Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

R-1 Program Element (Number/Name)

**Appropriation/Budget Activity** 2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0605766A I National Capabilities Integration (MIP)

**Date:** May 2017

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior			FY 2018	FY 2018	FY 2018					Cost To	Total	
(4	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Cost	
Total Program Element	-	10.599	4.955	6.882	-	6.882	9.804	10.033	8.104	11.066	Continuing	Continuing	
DX9: National Integration To Tactical Systems(MIP)	-	10.599	4.955	2.820	-	2.820	6.524	6.688	4.650	4.567	Continuing	Continuing	
EX7: Air Vigilance System Development	-	0.000	0.000	4.062	-	4.062	3.280	3.345	3.454	6.499	Continuing	Continuing	

#### Note

In FY 2018, PE 0605766A 'National Capabilities Integration (MIP) funds realign into two (2) separate projects:

- (1) Project DX9 National Integration To Tactical Systems (MIP)
- (2) Project EX7 Air Vigilance System Development

All funding is in support of the ACTIVE COMPONENT

# A. Mission Description and Budget Item Justification

National Integration to Tactical Systems provides centralized monitoring and synchronization by the Army's Tactical Exploitation of National Capabilities (TENCAP) office, for the transition and integration of proven advanced technologies, prototypes and standards developed by the National Intelligence Community (IC) into Army systems and Programs of Record. This Program Element includes System Development and Integration funds for an Army ACAT III Program of Record (POR). It also enables efficient use and oversight of system development funds for final stage integration, development, and testing of successful technologies and prototypes to advance, or make compliant, Army systems and Programs of Record that have or use National capabilities.

FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
10.599	4.955	7.201	-	7.201
10.599	4.955	6.882	-	6.882
0.000	0.000	-0.319	-	-0.319
-	-			
-	-			
-	-			
-	-			
-	-			
-	-			
-	-			
0.000	0.000	-0.319	-	-0.319
	10.599 10.599 0.000 - - - - - -	10.599 4.955 10.599 4.955 0.000 0.000	10.599	10.599

PE 0605766A: National Capabilities Integration (MIP) Army

Page 1 of 7

R-1 Line #143

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army		Date: May 2017		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0605766A / National Capabilities Integration (MIP)			
Change Summary Explanation The FY 2018 funding request was reduced by \$0.319 million to align	n with current execution of the program.			

PE 0605766A: *National Capabilities Integration (MIP)* Army

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army  Date: May 2017												
Appropriation/Budget Activity 2040 / 5									umber/Name) onal Integration To Tactical MIP)			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base					FY 2021	FY 2022	Cost To Complete	Total Cost
DX9: National Integration To Tactical Systems(MIP)	-	10.599	4.955	2.820	-	2.820	6.524	6.688	4.650	4.567	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

National Integration to Tactical Systems provides for centralized monitoring and synchronization by the Army's Tactical Exploitation of National Capabilities (TENCAP) office for the transition and integration of new, updated, and emerging National Intelligence Community (IC) technologies, capabilities, and standards into Programs of Record across the Army to: (1) maintain operational relevance of Army programs and address changes in technology and the threat, (2) ensure Army programs maintain interoperability with and access to the National community architecture and systems, and (3) advance Army ability to conduct analysis and tasking, collection, processing, exploitation, dissemination and feedback (TCPEDF) of intelligence data.

FY2018 Base funding in the amount of \$2.820 million provides integration funds for 1 validated National Intel Community (IC) effort: Army TNG Integration, \$2.820 million funds the continued efforts to ensure Army Programs of Record are in compliance to the National standard for Airborne Overhead Cooperative Operations/ Theater Net-Centric Geolocation (AOCO/TNG), per the Joint Requirement (JROCM 101-10).

