Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-349

WIN-T Increment 2 – Initial Networking On The Move

Warfighter Information Network-Tactical Increment 2 (WIN-T Inc 2)

As of December 31, 2012

Defense Acquisition Management
Information Retrieval
(DAMIR)

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Program Information

Program Name

Warfighter Information Network-Tactical Increment 2 (WIN-T Inc 2)

DoD Component

Army

Responsible Office

Responsible Office

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Date Assigned September 29, 2011

References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acqusition Program Baseline (APB) dated March 8, 2010

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated May 8, 2013

Mission and Description

Warfighter Information Network (WIN-T) Increment 2 (Inc 2) provides the Army with initial On-The-Move (OTM) networking capability. The Inc 2 network retains capabilities delivered by WIN-T Inc 1 and by leveraging proven government and commercial technologies, adds greater network throughput and automated Network Management to optimize planning (to include spectrum use), initialization, monitoring and troubleshooting. WIN-T Inc 2 employs Satellite Communications (SATCOM) OTM to extend the network in maneuver Brigade Combat Teams (BCTs) to Company level for the first time. Using equipment mounted on combat platforms, WIN-T Inc 2 delivers a mobile capability that reduces reliance on fixed infrastructure and allows key leaders to move on the battlefield while retaining Situational Awareness and Mission Command capabilities. Using the Highband Networking Radio, with the Highband Networking Waveform and high performance antennas, the WIN-T Inc 2 Line-of-Sight network offers an adaptive 30 Megabit per second (Mbps) aggregate throughput to key leaders in their Command Post or in their vehicle. The WIN-T Inc 2 network is self-forming, which means that it automatically creates transmission paths based on terrain and environmental conditions; and self-healing, meaning that the paths will automatically re-route traffic to complete network transactions and calls even if one or more nodes break down or loses connectivity. This offers greater network reliability and better end-to-end connectivity than traditional point-to-point networks. WIN-T Inc 2 introduces the network management capability needed to keep the mobile and dispersed forces networked together through automated planning, initialization, monitoring, and troubleshooting. Finally, WIN-T Inc 2 adopts "Colorless Core" technology that encrypts both classified and unclassified user information in the network and minimizes the number of users on the "core" of the network. The Colorless Core allows commanders to utilize the tactical network without fear of the enemy intercepting information. Colorless Core is a technical insertion in the WIN-T Inc 1b network which enables information sharing between Inc 1b and Inc 2.

The WIN-T Inc 2 capabilities are identified for fielding to Armored, Infantry, and Stryker BCTs and Division Headquarters. The Point of Presence and the Tactical Communications Node have both satellite and Line-of-Sight communication capability. The Soldier Network Extension provides satellite communication only. The Point of Presence and the Tactical Communications Node are deployed at Division, Brigade and Battalion echelons. The Soldier Network Extension serves as the S3 vehicle at Battalion level and is also deployed down to Company level.

WIN-T Inc 3 mature technologies will be inserted into Inc 2 units.

Executive Summary

WIN-T Inc 2 participated in a Defense Acquisition Board (DAB) on September 25, 2012. A subsequent Acquisition Decision Memorandum (ADM) was signed on September 26, 2012. The ADM approved the procurement of Lot 3 (an additional quantity of Low Rate Initial Production (LRIP)) consisting of 538 communication nodes (i.e., 9 Brigade Combat Teams (BCTs) and 3 Division Headquarters (Div HQ)). The additional quantities are needed to maintain adequate production rates and to remain synchronized with the Army's Capability Set fielding strategy.

Director of Operational Test and Evaluation (DOT&E) also signed the Beyond Low Rate Initial Production Report (BLRIP), allowing the Army to field WIN-T Inc 2 equipment. The BLRIP raised concerns with Soldier Network Extension (SNE) and Highband Networking Radio (HNR) effectiveness and with system reliability, which have been addressed in the Product Manager's (PdMs) Corrective Action Plan.

Test and Evaluation (T&E) Working Integrated Product Team (WIPT) meetings that included Army and the Office of the Secretary of Defense (OSD) participation, were held to discuss the requirements, planning, and readiness for the the ADM directed Follow-on Test and Evaluation (FOT&E), on schedule for May 2013. The FOT&E will focus on three areas: Reliability and Maintainability, SNE performance, and Highband Networking Waveform (HNW) performance.

A Full Rate Production decision will be requested in 4Q FY 2013 after conducting the FOT&E.

A series of events have successfully occurred as follows: Conduct of an Initial Operational Test (IOT) was held from May 8 - 25, 2012 at White Sands Missile Range, NM, Fort Gordon, GA, Fort Campbell, KY and Fort Riley, KS as part of the Network Integration Evaluation (NIE) 12.2; a Production Readiness Review was successfully completed April through July 2012; all Milestone documentation associated with the September 2012 DAB was completed; implementation of a robust series of Failure Mode Closure and Reliability Test Events; successful completion of Network Integration Evaluation (NIE) 13.1, and completed refresher and leader training for the 2 BCT /1 Armored Division (A/D) in preparation for FOT&E.

