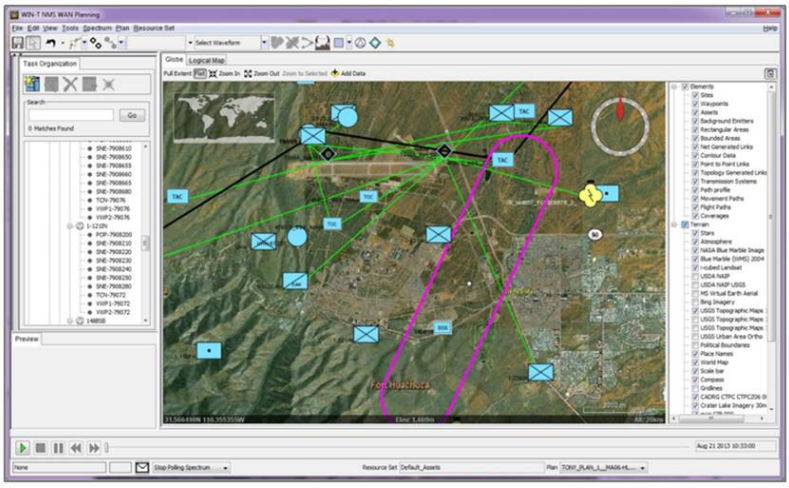
Selected Acquisition Report (SAR)

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

Increment 3 Network Operations Capability



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

As of FY 2015 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

Table of Contents

Common Acronyms and Abbreviations

Acq O&M - Acquisition-Related Operations and Maintenance
APB - Acquisition Program Baseline
APPN - Appropriation
APUC - Average Procurement Unit Cost
BA - Budget Authority/Budget Activity
BY - Base Year
DAMIR - Defense Acquisition Management Information Retrieval
Dev Est - Development Estimate
DoD - Department of Defense
DSN - Defense Switched Network
Econ - Economic
Eng - Engineering
Est - Estimating
FMS - Foreign Military Sales
FY - Fiscal Year
IOC - Initial Operational Capability
$K - Thousands of Dollars
LRIP - Low Rate Initial Production
$M - Millions of Dollars
MILCON - Military Construction
N/A - Not Applicable
O&S - Operating and Support
Oth - Other
PAUC - Program Acquisition Unit Cost
PB - President's Budget
PE - Program Element
Proc - Procurement
Prod Est - Production Estimate
QR - Quantity Related
Qty - Quantity
RDT&E - Research, Development, Test, and Evaluation
SAR - Selected Acquisition Report
Sch - Schedule
Spt - Support
TBD - To Be Determined
TY - Then Year
UCR - Unit Cost Reporting

Program Information

Program Name

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

DoD Component

Army

Responsible Office

Responsible Office

COL Edward Swanson
PM WIN-T
6010 Frankford Street
Aberdeen Proving Ground, MD 21005-1848
edward.j.swanson.mil@mail.mil

Phone 443-395-7223
Fax 443-395-7208
DSN Phone 648-7223
DSN Fax 648-7208
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

Warfighter Information Network – Tactical Increment 3 (WIN-T Inc 3) develops the Network Operations (NetOps) software to meet the Army's Network Convergence goals. NetOps provides the monitoring, control and planning tools to ensure management of the voice, data and internet transport networks. The NetOps software will also provide Information Assurance and Network Centric Enterprise Services. This allows for seamless integration of the tactical network planning, management, monitoring, and defense for the Signal staff. These NetOps improvements simplify the management of the network and increase the automation of tools and reporting. The developed NetOps software enhancements will be provided as a technical insertion to WIN-T Inc 1 and WIN-T Inc 2 for fielding and support.

WIN-T Inc 3 develops the enhanced Net Centric Waveform (NCW) version 10.x for increased throughput capability beyond the line of sight satellite communication and the Highband Networking Waveform (HNW) version 3.0 for line of sight communications. Both NCW and HNW provide improved network capacity and robustness. The waveform improvements will be available for use in WIN-T and other radio programs.

