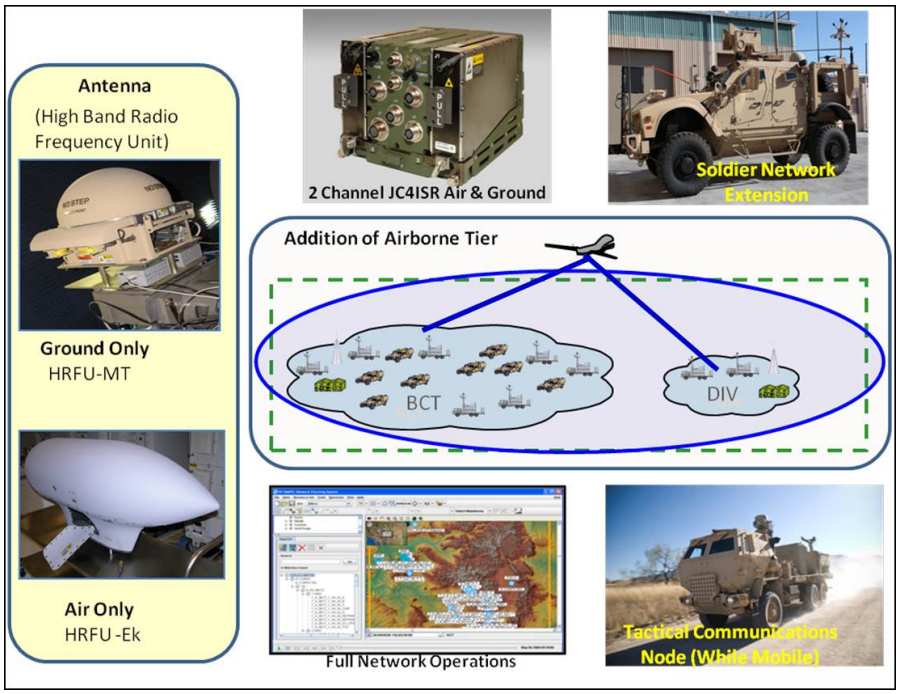
Selected Acquisition Report (SAR)

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



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

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Program 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

Warfighter Information Network – Tactical (WIN-T) Increment 3 (Inc 3) provides full network mobility and introduces an additional Line-of-Sight link using an airborne platform, building on the capabilities of previous WIN-T Increments. WIN-T Inc 3 connects all users to each other from theater down to the maneuver company level, to Joint and multinational elements, and to the Defense Information System Network (DISN). WIN-T Inc 3 is key to the Army's Network Modernization program. It provides a leap forward in network capacity with improved system reliability and robustness, made possible by the new Highband Networking Waveform (HNW) version 3.0 embedded on the Joint Command, Control, Communications, Computers, Intelligence, Surveillance (JC4ISR) radios. The technology advances in the combination of the JC4ISR radios and HNW will provide a throughput capability four times greater than currently fielded networking radios. The Air Tier implementation of the JC4ISR radios and HNW 3.0 will offload significant amounts of traffic from satellites with reduced operating cost to the Army, freeing satellite bandwidth and providing the Commander the ability to allocate bandwidth resources at the critical point on the battlefield. Inc 3 provides a Top Secret Enclave that supports communication of Intelligence Traffic over the WIN-T colorless network. WIN-T Inc 3 Network Operations (NetOps) software provides the on the move capability to meet the Global Information Grid (GIG) NetCentric Vision including Information Assurance and Network Centric Enterprise Services with mature planning, monitoring, and controlling capabilities; additionally implementation of the WIN-T Inc 3 NetOps solution supports the Army's NetOps convergence goals. WIN-T Inc 3 mature technologies will be inserted into WIN-T Increment 2 units.

Executive Summary

Engineering and Manufacturing Development (EMD) efforts are on-going and include: development, integration and test of the WIN-T Inc 3 network architecture, configuration items, transmission subsystem and the Network Operations (NetOps) Management software. An In-Process Review (IPR) was held at General Dynamics in June 2012 and provided a detailed review of the technical development, cost and schedule for the program. The Highband Networking Waveform (HNW) 3.0 Preliminary Design Review was held in August 2012. Component Critical Design Reviews (CDRs) for the HNW and the Radio Platform Software are in progress during March and April 2013. A system level CDR is planned for 4Q FY 2013.

