers per hour with 4 Mbps per link available for user data.

		available for user data.	available for user data.		

Requirements Source: Capability Development Document (CDD) for Warfighter Information Network – Tactical (WIN-T), approved November 6, 2006 and revalidated by the Joint Requirements Oversight Council (JROC) in May 2007.

Acronyms And Abbreviations

AOR - Area of Responsibility
ATH - At-the-Halt
ATO - Approval to Operate
AVN - Aviation
BCT - Brigade Combat Team
BfSB - Battlefield Surveillance Brigades
Bps - Bits per second
DAA - Designated Approval Authority
DISN - Defense Information Systems Network
DISR - Department of Defense IT Standards Registry
FCS - Future Combat Systems
GIG - Global Information Grid
IATO - Interim Approval to Operate
IED - Improvised Explosive Devices
IT - Information Technology
JTF - Joint Task Force
Kbps - Kilobits per second
KIP - Key Interface Profile
Mbps - Megabits per second
mph - Miles per hour
NCOW - Net Centric Operations and Warfare
RM - Reference Model
sec - seconds
STEP - Standardized Tactical Entry Point
TV - Technical View

Change Explanations

None

Memo

The WIN-T Capabilities Development Document (CDD) does not include the Sustainment Key Performance Parameter (KPP) for Materiel Availability and the associated Key System Attributes (KSAs). Per the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01G dated March 1, 2009 and the subsequent Joint Capabilities Integration and Development System (JCIDS) Manual dated January 19, 2012, it will not be applied as a mandatory KPP in the WIN-T Inc 3 Capabilities Production Document (CPD) for Milestone C because it was not included in the CDD. WIN-T Inc 3 will identify the associated sustainment metrics for the system based on expected performance of the system that will go into production.

When the Future Combat Systems (FCS) program was terminated, the requirement as stated in the Mobile Throughput KPP for FCS ground vehicles ceased to exist. The reference is included in this section to show consistency with the approved CDD. WIN-T Inc 3 will provide B-Kits to ground vehicles in order to support KPP 5: Mobile Throughput.

Track To Budget

RDT&E

APPN 2040	BA 04	PE 0603782A	(Army)	
	Project 355	WIN-TACTICAL DEM/VAL	(Shared)	(Sunk)
	Sunk in 2008. Prior to FY 2009 WIN-T Inc 3 shared Project 355 with WIN-T Inc 2.			
	Project 372	WIN-T INCREMENT 3 - FULL NETWORKING ON THE MOVE		
	Project 372 began in FY 2009 for WIN-T Inc 3 exclusively.			

Procurement

APPN 2035	BA 04	PE 0310704A	(Army)
	ICN BS9723	WIN-T SPARES	
APPN 2035	BA 02	PE 0310704A	(Army)
	ICN BW7120	INCREMENT 3 - FULL NETWORKING ON THE MOVE	(Shared)

The parent line for the Inc 3 Procurement funding line (BW7120) is BW7100. The parent line for the Inc 3 Spares funding (BW9723) is BS9100.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2009 $M			BY2009 $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	2595.5	2146.3	2360.9	2205.8	2656.5	2194.3	2303.6
Procurement	13212.4	11250.7	12370.8	9821.8	16156.7	13881.7	12151.9
Flyaway	9988.4	--	--	6259.6	12068.9	--	7677.7
Recurring	9967.0	--	--	6232.2	12044.6	--	7645.5
Non Recurring	21.4	--	--	27.4	24.3	--	32.2
Support	3224.0	--	--	3562.2	4087.8	--	4474.2
Other Support	2555.3	--	--	3101.9	3248.6	--	3888.1
Initial Spares	668.7	--	--	460.3	839.2	--	586.1
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	15807.9	13397.0	N/A	12027.6	18813.2	16076.0	14455.5

Confidence Level is 50%.

The Independent Cost Estimate (ICE) to support WIN-T Inc 3 program restructure decision, like all life cycle cost estimates previously performed by the Cost Assessment and Program Evaluation (CAPE) office, is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and, most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful.

