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

PE 0604290A: Mid-tier Networking Vehicular Radio (MNVR)

BA 5: System Development & Demonstration (SDD)

, ,												
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	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	-	47.000	12.636	23.341	-	23.341	9.897	0.000	0.000	0.000	Continuing	Continuing
DW1: MID-TIER WIDEBAND NETWORKING VEHICULAR RADIO MNVR	-	47.000	12.636	23.341	-	23.341	9.897	0.000	0.000	0.000	Continuing	Continuing

<sup>\*</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

#### Note

FY 2014 Base funding supports program management office and system security certification activities to execute a Non-Developmental Item (NDI) strategy for a Mid-Tier Networking Vehicular capability.

FY2012 Congressional Add of \$47.000 million released to PM MNVR upon receipt of funds in August 2012.

### A. Mission Description and Budget Item Justification

The Mid-tier Networking Vehicular Radio (MNVR) encourages an industry solution for a multi-channel vehicular radio which will host Joint Tactical Networking Center (JTNC) waveforms, addressing the Army's requirement for Mid-Tier Wideband Networking (MWN) capabilities to support the Warfighter by providing an extension of data services from the upper tactical network at brigade and battalion to the lower tactical network at company and platoon echelon platforms.

The Mid-tier Networking Vehicular Radio (MNVR) is a Non-Developmental Item (NDI) Initiative that equips the joint military with a multiple channel, Type-1 classification radio providing data communication service capabilities for mobile and fixed forces supporting mission planning, Command and Control (C2), and situational awareness from brigade to platoon levels. The advanced network waveforms provide rapid distribution of data and imagery with increased information assurance protection and automatic routing across complex terrain and under adverse weather conditions.

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item 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	NOMEN	CLATURE
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PE 0604290A: Mid-tier Networking Vehicular Radio (MNVR)

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	12.636	29.341	-	29.341
Current President's Budget	47.000	12.636	23.341	-	23.341
Total Adjustments	47.000	0.000	-6.000	-	-6.000
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	47.000	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Adjustments to Budget Years</li> </ul>	-	-	-6.000	-	-6.000

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY
2040: Research, Development, Test & Evaluation, Army
BA 5: System Development & Demonstration (SDD)

COST (\$ in Millions)

All Prior Years FY 2012 FY 2013# Base

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0604290A: Mid-tier Networking
Vehicular Radio (MNVR)

NETWORKING VEHICULAR RADIO MNVR

FY 2014 FY 2014 FY 2014 Total FY 2015 FY 2016 FY 2017 FY 2018 Complete Cost

DW1: MID-TIER WIDEBAND

- 47.000 12.636 23.341 - 23.341 9.897 0.000 0.000 Continuing Continuing

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
DW1: MID-TIER WIDEBAND NETWORKING VEHICULAR RADIO MNVR	-	47.000	12.636	23.341	-	23.341	9.897	0.000	0.000	0.000	Continuing C	Continuing
Quantity of RDT&E Articles												

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

#### Note

Army

The Mid-tier Networking Vehicular Radio (MNVR) encourages an industry solution for a multi-channel vehicular radio which will host Joint Tactical Networking Center (JTNC) networking waveforms, addressing the Army's requirement for Mid-Tier Wideband Networking (MWN) capabilities to support the Warfighter by providing an extension of data services from the upper tactical network at brigade and battalion to the lower tactical network at company and platoon echelon platforms. The MNVR provides the Army with the Multi-tier Wideband Networking (MWN) waveform capability with a dynamic, scalable, on the move (OTM) network architecture, connecting the Warfighter to the Mission Command (MC) Network and enhances capability to exchange voice and data simultaneously via the desired government owned Mobile Ad-hoc Networking (MANET) Wideband Networking Waveform (WNW) faster than current systems and at a lower cost solution than MNVR's predecessor, the Ground Mobile Radio (GMR).