The WIN-T Communications Payload (WCP) subsystem test was performed March - June 2012 at Fort Huachuca, AZ. The testing covered availability, range and throughput of the antenna. The testing included the Highband Radio Frequency Unit - Extended Range Ku band (HRFU-Ek) and the the HRFU-Multi Platform (HRFU MT). The test results indicated positive attributes for both antennas. A successful Cosite test in conjunction with the Grey Eagle unmanned aerial system followed in October 2012, based on both variants. Development will continue to improve performance of both antenna variants. A final selection is planned to occur in 3Q FY 2013.

WIN-T Inc 3 is leading the Assistant Secretary of the Army for Acquisition, Logistics and Technology's (ASAALT's) Tactical Network Operations (NetOps) Convergence efforts and will execute the changes through annual NetOps releases.

Alpha contracting for the Follow-on EMD contract began in 2012 and is on-going. Contract award is planned for May 2013.

The program currently has a schedule breach. The schedule breach is due to the FY 2014 decrement in the President's Budget FY 2014. The Program Office will submit a Program Deviation Report and a revised Acquistion Program Baseline (APB) based on updated program costs and schedule.

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

Threshold Breaches

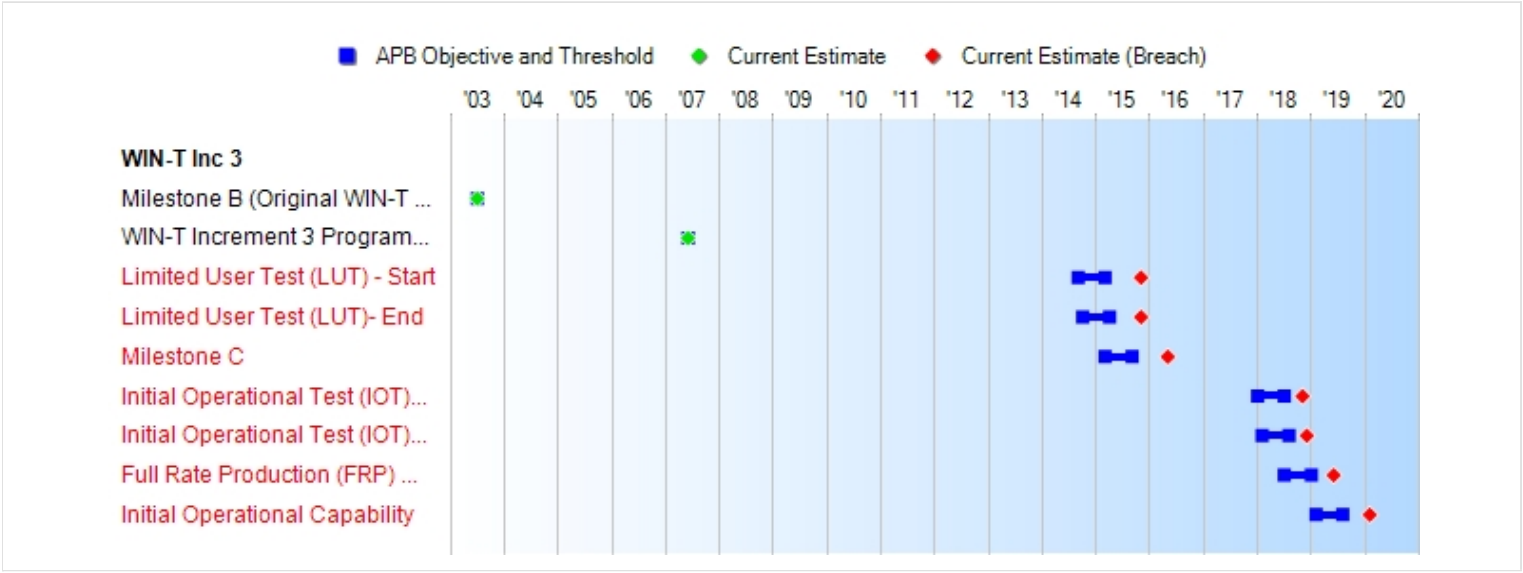
APB Breaches		
Schedule		☑
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
O&S Cost		☐
Unit Cost	PAUC	☐
	APUC	☐

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 FY 2014 decrement in the President's Budget FY 2014. The Program Office will submit a Program Deviation Report based on updated program costs and schedule.

