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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE							
2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					PE 0605030A: Joint Tactical Network Center (JTNC)							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	68.148	-	68.148	19.909	21.788	26.849	25.000	Continuing	Continuing
EA8: Joint Tactical Network Center (JTNC)	-	0.000	0.000	68.148	-	68.148	19.909	21.788	26.849	25.000	Continuing	Continuing

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

In accordance with the ADM dated 11 July 2012, the FY 2014 JTN funding previously residing in the Army PE 0604280A, the Navy PE 0604280N, and the Air Force PE 0604280F was transferred to this PE. The continuing Joint Tactical Networks (JTN) will remain under a joint budget strategy in the three Military Departments (MILDEPs) in new PEs (Army PE 0605030A, the Navy PE 0605030N, and the Air Force PE 0605030F). As part of the joint program budget strategy, each MILDEP budgets for their portion of the total program RDT&E funds. Prior to the President's Budget submission, the budget year funding is consolidated in the new Army PE.

A. Mission Description and Budget Item Justification

Joint Tactical Networks (JTN) will provide interoperable, secure Joint Tactical Networking applications capable of operating in a variety of radio solutions to maintain and sustain an affordable, government-controlled open architecture, in support of Combatant Commanders', Services' and Coalition mission network requirements. JTN is responsible for the continuous development, delivery, and maintenance of networking waveforms and modified legacy radio waveforms that are Software Communications Architecture (SCA) compliant. SCA compliant waveforms enable interoperability and support Net-Centric operational warfare at sea, in the air and on the ground. Networking waveforms extend the Global Information Grid (GIG) to the last tactical mile and to the warfighter.

The JTN team is responsible for (1) the overall management and oversight of the Waveforms contained in the JTN repository; (2) development, validation, and evolution of a common JTN SCA; (3) development and evolution of waveform software applications for tactical radios; (4) development of software cryptographic algorithms and equipment applications (Information Assurance); (5) development and evolution of the JTN networking and network management software components, Joint Enterprise Network Manager (JENM); (6) testing and certification of JTN waveforms, network services, and network management; and, (7) full lifecycle support of waveforms and networking applications in order to maintain a robust industry base of radio vendors.

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
2040: Research, Development, Test & Evaluation, Army		PE 0605030A: Joint Tactical Network Center (JTNC)			
BA 5: System Development & Demonstration (SDD)					
B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	68.148	-	68.148
Total Adjustments	0.000	0.000	68.148	-	68.148
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	68.148	-	68.148

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0605030A: Joint Tactical Network Center (JTNC)				PROJECT EA8: Joint Tactical Network Center (JTNC)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
EA8: Joint Tactical Network Center (JTNC)	-	0.000	0.000	68.148	-	68.148	19.909	21.788	26.849	25.000	Continuing	Continuing
Quantity of RDT&E Articles												

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

Note

In FY 2012-FY 2013, the Joint Tactical Networks (JTN) funding resides in the Navy Program Element (PE) 0604280N (Joint Tactical Radio System (JTRS)), Project No. 3076 (formally known as JTRS Network Enterprise Domain (JNED)). The FY 2014 funding residing in PE 0605030A represents the total JTN Budget. FY 2015-18 PE 0605030A represents only the Army share of the JTN funding.

In accordance with the ADM dated 11 July 2012, the JTRS Program of Records (PORs) transitioned to Military Department (MILDEP) managed programs. The continuing Joint Tactical Networks (JTN) will remain under a joint budget strategy in the three MILDEPs in new PEs (Army PE 0605030A, the Navy PE 0605030N, and the Air Force PE 0605030F). As part of the joint program budget strategy, each MILDEP budgets for their portion of the total program RDT&E funds. Prior to the President's Budget submission, the budget year funding is consolidated in the new Army PE.

The Joint Tactical Networking Center (JTNC) provides the DoD centralized management, development and sustainment of joint waveform and network management applications. JTN is a component of the JTNC and the official Program of Record (PoR).

A. Mission Description and Budget Item Justification

Joint Tactical Networks (JTN) will provide interoperable, secure Joint Tactical Networking applications capable of operating in a variety of radio solutions to maintain and sustain an affordable, government-controlled open architecture, in support of Combatant Commanders', Services' and Coalition mission network requirements. JTN is responsible for the continuous development, delivery, and maintenance of networking waveforms and modified legacy radio waveforms that are Software Communications Architecture (SCA) compliant. SCA compliant waveforms enable interoperability and support Net-Centric operational warfare at sea, in the air and on the ground. Networking waveforms extend the Global Information Grid (GIG) to the last tactical mile and to the warfighter.

The JTN team is responsible for (1) the overall management and oversight of the Waveforms contained in the JTN repository; (2) development, validation, and evolution of a common JTN SCA; (3) development and evolution of waveform software applications for tactical radios; (4) development of software cryptographic algorithms and equipment applications (Information Assurance); (5) development and evolution of the JTN networking and network management software components, Joint Enterprise Network Manager (JENM); (6) testing and certification of JTN waveforms, network services, and network management; and, (7) full lifecycle support of waveforms and networking applications in order to maintain a robust industry base of radio vendors.