# A. Mission Description and Budget Item Justification

The Mid-tier Networking Vehicular Radio (MNVR) encourages an industry solution for a multi-channel vehicular radio which will host Joint Tactical Networking Center (JTNC) networking waveforms, addressing the Army's requirement for Mid-Tier Wideband Networking (MWN) capabilities to support the Warfighter by providing an extension of data services from the upper tactical network at brigade and battalion to the lower tactical network at company and platoon echelon platforms.

The Mid-tier Networking Vehicular Radio (MNVR) is a Non-Developmental Item (NDI) Initiative that equips the joint military with a multiple channel, Type-1 classification radio providing data communication service capabilities for mobile and fixed forces supporting mission planning, Command and Control (C2), and situational awareness from brigade to platoon levels. The advanced network waveforms provide rapid distribution of data and imagery with increased information assurance protection and automatic routing across complex terrain and under adverse weather conditions.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
Title: Mid-Tier Networking Vehicular Radio (MNVR) Program		47.000	12.636	23.341
	Articles:	0	0	

PE 0604290A: Mid-tier Networking Vehicular Radio (MNVR)

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

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 0604290A: Mid-tier Networking Vehicular Radio (MNVR)		MID-TIER V	/IDEBAND EHICULAR R.	ADIO MNVR
B. Accomplishments/Planned Programs (\$ in Millions, Article Q	Quantities in Each)		FY 2012	FY 2013	FY 2014
<b>Description:</b> RDTE Funding supports Program Office and contract and Platform Integration and Test of industry solutions for a Non-De Networking Center (JTNC) waveforms and user operational requires	evelopmental Item (NDI) solution support for Joint Ta				
FY 2012 Accomplishments:  FY 2012 Funding supports Program Office establishment and award manufacture and deliver MNVR units to Army Capability Set 14/15 bintegration, and customer test activities to execute a Non-Developm capability, including vendor Manufacturing Readiness Assessments Demonstration (SSPD) for contract evaluation.	brigades. Supports program management, vehicular nental Item (NDI) strategy for a mid-tier networking ve	platform ehicular			
FY 2013 Plans: FY 2013 Funding supports program management activities to execunetworking vehicular capability.	ute a Non-Developmental Item (NDI) strategy for a m	iid-tier			
FY 2014 Plans: FY 2014 Funding supports program management and system secur (NDI) strategy for a mid-tier networking vehicular capability, including Defense Information Assurance Certification and Accreditation Program Electronic Warfare (CREW) testing, System Threat Assessment Re	ng National Security Agency (NSA) certification, Department (DIACAP) assessment, Counter Remote Control	artment of I Radio			

# C. Other Program Funding Summary (\$ in Millions)

			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	<b>Total Cost</b>
B51001: Mid-Tier Networking		86.219	19.200		19.200	83.700	83.700	83.700	86.616	Continuing	Continuing
Vehicular Radio (MNVR)											

**Accomplishments/Planned Programs Subtotals** 

#### Remarks

The Mid-tier Networking Vehicular Radio (MNVR) is a Non Developmental Item (NDI) Initiative that equips the joint military with a multiple channel, Type 1 classification radio providing data communication service capabilities for mobile and fixed forces supporting mission planning, Command and Control (C2), and situational awareness from brigade to platoon levels. The advanced network waveforms provide rapid distribution of data and imagery with increased information assurance protection and automatic routing across complex terrain and under adverse weather conditions.

PE 0604290A: *Mid-tier Networking Vehicular Radio (MNVR)*Army

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47.000

12.636

23.341

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0604290A: Mid-tier Networking	DW1: MID-TIER WIDEBAND
BA 5: System Development & Demonstration (SDD)	Vehicular Radio (MNVR)	NETWORKING VEHICULAR RADIO MNVR

### D. Acquisition Strategy

The MNVR encourages an industry solution for a multi-channel vehicular radio which will host Joint Tactical Networking Center (JTNC) networking waveforms, addressing the Army's requirement for Mid-Tier Wideband Networking (MWN) capabilities. MNVR provides an extension of data services from the upper tactical network at brigade and battalion to the lower tactical network at company and platoon echelon platforms.