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

[1] *APB Breach*

Change Explanations

(Ch-1) The Current Estimate for some program schedule dates including LUT, Milestone C, IOT, FRP and Initial Operational Capability (IOC) have changed due to funding decrements in the President's Budget FY2014 as follows: LUT start has changed from September 2014 to November 2015, LUT end has changed from October 2014 to November 2015, Milestone C has changed from April 2015 to May 2016, IOT start has changed from March 2018 to November 2018, IOT end has changed from April 2018 to December 2018, FRP has changed from September 2018 to June 2019, and IOC has changed from April 2019 to February 2020.

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 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 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

	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		including availability, integrity, authentica-tion, confidential-ity, and non-repudiation, 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.

	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.		
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 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.	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. Objective: Outside of 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 / 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	Armor required to protect personnel operating WIN-T vehicles employed at	Armor required to protect personnel operating WIN-T vehicles employed at	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.	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.	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		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.
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	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	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

		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 available for user data.	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 available for user data.		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.

Requirements Source: Capability Development Document (CDD) for Warfighter Information Network - Tactical (WIN-T) dated November 6, 2006 and revalidated 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 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 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)
	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	2353.6	2656.5	2194.3	2469.0
Procurement	13212.4	11250.7	12370.8	11800.8	16156.7	13881.7	15421.1
Flyaway	9988.4	--	--	7151.2	12068.9	--	9181.0
Recurring	9967.0	--	--	7123.7	12044.6	--	9148.2
Non Recurring	21.4	--	--	27.5	24.3	--	32.8
Support	3224.0	--	--	4649.6	4087.8	--	6240.1
Other Support	2555.3	--	--	4124.1	3248.6	--	5539.7
Initial Spares	668.7	--	--	525.5	839.2	--	700.4
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	14154.4	18813.2	16076.0	17890.1

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 this 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 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	64
Procurement	3443	3168	3449
Total	3482	3207	3513

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
FY2014 President's Budget / December 2012 SAR (TY$ M)

Appropriation	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
RDT&E	1427.8	275.2	271.3	325.6	76.4	71.0	21.7	0.0	2469.0
Procurement	0.0	0.0	0.0	236.6	413.0	752.3	1876.1	12143.1	15421.1
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 2014 Total	1427.8	275.2	271.3	562.2	489.4	823.3	1897.8	12143.1	17890.1
PB 2013 Total	1433.3	275.2	76.3	312.5	374.6	700.1	2067.9	9215.6	14455.5
Delta	-5.5	0.0	195.0	249.7	114.8	123.2	-170.1	2927.5	3434.6

Program funding and production quantities listed in this SAR are consistent with the FY 2014 President's Budget (PB). The FY 2014 PB did not reflect the enacted DoD appropriation for FY 2013, nor sequestration; it reflected the President's requested amounts for FY 2013.

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	64	0	0	0	0	0	0	0	0	64
Production	0	0	0	0	6	83	208	534	2618	3449
PB 2014 Total	64	0	0	0	6	83	208	534	2618	3513
PB 2013 Total	39	0	0	0	6	48	119	355	2517	3084
Delta	25	0	0	0	0	35	89	179	101	429

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	--	--	--	--	--	--	275.2
2014	--	--	--	--	--	--	271.3
2015	--	--	--	--	--	--	325.6
2016	--	--	--	--	--	--	76.4
2017	--	--	--	--	--	--	71.0
2018	--	--	--	--	--	--	21.7
Subtotal	**64**	**--**	**--**	**--**	**--**	**--**	**2469.0**

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	--	--	--	--	--	--	297.4
2010	--	--	--	--	--	--	141.9
2011	--	--	--	--	--	--	159.6
2012	--	--	--	--	--	--	156.4
2013	--	--	--	--	--	--	251.5
2014	--	--	--	--	--	--	241.3
2015	--	--	--	--	--	--	284.2
2016	--	--	--	--	--	--	65.4
2017	--	--	--	--	--	--	59.7
2018	--	--	--	--	--	--	17.9
Subtotal	**64**	**--**	**--**	**--**	**--**	**--**	**2353.6**