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Advanced Air Vigilance (AV) capabilities	7.179	2.352	-
Description: Advanced development, modifications and changes to the Air Vigilance (AV) system software.			
FY 2016 Accomplishments:  Provided updates to software baseline being used to provide timely intelligence to the warfighter across the world. Developed a future capability from the user to have the POR be used to collect data in an austere environment.			
FY 2017 Plans: Provides updates to software baseline being used to provide timely intelligence to the warfighter across the world. Develops the user capability to ensure theater net-centric geolocation capability, and the ability for the POR to be operated in austere environments as required by the warfighter.			
Title: Army TNG Integration - Airborne Overhead Cooperative Operations (AOCO) / Theater Net-Centric Geolocation (TNG)	3.420	2.603	2.820
<b>Description:</b> National Intelligence Community (IC) standard for interoperability and use of specific intelligence networked capabilities.			
FY 2016 Accomplishments:			

PE 0605766A: National Capabilities Integration (MIP)

Page 3 of 7

R-1 Line #143

EXPLOID REPROJECT JUSTIFICATION: FY 2018 Army		Date: May 2017				
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A I National Capabilities Integration (MIP)	Project (Number DX9 / National Int Systems(MIP)	,	actical		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018		
Provided funds to specified Army Programs of Record for final-sta compliance to the National requirement and standards, and intero networked capability for joint tactical use and improved Army battl	perability with this National Intelligence Community (IC)	3				
FY 2017 Plans: Provides funds to ensure SIGNIT Army assets can perform timely software development enhancements of the current JCID 4.1/4.2 requirement and standards and interoperability with National Intell use and improved Army battlefield awareness, to participate in the interoperability. (ref. CJCSI 32450.61, AOCO 13Jan2012)	TNG investment, ensuring compliance to the National ligence Community (IC) networked capabilities for tactical					
FY 2018 Plans: Provides funds to specified Army Programs of Record (PORs) for ensuring their compliance to the National requirement and standa National Intelligence Community (IC) "Theater Net-Centric Geolog battlefield awareness. (ref. CJCSI 32450.61, AOCO 13Jan2012)	rds that enables these PORs to be interoperable within th					

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

Exhibit P 24 PDT8 E Project Justification: EV 2018 Army

			FY 2018	FY 2018	FY 2018					Cost To	
<u>Line Item</u>	FY 2016	FY 2017	<b>Base</b>	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	<b>Total Cost</b>
<ul> <li>0603766A: Tactical</li> </ul>	17.562	15.730	27.733	-	27.733	32.340	36.742	30.894	31.838	Continuing	Continuing
Support Davelonment										_	-

**Accomplishments/Planned Programs Subtotals** 

Support Development - Adv Dev (MIP), PE 643766

### Remarks

Army

## D. Acquisition Strategy

The 'National Integration To Tactical Systems (Military Intelligence Program - MIP)' funds provide for transition and integration of National Intelligence Community (IC) advanced technologies and prototypes leveraged by the Army's Tactical Exploitation of National Capabilities (TENCAP) program office. The Army TENCAP acquisition strategy is driven by an annual TENCAP General Officer Steering Group (TGOSG), co-chaired by the Army G2; Army G8; and the Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology [ASA(ALT)]; and includes representatives from the Army G3; Army G6; Army Training and Doctrine Command (TRADOC); and the Program Executive Office for Intelligence, Electronic Warfare and Sensors (PEO IEW&S). The TGOSG reviews, validates, prioritizes, and guides Army TENCAP efforts, according to Army and Defense strategy. Based on this TGOSG guidance, Army TENCAP invests BA 6.4 RDTE in Intelligence Community (IC) developments during the more cost-effective advanced development phase to ensure Army requirements are met with minimal redundancy. Army

PE 0605766A: National Capabilities Integration (MIP)

Page 4 of 7

R-1 Line #143

Dato: May 2017

10.599

4.955

2.820

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army		<b>Date:</b> May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
2040 / 5	PE 0605766A / National Capabilities	DX9 I National Integration To Tactical
	Integration (MIP)	Systems(MIP)

TENCAP then uses BA 6.5 RDTE to manage the transition of these advanced development efforts through system development and integration into Army Programs of Record (POR). This strategy ensures these leveraged investments remain viable through multiple budget cycles, significantly increasing successful transition to recipient Army POR. Army TENCAP facilitates the continued access to National Intel Community (IC) 'joint' efforts and compatibility with those National standards and software baseline for those Army PORs that benefit from these leveraged National IC technologies, resulting in cost-savings through cost-sharing, and Army participation in collaborative Intelligence. Funds will be used for final-stage integration efforts identified and vetted through the Army TENCAP annual TGOSG, such as advanced Air Vigilance software enhancements, POR sensor integration into the Theater Net-Centric Geolocation network, integration of the future AMDAS capability into PM DCGS-A family of systems and operational concepts, transition and integration of Army TENCAP technologies discovered and leveraged by the annual MERIT project selection process, as well as other transitioning technologies discovered and/or leverage through other joint TENCAP outreach efforts.