It is difficult to calculate mathematically the precise confidence levels associated with life cycle cost estimates prepared for Major Defense Acquisition Program (MDAP). Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimate will prove too low or too high for execution of the program described.

Total Procurement dollars have decreased due to the Army Configuration Steering Board (CSB) decision to field to the entire Army with a combination of WIN-T Inc 2 and Inc 3. As such, Inc 3 will now field to a total of 65 units.

The original WIN-T program underwent a Nunn-McCurdy certification process as documented in the December 2006 SAR. The resulting Acquisition Decision Memorandum (ADM) of June 5, 2007 restructured the WIN-T program into four increments. The costs for WIN-T Inc 3 reflect all sunk costs associated with the original WIN-T program as well as the costs to implement this individual increment.

Technology development prior to Nunn-McCurdy certification that is now identified as WIN-T Inc 2 functionality appears as sunk costs in WIN-T Inc 3. WIN-T Inc 3 develops the mature technologies which will be inserted into WIN-T Inc 2. All of the funds required for these technology inserts are included in WIN-T Inc 3 and

reflected in the costs in this report.

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	39	39	39
Procurement	3443	3168	3045
Total	3482	3207	3084

The unit of measure is a communications node which varies in capability depending upon the increment of WIN-T being executed. The WIN-T Inc 3 unit of measure is comprised of Tactical Communications Nodes (TCNs), Points of Presence (PoPs) and Soldier Network Extensions (SNEs). The sum of these three items equates to the total number of communications nodes to be procured for WIN-T Inc 3.

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	1260.5	172.8	275.2	76.3	76.0	120.9	71.0	250.9	2303.6
Procurement	0.0	0.0	0.0	0.0	236.5	253.7	629.1	11032.6	12151.9
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 2013 Total	1260.5	172.8	275.2	76.3	312.5	374.6	700.1	11283.5	14455.5
PB 2012 Total	1266.7	287.8	275.2	168.9	304.5	427.6	626.0	12699.2	16055.9
Delta	-6.2	-115.0	0.0	-92.6	8.0	-53.0	74.1	-1415.7	-1600.4

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	39	0	0	0	0	0	0	0	0	39
Production	0	0	0	0	0	6	48	119	2872	3045
PB 2013 Total	39	0	0	0	0	6	48	119	2872	3084
PB 2012 Total	39	0	0	0	0	6	90	94	2978	3207
Delta	0	0	0	0	0	0	-42	25	-106	-123

Cost and Funding

Annual Funding By Appropriation

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
2002	--	--	--	--	--	--	12.1
2003	--	--	--	--	--	--	48.8
2004	--	--	--	--	--	--	87.7
2005	--	--	--	--	--	--	95.1
2006	--	--	--	--	--	--	92.0
2007	--	--	--	--	--	--	119.3
2008	--	--	--	--	--	--	191.7
2009	--	--	--	--	--	--	300.8
2010	--	--	--	--	--	--	145.7
2011	--	--	--	--	--	--	167.3
2012	--	--	--	--	--	--	172.8
2013	--	--	--	--	--	--	275.2
2014	--	--	--	--	--	--	76.3
2015	--	--	--	--	--	--	76.0
2016	--	--	--	--	--	--	120.9
2017	--	--	--	--	--	--	71.0
2018	--	--	--	--	--	--	247.6
2019	--	--	--	--	--	--	3.3
Subtotal	**39**	**--**	**--**	**--**	**--**	**--**	**2303.6**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2009 $M	Non End Item Recurring Flyaway BY 2009 $M	Non Recurring Flyaway BY 2009 $M	Total Flyaway BY 2009 $M	Total Support BY 2009 $M	Total Program BY 2009 $M
2002	--	--	--	--	--	--	14.0
2003	--	--	--	--	--	--	55.2
2004	--	--	--	--	--	--	96.9
2005	--	--	--	--	--	--	102.2
2006	--	--	--	--	--	--	96.2
2007	--	--	--	--	--	--	121.8
2008	--	--	--	--	--	--	192.0
2009	--	--	--	--	--	--	297.5
2010	--	--	--	--	--	--	141.9
2011	--	--	--	--	--	--	159.6
2012	--	--	--	--	--	--	162.0
2013	--	--	--	--	--	--	253.0
2014	--	--	--	--	--	--	68.9
2015	--	--	--	--	--	--	67.4
2016	--	--	--	--	--	--	105.4
2017	--	--	--	--	--	--	60.8
2018	--	--	--	--	--	--	208.3
2019	--	--	--	--	--	--	2.7
Subtotal	**39**	**--**	**--**	**--**	**--**	**--**	**2205.8**