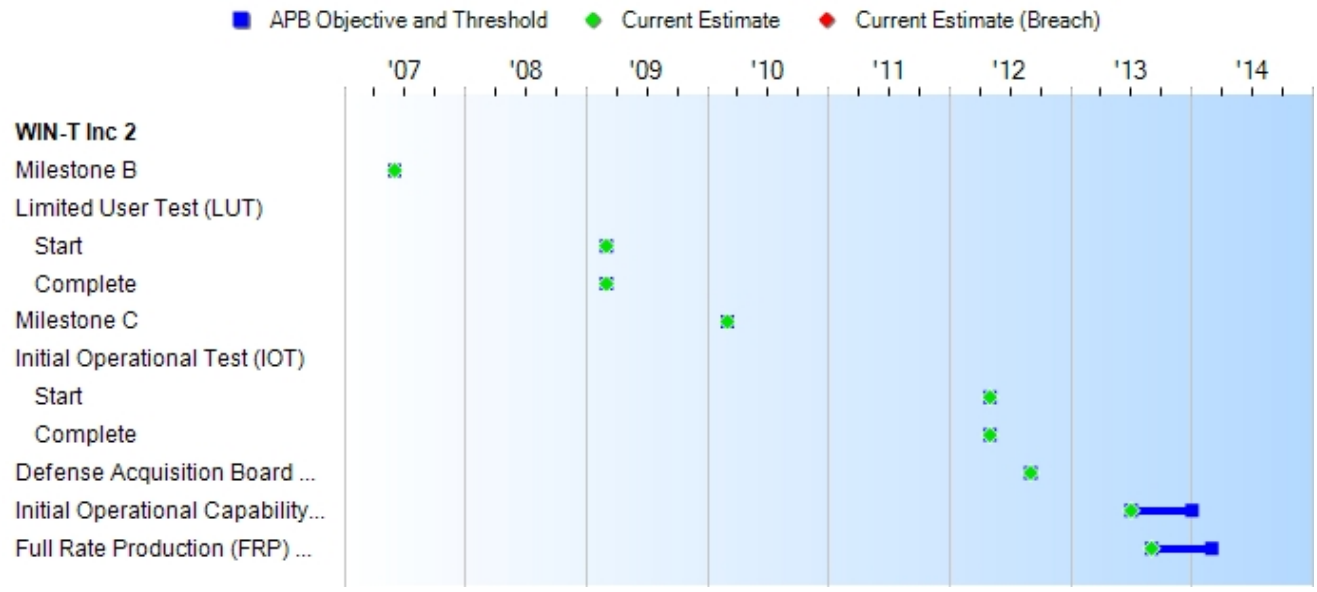
There are no significant software-related issues associated with this program at this time.

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

Schedule



Milestones	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	
Milestone B	JUN 2007	JUN 2007	JUN 2007	JUN 2007	
Limited User Test (LUT)					
Start	MAR 2009	MAR 2009	MAR 2009	MAR 2009	
Complete	MAR 2009	MAR 2009	MAR 2009	MAR 2009	
Milestone C	FEB 2010	MAR 2010	MAR 2010	MAR 2010	(Ch-1)
Initial Operational Test (IOT)					
Start	NOV 2011	MAY 2012	MAY 2012	MAY 2012	
Complete	NOV 2011	MAY 2012	MAY 2012	MAY 2012	
Defense Acquisition Board Review	N/A	SEP 2012	SEP 2012	SEP 2012	(Ch-2)
Initial Operational Capability (IOC)	NOV 2012	JUL 2013	JAN 2014	JUL 2013	(Ch-3)
Full Rate Production (FRP) Decision Review	FEB 2012	SEP 2013	MAR 2014	SEP 2013	(Ch-4)

Change Explanations

(Ch-1) The Milestone C current estimate date has been changed from February 2010 to March 2010 to reflect the date that the Acquisition Decision Memorandum (ADM) was signed.

(Ch-2) A Defense Acquisition Board (DAB) Review in September 2012 has been added to the schedule. This review resulted in the ADM directed conduct of a Follow-on Operational Test and Evaluation (FOT&E) prior to FRP and approval for additional Low Rate Initial Production (LRIP) quantities.

(Ch-3) The IOC current estimate has changed from May 2013 to July 2013 due to a requirement to align all operational testing with the Network Integration Evaluation (NIE) and also by ADM direction to conduct a FOT&E.