PM MNVR Phase One is the procurement of the MNVR Directed Requirement Non-Developmental Item (NDI) Solution resulting in a Competitive, Single-Award, Indefinite Delivery, Indefinite Quantity (IDIQ) Firm-Fixed Price (FFP) contract award with a two-year production period, planned for June 2013.

PM MNVR Phase Two is the procurement of the MNVR Program of Record (PoR) Non-Developmental Item (NDI) Solution resulting in a Competitive, Multiple-Award, Indefinite Delivery, Indefinite Quantity (IDIQ) Firm-Fixed Price (FFP) contract award that will qualify two vendors for competitive Delivery Orders, with a five-year production period.

### **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.

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 2040: Research, Development, Test & Evaluation, Army PE 0604290A: Mid-tier Networking DW1: MID-TIER WIDEBAND BA 5: System Development & Demonstration (SDD) NETWORKING VEHICULAR RADIO MNVR Vehicular Radio (MNVR) FY 2014 FY 2014 FY 2014 Management Services (\$ in Millions) oco FY 2012 FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Complete Cost Contract Cost Aberdeen Proving Program Management MIPR 0.000 24.272 7.100 13.941 13.941 5.912 51.225 0.000 Ground:Maryland Support Subtotal 0.000 24.272 7.100 13.941 0.000 13.941 5.912 51.225 0.000 FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract System Development Aberdeen Proving Analysis and Product MIPR 0.000 12.298 0.590 0.590 0.250 13.138 0.000 Ground:Maryland Source Selection Subtotal 0.000 12.298 0.000 0.590 0.000 0.590 0.250 13.138 0.000 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Award Cost To Total Value of & Type **Activity & Location** Cost Cost Complete Contract **Cost Category Item** Years Date Cost Date Date Cost Date Cost Cost Aberdeen Proving Systems Test and **MIPR** 0.000 10.430 5.536 8.810 8.810 3.735 28.511 0.000 Evaluation Ground:Maryland Subtotal 0.000 10.430 5.536 8.810 0.000 8.810 3.735 28.511 0.000 Target All Prior FY 2014 FY 2014 FY 2014 **Cost To** Total Value of

Remarks

PE 0604290A: Mid-tier Networking Vehicular Radio (MNVR) Army

Years

**Project Cost Totals** 

0.000

FY 2012

47.000

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FY 2013

12.636

Base

23 341

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oco

0.000

Total

23 341

Complete

9 897

Cost

92 874

Contract

0.000

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 5: System Development & Demonstration (SDD)

PATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0604290A: Mid-tier Networking
Vehicular Radio (MNVR)

DW1: MID-TIER WIDEBAND
NETWORKING VEHICULAR RADIO MNVR

		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
Directed Requirement (DR) Contract Award												,								,								
Directed Requirement Delivery Order 1 Production																												
Material Development Decision (MDD)																												
Directed Requirement Order 1 Delivery																												
DR Initial Operational Test and Evaluation (IOT&E)																												
Initial Operating Capability (IOC)																												
Program of Record (PoR) Contract Award																												

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 0604290A: Mid-tier Networking DW1: MID-TIER WIDEBAND

BA 5: System Development & Demonstration (SDD) Vehicular Radio (MNVR)

NETWORKING VEHICULAR RADIO MNVR

# Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
Directed Requirement (DR) Contract Award	3	2013	3	2013
Directed Requirement Delivery Order 1 Production	3	2013	1	2015
Material Development Decision (MDD)	4	2013	4	2013
Directed Requirement Order 1 Delivery	2	2014	2	2015
DR Initial Operational Test and Evaluation (IOT&E)	3	2014	3	2014
Initial Operating Capability (IOC)	1	2015	1	2015
Program of Record (PoR) Contract Award	2	2015	2	2015