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
2015	6	201.5	--	6.0	207.5	29.0	236.5
2016	48	197.7	--	6.7	204.4	49.3	253.7
2017	119	459.6	--	--	459.6	169.5	629.1
2018	355	940.0	--	17.3	957.3	863.0	1820.3
2019	804	1813.9	--	2.2	1816.1	218.5	2034.6
2020	588	1570.8	--	--	1570.8	405.5	1976.3
2021	578	1256.2	--	--	1256.2	669.9	1926.1
2022	547	1205.8	--	--	1205.8	678.5	1884.3
2023	--	--	--	--	--	684.2	684.2
2024	--	--	--	--	--	706.8	706.8
Subtotal	**3045**	**7645.5**	**--**	**32.2**	**7677.7**	**4474.2**	**12151.9**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2009 $M	Non End Item Recurring Flyaway BY 2009 $M	Non Recurring Flyaway BY 2009 $M	Total Flyaway BY 2009 $M	Total Support BY 2009 $M	Total Program BY 2009 $M
2015	6	178.2	--	5.3	183.5	25.6	209.1
2016	48	171.7	--	5.8	177.5	42.8	220.3
2017	119	392.1	--	--	392.1	144.6	536.7
2018	355	787.8	--	14.5	802.3	723.2	1525.5
2019	804	1493.3	--	1.8	1495.1	179.8	1674.9
2020	588	1270.3	--	--	1270.3	327.9	1598.2
2021	578	997.9	--	--	997.9	532.1	1530.0
2022	547	940.9	--	--	940.9	529.5	1470.4
2023	--	--	--	--	--	524.5	524.5
2024	--	--	--	--	--	532.2	532.2
Subtotal	**3045**	**6232.2**	**--**	**27.4**	**6259.6**	**3562.2**	**9821.8**

Low Rate Initial Production

The original Low Rate Initial Production (LRIP) program as described in the initial, December 2009 SAR consisted of a three-year LRIP phase with quantities totaling 448 communications nodes or approximately 14% of the Acquisition Program Objective (APO) of 3102. This is greater than the 10% threshold.

The current LRIP phase remains a three-year plan with quantities now totaling 173 communications nodes. The quantities procured during first and second year will be used to procure sufficient assets to support Production Qualification Testing (PQT) and Initial Operational Test (IOT). The third year quantities will be used to establish an initial production base for the system to support production ramp-up and fielding to permit an orderly increase to the production rate for the system. LRIP quantities will be approved at Milestone C.

Foreign Military Sales

None.