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	201.4	--	6.2	207.6	29.0	236.6
2016	83	313.5	--	6.9	320.4	92.6	413.0
2017	208	548.8	--	--	548.8	203.5	752.3
2018	534	1225.4	--	17.5	1242.9	633.2	1876.1
2019	435	1018.6	--	2.2	1020.8	246.8	1267.6
2020	336	935.4	--	--	935.4	413.6	1349.0
2021	390	1010.0	--	--	1010.0	393.8	1403.8
2022	410	1008.7	--	--	1008.7	464.9	1473.6
2023	387	1032.7	--	--	1032.7	520.0	1552.7
2024	322	862.1	--	--	862.1	553.4	1415.5
2025	146	503.2	--	--	503.2	656.0	1159.2
2026	192	488.4	--	--	488.4	626.0	1114.4
2027	--	--	--	--	--	694.3	694.3
2028	--	--	--	--	--	713.0	713.0
Subtotal	**3449**	**9148.2**	**--**	**32.8**	**9181.0**	**6240.1**	**15421.1**

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	174.8	--	5.4	180.2	25.1	205.3
2016	83	267.0	--	5.9	272.9	78.8	351.7
2017	208	458.7	--	--	458.7	170.1	628.8
2018	534	1005.1	--	14.4	1019.5	519.3	1538.8
2019	435	819.9	--	1.8	821.7	198.6	1020.3
2020	336	738.9	--	--	738.9	326.7	1065.6
2021	390	782.9	--	--	782.9	305.3	1088.2
2022	410	767.4	--	--	767.4	353.6	1121.0
2023	387	771.0	--	--	771.0	388.2	1159.2
2024	322	631.6	--	--	631.6	405.4	1037.0
2025	146	361.8	--	--	361.8	471.6	833.4
2026	192	344.6	--	--	344.6	441.7	786.3
2027	--	--	--	--	--	480.7	480.7
2028	--	--	--	--	--	484.5	484.5
Subtotal	**3449**	**7123.7**	**--**	**27.5**	**7151.2**	**4649.6**	**11800.8**

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 297 communications nodes or approximately 9% of the APO of 3449. 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

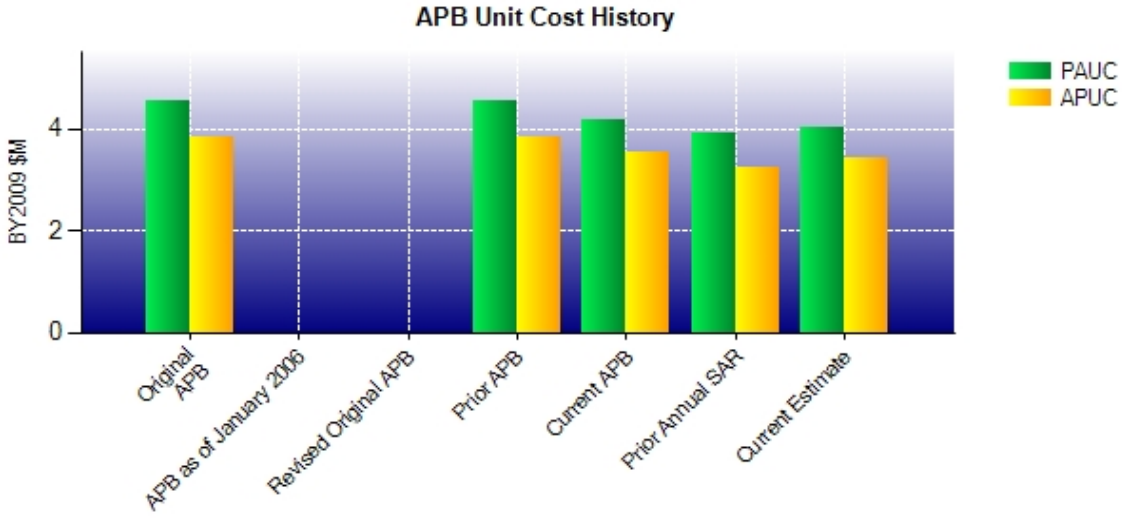
Unit Cost

Unit Cost Report

Unit Cost	BY2009 $M Current UCR Baseline (OCT 2010 APB)	BY2009 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	13397.0	14154.4	
Quantity	3207	3513	
Unit Cost	4.177	4.029	-3.54
Average Procurement Unit Cost (APUC)			
Cost	11250.7	11800.8	
Quantity	3168	3449	
Unit Cost	3.551	3.422	-3.63

