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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603627A I Smoke, Obscurant and Target Defeating Sys-Adv Dev							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	-	-	13.426	-	13.426	13.400	10.775	7.093	-	-	44.694
E79: SMOKE/OBSCURANT SYSTEM	-	-	-	13.426	-	13.426	13.400	10.775	7.093	-	-	44.694

Note

The FY 2016 funding request was reduced for \$4.517 million to account for the availability of prior year execution balances.

A. Mission Description and Budget Item Justification

SOM: US Forces must be able to effectively neutralize and degrade energy weapon systems and electro-optical systems/smart weapons that operate in the full range of the electromagnetic spectrum to improve platform survivability and soldier protection levels of maneuver forces on the battlefield. Improvements are sought across the entire multi-spectral range from visual through infrared (IR) and millimeter wavelengths (MMW) radar for incorporation into self-protection using sustained generated obscuration technology. SOM will be man portable and modular to facilitate quick mounting on manned/unmanned platforms and dismounted operations.

NBCRV: This program upgrades the Stryker Nuclear Biological Chemical Radiological Vehicle Sensor Suite (NBCRVSS) for increased sensitivity, chemical detection at increased maneuver speeds, and increased reliability. The NBCRVSS consists of a chemical point detector for solid, liquid, and vapor Chemical Warfare Agents, a biological point detection system, a Chemical Vapor Sampling System, a Training Aids, Devices, and Simulation System, and the Sensor Processing Group. The NBCRVSS provides the Stryker NBCRV the ability to detect, identify, collect, report, and mark NBC hazards. NBCRVSS funding is expected to move to a separate Program Element during the FY16 President's Budget cycle. It will be reflected under PE 655038, Project Code EQ7.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	-	13.426	-	13.426
Total Adjustments	-	-	13.426	-	13.426
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	13.426	-	13.426

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Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603627A / Smoke, Obscurant and Target Defeating Sys-Adv Dev				Project (Number/Name) E79 / SMOKE/OBSCURANT SYSTEM			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
E79: SMOKE/OBSCURANT SYSTEM	-	-	-	13.426	-	13.426	13.400	10.775	7.093	-	-	44.694
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Nuclear Biological Chemical Radiological Vehicle Sensor Suite (NBCRVSS) funding is expected to move to a separate Program Element during the FY16 President's Budget cycle. It will be reflected under PE 655038, Project Code EQ7.

A. Mission Description and Budget Item Justification

Screening Obscuration Module (SOM): US Forces must be able to effectively neutralize and degrade energy weapon systems and electro-optical systems/smart weapons that operate in the full range of the electromagnetic spectrum to improve platform survivability and soldier protection levels of maneuver forces on the battlefield. Improvements are sought across the entire multi-spectral range from visual through infrared (IR) and millimeter wavelengths (MMW) radar for incorporation into self-protection using sustained generated obscuration technology. SOM will be man portable and modular to facilitate quick mounting on manned/unmanned platforms and dismounted operations.

NBCRV: This program upgrades the Stryker Nuclear Biological Chemical Radiological Vehicle Sensor Suite (NBCRVSS) for increased sensitivity, chemical detection at increased maneuver speeds, and increased reliability. The NBCRVSS consists of chemical point detectors, a standoff chemical vapor detector, a biological point detector system, a Chemical Vapor Sampling System (CVSS), a Training Aids, Devices, and Simulation System (TADSS), and the Sensor Processing Group (SPG). The NBCRVSS provides the Stryker NBCRV the ability to detect, identify, collect, report, and mark NBC hazards. NBCRVSS funding is expected to move to a separate Program Element during the FY16 President's Budget cycle. It will be reflected under PE 655038, Project Code EQ7.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2014	FY 2015	FY 2016
Title: SOM: Product Development	-	-	1.700
Description: SOM Development			
FY 2016 Plans: SOM: Initiate design and development of the SOM system.			
Title: SOM: Test and Evaluation of SOM systems	-	-	0.286
Description: Test and Evaluation of SOM systems			
FY 2016 Plans:			

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B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016
SOM: Initiate test and evaluation planning.					
Title: SOM: Project Management			-	-	0.600
Description: Project Management					
FY 2016 Plans: SOM: Initiate Government program management, systems engineering, and Integrated Product Team (IPT) support.					
Title: NBCRV: Engineering and Modeling			-	-	0.700
Description: Provide ILS and Integration support to the sensor suite upgrades.					
FY 2016 Plans: NBCRV: Initiate Integrated Logistics Support (ILS) and Integration support to the sensor suite upgrades.					
Title: NBCRV: Sensor Suite Upgrade Development			-	-	8.140
Description: Sensor suite upgrade development					
FY 2016 Plans: NBCRV: Award contracts for sensor suite development.					
Title: NBCRV: Test & Evaluation			-	-	0.500
Description: NBCRV testing of prototypes					
FY 2016 Plans: NBCRV: Initiate test and evaluation planning and support for sensor suite upgrade prototypes.					
Title: NBCRV: Project Management			-	-	1.500
Description: NBCRV Project Management Labor					
FY 2016 Plans: NBCRV: Initiate Government program management, systems engineering, and Integrated Product Team (IPT) support.					
Accomplishments/Planned Programs Subtotals			-	-	13.426