Nuclear Cost

None

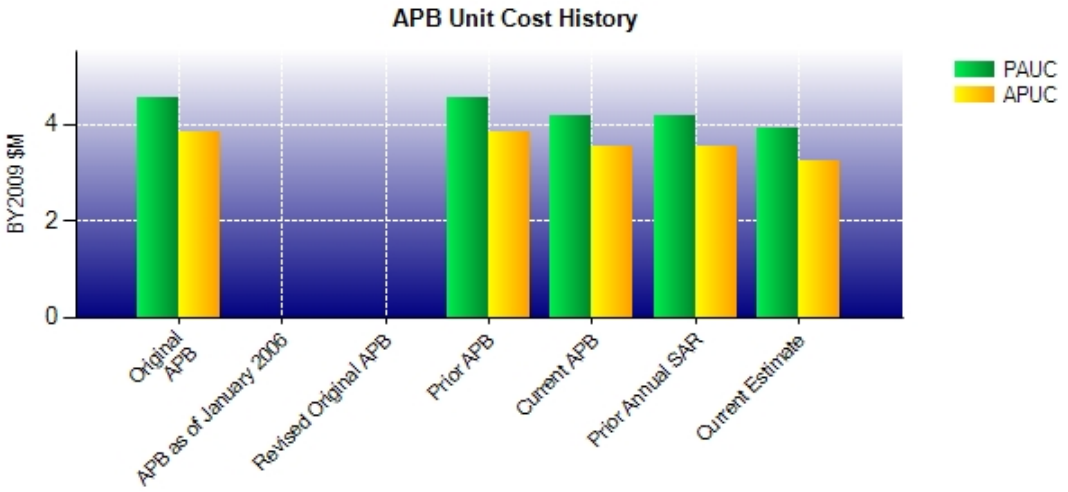
Unit Cost

Unit Cost Report

Unit Cost	BY2009 $M Current UCR Baseline (OCT 2010 APB)	BY2009 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	13397.0	12027.6	
Quantity	3207	3084	
Unit Cost	4.177	3.900	-6.63
Average Procurement Unit Cost (APUC)			
Cost	11250.7	9821.8	
Quantity	3168	3045	
Unit Cost	3.551	3.226	-9.15

Unit Cost	BY2009 $M Original UCR Baseline (MAY 2009 APB)	BY2009 $M Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	15807.9	12027.6	
Quantity	3482	3084	
Unit Cost	4.540	3.900	-14.10
Average Procurement Unit Cost (APUC)			
Cost	13212.4	9821.8	
Quantity	3443	3045	
Unit Cost	3.837	3.226	-15.92

Unit Cost History



		BY2009 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	MAY 2009	4.540	3.837	5.403	4.693
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	MAY 2009	4.540	3.837	5.403	4.693
Current APB	OCT 2010	4.177	3.551	5.013	4.382
Prior Annual SAR	DEC 2010	4.177	3.551	5.007	4.375
Current Estimate	DEC 2011	3.900	3.226	4.687	3.991

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	
5.403	0.025	0.333	0.080	-0.710	-0.560	0.000	0.116	-0.716	4.687

Current SAR Baseline to Current Estimate (TY $M)

Initial APUC Dev Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
4.693	0.023	0.245	0.081	-0.583	-0.585	0.000	0.117	-0.702	3.991

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	JUL 2003	N/A	JUL 2003
Milestone C	N/A	MAY 2013	N/A	APR 2015
IOC	N/A	APR 2017	N/A	APR 2019
Total Cost (TY $M)	N/A	18813.2	N/A	14455.5
Total Quantity	N/A	3482	N/A	3084
Prog. Acq. Unit Cost (PAUC)	N/A	5.403	N/A	4.687

Cost Variance

Cost Variance Summary

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	2656.5	16156.7	--	18813.2
Previous Changes				
Economic	-9.8	-237.3	--	-247.1
Quantity	--	-761.0	--	-761.0
Schedule	-14.9	+349.0	--	+334.1
Engineering	-491.2	-1565.5	--	-2056.7
Estimating	+55.8	-212.3	--	-156.5
Other	--	--	--	--
Support	--	+129.9	--	+129.9
Subtotal	-460.1	-2297.2	--	-2757.3
Current Changes				
Economic	+17.4	+308.2	--	+325.6
Quantity	--	-361.9	--	-361.9
Schedule	+14.3	-101.5	--	-87.2
Engineering	+76.6	-209.9	--	-133.3
Estimating	-1.1	-1568.9	--	-1570.0
Other	--	--	--	--
Support	--	+226.4	--	+226.4
Subtotal	+107.2	-1707.6	--	-1600.4
Total Changes	-352.9	-4004.8	--	-4357.7
CE - Cost Variance	2303.6	12151.9	--	14455.5
CE - Cost & Funding	2303.6	12151.9	--	14455.5