Executive Summary

Throughout FY 2013, program development was on-going. Component Critical Design Reviews (CDRs) were held throughout the year, culminating in a full system CDR the week of December 9, 2013. The program office assessment is that the system meets Key Performance Parameters, the program risks are manageable, and the system baseline is established with effective configuration control.

The Follow-On Engineering and Manufacturing Development contract was awarded to General Dynamics C4 Systems, Taunton, Massachusetts on October 31, 2013. The initial Task Order completed the CDR and continues Network Operations (NetOps) and software waveform development.

An Army Configuration Steering Board meeting on November 7, 2013 approved the de-scope of the program to focus on NetOps and completion of the waveform development efforts. The program will complete: system CDR, development efforts of Highband Networking Waveform (HNW) 3.0 and NetCentric Waveform, NetOps software Build 4, and an 11 node demonstration of HNW 3.0. Efforts for Air Tier, including development of the Joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance radio and antenna, and associated WIN-T Inc 3 unique Configuration Items were descoped from the program. The program is currently being restructured. Upon Defense Acquisition Executive approval, a revised APB will be created.

The final FY 2014 Joint Appropriations Act includes a reduction of FY 2014 Research, Development, Test and Evaluation funds of $149.649M. The impact of this reduction is accounted for as part of the program restructure.

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	☐
O&S Cost		☐
Unit Cost	PAUC	☑
	APUC	☐

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

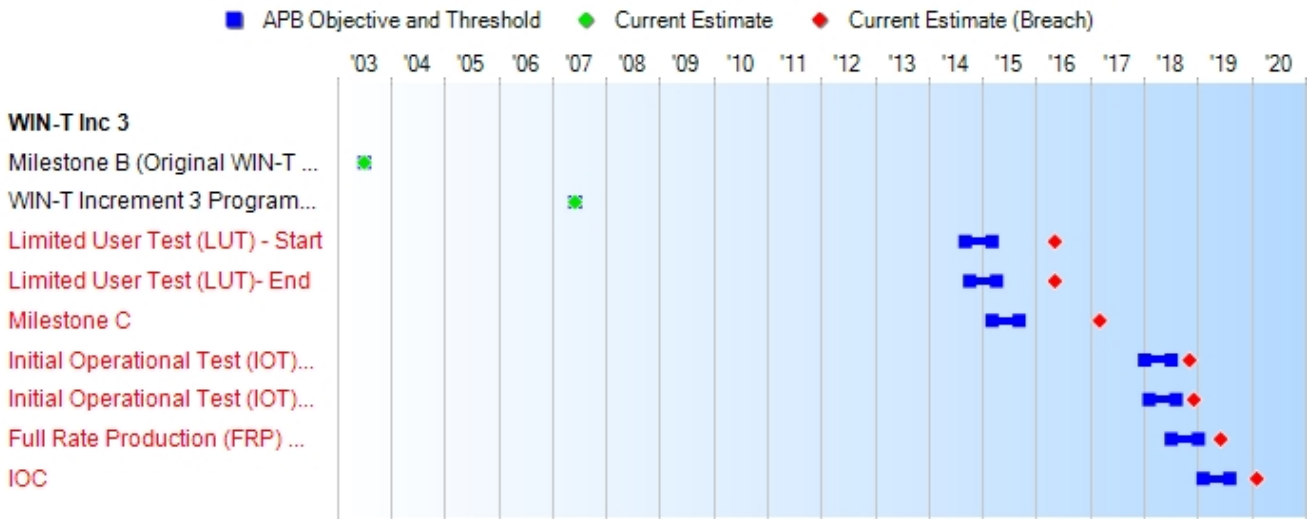
Explanation of Breach

The schedule breach is due to the final decrement in the FY 2013 funding. A Program Deviation Report was submitted. This breach was reported in the December 2012 SAR. The breach will be addressed as part of the program restructure.

An Army Configuration Steering Board (CSB) meeting held on November 7, 2013 approved the de-scope of the WIN-T Inc 3 program to focus on Network Operations and completion of the waveform development efforts. The program is currently being restructured. Upon Defense Acquisition Executive approval, a revised APB will be created.