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C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• SMOKE/OBSCURANT SYSTEM: Project 200 Smoke, Obscurant and Target Defeating Sys - Eng Dev	-	-	-	-	-	-	-	-	-	-	-
• Target Defeating System: Project 198 Smoke, Obscurant and Target Defeating Sys - Eng Dev	-	-	-	-	-	-	-	-	-	-	-
Remarks											
D. Acquisition Strategy											
Acquisition Strategy:											
NBCRV: The Nuclear Biological Chemical Radiological Vehicle Sensor Suite (NBCRVSS) is a Component of End Item to the Stryker Nuclear Biological Chemical Radiological Vehicle (NBCRV) designed to detect, identify, collect, report, and mark NBC hazards while integrated on the Stryker NBCRV. The NBCRVSS is a single step in the evolutionary acquisition strategy of the Stryker NBCRV. The NBCRVSS program will design, develop, integrate, test, procure, and field systems that will allow increased maneuver speeds when sampling liquid/solid ground contamination, increase chemical point identification sensitivity, lower sustainment costs, and increase reliability. Full and Open competition will be used for the development of the NBCRVSS with options for Low Rate Initial Production and Full Rate Production. The NBCRVSS will utilize competitive prototyping and a best value approach. SOM: The Screening Obscuration Module (SOM) acquisition strategy is a single step Technology Development (TD) phase leading to a Milestone B/C production decision. The path forward for the TD phase will include the release of a formal request for proposal (RFP) to develop, test, and produce a SOM system capable of obscuring the Visual through Near IR wavelengths of the electromagnetic spectrum. The SOM RFP will utilize a cost plus fixed fee best value contract approach to execute the TD phase and a firm fixed price contract option for production. This acquisition strategy includes system development and demonstration, full system integration, design for producibility and a demonstration of interoperability, safety and utility.											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603627A / Smoke, Obscurant and Target Defeating Sys-Adv Dev				Project (Number/Name) E79 / SMOKE/OBSCURANT SYSTEM					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
SOM-Project Management Personnel	MIPR	JPM : NBCCA	5.630	-		-		0.600		-		0.600	Continuing	Continuing	Continuing
NBCRV-Project Management Personnel	MIPR	JPM NBC CA : Edgewood, MD	0.000	-		-		1.500		-		1.500	-	1.500	-
Subtotal			5.630	-		-		2.100		-		2.100	-	-	-
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
SOM Product Development	C/CPFF	JPM NBCCA, APG MD : Edgewood. MD	21.551	-		-		1.700		-		1.700	Continuing	Continuing	Continuing
NBCRV Product Development	C/CPFF	JPM NBC CA : Edgewood, MD	0.000	-		-		8.140		-		8.140	-	8.140	-
Subtotal			21.551	-		-		9.840		-		9.840	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
NBCRV Engineering and Modeling	MIPR	PM SBCT : Edgewood, Md	0.000	-		-		0.700		-		0.700	Continuing	Continuing	Continuing
Subtotal			0.000	-		-		0.700		-		0.700	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
SOM Test & Evaluation	MIPR	OGA Various : Various	1.392	-		-		0.286		-		0.286	Continuing	Continuing	Continuing
NBCRV-Test & Evaluation	MIPR	OGA : Various	0.000	-		-		0.500		-		0.500	-	0.500	-

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Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Subtotal			1.392	-		-		0.786		-		0.786	-	-	-

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	28.573	-	-	13.426	-	13.426	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																Date: February 2015												
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Event Name	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
SOM Design and Fabrication																												
SOM Developmental Testing #1																												
SOM Developmental Testing #2																												
SOM User Testing																												
SOM MS B/C/FRP																												
SOM Production Award																												
SOM FAT																												
NBCRV: SS Contract Award																												
NBCRV: SS Design and Fabrication																												
NBCRV: SS Developmental Testing																												
NBCRV: SS Maturation																												
NBCRV: Operational Test																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603627A / <i>Smoke, Obscurant and Target Defeating Sys-Adv Dev</i>	Project (Number/Name) E79 / <i>SMOKE/OBSCURANT SYSTEM</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SOM Design and Fabrication	2	2016	1	2018
SOM Developmental Testing #1	4	2017	4	2017
SOM Developmental Testing #2	2	2018	2	2019
SOM User Testing	2	2019	2	2019
SOM MS B/C/FRP	1	2020	1	2020
SOM Production Award	1	2020	1	2020
SOM FAT	2	2020	4	2020
NBCRV: SS Contract Award	1	2016	1	2016
NBCRV: SS Design and Fabrication	1	2016	4	2018
NBCRV: SS Developmental Testing	2	2018	4	2018
NBCRV: SS Maturation	1	2018	4	2019
NBCRV: Operational Test	3	2020	3	2020