Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army

R-1 Program Element (Number/Name)

Appropriation/Budget Activity

2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0605036A / Combating Weapons of Mass Destruction (CWMD)

Date: February 2018

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	2.008	6.927	11.311	-	11.311	8.919	3.959	0.000	0.000	0.000	33.124
EQ5: Combating Weapons of Mass Destruction (CWMD)	-	2.008	6.927	11.311	-	11.311	8.919	3.959	0.000	0.000	0.000	33.124

A. Mission Description and Budget Item Justification

The Man-Portable Radiological Detection System (MRDS) capability will provide increased radiological and nuclear (RN) detection, localization, presumptive identification and field-confirmatory identification capabilities that are networked to provide situational awareness at the tactical level. The MRDS will support Countering Weapons of Mass Destruction (CWMD) Interdiction and Elimination operations, specifically RN Sensitive Site Assessments and Sensitive Site Exploitation. Future capability may also support Reconnaissance and Surveillance across the full range of CWMD operations. This capability supports Radiological and Nuclear Interdiction (RNI) and Weapons of Mass Destruction - Elimination (WMD-E) operations to: systematically locate, secure, characterize, and disable WMD programs and related capabilities.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	2.089	6.927	5.548	-	5.548
Current President's Budget	2.008	6.927	11.311	-	11.311
Total Adjustments	-0.081	0.000	5.763	-	5.763
 Congressional General Reductions 	-0.001	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-0.080	-			
 Adjustments to Budget Years 	-	-	5.763	-	5.763

Change Summary Explanation

FY 2019 increase in the amount of \$5.763M attributable to additional testing requirements.

Exhibit R-2A, RDT&E Project Ju	Date: February 2018											
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605036A / Combating Weapons of Mass Destruction (CWMD) Project (Number/Name EQ5 / Combating Wea Destruction (CWMD)						,	SS				
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
EQ5: Combating Weapons of Mass Destruction (CWMD)	-	2.008	6.927	11.311	-	11.311	8.919	3.959	0.000	0.000	0.000	33.124
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Man-Portable Radiological Detection System (MRDS) capability will provide increased radiological and nuclear (RN) detection, localization, presumptive identification and field-confirmatory identification capabilities that are networked to provide situational awareness at the tactical level. The MRDS will support Countering Weapons of Mass Destruction (CWMD) Interdiction and Elimination operations, specifically RN Sensitive Site Assessments and Sensitive Site Exploitation. The Joint Point Dosimeter (JPD-I) is intended to replace DoD's legacy dosimeters (the Navy's IM-270 and the Army's PDR-75 reader with the DT-236 watch). The JPD-I will provide a sensor to record and retrieve a Service member's radiation exposure from occupational to tactical levels. Future capability may also support Reconnaissance and Surveillance across the full range of CWMD operations. This capability supports Radiological and Nuclear Interdiction (RNI) and Weapons of Mass Destruction -Elimination (WMD-E) operations to: systematically locate, secure, characterize, and disable WMD programs and related capabilities.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2017	FY 2018	FY 2019
Title: Acquisition Documentation Development	0.180	-	-
Description: Provide the acquisition documentation for the MRDS program MS-C.			
Title: Program Management	0.298	2.289	2.630
Description: Provide Program Management			
FY 2018 Plans: Continue Government program management and Integrated Product Team support.			
FY 2019 Plans: Continue Government program management and Integrated Product Team support.			
FY 2018 to FY 2019 Increase/Decrease Statement: Increase due to additional testing requirements program changes.			
Title: Test & Evaluation Planning	0.090	0.290	0.398
Description: Provides test & evaluation support (ATEC/OTC).			
FY 2018 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army		Date:	February 2018	3
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605036A / Combating Weapons of Mass Destruction (CWMD)	Project (Number EQ5 / Combating Destruction (CW)	lass	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019
Provide TEMP development and test coordination planning.				
FY 2019 Plans: Conduct test and review/approve detail test plans				
FY 2018 to FY 2019 Increase/Decrease Statement: Increase due to additional testing requirement in 2019				
Title: System Engineering		0.47	0.455	0.45
Description: Provide system engineering support to the MRDS program.				
FY 2018 Plans: Provide system engineering support to the MRDS program.				
FY 2019 Plans: Provide system engineering support to the MRDS program.				
Title: Cybersecurity/Integration		0.20	0.563	0.56
Description: Provides cybersecurity thru integration of COTS.				
FY 2018 Plans: Initiate work on the Situational Awareness Tool and Networking capability.				
FY 2019 Plans: Continue work on the Situational Awareness Tool and Networking capability the	nrough validation testing			
Title: Acquisition Logistics		0.30	0.390	0.39
Description: Provides Acquisition Logistics support to the MRDS program.				
FY 2018 Plans: Initiate work on the level of repair analysis, provisioning, Army standard training	ng material and Army standard technical man	uals.		
FY 2019 Plans:				
Continue work on the level of repair analysis, provisioning, Army standard trai	ning material and Army standard technical ma			
Title: Analytical Support		0.47	-	0.24
$\textbf{\textit{Description:}} \ \text{Provide analytical and technical support to the MRDS program}.$				