The unit cost breach to PAUC is due to initial reduction in quantities and transfer of procurement quantities to WIN-T Inc 2 as directed by the Army CSB. The breach will be addressed as part of the program restructure.

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	**MAY 2016**[1]	(Ch-1)
Limited User Test (LUT)- End	DEC 2012	OCT 2014	APR 2015	**MAY 2016**[1]	(Ch-1)
Milestone C	MAY 2013	MAR 2015	SEP 2015	**MAR 2017**[1]	(Ch-1)
Initial Operational Test (IOT) - Start	MAR 2016	JAN 2018	JUL 2018	**NOV 2018**[1]	
Initial Operational Test (IOT) - End	APR 2016	FEB 2018	AUG 2018	**DEC 2018**[1]	
Full Rate Production (FRP) Decision Review	SEP 2016	JUL 2018	JAN 2019	**JUN 2019**[1]	
IOC	APR 2017	FEB 2019	AUG 2019	**FEB 2020**[1]	

[1] *APB Breach*

Change Explanations

(Ch-1) The following current estimates have changed due to program restructuring efforts: LUT start changed from November 2015 to May 2016, LUT end changed from November 2015 to May 2016 and Milestone C changed from May 2016 to March 2017.

Memo

The program is currently being restructured. Upon DAE approval, a revised APB will be created which may further change the current estimate dates for Milestone C and all subsequent events.

The LUT is an operational test to be conducted at NIE 16.2.

Acronyms and Abbreviations

DAE - Defense Acquisition Executive
FRP - Full Rate Production
IOT - Initial Operational Test
LUT - Limited User Test
NIE - Network Integration Evaluation

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, KIP 4 – JTF Component to JTF Headquarter	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	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	TBD	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 effectiveness. The system must continuously provide survivable, interoperable, 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	(Ch-1)

	s , KIP 5 – STEP and Teleport, and KIP 7 – DISN Service Delivery Point 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authenticat-ion, confidential-ity, and nonrepudiat-ion, 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	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, authenticat-ion, confidential-ity, and nonrepudiat-ion, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges;	joint and system integrated 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, authenticat-ion, confidential-ity, and nonrepudiat-ion, and issuance of an IATO by the DAA, and 5) Operationally effective information		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, authenticatio n, confidentiality , and non-repudiation, and issuance of an IATO by the DAA, and 5) Operationally effective information exchanges; and mission

	integrated architecture views.	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.	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.		critical performance and information 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	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	TBD	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 and internet-working components for networks	(Ch-1)

		that connect Secret and Unclass users from a location: Objective: Outside of the AOR.	that connect Secret and Unclass users from a location: Threshold: At the Corps, Division and Brigade in the AOR.		that connect Secret and Unclass users from a location: Threshold: At the Corps, Division and Brigade in the AOR.	
Information Dissemination Category 1/Category 2	Critical survival information (Category 1) delivery in less than or equal to 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: 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/delivere d 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.	(Ch-1)
Force Protection	Armor required to protect personnel operating WIN-T vehicles employed at BCT, Fires,	Armor required to protect personnel operating WIN-T vehicles employed at BCT, Fires,	Armor required to protect personnel operating WIN-T vehicles employed at BCT, Fires,	TBD	Armor required to protect personnel operating WIN-T vehicles employed at BCT, Fires,	(Ch-1)

	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.	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.	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		AVN, BfSB, and select force pooled assets operating within the Division battlespace. WIN-T components at Brigade abnd 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	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	TBD	WIN-T will enable selected warfighters to conduct decisive operations throughout the battlespace while moving "cros s- country" in tactical formation utilizing satellite communicati ons: Threshold: Modular Force ground vehicles: from zero to 25 miles per	(Ch-1)

		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 available for user data.	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 available for user data.		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 available for user data.

Requirements Source

Capability Development Document (CDD) for Warfighter Information Network - Tactical (WIN-T) dated November 6, 2006 and revalidated May 2, 2007

Change Explanations

(Ch-1) The current estimate for each of the characteristics is updated to the Threshold requirement.

