

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army	Date: May 2017
---	-----------------------

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					PE 0605036A / Combating Weapons of Mass Destruction (CWMD)							
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
Total Program Element	-	0.000	2.089	6.927	-	6.927	5.548	9.195	4.181	0.000	0.000	27.940
EQ5: Combating Weapons of Mass Destruction (CWMD)	-	0.000	2.089	6.927	-	6.927	5.548	9.195	4.181	0.000	0.000	27.940

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 increments of this 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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.000	2.089	6.543	-	6.543
Current President's Budget	0.000	2.089	6.927	-	6.927
Total Adjustments	0.000	0.000	0.384	-	0.384
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	0.000	0.000	0.384	-	0.384

UNCLASSIFIED

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 0605036A / Combating Weapons of Mass Destruction (CWMD)				Project (Number/Name) EQ5 / Combating Weapons of Mass Destruction (CWMD)			
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
EQ5: Combating Weapons of Mass Destruction (CWMD)	-	0.000	2.089	6.927	-	6.927	5.548	9.195	4.181	0.000	0.000	27.940
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. Future increments of this 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 2016	FY 2017	FY 2018
Title: Acquisition Documentation Development										-	0.260	-
Description: Provide the acquisition documentation for the MRDS program MS-C.												
FY 2017 Plans: Initiate the development of the acquisition documentation.												
Title: Program Management										-	0.299	1.550
Description: Provide Program Management												
FY 2017 Plans: MRDS: Initiate Government program management and Integrated Product Team (IPT) support.												
FY 2018 Plans: Continue Government program management and Integrated Product Team support.												
Title: Test & Evaluation Planning										-	0.090	0.158
Description: Provides test & evaluation support (ATEC/JTIC).												
FY 2017 Plans:												

UNCLASSIFIED

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 0605036A / <i>Combating Weapons of Mass Destruction (CWMD)</i>	Project (Number/Name) EQ5 / <i>Combating Weapons of Mass Destruction (CWMD)</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017
Provide Developmental Test and Evaluation for the MRDS program.			
FY 2018 Plans: Provide TEMP development and test coordination planning.			
Title: System Engineering Description: Provide system engineering support to the MRDS program. FY 2017 Plans: Initiate the system engineering planning and support for the MRDS program.		-	0.470
Title: Cybersecurity/Integration Description: Provides cybersecurity thru integration of COTS. FY 2017 Plans: Initiate cybersecurity planning and support to the MRDS program. FY 2018 Plans: Initiate work on the Situational Awareness Tool and Networking capability.		-	0.200
Title: Acquisition Logistics Description: Provides Acquisition Logistics support to the MRDS program. FY 2017 Plans: Initiate acquisition logistics planning and support to the MRDS program. FY 2018 Plans: Initiate work on the level of repair analysis, provisioning, Army standard training material and Army standard technical manuals.		-	0.300
Title: Analytical Support Description: Provide analytical and technical support to the MRDS program. FY 2017 Plans: Provide analytical support and planning to the MRDS program. FY 2018 Plans:		-	0.470
			0.671

UNCLASSIFIED

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 0605036A / <i>Combating Weapons of Mass Destruction (CWMD)</i>	Project (Number/Name) EQ5 / <i>Combating Weapons of Mass Destruction (CWMD)</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017
Provide support to the test strategy and logistical development.			
Title: Procure LRIP Prototypes Description: Purchases the systems FY 2018 Plans: Procure 12 COTS Systems (2 Types) to support testing and logistics evaluation.		-	2.479
Title: Component Testing Description: Provides component testing of the systems. FY 2018 Plans: Initiate testing with LRIP prototypes.		-	0.911
Accomplishments/Planned Programs Subtotals		-	6.927
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 successive targets contract for LRIP systems to support post Milestone C testing, and an indefinite delivery indefinite quantity fixed price incentive successive targets contract for the full rate production task order. E. Performance Metrics N/A			