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

Exhibit R-2A, RDT&E Project Justification: 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*	

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

Exhibit R-2A, RDT&E Project Justification: 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*

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

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
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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 NBCRSS program will design, develop, integrate, test, procure, and field systems that will allow increased manuever 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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army			Date: February 2015
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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total 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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total 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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total 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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total 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	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army		Date: February 2015
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total 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

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army		Date: February 2015
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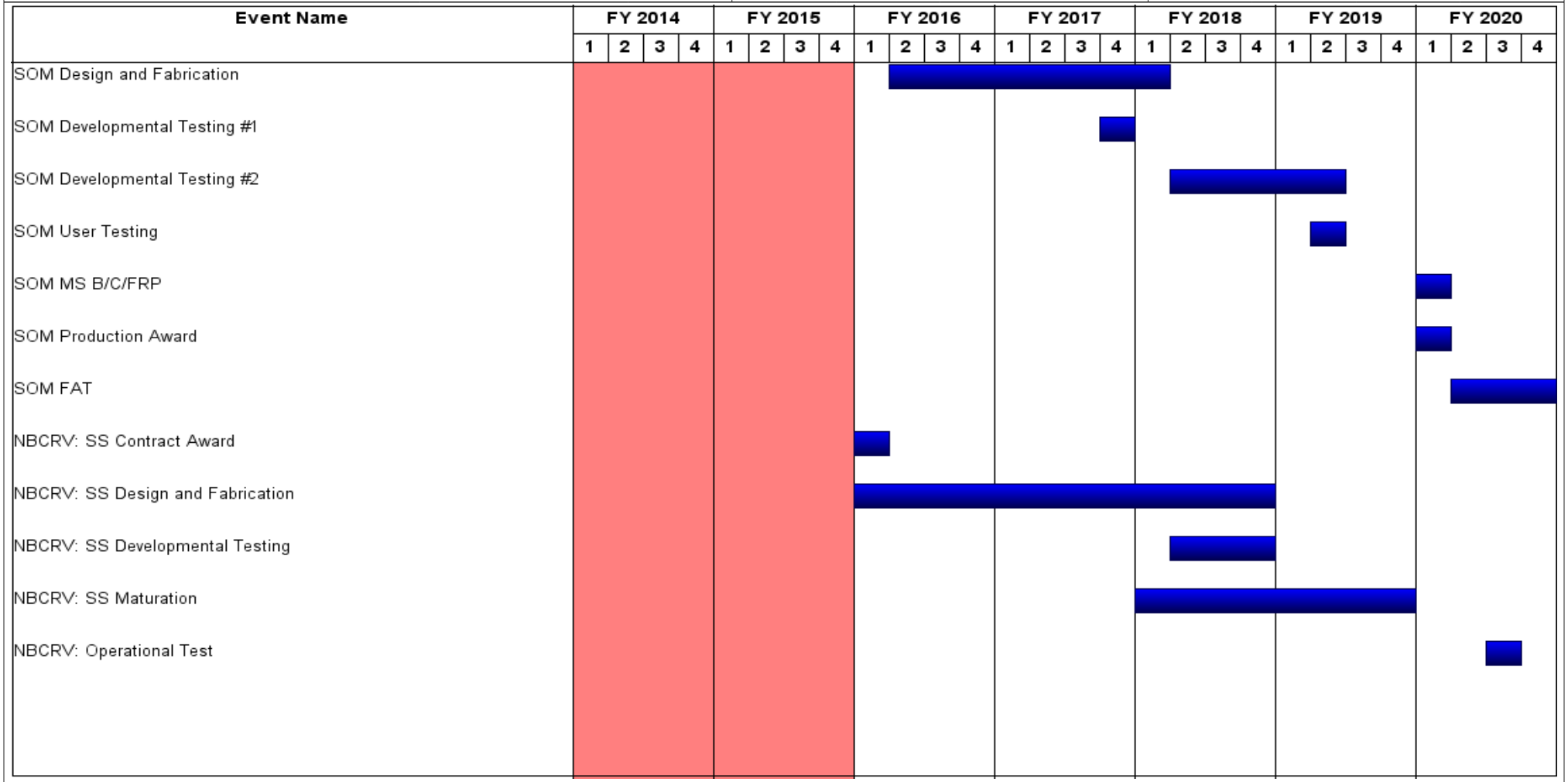

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army		Date: February 2015
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Schedule Details

	Start		End	
Events	**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