Memo

The WIN-T CDD does not include the Sustainment KPP for Materiel Availability and the associated KSAs. Per the CJCSI 3170.01G dated March 1, 2009 and the subsequent JCIDS Manual dated January 19, 2012, it will not be applied as a mandatory KPP in the WIN-T Inc 3 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 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.

As part of the program restructuring efforts, the WIN-T Inc 3 KPPs were updated by the TRADOC TCM N&S and were approved by the JROC via JROCM 142-13 on August 13, 2013. The WIN-T Inc 3 KSA requirements were updated by TCM N&S and were approved by the Army on August 22, 2013.

Per the ADM of June 24, 2013, "the Army shall obtain Joint Staff approval of updated KPPs and Army approval of KSAs threshold requirements prior to awarding the Follow-On Engineering, Manufacturing and Development contract." Both were approved in August 2013.

The Army CSB meeting on November 7, 2013 approved the de-scope of the program to focus on NetOps and completion of the waveform development efforts. The program is currently being restructured. Upon DAE approval a revised APB will be created and will reflect revised KPPs.

Acronyms and Abbreviations

ADM - Acquisition Decision Memorandum
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
CDD - Capabilities Development Document
CJCSI - Chairman of the Joint Chiefs of Staff Instruction
CPD - Capabilities Production Document
CSB - Configuration Steering Board
DAA - Designated Approval Authority
DAE - Defense Acquisition Executive
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
JCIDS - Joint Capabilities Integration and Development System
JROC - Joint Requirements Oversight Council
JROCM - Joint Requirements Oversight Council Memorandum
JTF - Joint Task Force
Kbps - Kilobits per second
KIP - Key Interface Profile
KPP - Key Performance Parameters
KSA - Key System Attributes
Mbps - Megabits per second
mph - Miles per hour
NCOW - Net Centric Operations and Warfare
NetOps - Network Operations
RM - Reference Model
sec - seconds
STEP - Standardized Tactical Entry Point
TCM N&S - Training and Doctrine Command Capabilty Manager for Networks and Services
TRADOC - Training and Doctrine Command
TV - Technical View

Track to Budget

RDT&E

Appn		BA	PE		
Army	2040	04	0603782A		
	Project		**Name**		
	355		WIN-TACTICAL DEM/VAL	(Shared)	(Sunk)
	372		WIN-T INCREMENT 3 - FULL NETWORKING ON THE MOVE		(Sunk)
	Notes:		Project 372 began in FY 2009 for WIN-T Inc 3 exclusively.		
Army	2040	05	0605350A		
	Project		**Name**		
	EE8		WIN-T INC 3 Full Networking		
	Notes:		This Project EE8 is not a new start in FY 2015. This effort is funded under PE 0603782A Project 372 through FY 2014. It is funded under 0605350A Project EE8 in the out years.		

Procurement

Appn		BA	PE	
Army	2035	04	0310704A	
	Line Item		**Name**	
	BS9723		WIN-T SPARES	
Army	2035	02	0310704A	
	Line Item		**Name**	
	BW7120		INCREMENT 3 - FULL NETWORKING ON THE MOVE	(Shared)

The parent Line Item for the WIN-T Inc 3 Procurement line (BW7120) is BW7100. The parent Line Item for the WIN-T Inc 3 Spares (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	1828.3	2656.5	2194.3	1865.7
Procurement	13212.4	11250.7	12370.8	1497.6	16156.7	13881.7	1849.8
Flyaway	--	--	--	1083.1	--	--	1329.0
Recurring	--	--	--	1067.0	--	--	1309.1
Non Recurring	--	--	--	16.1	--	--	19.9
Support	--	--	--	414.5	--	--	520.8
Other Support	--	--	--	369.8	--	--	464.2
Initial Spares	--	--	--	44.7	--	--	56.6
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	3325.9	18813.2	16076.0	3715.5

Confidence Level for Current APB Cost 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 Programs (MDAPs). 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.

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 WIN-T Inc 3. Technology development prior to the FY 2007 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 technologies which will be inserted into WIN-T Inc 2. All funds required for these technology inserts are included in WIN-T Inc 3 and reflected in the costs in this report.