Unit Cost	BY2009 $M Original UCR Baseline (MAY 2009 APB)	BY2009 $M Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	15807.9	14154.4	
Quantity	3482	3513	
Unit Cost	4.540	4.029	-11.26
Average Procurement Unit Cost (APUC)			
Cost	13212.4	11800.8	
Quantity	3443	3449	
Unit Cost	3.837	3.422	-10.82

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 2011	3.900	3.226	4.687	3.991
Current Estimate	DEC 2012	4.029	3.422	5.093	4.471

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	0.108	0.029	0.088	-0.725	-0.383	0.000	0.573	-0.310	5.093

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	0.104	0.024	0.094	-0.605	-0.422	0.000	0.583	-0.222	4.471

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	MAY 2016
IOC	N/A	APR 2017	N/A	FEB 2020
Total Cost (TY $M)	N/A	18813.2	N/A	17890.1
Total Quantity	N/A	3482	N/A	3513
Prog. Acq. Unit Cost (PAUC)	N/A	5.403	N/A	5.093

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Dev Est)	2656.5	16156.7	--	18813.2
Previous Changes				
Economic	+7.6	+70.9	--	+78.5
Quantity	--	-1122.9	--	-1122.9
Schedule	-0.6	+247.5	--	+246.9
Engineering	-414.6	-1775.4	--	-2190.0
Estimating	+54.7	-1781.2	--	-1726.5
Other	--	--	--	--
Support	--	+356.3	--	+356.3
Subtotal	-352.9	-4004.8	--	-4357.7
Current Changes				
Economic	+13.0	+289.4	--	+302.4
Quantity	+158.2	+1232.4	--	+1390.6
Schedule	-13.4	+77.0	--	+63.6
Engineering	-47.4	-309.8	--	-357.2
Estimating	+55.0	+324.6	--	+379.6
Other	--	--	--	--
Support	--	+1655.6	--	+1655.6
Subtotal	+165.4	+3269.2	--	+3434.6
Total Changes	-187.5	-735.6	--	-923.1
CE - Cost Variance	2469.0	15421.1	--	17890.1
CE - Cost & Funding	2469.0	15421.1	--	17890.1

Summary Base Year 2009 $M				
	RDT&E	**Proc**	**MILCON**	**Total**
SAR Baseline (Dev Est)	2595.5	13212.4	--	15807.9
Previous Changes				
Economic	--	--	--	--
Quantity	--	-869.0	--	-869.0
Schedule	-0.5	-13.0	--	-13.5
Engineering	-432.7	-1417.3	--	-1850.0
Estimating	+43.5	-1429.5	--	-1386.0
Other	--	--	--	--
Support	--	+338.2	--	+338.2
Subtotal	-389.7	-3390.6	--	-3780.3
Current Changes				
Economic	--	--	--	--
Quantity	+143.4	+880.9	--	+1024.3
Schedule	--	+26.6	--	+26.6
Engineering	-42.9	-224.6	--	-267.5
Estimating	+47.3	+208.7	--	+256.0
Other	--	--	--	--
Support	--	+1087.4	--	+1087.4
Subtotal	+147.8	+1979.0	--	+2126.8
Total Changes	-241.9	-1411.6	--	-1653.5
CE - Cost Variance	2353.6	11800.8	--	14154.4
CE - Cost & Funding	2353.6	11800.8	--	14154.4

Previous Estimate: December 2011

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+13.0
Acceleration of component design reviews in the development schedule. (Schedule)	0.0	-13.4
Increase in 25 nodes from 39 to 64 required for Limited User Test (LUT). (Quantity) (QR)	+143.4	+158.2
Decrease in Development Engineering due to leveraging the Increment 2 design. (Engineering)	-38.5	-42.5
Decrease resulting from a descope of the Point of Presence-Command (PoP-C) and the Modular Communication Node-Global Information Grid Interface (MCN-GI). (Engineering)	-4.4	-4.9
Increase due to refinement of estimate for Development Testing, Limited User Testing, and New Equipment Training. (Estimating)	+19.6	+22.5
Increase due to refinement of System Engineering and Program Management estimating methodology. (Estimating)	+34.9	+40.1
Cost decrease due to FY 2012 fact of life Revised Annual Program (RAP) Congressional adjustments. (Estimating)	-5.2	-5.5
Adjustment for current and prior escalation. (Estimating)	-2.0	-2.1
RDT&E Subtotal	+147.8	+165.4