(Ch-4) The FRP date has changed from September 2012 to September 2013 because the DAB held in September 2012 and resulting ADM directed the conduct of a FOT&E prior to FRP.

Performance

Characteristics	SAR Baseline Prod Est	Current APB Production 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 identified in the KIP declaration table, 3) NCOW RM Enterprise Services 4) IA requirements including	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) IA requirements including	The system must fully support execution of joint critical operational activities identified in the applicable 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) IA requirements	Achieved threshold at Initial Operational Test (IOT).	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) IA requirements including

	availability, integrity, authenticat-ion, confidential-ity, and nonrepudiat-ion, 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.	availability, integrity, authenticatio n, confidentiality , and nonrepudiati on, and issuance of an ATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.	including availability, integrity, authenticatio n, confidentiality , and nonrepudiati on, and issuance of an IATO by the DAA, and 5) Operationally effective information exchanges; and mission critical performance and IA attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views.		availability, integrity, authentica-tion, confidential-ity, and nonrepudi-ation, 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.
Network Management	Increment 2 will enable the BCT S6 NetOps managers to plan, monitor, prioritize, control and visually display (e.g., current	Increment 2 will enable the BCT S6 NetOps managers to plan, monitor, prioritize, control and visually display (e.g., current	Increment 2 will enable the BCT S6 NetOps managers to plan, monitor, prioritize, control and visually display (e.g., current	Achieved threshold at Initial Operational Test (IOT).	Inc 2 will enable the BCT S6 NetOps managers to plan, monitor, prioritize, control and visually display (e.g., current

	network status and connectivity) its WIN-T equipped units (Bde, Bn, Co) that connect: Objective: Top Secret, Secret, and Unclassified users.	network status and connectivity) its WIN-T equipped units (Bde, Bn, Co) that connect: Objective: Top Secret, Secret, and Unclassified users.	network status and connectivity) its WIN-T equipped units (Bde, Bn, Co) that connect: Threshold: Secret and Unclassified users.		network status and connectivity) its WIN-T equipped units (Bde, Bn, Co) that connect: Objective: Top Secret, Secret, and Unclassified users.
Information Dissemination	Increment 2 will provide a transport capability that enables battle command and situational awareness data message information to be exchanged within a BCT's WIN-T Increment 2 enabled ATH platforms and to its WIN-T enabled ATH Divisional HQ: Objective: Critical survival information (Category 1) delivery in <0.5 seconds (95% of completed messages)	Increment 2 will provide a transport capability that enables battle command and situational awareness data message information to be exchanged within a BCT's WIN-T Increment 2 enabled ATH platforms and to its WIN-T enabled ATH Divisional HQ: Objective: Critical survival information (Category 1) delivery in <0.5 seconds (95% of completed messages)	Increment 2 will provide a transport capability that enables battle command and situational awareness data message information to be exchanged within a BCT's WIN-T Increment 2 enabled ATH platforms and to its WIN-T enabled ATH Divisional HQ: Threshold: Critical survival information (Category 1) delivery in < or = to 5 seconds (95% of completed messages)	Achieved threshold at Initial Operational Test (IOT).	Inc 2 will provide a transport capability that enables battle command and situational awareness data message information to be exchanged within a BCT's WIN-T Inc 2 enabled ATH platforms and to its WIN-T enabled ATH Divisional HQ: Objective: Critical survival information (Category 1) delivery in <0.5 seconds (95% of completed messages)

	and time sensitive information (Category 2) in <1 seconds (92% of completed messages).	and time sensitive information (Category 2) in <1 seconds (92% of completed messages).	and time sensitive information (Category 2) in <8 seconds (92% of completed messages).		and time sensitive information (Category 2) in <1 seconds (92% of completed messages).
Force Protection Armor required for protection of passengers inside the vehicle cab from small arms fire, mines, and other anti-vehicle/personnel threats	Increment 2 unique vehicles require armor kits for protection of passengers inside the vehicle cab from small arms fire, mines, and other anti-vehicle/personnel	Increment 2 unique vehicles require armor kits for protection of passengers inside the vehicle cab from small arms fire, mines, and other anti-vehicle/ personnel threats (IAW JROCM 120-05).	Increment 2 unique vehicles require armor kits for protection of passengers inside the vehicle cab from small arms fire, mines, and other anti-vehicle/personnel threats (IAW JROCM 120-05).	Achieved threshold at Initial Operational Test (IOT).	Inc 2 unique vehicles require armor kits for protection of passengers inside the vehicle cab from small arms fire, mines, and other antivehicle personnel.
Mobile Throughput For Brigade/Battalion maneuver commanders and their CPs	Increment 2 will enable selected warfighters (Bde/Bn maneuver commanders and their CPs) to conduct decisive operations while moving "cross-country" utilizing satellite communicat-ions: Objective: Ground vehicles: from 0 to 45	Increment 2 will enable selected warfighters (Bde/Bn maneuver commanders and their CPs) to conduct decisive operations while moving "cross-country" utilizing satellite communicat-ions: Objective: Ground vehicles: from 0 to 45	Increment 2 will enable selected warfighters (Bde/Bn maneuver commanders and their CPs) to conduct decisive operations while moving "cross-country" utilizing satellite communicat-ions: Threshold: Ground vehicles: from 0 to 25	Achieved threshold at PQT-G (DT) in 2011. User feedback from Initial Operational Test (IOT) indicated potential mobility and connectivity issues.	Inc 2 will enable selected warfighters (Bde/Bn maneuver commanders and their CPs) to conduct decisive operations while moving "cross- country" utilizing satellite communica-tions: Objective: Ground vehicles: from 0 to 45