The current estimate costs reflect Army Configuration Steering Board direction in addition to FY 2015 PB funding.

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	39	39	0
Procurement	3443	3168	699
Total	3482	3207	699

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, Points of Presence and Soldier Network Extensions. 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
FY2015 President's Budget / December 2013 SAR (TY$ M)

Appropriation	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
RDT&E	1586.6	117.2	113.2	39.7	9.0	0.0	0.0	0.0	1865.7
Procurement	0.0	0.0	0.0	0.0	61.7	534.3	551.6	702.2	1849.8
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 2015 Total	1586.6	117.2	113.2	39.7	70.7	534.3	551.6	702.2	3715.5
PB 2014 Total	1703.0	271.3	562.2	489.4	823.3	1897.8	1267.6	10875.5	17890.1
Delta	-116.4	-154.1	-449.0	-449.7	-752.6	-1363.5	-716.0	-10173.3	-14174.6

Quantity	Undistributed	Prior	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	0	0	0	0	6	252	252	189	699
PB 2015 Total	0	0	0	0	0	6	252	252	189	699
PB 2014 Total	64	0	0	6	83	208	534	435	2183	3513
Delta	-64	0	0	-6	-83	-202	-282	-183	-1994	-2814

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	--	--	--	--	--	--	167.3
2013	--	--	--	--	--	--	158.8
2014	--	--	--	--	--	--	117.2
2015	--	--	--	--	--	--	113.2
2016	--	--	--	--	--	--	39.7
2017	--	--	--	--	--	--	9.0
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**1865.7**

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	--	--	--	--	--	--	159.8
2012	--	--	--	--	--	--	157.3
2013	--	--	--	--	--	--	146.6
2014	--	--	--	--	--	--	105.4
2015	--	--	--	--	--	--	99.6
2016	--	--	--	--	--	--	34.3
2017	--	--	--	--	--	--	7.6
Subtotal	**--**	**--**	**--**	**--**	**--**	**--**	**1828.3**

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
2017	6	53.4	--	6.4	59.8	1.9	61.7
2018	252	471.2	--	--	471.2	63.1	534.3
2019	252	464.6	--	--	464.6	87.0	551.6
2020	189	319.9	--	11.2	331.1	144.8	475.9
2021	--	--	--	2.3	2.3	224.0	226.3
Subtotal	**699**	**1309.1**	**--**	**19.9**	**1329.0**	**520.8**	**1849.8**

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
2017	6	45.1	--	5.4	50.5	1.6	52.1
2018	252	390.2	--	--	390.2	52.2	442.4
2019	252	377.1	--	--	377.1	70.7	447.8
2020	189	254.6	--	8.9	263.5	115.2	378.7
2021	--	--	--	1.8	1.8	174.8	176.6
Subtotal	**699**	**1067.0**	**--**	**16.1**	**1083.1**	**414.5**	**1497.6**

Low Rate Initial Production

LRIP quantities will be approved at Milestone C.

The Army Configuration Steering Board (CSB) meeting on November 7, 2013 approved the de-scope of the program to focus on Network Operations and completion of the waveform development efforts. The program is currently being restructured. Upon Defense Acquisition Executive approval, a revised APB will be created and will reflect revised production plans.