Summary Base Year 2009 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	2595.5	13212.4	--	15807.9
Previous Changes				
Economic	--	--	--	--
Quantity	--	-596.5	--	-596.5
Schedule	-0.5	--	--	-0.5
Engineering	-499.0	-1242.2	--	-1741.2
Estimating	+50.3	-177.3	--	-127.0
Other	--	--	--	--
Support	--	+54.3	--	+54.3
Subtotal	-449.2	-1961.7	--	-2410.9
Current Changes				
Economic	--	--	--	--
Quantity	--	-272.5	--	-272.5
Schedule	--	-13.0	--	-13.0
Engineering	+66.3	-175.1	--	-108.8
Estimating	-6.8	-1252.2	--	-1259.0
Other	--	--	--	--
Support	--	+283.9	--	+283.9
Subtotal	+59.5	-1428.9	--	-1369.4
Total Changes	-389.7	-3390.6	--	-3780.3
CE - Cost Variance	2205.8	9821.8	--	12027.6
CE - Cost & Funding	2205.8	9821.8	--	12027.6

Previous Estimate: December 2010

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+17.4
Extension of development schedule by one year from FY 2012 through FY 2018 to FY 2013 through FY 2019. (Schedule)	0.0	+14.3
Cost decrease due to FY 2011 fact of life Revised Annual Program (RAP) Congressional adjustments. (Estimating)	-6.0	-6.2
Increase to integration costs due to revision of the estimates from the Platform Integrators. (Estimating)	+33.2	+42.6
Decrease in Government test costs due to revision of estimates from the test agencies. (Estimating)	-20.2	-22.8
Decrease in non-recurring Hardware cost as a result of removing the requirement for the Wideband-Large Aperture (W-LA) antenna. (Estimating)	-7.3	-7.9
Adjustment for current and prior escalation. (Estimating)	-6.5	-6.8
Increase in Software development costs due to emerging requirements and continuing improvements. (Engineering)	+66.3	+76.6
RDT&E Subtotal	+59.5	+107.2

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+308.2
Quantity variance resulting from a decrease of 123 Nodes from 3168 to 3045 due to the removal of the requirement to replace Inc 2 hardware with Inc 3 hardware, de-scope of the Expeditionary Signal Battalion (ESB) Platoons, and the addition of the United States Army Special Operations Command (USASOC) requirements. (Subtotal)	-219.4	-291.4
Quantity variance resulting from a decrease of 123 Nodes from 3168 to 3045 due to the removal of the requirement to replace Inc 2 hardware with Inc 3 hardware, de-scope of the Expeditionary Signal Battalion (ESB) Platoons, and the addition of the USASOC requirements. (Quantity)	(-272.5)	(-361.9)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-13.0)	(-17.3)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(+58.2)	(+77.3)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+7.9)	(+10.5)
Acceleration of Procurement Schedule by two years from FY 2026 to FY 2024 resulting from the removal of the requirement to re-buy Inc 2 hardware. (Schedule)	0.0	-84.2
Increase in Hardware estimates for the Satellite Tactical Terminal-High Powered (STT-HP) and Highband Radio Frequency Unit- Multiband Terrestrial (HRFU-MT) antenna. (Estimating)	+285.9	+352.6
Decrease in Hardware cost due to fewer quantities of associated, high cost Configuration Items (CIs) being procured and a change in the mix of CIs being procured. (Estimating) (QR)	-1446.9	-1809.1
Decrease in total A-Kit costs due to reduction of A-Kit quantities. (Estimating) (QR)	-39.3	-54.7
Reduction in Systems Engineering and Program Management due to compression of Procurement schedule by two years from FY 2026 to FY 2024. (Estimating)	-89.1	-105.0
Increase in System Test and Evaluation (ST&E) costs due to the inclusion of annual Network Integrated Evaluation (NIE) requirements and the refinement of Contractor Test costs. (Estimating)	+29.3	+36.8