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0605030A: Joint Tactical Network Center (JTNC)	PROJECT EA8: Joint Tactical Network Center (JTNC)		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Title: Wideband Networking Waveform (WNW) Description: Wideband Networking Waveform (WNW) is a high data rate Mobile Adhoc NETworking (MANET) waveform application that provides the mid tier tactical Internet backbone and connects tactical forces across the battle sphere. WNW will provide high throughput, dynamically adaptable connectivity for the exchange of Internet Protocol (IP) based voice, data, and video traffic. WNW will feature two signals-in-space (SiS), which are the Orthogonal Frequency Division Multiplexing (OFDM) and Anti-Jam (AJ). WNW will support network nodes on mobile, airborne, and maritime platforms. WNW includes networking services, security, High Assurance IP Equipment (HAiPE) capabilities, red black switching, and internal routing of other WNW signals. WNW is currently ported on 6 platforms with 6 different vendors. FY 2014 Plans: Continue Software In Service Support for the WNW waveform.		0.000	0.000	9.481
Title: Soldier Radio Waveform (SRW) Description: Soldier Radio Waveform (SRW) will operate on tactical radio sets to provide a networked battlefield communications capability for power disadvantaged users engaged in land combat operations and will support voice, data, and video communications on the immediate battlefield. These forces include vehicles, rotary wing, dismounted soldiers, munitions, sensors, and unmanned air vehicles (UAV). Functional software applications will use SRW enabled JTR sets over IP capable networks and sub-networks. SRW will be interoperable with higher throughput, IP-based network waveforms, such as WNW. As applicable, these IP-based networking waveforms will enable information exchanges through the GIG to the soldier and provide entirely new capabilities for battlefield communications and information sharing. SRW is currently ported on 16 different platforms with 9 different vendors. FY 2014 Plans: Continue Software In Service Support for the SRW waveform.		0.000	0.000	3.601
Title: Mobile User Objective System (MUOS) Waveform Description: Mobile User Objective System (MUOS) Waveform will enable MUOS satellites to provide worldwide communication satellite coverage for DoD requirements. MUOS will provide functionality comparable to commercial mobile phone systems. MUOS offers secure streaming video, netted communications, and voice/data in real time to provide essential connectivity. The JTN program will modify this waveform, making it compatible and certifiable with DoD security requirements while enabling porting to tactical radio sets. MUOS is currently being ported by 5 vendors on 6 different platforms. FY 2014 Plans:		0.000	0.000	6.000