Foreign Military Sales

None

Nuclear Costs

None

Unit Cost

Unit Cost Report

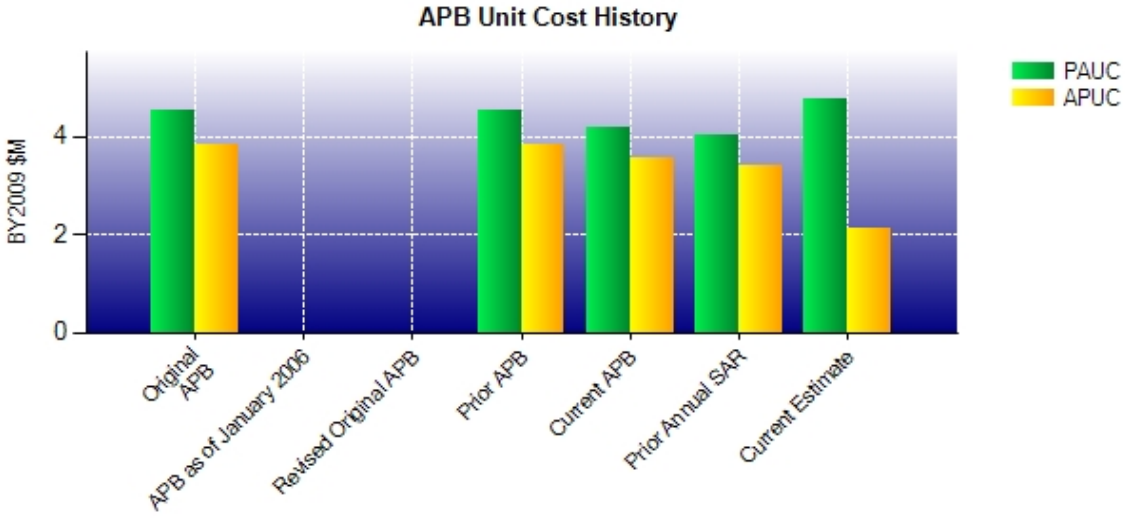
Unit Cost	BY2009 $M Current UCR Baseline (OCT 2010 APB)	BY2009 $M Current Estimate (DEC 2013 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	13397.0	3325.9	
Quantity	3207	699	
Unit Cost	4.177	**4.758** [1]	+13.91
Average Procurement Unit Cost (APUC)			
Cost	11250.7	1497.6	
Quantity	3168	699	
Unit Cost	3.551	2.142	-39.68

Unit Cost	BY2009 $M Original UCR Baseline (MAY 2009 APB)	BY2009 $M Current Estimate (DEC 2013 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	15807.9	3325.9	
Quantity	3482	699	
Unit Cost	4.540	4.758	+4.80
Average Procurement Unit Cost (APUC)			
Cost	13212.4	1497.6	
Quantity	3443	699	
Unit Cost	3.837	2.142	-44.18

[1] **APB Unit Cost Breach**

The unit cost breach to PAUC is due to initial reduction in quantities and transfer of procurement quantities to WIN-T Inc 2 as directed by the Army Configuration Steering Board. The breach will be addressed as part of the program restructure.

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 2012	4.029	3.422	5.093	4.471
Current Estimate	DEC 2013	4.758	2.142	5.315	2.646

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	0.403	7.567	0.277	-2.450	-0.619	0.000	-5.266	-0.088	5.315

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	0.390	4.679	0.297	-1.361	-0.786	0.000	-5.266	-2.047	2.646

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	MAR 2017
IOC	N/A	APR 2017	N/A	FEB 2020
Total Cost (TY $M)	N/A	18813.2	N/A	3715.5
Total Quantity	N/A	3482	N/A	699
Prog. Acq. Unit Cost (PAUC)	N/A	5.403	N/A	5.315

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	2656.5	16156.7	--	18813.2
Previous Changes				
Economic	+20.6	+360.3	--	+380.9
Quantity	+158.2	+109.5	--	+267.7
Schedule	-14.0	+324.5	--	+310.5
Engineering	-462.0	-2085.2	--	-2547.2
Estimating	+109.7	-1456.6	--	-1346.9
Other	--	--	--	--
Support	--	+2011.9	--	+2011.9
Subtotal	-187.5	-735.6	--	-923.1
Current Changes				
Economic	-10.9	-88.0	--	-98.9
Quantity	-300.1	-9715.2	--	-10015.3
Schedule	--	-116.8	--	-116.8
Engineering	-299.3	+1133.9	--	+834.6
Estimating	+7.0	+907.4	--	+914.4
Other	--	--	--	--
Support	--	-5692.6	--	-5692.6
Subtotal	-603.3	-13571.3	--	-14174.6
Total Changes	-790.8	-14306.9	--	-15097.7
CE - Cost Variance	1865.7	1849.8	--	3715.5
CE - Cost & Funding	1865.7	1849.8	--	3715.5