	mph with 4 Mbps per link available for user data.	mph with 4 Mbps per link available for user data.	mph with 256 Kbps per link available for user data.		mph with 4 Mbps per link available for user data.

Requirements Source: Capability Production Document (CPD) dated February 14, 2012

Acronyms And Abbreviations

ATH - At The Halt
ATO - Authority to Operate
BCT - Brigade Combat Team
Bde - Brigade
Bn - Battalion
Co - Company
CP - Command Post
DAA - Designated Approving Authority
DISR - Department of Defense Information Technology Standards and Profile Registry
DT - Development Test
GIG - Global Information Grid
HQ - Headquarters
IA - Information Assurance
IATO - Interim Authority to Operate
IAW - In Accordance With
IT - Information Technology
JROC - Joint Requirements Oversight Council
JROCM - Joint Requirements Oversight Council Memorandum
Kbps - Kilobits Per Second
KIPs - Key Interface Profiles
Mbps - Megabits Per Second
Mph - Miles Per Hour
NCOW - Network Centric Operations and Warfare
NetOps - Network Operations
PQT-G - Production Qualification Testing - Government
RM - Reference Model
TV - Technical View

Change Explanations

None

Memo

A WIN-T Inc 2 Capability Production Document (CPD) was approved by the JROC on November 25, 2008. Revision 1 to the approved CPD was approved on February 14, 2012.

Demonstrated performance is as demonstrated at the Production Qualification Test - Government (PQT-G) of 2011 and the Initial Operational Test (IOT) of May 2012 and documented in the Operational Test Agency Evaluation Report for the WIN-T Inc 2 dated July 2012.

Track To Budget

RDT&E				
APPN 2040	BA 04	PE 0603782A	(Army)	
	Project 355	WIN-T DEM/VAL/Warfighter Information Network Tactical - DEM/VAL	(Shared)	(Sunk)
	Project 367	WIN-T DEM/VAL/Warfighter Information Network Tactical - DEM/VAL		

Project 367 began in FY 2009 for WIN-T Inc 2 exclusively. Prior to FY 2009 Project 355 was a shared line for both WIN-T Inc 2 and WIN-T Inc 3.

Procurement				
APPN 2035	BA 04	PE 0310706A	(Army)	
	ICN BS9741	WIN-T INCREMENT 2 Spares		
APPN 2035	BA 02	PE 0310706A	(Army)	
	ICN BW7115	Increment 2 Initial Networking On The Move		

The parent line for the Inc 2 Spares (BS9741) is BS9100. The parent line for the Inc 2 procurement (BW7115) is BW7100.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2010 $M			BY2010 $M	TY $M		
Appropriation	SAR Baseline Prod Est	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	264.7	274.6	302.4	274.6	266.5	278.9	278.6
Procurement	4421.3	4134.3	4547.8	4396.7	4730.4	4576.2	4858.8
Flyaway	3426.9	--	--	3151.5	3652.6	--	3438.8
Recurring	3316.9	--	--	2886.6	3537.1	--	3151.6
Non Recurring	110.0	--	--	264.9	115.5	--	287.2
Support	994.4	--	--	1245.2	1077.8	--	1420.0
Other Support	732.7	--	--	1012.6	793.9	--	1157.4
Initial Spares	261.7	--	--	232.6	283.9	--	262.6
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	4686.0	4408.9	N/A	4671.3	4996.9	4855.1	5137.4

Confidence Level for Current APB Cost 50% -
The program is considered a low risk program at this point in its acquisition life cycle. The variability of funding and thus changes in procurement quantity are the only identifiable risks. The Army Cost Position (ACP) does add risk dollars to the WIN-T Inc 2 software procurement and maintenance estimates, based on actual fluctuations experienced in software procurement and maintenance activities.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	56	56	56
Procurement	2160	1860	2100
Total	2216	1916	2156

Unit of measure is a combination of communications nodes, which vary in capability depending upon the increment of WIN-T being executed. WIN-T Inc 2 unit of measure is comprised of Tactical Communications Nodes (TCNs), Points of Presence (PoPs) and Soldier Network Extensions (SNEs).