Decrease resulting from the Configuration Steering Board (CSB) directed de-scoping of the 4-Channel Joint Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (JC4ISR) Radio and W-LA antenna. (Engineering)	-233.3	-287.2
Net Increase in Other Support costs due to increased annual Software license costs and the retrofit of the JC4ISR Radios and Antennas, and the Modular Communication Node-Top Secret (MCN-TS). (Support)	+399.0	+383.8
Net decrease in spares costs due to compression of the procurement schedule by two years from FY 2026 to FY 2024. (Support)	-115.1	-157.4
Procurement Subtotal	-1428.9	-1707.6

(QR) Quantity Related

Contracts

Appropriation: RDT&E	
Contract Name	**WIN-T Increment 3 SDD**
Contractor	General Dynamics C4 Systems, Inc.
Contractor Location	Taunton, MA 02780
Contract Number, Type	DAAB07-02-C-F404, CPAF
Award Date	July 01, 2007
Definitization Date	November 03, 2009

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
784.2	N/A	39	816.0	N/A	39	752.1	760.7

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date	-35.3	-4.3
Previous Cumulative Variances	-34.5	-8.2
Net Change	-0.8	+3.9

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to increased staffing required for waveform development and additional testing required for antenna development.

The favorable net change in the schedule variance is due to progression towards contract completion.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to finalizing the contract requirements in the April 2009 definitization modification and awarding the Extended Range/Multi-Purpose WIN-T Communications Payload (ER/MP WCP) priced option.

The estimated price at completion is less than the initial and current contract prices due to the termination of the Future Combat Systems (FCS) program and the associated requirements on the Inc 3 contract as well as the Army Configuration Steering Board (CSB) directed de-scoping of the program.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	39	0.00%
Production	0	0	3045	0.00%
Total Program Quantities Delivered	0	0	3084	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	14455.5	Years Appropriated	11
Expenditures To Date	1323.8	Percent Years Appropriated	47.83%
Percent Expended	9.16%	Appropriated to Date	1433.3
Total Funding Years	23	Percent Appropriated	9.92%

Total expenditures to date reflects actual disbursements through December 31, 2011.

Operating and Support Cost

Assumptions And Ground Rules

1. Operating and support costs based on an annual update to the Program Office Estimate dated January 2012 and on the approved Acquisition Program Baseline (APB) as of October 22, 2010.
2. Costs estimated in accordance with Department of the Army Cost Analysis Manual, Deputy Assistant Secretary of the Army, US Army Cost and Economic Analysis Center, May 2002.
3. Operating and support cost factors taken from Operating and Support Management Information System.
4. The figures below are per the Office of the Secretary of Defense (OSD) Operating and Support (O&S) cost structure.
5. Mission Pay and Allowance costs are the total Military Personnel costs.
6. Mission Pay and Allowance estimates based on WIN-T manpower estimates included in the WIN-T Inc 3 Cost Analysis Requirements Description (CARD) dated December 22, 2009.
7. Intermediate Maintenance costs reflect the OSD cost element Maintenance Costs and includes Depot Maintenance and Contractor Support.
8. Estimated costs based on Operating Tempo approved by the Army's Training and Doctrine Command.
9. Other costs reflect the OSD defined Continuing Improvement cost total.
10. Costs based on two-level maintenance concept.
11. System life is estimated at 20 years.
12. Operating and support costs reflect the total average annual cost per WIN-T Inc 3 communications node. Multiplying the total average annual cost by 20 years and by 3045 communications nodes will achieve the total costs shown below.
13. There is no antecedent program to this system.

Costs BY2009 $M		
Cost Element	**WIN-T INCREMENT 3 Average Annual Cost Per Communications Node**	**No Antecedent**
Unit-Level Manpower	0.095	--
Unit Operations	0.003	--
Maintenance	0.047	--
Sustaining Support	0.003	--
Continuing System Improvements	0.086	--
Indirect Support	--	--
Other	0.009	--
Total Unitized Cost (Base Year 2009 $)	0.243	--

Total O&S Costs $M	WIN-T INCREMENT 3	No Antecedent
Base Year	14815.1	--
Then Year	23876.8	--

Total O&S Costs include demilitarization and disposal costs valued at $29.6 BY 2009$M.