(QR) Quantity Related

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+289.4
Stretch-out of procurement buy profile from FY 2015 - FY 2024 to FY 2015 - FY 2028 to accomodate additional units procured. (Schedule)	0.0	+39.7
Total Quantity variance resulting from an increase of 404 nodes from 3045 to 3449 due to Increment 2 quantity reductions. (Subtotal)	+525.2	+734.7
Quantity variance resulting from an increase of 404 nodes from 3045 to 3449 due to Increment 2 quantity reductions. (Quantity) (QR)	(+880.9)	(+1232.4)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+26.6)	(+37.3)
Allocation to Engineering resulting from Quantity change. (Engineering) (QR)	(-190.8)	(-267.0)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-191.5)	(-268.0)
Decrease resulting from a descope of the Point of Presence-Command (PoP-C) and Modular Communication Node-Global Information Grid Interface (MCN-GI). (Engineering)	-33.8	-42.8
Increase in Systems Engineering and Program Management fixed costs resulting from four additional years of procurement. (Estimating)	+192.8	+282.6
Increase in Engineering Change Order costs as a function of additional Hardware procurement. (Estimating) (QR)	+48.0	+79.1
Increase in the cost for software licenses due to an additional 404 nodes and four additional years of procurement. (Estimating) (QR)	+159.4	+230.9

Increase in Fielding, New Equipment Training, and Hardware End of Life (Tech Refresh) resulting from an additional 404 nodes procured. (Support) (QR)	+1022.2	+1556.1
Increase in Initial Spares due to procurement of an additional 404 nodes. (Support) (QR)	+65.2	+99.5
Procurement Subtotal	+1979.0	+3269.2

(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	830.6	840.1

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (3/31/2013)	-39.5	-1.3
Previous Cumulative Variances	-35.3	-4.3
Net Change	-4.2	+3.0

Cost And Schedule Variance Explanations

The unfavorable net change in the cost variance is due to challenges encountered in design of aperatures and converters as well as mechanical design for antennas. Resolutions have been implemented.

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

Contract Comments

This contract is more than 90% complete; therefore, this is the final report for this contract.

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 more than the initial and current contract prices due to the current Over Target Baseline (OTB) and Over Target Schedule (OTS).

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	64	0.00%
Production	0	0	3449	0.00%
Total Program Quantities Delivered	0	0	3513	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	17890.1	Years Appropriated	12
Expenditures To Date	1750.6	Percent Years Appropriated	44.44%
Percent Expended	9.79%	Appropriated to Date	1703.0
Total Funding Years	27	Percent Appropriated	9.52%

The above data is current as of 3/31/2013.

Operating and Support Cost

WIN-T Inc 3

Assumptions and Ground Rules

Cost Estimate Reference:

1. Operating and Support (O&S) costs based on an annual update to the Program Office Estimate dated April 2013.
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. O&S cost factors taken from Army Operating and Support Management Information System (OSMIS).
4. The figures below are per the Office of the Secretary of Defense (OSD) 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. 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 3,449 communications nodes will achieve the total costs shown below.

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 3,449 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	83.0	0.0
Unit Operations	3.0	0.0
Maintenance	45.8	0.0
Sustaining Support	6.9	0.0
Continuing System Improvements	70.1	0.0
Indirect Support	0.0	0.0
Other	0.0	0.0
Total	208.8	--

Unitized Cost Comments:

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 3,449 communications nodes will achieve 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	14402.7	N/A
Then Year	33660.3	N/A	24328.3	N/A

Total O&S Costs Comments:

The WIN-T Inc 3 O&S cost decreased from $19.9 (BY 2009 $B) in the 2010 APB to $14.4 (BY 2009 $B) in the December 2012 SAR. The primary driver of the cost reduction is due to the reduction of personnel required for United States Army Special Operations Command (USASOC) units.

The WIN-T Inc 3 O&S cost decreased from $14.8 (BY 2009 $B) in the 2011 SAR to $14.4 (BY 2009 $B) in the December 2012 SAR. The primary driver of the cost reduction is due to a longer fielding schedule, therefore, more of the hardware refresh and annual software license renewals are funded during the procurement phase.

Disposal Costs

Demilitarization and disposal costs valued at $34.5 BY 2009$M.