Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Office of the Secretary Of Defense	Date: February 2015
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*

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	93.320	46.889	41.014	31.710	-	31.710	32.244	38.426	41.257	41.843	Continuing	Continuing
P162: *Nuclear and Conventional Physical Security*	93.320	23.534	28.545	28.359	-	28.359	28.676	31.449	34.065	34.506	Continuing	Continuing
P041: *CNT Rad/Nuc Passive Defense ADC&P*	0.000	1.927	-	-	-	-	-	-	-	-	Continuing	Continuing
P040: *National Technical Nuclear Forensics Systems*	0.000	21.428	12.469	3.351	-	3.351	3.568	6.977	7.192	7.337	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Program Element (PE) addresses the need to defend and deter against weapons of mass destruction (WMD) threats and to safeguard personnel; prevent unauthorized access to equipment, installations, material, and documents; and to safeguard the foregoing against espionage, sabotage, damage, and theft. This program oversees advanced engineering development throughout DoD for an integrated and systemic RDT&E approach for countering nuclear threats and nuclear and conventional physical security technology and systems. The funding has been centralized in this Defense-wide PE since the early 1990s and represents a substantial portion of all DoD physical security RDT&E funding. Priorities for this PE RDT&E efforts are driven by inputs from Quadrennial Defense Review guidance, Combatant Command and Service requirements, analysis reports such as “Protecting the Force: Lessons from Fort Hood," January 2010, the Integrated Unit, Base, and Installation Protection Cost Benefits Analysis, Multi-national Work Plans established through the Nuclear Security Summit process, and DoD Directive 5210.41, Security Policy for Protecting Nuclear Weapons-directed requirements and associated security deviation reports.

Under this integrated approach, funds are used to provide advanced component development and prototypes for the Department in seven capability areas: (1) Detection and Assessment; (2) Access Controls; (3) Installation and Transport Security; (4) Storage and Safeguards; (5) Prevention; (6) Decision Support Systems; and (7) Analytical Support. This program will evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment. The projects under the Program Element either (a) lead to Programs of Record which can transition to Program Element 0604161D8Z for systems development and demonstration (SDD); (b) become technology insertions into existing programs; or (c) advance to being a certified Commercial/Government off-the-shelf product. The PE initiatives are coordinated by the Physical Security Enterprise and Analysis Group. This group is responsible for avoiding duplication of effort and when applicable ensure systems integration and promote interoperability and sustainability.

This PE can fund travel to support the requirements of this program.

This appropriation will finance work, including manpower, performed by a government agency or by private individuals or organizations under a contractual or grant arrangement with the government who conduct research (systematic study directed toward fuller scientific knowledge or understanding of the subject studied), development (systematic use of the knowledge and understanding gained from research, for the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes) and test and evaluation efforts.

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Office of the Secretary Of Defense	Date: February 2015
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*

B. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	48.302	41.072	41.762	-	41.762
Current President's Budget	46.889	41.014	31.710	-	31.710
Total Adjustments	-1.413	-0.058	-10.052	-	-10.052
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.413	-			
• Internal realignment	-	-	-9.962	-	-9.962
• FFRDC	-	-0.058	-	-	-
• Economic Assumptions	-	-	-0.090	-	-0.090

Change Summary Explanation

Realign RDT&E funding under CWMD Procurement line for the National Technical Nuclear Forensics mission. Also moved $900K from this Program Element to PE 0605161D8Z in order to align all contract support requirements under this Management Support RDT&E line.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense			Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*	

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
P162: *Nuclear and Conventional Physical Security*	93.320	23.534	28.545	28.359	-	28.359	28.676	31.449	34.065	34.506	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This Program Element (PE) addresses the need to defend and deter against weapons of mass destruction (WMD) threats and to safeguard personnel; prevent unauthorized access to equipment, installations, material, and documents; and to safeguard the foregoing against espionage, sabotage, damage, and theft. This program oversees advanced engineering development throughout DoD for an integrated and systemic RDT&E approach for countering nuclear threats and nuclear and conventional physical security equipment (PSE) technology and systems. The funding has been centralized in this Defense-wide PE since the early 1990s and represents a substantial portion of all DoD PSE RDT&E funding. Priorities for this PE RDT&E efforts are driven by inputs from Quadrennial Defense Review guidance, Combatant Command and Service requirements, analysis reports such as “Protecting the Force: Lessons from Fort Hood," January 2010, the Integrated Unit, Base, and Installation Protection Cost Benefits Analysis, Multi-national Work Plans established through the Nuclear Security Summit process, and DoD Directive 5210.41, Security Policy for Protecting Nuclear Weapons-directed requirements and associated security deviation reports.

Under this integrated approach, funds are used to provide PSE advanced component development and prototypes for the Department in seven capability areas: (1) Detection and Assessment; (2) Access Controls; (3) Installation and Transport Security; (4) Storage and Safeguards; (5) Prevention; (6) Decision Support Systems; and (7) Analytical Support. The projects under the Program Element either (a) lead to Programs of Record – which can transition to Program Element 0604161D8Z for systems development and demonstration (SDD); (b) become technology insertions into existing programs; or (c) advance to being a certified Commercial/Government off-the-shelf product. The PE initiatives are coordinated by the Security Policy Verification Committee and the Physical Security Equipment Action Group. These groups work together to avoid duplication of effort and when applicable ensure systems integration and promote interoperability and sustainability.

This PE can fund travel to support the requirements of this program.