PE 0605036A: Combating Weapons of Mass Destruction (C... Army

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army		Date:	February 2018	3		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605036A I Combating Weapons of Mass Destruction (CWMD)		t (Number/Name) Combating Weapons of Mass ction (CWMD)			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019		
FY 2019 Plans: Provide support to the test by the COTS vendor.						
FY 2018 to FY 2019 Increase/Decrease Statement: No effort in FY18.						
Title: Procure LRIP Prototypes		-	2.680	2.23		
Description: Purchases the systems						
FY 2018 Plans: Procure 12 COTS Systems (2 Types) to support testing and logist	tics evaluation.					
FY 2019 Plans: Procure 12 COTS Systems (2 Types) to support operational testing	ng and logistics evaluation.					
FY 2018 to FY 2019 Increase/Decrease Statement: Minor change due to routine program adjustments.						
Title: Component Testing		-	0.260	3.39		
Description: Provides component testing of the systems.						
FY 2018 Plans: Initiate radio testing with LRIP prototypes.						
FY 2019 Plans: Continue radiological performance and environmental testing with	LRIP prototypes.					
FY 2018 to FY 2019 Increase/Decrease Statement: Test preparation begins in 2018 and testing will continue though 2	2019.					
Title: Program Management JPD - I		-	-	0.36		
FY 2019 Plans: Provide Program Management - JPD-I						
FY 2018 to FY 2019 Increase/Decrease Statement: Increase due testing requirements						
Title: Test & Evaluation Planning JPD- I		-	-	0.64		

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army			Date: F	ebruary 2018	}	
Appropriation/Budget Activity 2040 / 5	CtivityR-1 Program Element (Number/Name)Project (NPE 0605036A / Combating Weapons of Mass Destruction (CWMD)EQ5 / Combating Destruction					
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2017	FY 2018	FY 2019	
FY 2019 Plans: Conduct Final Operational Test and Evaluation - JPD-I						
FY 2018 to FY 2019 Increase/Decrease Statement: Test to initiate in FY19						
	Accomplishments/Planned Programs Su	btotals	2.008	6.927	11.311	

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

N/A

Remarks

D. Acquisition Strategy

Man-portable Radiological Detection System is a single step acquisition strategy starting at Milestone C to acquire Commercial-Off-The-Shelf equipment sets consisting of a Hands-Free search device, a Hand-Held Radioisotope Identification Device, an integrated tactical radio network, and a Situational Awareness tool in order to provide specialized Army units with a net-ready, rugged, and reliable system that can detect, identify, and characterize designated radionuclides and transmit that information securely to tactical, operational, and strategic command levels in near-real time. The contract approach will be a full and open fixed price incentive contract for LRIP systems to support post Milestone C testing, and an indefinite delivery indefinite quantity fixed price incentive contract for the full rate production task order.

The Joint Point Dosimeter - Individual (JPD-I) Program Office (PO) will leverage the Navy's market research, testing and down select to meet the Army's requirements. The level of technological maturity is such that JPD-IND will enter the acquisition cycle from MDD at MS C. Currently conducting Production Qualification Testing, the program is working toward a Full Rate Production Decision in 1st Qtr FY19 concurrent with a Full Rate Production Contract Award.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2019 Arm	y								Date:	February	2018	
Appropriation/Budge 2040 / 5	et Activity	1		-		PE 060		combatin	l umber/N g Weapor))		EQ5/C	Sombating	umber/Name) nbating Weapons of Mass n (CWMD)		
Management Service	es (\$ in M	illions)		FY 2017		′ 2017 FY 2018		FY 2019 I Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	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	Allot	Various : Various	-	0.298	Aug 2017	2.289		2.630	Dec 2018	-		2.630	0.000	5.217	-
Acquisition Document Development	Allot	Various : Various	-	0.180	Aug 2017	-		-		-		-	0.000	0.180	-
		Subtotal	-	0.478		2.289		2.630		-		2.630	0.000	5.397	N/A
Product Developmen	nt (\$ in M	illions)		FY:	2017	FY 2	2018		2019 ise		2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contract Award	C/FPIF	TBD : TBD	-	-		2.680	Jun 2017	2.733		-		2.733	0.000	5.413	-
		Subtotal	-	-		2.680		2.733		-		2.733	0.000	5.413	N/A
Support (\$ in Million	ıs)			FY	2017	FY 2	2018		2019 ise		2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Cybersecurity	MIPR	Edgewood Chemical and Biological Center : Edgewood, Maryland	-	0.200	Sep 2017	0.563		0.563	Jan 2019	-		0.563	0.000	1.326	-
Acquisition Logistics	MIPR	Communications- Electronics Command : Aberdeen Proving Ground, MD	-	0.300	Aug 2017	0.390		0.390	Jan 2019	-		0.390	0.000	1.080	-
Analytical Support	MIPR	Various : Various	-	0.470	Jul 2017	-		0.247	Jan 2019	-		0.247	0.000	0.717	-
Systems Engineering	MIPR	Edgewood Chemical and Biological Center : Aberdeen Proving Ground, MD	-	0.470	Jul 2017	0.455		0.455	Jan 2019	-		0.455	0.000	1.380	-