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	252.0	2.8	1.1	0.0	21.5	0.0	0.0	1.2	278.6
Procurement	1635.9	785.9	712.5	657.3	605.6	233.0	228.6	0.0	4858.8
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 2014 Total	1887.9	788.7	713.6	657.3	627.1	233.0	228.6	1.2	5137.4
PB 2013 Total	2021.1	788.7	988.6	1099.3	1074.2	286.2	203.2	0.0	6461.3
Delta	-133.2	0.0	-275.0	-442.0	-447.1	-53.2	25.4	1.2	-1323.9

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	56	0	0	0	0	0	0	0	0	56
Production	0	932	507	290	241	130	0	0	0	2100
PB 2014 Total	56	932	507	290	241	130	0	0	0	2156
PB 2013 Total	56	946	368	482	556	438	0	0	0	2846
Delta	0	-14	139	-192	-315	-308	0	0	0	-690

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
2007	--	--	--	--	--	--	8.2
2008	--	--	--	--	--	--	107.6
2009	--	--	--	--	--	--	91.3
2010	--	--	--	--	--	--	18.3
2011	--	--	--	--	--	--	16.8
2012	--	--	--	--	--	--	9.8
2013	--	--	--	--	--	--	2.8
2014	--	--	--	--	--	--	1.1
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	21.5
2017	--	--	--	--	--	--	--
2018	--	--	--	--	--	--	--
2019	--	--	--	--	--	--	1.2
Subtotal	**56**	**--**	**--**	**--**	**--**	**--**	**278.6**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 $M	Non End Item Recurring Flyaway BY 2010 $M	Non Recurring Flyaway BY 2010 $M	Total Flyaway BY 2010 $M	Total Support BY 2010 $M	Total Program BY 2010 $M
2007	--	--	--	--	--	--	8.4
2008	--	--	--	--	--	--	108.6
2009	--	--	--	--	--	--	91.0
2010	--	--	--	--	--	--	18.0
2011	--	--	--	--	--	--	16.2
2012	--	--	--	--	--	--	9.2
2013	--	--	--	--	--	--	2.6
2014	--	--	--	--	--	--	1.0
2015	--	--	--	--	--	--	--
2016	--	--	--	--	--	--	18.6
2017	--	--	--	--	--	--	--
2018	--	--	--	--	--	--	--
2019	--	--	--	--	--	--	1.0
Subtotal	**56**	**--**	**--**	**--**	**--**	**--**	**274.6**

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
2009	56	135.8	--	--	135.8	0.1	135.9
2010	248	333.1	--	61.1	394.2	72.9	467.1
2011	96	208.2	--	82.8	291.0	49.2	340.2
2012	532	599.3	--	27.1	626.4	66.3	692.7
2013	507	647.8	--	13.2	661.0	124.9	785.9
2014	290	455.3	--	22.8	478.1	234.4	712.5
2015	241	417.0	--	9.6	426.6	230.7	657.3
2016	130	355.1	--	37.6	392.7	212.9	605.6
2017	--	--	--	23.1	23.1	209.9	233.0
2018	--	--	--	9.9	9.9	218.7	228.6
Subtotal	**2100**	**3151.6**	**--**	**287.2**	**3438.8**	**1420.0**	**4858.8**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 $M	Non End Item Recurring Flyaway BY 2010 $M	Non Recurring Flyaway BY 2010 $M	Total Flyaway BY 2010 $M	Total Support BY 2010 $M	Total Program BY 2010 $M
2009	56	134.9	--	--	134.9	0.1	135.0
2010	248	324.8	--	59.6	384.4	71.0	455.4
2011	96	199.0	--	79.2	278.2	47.0	325.2
2012	532	561.7	--	25.4	587.1	62.2	649.3
2013	507	590.6	--	12.0	602.6	113.9	716.5
2014	290	405.9	--	20.3	426.2	208.9	635.1
2015	241	364.8	--	8.4	373.2	201.8	575.0
2016	130	304.9	--	32.3	337.2	182.7	519.9
2017	--	--	--	19.5	19.5	176.8	196.3
2018	--	--	--	8.2	8.2	180.8	189.0
Subtotal	**2100**	**2886.6**	**--**	**264.9**	**3151.5**	**1245.2**	**4396.7**

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	6/5/2007	9/25/2012
Approved Quantity	408	938
Reference	Restructure ADM	Additional LRIP ADM
Start Year	2009	2009
End Year	2010	2012

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the following:

The WIN-T Inc 2 Low Rate Initial Production (LRIP) program is consistent with Defense Acquisition Executive (DAE) direction contained in the WIN-T Acquisition Decision Memorandum (ADM) dated June 5, 2007 and corresponding Office of the Secretary of Defense (OSD) Cost Analysis Improvement Group (CAIG) estimate. The ADM stated “The Army will fund to the Chairman of the Cost Analysis Improvement Group's (CAIG) estimate for Increments 1 and 2; procure Increment 1 equipment to complete fielding to about 199 Army units; and procure Increment 2 equipment for about 37 Army units, based on affordability through FY 2013.” The current WIN-T Inc 2 program only procures 32 Army units through FY 2013**.**

The initial LRIP quantity was reported to Congress in the initial September 2007 SAR and again in the December 2007 SAR. This initial LRIP plan consisted of a two year LRIP phase with quantities totaling 408 communications nodes, or approximately 22%, of the total Army Procurement Objective (APO) of 1837. These LRIP units were to be procured over two years, with the first year providing units to support Production Qualification Test (PQT) and Initial Operational Test (IOT), and the second year supporting production ramp up and fielding.

The LRIP start year changed from 2009 to 2010 as a result of program schedule changes. The Milestone C meeting was held on February 3, 2010 after which the program entered into LRIP. The initial LRIP quantities and costs were funded with FY 2009 dollars.

The ADM of September 26, 2012 approved an additional LRIP Lot 3 of 538 communications nodes to bring the total LRIP quantities to 938 communications nodes. The current WIN-T Inc 2 LRIP plan consists of a three year LRIP phase with quantities totaling 932 communications nodes, or approximately 44%, of the total APO of 2100. The Product Manager (PM) has received approval to exceed the 10% limit. The first year of LRIP provided units to support IOT and the second and third years permitted an orderly increase in the production rate for the system sufficient to lead to full-rate production upon the successful completion of operational testing. Full Rate Production requires a successful Follow-on Test and Evaluation (FOT&E).

Foreign Military Sales

None

Nuclear Cost

None

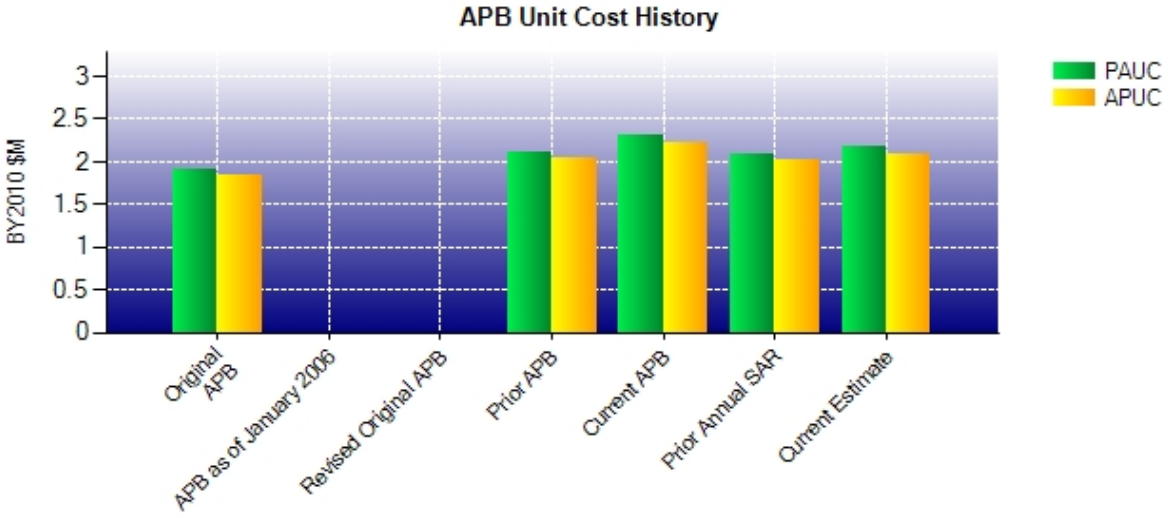
Unit Cost

Unit Cost Report

	BY2010 $M	BY2010 $M	
Unit Cost	**Current UCR Baseline (MAY 2013 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	4408.9	4671.3	
Quantity	1916	2156	
Unit Cost	2.301	2.167	-5.82
Average Procurement Unit Cost (APUC)			
Cost	4134.3	4396.7	
Quantity	1860	2100	
Unit Cost	2.223	2.094	-5.80

	BY2010 $M	BY2010 $M	
Unit Cost	**Original UCR Baseline (OCT 2007 APB)**	**Current Estimate (DEC 2012 SAR)**	**BY % Change**
Program Acquisition Unit Cost (PAUC)			
Cost	3617.2	4671.3	
Quantity	1893	2156	
Unit Cost	1.911	2.167	+13.40
Average Procurement Unit Cost (APUC)			
Cost	3384.5	4396.7	
Quantity	1837	2100	
Unit Cost	1.842	2.094	+13.68