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0605030A: Joint Tactical Network Center (JTNC)			PROJECT EA8: Joint Tactical Network Center (JTNC)				
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014
Continue Software In Service Support for the MUOS waveform.											
Title: JTRS Network Enterprise Services (JNES)/JTRS Enterprise Network Manager (JENM)									0.000	0.000	16.099
Description: JTRS Network Enterprise Services (JNES)/JTRS Enterprise Network Manager (JENM): Prior to FY13, JTRS Network Enterprise Services (JNES) included the development and acquisition of JTRS WNW Network Manager (JWNM), JTRS Enterprise Network Manager (JENM), Soldier Radio Waveform Network Manager (SRWNM), and Enterprise Network Services (ENS). In FY13 and out, JENM provides consolidated communications planning, network configuration, network activation, position reporting, fault management, security management, and network health and status reporting needed to establish and maintain a mobile wireless network comprised of JTN network waveforms. JENM can interface with other external network managers, mission planning systems, network planning systems, key management systems, and spectrum planning systems. JENM is considered a mission essential system. JENM is also considered a critical element within the J-TNT configuration management tool kit.											
FY 2014 Plans: Continue Software In Service Support for JENM.											
Title: Legacy Radio Waveforms/Program Management									0.000	0.000	32.967
Description: Legacy Radio Waveforms/Program Management: Includes the continued development, incremental upgrades, and software efficiencies of legacy software and other related activities to support the legacy waveform integration into hardware solutions in the field.											
FY 2014 Plans: Continue to support waveform integration, test and evaluation to include hardware and software waveform Certification Process to meet program requirements. Continue JTN program management office support. Continue Software In Service Support for Legacy waveforms.											
Accomplishments/Planned Programs Subtotals									0.000	0.000	68.148
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• 0604280N: 0604280N: JNED, RDTE,N	147.190	59.077								0.000	206.267
• 0605030N: 0605030N: JTNC, RDTE,N						16.911	14.039	14.274	14.536	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army										DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0605030A: Joint Tactical Network Center (JTNC)			PROJECT EA8: Joint Tactical Network Center (JTNC)			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• 0605030F: 0605030F: JTNC, RDTE,F						20.088	22.346	22.255	22.656	Continuing	Continuing
• 0303109N: 0303109N: JNED, O&M,N	39.508	42.264								0.000	81.772
Remarks											
In FY 2012-FY 2013, the Joint Tactical Networks (JTN) funding resides in the Navy Program Element (PE) 0604280N (Joint Tactical Radio System (JTRS)), Project No. 3076 (formally known as JTRS Network Enterprise Domain (JNED)). In accordance with the ADM dated 11 July 2012, the JTRS Program of Records (PORs) transitioned to Military Department (MILDEP) managed programs. The continuing Joint Tactical Networks (JTN) will remain under a joint budget strategy in the three MILDEPs in new PEs (Army PE 0605030A, the Navy PE 0605030N, and the Air Force PE 0605030F). As part of the joint program budget strategy, each MILDEP budgets for their portion of the total program RDT&E funds. Prior to the President's Budget submission, the budget year funding is consolidated in the new Army PE.											
D. Acquisition Strategy											
JTN is responsible for common core activities including developing and updating the SCA compliant legacy and networking waveforms that operate on multiple hardware sets and in all operational environments that support network-centric operational warfare, as well as common networking services (interface standards, network managers, etc). Waveform developments (upgrading, developing, and maintaining) will generally be procured through full and open contract competitions. The JTN program is developing waveforms and Cryptographic Equipment Applications (CEAs) for use within the software-defined radio community.											
The FY 2014 Budget supports continued development of waveforms/supporting software, testing support, and the National Security Agency (NSA) evaluation of software Information Assurance (IA) compliance.											
E. Performance Metrics											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)						R-1 ITEM NOMENCLATURE PE 0605030A: Joint Tactical Network Center (JTNC)						PROJECT EA8: Joint Tactical Network Center (JTNC)			
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/Various	Various::Various	0.000	-		-		6.101	Mar 2014	-		6.101	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.000		6.101		0.000		6.101			
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Network Enterprise Services Development	C/Various	Boeing::Huntington Beach, CA	0.000	-		-		7.423	Mar 2014	-		7.423	0.000	7.423	0.000
Post FQT / Software Sustainment	C/Various	BAE::Wayne, NJ	0.000	-		-		4.207	Mar 2014	-		4.207	Continuing	Continuing	Continuing
Post FQT / Software Sustainment	C/Various	Boeing::Huntington Beach, CA	0.000	-		-		8.676	Dec 2013	-		8.676	Continuing	Continuing	Continuing
Post FQT / Software Sustainment	C/TBD	TBD::TBD	0.000	-		-		6.000	Mar 2014	-		6.000	Continuing	Continuing	Continuing
Post FQT / Software Sustainment	C/Various	General Dynamics::Scottsdale, AZ	0.000	-		-		9.481	Oct 2013	-		9.481	Continuing	Continuing	Continuing
Post FQT / Software Sustainment	C/Various	Harris::Rochester, NY	0.000	-		-		3.601	Dec 2013	-		3.601	Continuing	Continuing	Continuing
Post FQT / Software Sustainment	WR	SSC PAC::San Diego, CA	0.000	-		-		7.630	Oct 2013	-		7.630	Continuing	Continuing	Continuing
Certification (Interim SCA Compliance Testing)	MIPR	NSA::Ft. Meade, MD	0.000	-		-		0.404	Dec 2013	-		0.404	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.000		47.422		0.000		47.422			
Remarks In FY12-FY13, the Joint Tactical Networks (JTN) funding resides in the Navy Program Element (PE) 0604280N (Joint Tactical Radio System (JTRS)), Project No. 3076 (formally known as JTRS Network Enterprise Domain (JNED)). The FY14 funding residing in PE 0605030A represents the total JTN Budget.															

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army												DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 5: <i>System Development & Demonstration (SDD)</i>							R-1 ITEM NOMENCLATURE PE 0605030A: <i>Joint Tactical Network Center (JTNC)</i>				PROJECT EA8: <i>Joint Tactical Network Center (JTNC)</i>			

Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
JTN Engineering/Technical Support	C/Various	Various::Various	0.000	-		-		14.625	Mar 2014	-		14.625	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.000		14.625		0.000		14.625			

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	0.000	68.148	0.000	68.148			

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army										DATE: April 2013									
APPROPRIATION/BUDGET ACTIVITY										R-1 ITEM NOMENCLATURE									
2040: Research, Development, Test & Evaluation, Army										PE 0605030A: Joint Tactical Network Center									
BA 5: System Development & Demonstration (SDD)										EA8: Joint Tactical Network Center (JTNC)									

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Software Sustainment																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army			DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE		PROJECT
2040: Research, Development, Test & Evaluation, Army		PE 0605030A: Joint Tactical Network Center		EA8: Joint Tactical Network Center (JTNC)
BA 5: System Development & Demonstration (SDD)		(JTNC)		

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Software Sustainment	1	2014	4	2018