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Subtotal

1.440

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1.408

1.655

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1.655

0.000

4.503

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army	Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army								
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)						
2040 / 5	PE 0605036A I Combating Weapons of	EQ5 / Com	nbating Weapons of Mass						
	Mass Destruction (CWMD)	Destruction	n (CWMD)						

Test and Evaluation	(\$ in Milli	ions)		FY 2	2017	FY 2	018	FY 2 Ba	2019 ise	FY 2	2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
T&E	MIPR	ATEC : Aberdeen Proving Ground, MD	-	0.090	Sep 2017	0.290		0.398	Dec 2018	-		0.398	0.000	0.778	-
Component testing	MIPR	Various : Various	-	-		0.260		3.895	Feb 2019	-		3.895	0.000	4.155	-
		Subtotal	-	0.090		0.550		4.293		-		4.293	0.000	4.933	N/A
															Target

	Prior Years	FY 201	7 FY 2		019 FY 2019 se OCO	FY 2019 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	-	2.008	6.927	11.311	-	11.311	0.000	20.246	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army

Date: February 2018

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)
PE 0605036A I Combating Weapons of
Mass Destruction (CWMD)

Project (Number/Name)
EQ5 / Combating Weapons of Mass
Destruction (CWMD)

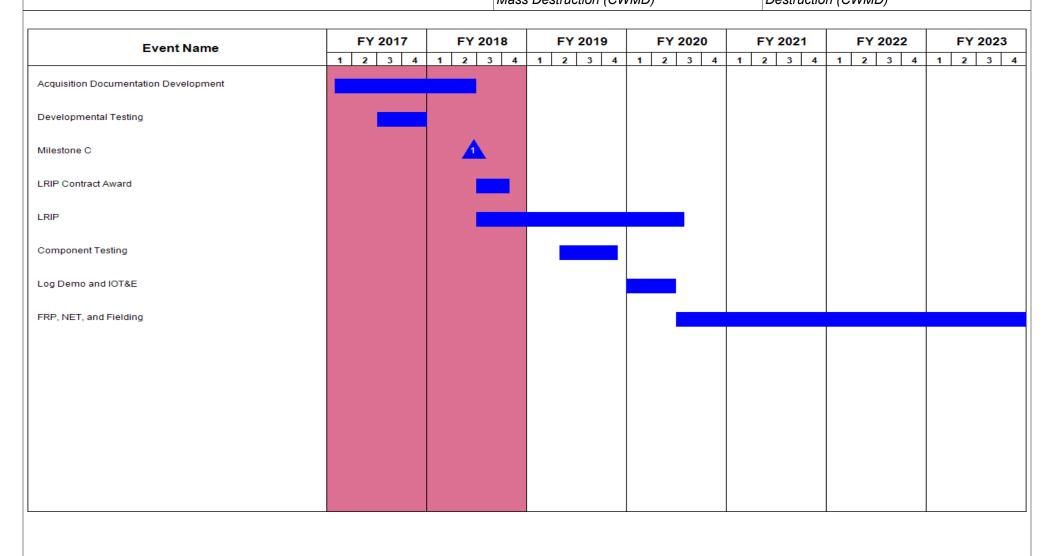


Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605036A I Combating Weapons of Mass Destruction (CWMD)	, ,	umber/Name) nbating Weapons of Mass n (CWMD)

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Acquisition Documentation Development	1	2017	2	2018
Developmental Testing	3	2017	4	2017
Milestone C	2	2018	2	2018
LRIP Contract Award	3	2018	4	2018
LRIP	3	2018	3	2020
Component Testing	2	2019	4	2019
Log Demo and IOT&E	1	2020	2	2020
FRP, NET, and Fielding	3	2020	4	2024