Unit Cost History



		BY2010 $M		TY $M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	OCT 2007	1.911	1.842	2.064	1.999
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	MAR 2010	2.115	2.047	2.255	2.190
Current APB	MAY 2013	2.301	2.223	2.534	2.460
Prior Annual SAR	DEC 2011	2.076	2.017	2.270	2.214
Current Estimate	DEC 2012	2.167	2.094	2.383	2.314

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial PAUC Dev Est	Changes								PAUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
2.064	-0.055	-0.063	0.016	0.000	0.093	0.000	0.200	0.191	2.255

Current SAR Baseline to Current Estimate (TY $M)

PAUC Prod Est	Changes								PAUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
2.255	0.078	0.002	-0.002	-0.082	-0.003	0.000	0.135	0.128	2.383

Initial SAR Baseline to Current SAR Baseline (TY $M)

Initial APUC Dev Est	Changes								APUC Prod Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
1.999	-0.055	-0.055	0.017	0.000	0.079	0.000	0.205	0.191	2.190

Current SAR Baseline to Current Estimate (TY $M)

APUC Prod Est	Changes								APUC Current Est
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
2.190	0.079	0.000	-0.002	-0.084	-0.008	0.000	0.139	0.124	2.314

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	JUN 2007	N/A	JUN 2007
Milestone C	N/A	APR 2009	N/A	MAR 2010
IOC	N/A	AUG 2011	N/A	JUL 2013
Total Cost (TY $M)	N/A	3907.0	N/A	5137.4
Total Quantity	N/A	1893	N/A	2156
Prog. Acq. Unit Cost (PAUC)	N/A	2.064	N/A	2.383

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Prod Est)	266.5	4730.4	--	4996.9
Previous Changes				
Economic	+1.3	+84.1	--	+85.4
Quantity	--	+983.4	--	+983.4
Schedule	--	-11.1	--	-11.1
Engineering	--	--	--	--
Estimating	+15.7	-95.3	--	-79.6
Other	--	--	--	--
Support	--	+486.3	--	+486.3
Subtotal	+17.0	+1447.4	--	+1464.4
Current Changes				
Economic	+0.5	+82.7	--	+83.2
Quantity	--	-1115.8	--	-1115.8
Schedule	--	+6.0	--	+6.0
Engineering	--	-176.1	--	-176.1
Estimating	-5.4	+78.4	--	+73.0
Other	--	--	--	--
Support	--	-194.2	--	-194.2
Subtotal	-4.9	-1319.0	--	-1323.9
Total Changes	+12.1	+128.4	--	+140.5
CE - Cost Variance	278.6	4858.8	--	5137.4
CE - Cost & Funding	278.6	4858.8	--	5137.4

Summary Base Year 2010 $M				
	RDT&E	**Proc**	**MILCON**	**Total**
SAR Baseline (Prod Est)	264.7	4421.3	--	4686.0
Previous Changes				
Economic	--	--	--	--
Quantity	--	+879.1	--	+879.1
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+14.8	-93.1	--	-78.3
Other	--	--	--	--
Support	--	+420.8	--	+420.8
Subtotal	+14.8	+1206.8	--	+1221.6
Current Changes				
Economic	--	--	--	--
Quantity	--	-964.6	--	-964.6
Schedule	--	+3.5	--	+3.5
Engineering	--	-169.8	--	-169.8
Estimating	-4.9	+69.5	--	+64.6
Other	--	--	--	--
Support	--	-170.0	--	-170.0
Subtotal	-4.9	-1231.4	--	-1236.3
Total Changes	+9.9	-24.6	--	-14.7
CE - Cost Variance	274.6	4396.7	--	4671.3
CE - Cost & Funding	274.6	4396.7	--	4671.3

Previous Estimate: December 2011

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+0.5
Alignment of platform integration testing estimates. (Estimating)	-4.6	-5.1
Cost decrease due to FY 2012 fact of life Revised Annual Program (RAP) Congressional adjustments. (Estimating)	-0.3	-0.3
RDT&E Subtotal	-4.9	-4.9