## **E. Performance Metrics**

N	/A	

PE 0605766A: National Capabilities Integration (MIP) Army

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army										Date: May 2017		
Appropriation/Budget Activity 2040 / 5					, , ,					umber/Name) /igilance System Development		
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
EX7: Air Vigilance System Development	-	0.000	0.000	4.062	-	4.062	3.280	3.345	3.454	6.499	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

### **Note**

The FY 2018 funds realigned from Project DX9 'National Integration To Tactical Systems(MIP) to Project EX7 'Air Vigilance System Development'.

# A. Mission Description and Budget Item Justification

Air Vigilance (AV) is a classified program that enhances situational awareness and force protection. The AV program is primarily a software based solution that evolves through its use. Physically, AV consists of a single, or multiple, sensor(s) that collects data and a central server to process the data for immediate Army tactical action and as input into the Intelligence Community's (IC) common accessible library.

FY2018 Base funding in the amount of \$4.062 million provides for system development and integration of latest software developments and hardware configurations in accordance with Capability Drop (CD) 3 requirements

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Air Vigilance System Development and Integration	-	-	4.062
FY 2018 Plans: Provides for software development and integration to ingest latest collected sensor data into common baseline and enhance system capabilities to meet newly identified threats and latest Capability Drop requirements			
Accomplishments/Planned Programs Subtotals	-	-	4.062

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

			FY 2018	FY 2018	FY 2018					Cost To	
<u>Line Item</u>	FY 2016	FY 2017	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	<b>Total Cost</b>
<ul> <li>0603766A RDTE: Tactical</li> </ul>	17.562	15.730	27.733	-	27.733	32.340	36.742	30.894	31.828	Continuing	Continuing
Electronic Surveillance											
System - Adv Dev											
<ul> <li>W60001 OPA: Air Vigilance</li> </ul>	8.224	0.733	5.348	-	5.348	6.497	6.953	5.169	8.530	Continuing	Continuing
(AV) OPA2 (W60001)											

### Remarks

Army

PE 0605766A: National Capabilities Integration (MIP)

**UNCLASSIFIED** Page 6 of 7

R-1 Line #143

Exhibit R-2A, RDT&E Project Justification: FY 2018 Army			Date: May 2017
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605766A I National Capabilities Integration (MIP)	Project (Number/Name) EX7 I Air Vigilance System Development	

## D. Acquisition Strategy

Air Vigilance (AV) is an ACAT III Automated Information System (AIS) program of record (POR) that originated from a Quick Reaction Capability (QRC) developed and fielded cooperatively with the Intelligence Community (IC) through the efforts and mission of the Army's Tactical Exploitation of National Capabilities (TENCAP) office. The QRC was transitioned into an Army AIS POR by the AAE in May 2013 and assigned to Army Program Executive Office - Intelligence Electronic Warfare and Sensors (PEO IEWS), the chartered acquisition authority for management and execution of the Army's TENCAP mission and Milestone Decision Authority (MDA) for the AV POR. The Army TENCAP continues to leverage the IC common software development and support contract to field the AV systems, and ensure this primarily software based system can continue to access and leverage the common software, and input or ingest the latest sensor collects into the common IC data library. As an AIS POR, the AV POR is currently fielding systems per its Basis of Issue Plan (BOIP) and with software and system capabilities that meet its latest validated Capability Drop (CD) requirements. The AV POR is currently scheduled to meet Full Deployment (FD) by 2020, and will continue to evolve to meet future validated Capability Drop requirements and maintain its effectiveness against emerging threats.

## **E. Performance Metrics**

N/A

PE 0605766A: National Capabilities Integration (MIP) Army