Summary Base Year 2009 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	2595.5	13212.4	--	15807.9
Previous Changes				
Economic	--	--	--	--
Quantity	+143.4	+11.9	--	+155.3
Schedule	-0.5	+13.6	--	+13.1
Engineering	-475.6	-1641.9	--	-2117.5
Estimating	+90.8	-1220.8	--	-1130.0
Other	--	--	--	--
Support	--	+1425.6	--	+1425.6
Subtotal	-241.9	-1411.6	--	-1653.5
Current Changes				
Economic	--	--	--	--
Quantity	-267.8	-7470.6	--	-7738.4
Schedule	--	-155.0	--	-155.0
Engineering	-263.9	+862.0	--	+598.1
Estimating	+6.4	+695.5	--	+701.9
Other	--	--	--	--
Support	--	-4235.1	--	-4235.1
Subtotal	-525.3	-10303.2	--	-10828.5
Total Changes	-767.2	-11714.8	--	-12482.0
CE - Cost Variance	1828.3	1497.6	--	3325.9
CE - Cost & Funding	1828.3	1497.6	--	3325.9

Previous Estimate: December 2012

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-10.9
Adjustment for current and prior escalation. (Estimating)	+6.4	+7.0
Quantity variance resulting in reduction of all 39 prototype units from the program of record. (Quantity)	-267.8	-300.1
De-scope of the WIN-T Inc 3 unique development and Limited User Test hardware. (Engineering)	-263.9	-299.3
RDT&E Subtotal	-525.3	-603.3

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-88.0
Quantity variance resulting from a decrease of 2,750 Nodes from 3,449 to 699 due to Configuration Steering Board (CSB) direction. (Subtotal)	-5258.0	-6805.7
Quantity variance resulting from a decrease of 2,750 Nodes from 3,449 to 699 due to CSB direction. (Quantity)	(-6794.0)	(-8809.3)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-155.0)	(-202.2)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(+995.5)	(+1298.4)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+695.5)	(+907.4)
Additional quantity variance due to fewer quantities of associated, high cost Configuration Items (CIs) being procured and a change in the mix of CIs being procured. (Quantity)	-676.6	-905.9
Shift of procurement buy schedule from FY 2015 - FY 2028 to FY 2017 - FY 2021 due to procuring 2,750 fewer Nodes. (Schedule)	0.0	+85.4
Decrease due to the elimination of the Joint Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance Radio and Highband Radio Frequency Unit- Multiband Terrestrial antenna hardware components. (Engineering)	-50.2	-61.3
Decrease due to the elimination of the WIN-T Communications Payload – Extended Range/Multi-Purpose hardware components. (Engineering)	-83.3	-103.2
Decrease in Fielding, New Equipment Training, and Hardware End of Life (Technology Refresh) resulting from 2,750 fewer Nodes procured. (Support) (QR)	-3754.3	-5052.0
Decrease in Initial Spares due to procurement of 2,750 fewer Nodes. (Support) (QR)	-480.8	-640.6
Procurement Subtotal	-10303.2	-13571.3

(QR) Quantity Related

Contracts

Appropriation: RDT&E	
Contract Name	**Follow-On EMD**
Contractor	General Dynamics C4 Systems, Incorporated
Contractor Location	Taunton, MA 02780
Contract Number, Type	W15P7T-14-D-0002, CPIF/IDIQ
Award Date	October 31, 2013
Definitization Date	October 31, 2013

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price at Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
89.4	N/A	0	88.7	N/A	0	79.3	79.3

Target Price Change Explanation

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/21/2014)	+1.6	-0.1
Previous Cumulative Variances	--	--
Net Change	+1.6	-0.1

Cost and Schedule Variance Explanations

The favorable cumulative cost variance is due to the reduction of support originally anticipated. There were less features and complexities associated with reports and releases. The underrun is still projected at completion. There was also a reduction in Program Management, Contract Management, and Subcontract Management resources and travel due to the change in program direction based on the Acquisition Decision Memorandum.