Procurement	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+82.7
Realignment of procurement schedule to meet Force Structure schedule changes. (Schedule)	0.0	+2.0
Quantity variance resulting from a decrease of 690 nodes from 2790 to 2100 to align with Capability Sets. (Subtotal)	-931.1	-1077.0
Quantity variance resulting from a decrease of 690 nodes from 2790 to 2100 to align with Capability Sets. (Quantity) (QR)	(-964.6)	(-1115.8)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+3.5)	(+4.0)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(+30.0)	(+34.8)
Adjustment for current and prior escalation. (Estimating)	-9.9	-10.5
Decrease due to the elimination of the Joint Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (JC4ISR) Radio procurement from FY 2015. (Estimating)	-14.3	-16.3
Increase resulting from Follow-on Operational Test and Evaluation (FOT&E) costs; additional platform certification testing; actual costs for Initial Operational Testing (IOT); and JC4ISR Production Qualification Testing-Contractor costs. (Estimating)	+63.7	+70.4
Decrease due to a removal of M113 Family of Vehicles platform integration non-recurring engineering. (Engineering)	-22.6	-25.3
Reduction due to the removal of the Armored Brigade Combat Team (ABCT) recurring A-Kit costs. (Engineering) (QR)	-147.2	-150.8
Adjustment for current and prior escalation. (Support)	-2.6	-3.1
Decrease in Fielding, New Equipment Training, and Software Maintenance resulting from decrease of 690 nodes. (Support) (QR)	-74.0	-83.5
Decrease in initial spares cost resulting from decrease of 690 nodes. (Support) (QR)	-93.4	-107.6
Procurement Subtotal	-1231.4	-1319.0

(QR) Quantity Related

Contracts

Appropriation: Procurement

Contract Name	**WIN-T Increment 2 Production**
Contractor	General Dynamics C4 Systems, Inc.
Contractor Location	Taunton, MA 02780-1036
Contract Number, Type	W15P7T-10-D-C007, FPIF/FFP
Award Date	March 24, 2010
Definitization Date	December 30, 2010

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
299.7	299.7	160	1045.4	1045.4	932	1045.4	1045.4

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FPIF/FFP contract.

General Contract Variance Explanation

Cost and schedule variance reporting on the Fixed Price Incentive Firm (FPIF) portion of the contract is not required because the value of the incentive effort falls below the Earned Value Management dollar threshold.

Contract Comments

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the procurement of Lots 1B, 2 and 3 which equate to an additional 772 units for Low Rate Initial Production (LRIP). In addition, production support efforts were added to the contract price.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	56	56	56	100.00%
Production	212	212	2100	10.10%
Total Program Quantities Delivered	268	268	2156	12.43%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	5137.4	Years Appropriated	7
Expenditures To Date	1913.8	Percent Years Appropriated	53.85%
Percent Expended	37.25%	Appropriated to Date	2676.6
Total Funding Years	13	Percent Appropriated	52.10%

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

Operating and Support Cost

WIN-T Inc 2

Assumptions and Ground Rules

Cost Estimate Reference:

1. Operating and Support (O&S) costs are based on annual update to the Army Cost Position, as of April 8, 2013.
2. Costs are 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 the 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. A "buy-to-budget" strategy is reflected in the figures below.
6. Mission Pay and Allowance costs are the total Military Personnel costs.
7. Mission Pay and Allowance estimates based on the WIN-T manpower estimates included in the WIN-T Inc 2 Cost Analysis Requirements Description (CARD) dated September 12, 2012.
8. Unit Level Consumption and Intermediate Maintenance assumes threshold reliability is met.
9. Intermediate Maintenance Costs reflect the OSD cost element Maintenance Costs and includes Depot Maintenance and Contractor Support.
10. Estimated costs based on Operating Tempo approved by the Army's Training and Doctrine Command.

Sustainment Strategy:

1. Costs are based on two level maintenance concept.
2. System life is estimated to be 20 years.
3. Total quantity of the system being procured consists of 2,100 communication nodes.

Antecedent Information:

There is no antecedent program to this system.

Unitized O&S Costs BY2010 $K		
Cost Element	**WIN-T Inc 2 Average Annual Cost per Communications Node**	**N/A (Antecedent) N/A**
Unit-Level Manpower	98.3	0.0
Unit Operations	1.8	0.0
Maintenance	57.7	0.0
Sustaining Support	20.2	0.0
Continuing System Improvements	26.7	0.0
Indirect Support	0.0	0.0
Other	0.0	0.0
Total	204.7	--

Unitized Cost Comments:

Operating and support costs reflect the total average annual cost for WIN-T Inc 2 communications nodes. Multiplying the total average annual cost by 20 years and by 2,100 communications nodes will achieve the total costs.

	Total O&S Cost $M			
	Current Production APB Objective/Threshold		Current Estimate	
	WIN-T Inc 2		WIN-T Inc 2	N/A (Antecedent)
Base Year	7918.1	8709.9	8596.6	N/A
Then Year	10907.4	N/A	11799.8	N/A

Total O&S Costs Comments:

The Inc 2 O&S cost decreased from $10.7 (BY10$B) in the December 2011 SAR to $8.6 (BY10$B) in the December 2012 SAR. The primary driver in the reduction was the decrease in quantities from 2,790 nodes to 2,100 nodes.

Disposal Costs

Demilitarization and disposal costs are valued at $261.7 BY 2010 $M.