The unfavorable cumulative schedule variance is due to the delay of the WIN-T Inc 2 post deployment software support which delayed WIN-T Inc 3 Network Operations efforts and the lack of full access to radios that were on the Government Furnished Equipment list. General Dynamics has been traveling to the Aberdeen Proving Ground lab to minimize schedule variance. The Goverment and General Dynamics managers will work together to agree to a schedule recovery plan to mitigate any futher cost schedule and cost variances.

Contract Comments

This is the first time this contract is being reported.

Deliveries and Expenditures

Delivered to Date	Plan to Date	Actual to Date	Total Quantity	Percent Delivered
Development	0	0	0	--
Production	0	0	699	0.00%
Total Program Quantity Delivered	0	0	699	0.00%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	3715.5	Years Appropriated	13
Expended to Date	1864.8	Percent Years Appropriated	65.00%
Percent Expended	50.19%	Appropriated to Date	1703.8
Total Funding Years	20	Percent Appropriated	45.86%

The above data is current as of 3/4/2014.

Operating and Support Cost

WIN-T Inc 3

Assumptions and Ground Rules

Cost Estimate Reference:

1. O&S costs based on an annual update to the Program Office Estimate dated February 2014.
2. Costs estimated in accordance with Department of the Army Cost Analysis Manual, Deputy Assistant Secretary of the Army, U.S. Army Cost and Economic Analysis Center, May 2002.
3. O&S cost factors taken from Army Operating and Support Management Information System.
4. The figures below are per the Cost Assessment and Program Evaluation O&S Cost Estimating structure.
5. Military Personnel costs are taken from the Army Military Cost System.
6. Mission Pay and Allowance estimates based on WIN-T manpower estimates included in the WIN-T Inc 3 Cost Analysis Requirements Description dated December 22, 2009.
7. Estimated costs are based on the Operating Tempo approved by the Army's Training and Doctrine Command as well as individual Configuration Item component reliability.

Sustainment Strategy:

1. Costs based on two-level maintenance concept.
2. System life is estimated at 20-years.
2. Total quantity of the system being procured consists of 699 communication nodes.

Antecedent Information:

There is no antecedent program to this system.

Unitized O&S Costs BY2009 $K		
Cost Element	**WIN-T Inc 3 Average Annual Cost Per Communications Node**	**No Antecedent (Antecedent) N/A**
Unit-Level Manpower	90.758	0.000
Unit Operations	1.219	0.000
Maintenance	48.402	0.000
Sustaining Support	40.996	0.000
Continuing System Improvements	47.956	0.000
Indirect Support	0.000	0.000
Other	0.000	0.000
Total	229.331	--

Unitized Cost Comments:

O&S 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 699 communications nodes achieves the total costs.

	Total O&S Cost $M			
	Current Development APB Objective/Threshold		Current Estimate	
	WIN-T Inc 3		WIN-T Inc 3	No Antecedent (Antecedent)
Base Year	19927.9	21920.7	3206.0	N/A
Then Year	33660.3	N/A	4723.0	N/A

Total O&S Costs Comments:

The WIN-T Inc 3 O&S cost decreased from $14.4B (BY$ 2009) in the 2012 SAR to $3.2B (BY$ 2009) in the December 2013 SAR. The primary driver of the cost difference is due to the reduction of Nodes from 3,449 to 699.

O&S Cost Variance		
Category	**Base Year 2009 $M**	**Change Explanation**
Prior SAR Total O&S Estimate December 2012	14,402.7	
Cost Estimating Methodology	0.0	
Cost Data Update	0.0	
Labor Rate	0.0	
Energy Rate	-70.4	Updated Operations & Maintenance, Army Fuel Inflation Rates and updated quantities.
Technical Input	-917.0	Removal of Joint Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance Radio, Highband Radio Frequency Unit- Multiband Terrestrial Antenna, and WIN-T Communications Payload-Extended Range/Multi-Purpose requirements.
Programmatic/Planning Factors	-10,209.3	Decreased quantity by 2,750 Nodes.
Other	0.0	
Total Changes	-11,196.7	
Current Estimate	3,206.0	

Disposal Costs:

Demilitarization and disposal costs valued at $2.6M (BY$ 2009).