This appropriation will finance work, including manpower, performed by a government agency or by private individuals or organizations under a contractual or grant arrangement with the government who conduct research (systematic study directed toward fuller scientific knowledge or understanding of the subject studied), development (systematic use of the knowledge and understanding gained from research, for the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes) and test and evaluation efforts.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Detection and Assessment	3.903	8.554	9.787

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Description: The ability to detect an adversary and assess their intentions is a basic physical security tenant. This capability area will design equipment to identify and warn of unauthorized access to a specified area or installation as well as equipment related to the notification and identification of explosive threats or hazards. ***FY 2014 Accomplishments:*** • Conducted Explosive Detection Equipment testing (Sensor Fusion: Raman and Infrared and Comparative Test & Evaluation of X-ray technology) • Developed wide-area, long-range, foliage, seismic and radiological detection capability (both fixed & mobile) • Developed waterside detection & tracking capability (underwater & land-water interface) • Conducted fence sensors & cold weather testing ***FY 2015 Plans:*** • Conduct Explosive Detection Equipment testing • Develop wide-area, long-range, foliage, seismic and radiological detection capability (both fixed & mobile) • Develop waterside detection & tracking capability (underwater & land-water interface) • Develop standoff detection, assessment and defeat capability ***FY 2016 Plans:*** • Develop a Joint detection and assessment capability • Develop a multi-sensor detection and discrimination capability to reduce nuisance and false alarms • Compare dual energy X-Ray vehicle imaging systems • Develop a radar processing dynamic structure filter to reduce nuisance and false alarms • Finalize development of the Joint Radiological Detection System • SPAM Transition to Operational Initial Capability (STOIC) • Stand-Off Weapon Defeat IPT • Thermal Imaging Dual-use for Aerosol Monitoring Alarms and Security			
Title: Access Controls ***Description:*** Controlling access to safeguard personnel and their families and to prevent unauthorized access to critical infrastructure and materials is paramount. This capability area will focus on programs and processes related to the validity and verification of individuals entering or already within a facility. ***FY 2014 Accomplishments:***	2.060	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
• Conducted Defense Installation Access control Joint Capability Technology Demonstration--determine if technology meets requirements. • Advanced technology and procedures to minimize an insider threat to intentionally exceed or misuse an authorized level of access to nuclear materials or weapons.			
Title: Installation and Transport Security ***Description:*** Robust installation and transport security are vital to preventing a weapon of mass destruction attack or the unauthorized access to key assets such as nuclear weapons and special nuclear material. This capability area will focus on programs and equipment intended to improve the physical security profile of fixed sites and facilities, as well as critical items while in-transit. ***FY 2014 Accomplishments:*** • Developed an Integrated Waterside Security capability and conduct a concept demonstration • Developed a near-shore unified tactical response capability ***FY 2015 Plans:*** • Address technology gaps after Integrated Waterside Security concept demonstration • Continue to develop a near-shore unified tactical response capability ***FY 2016 Plans:*** • Determine the Operational suitability of an Automated Harbor Barrier Gate capability • develop an enterprise Installation Decision Support Initiative application providing risk analysis and risk mitigation decision support in a secure, web-enabled architecture to be hosted on the DoD's SIPRNET	3.364	4.570	9.321
Title: Storage and Safeguards ***Description:*** Properly securing critical assets to prevent access by unauthorized persons and implementing control measures that ensure access is limited to authorized persons is the foundation of physical security. This capability area will focus on equipment (e.g., locks, doors, etc.) designed to delay or stop unauthorized entry / access to a specified / localized area. ***FY 2014 Accomplishments:*** • Developed specifications for Ordnance Storage and Operating Facilities that addresses explosives safety and physical security design requirements • Designed a Semi-Hardened Prime Nuclear Air Force Secure Transport Container	1.576	4.291	-

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
• Designed a RFID Tagging for Items in Extreme Cold Storage (CONUS) ***FY 2015 Plans:*** • Finalize design of a Semi-Hardened Prime Nuclear Air Force Secure Transport Container • Design an internal delay capability for the Secure Transportable Maintenance System			
Title: Prevention ***Description:*** The security procedures taken to discourage an adversary from accessing weapons of mass destruction or gaining unauthorized access to critical assets are at the heart of prevention. This capability area will focus on broad spectrum, generic efforts which have the ability to influence multiple areas. ***FY 2014 Accomplishments:*** • Expanded engagement opportunities with international partners in Nuclear Security • Developed nuclear threat-related scenarios & use cases to frame Countering Nuclear Threat situational awareness development ***FY 2015 Plans:*** • Expand engagement opportunities with international partners in Nuclear Security	5.503	1.275	-
Title: Decision Support Systems ***Description:*** Decision support systems serve the management, operations, and planning levels of the DoD physical security enterprise to help to make decisions, which may be rapidly changing and not easily specified in advance. This capability area will focus on command and control equipment and projects related to the creation and enhancement of common operating pictures, and the establishment of common architectures / interface standards. ***FY 2014 Accomplishments:*** • Developed capability to ensure threat alert and response systems are interoperable with equipment used by the DoD and mutual aid partners in the local communities • Provided a backbone extending command and control and situational awareness within, between, and out to the edges of the missile launch facility complex • Developed a shared and automated content across the security domains and functional areas, enabling more efficient and accurate personnel vetting, access controls, insider threat prevention and enhanced security operating environments ***FY 2015 Plans:*** • Continue to develop capability to ensure threat alert and response systems are interoperable with equipment used by the DoD and mutual aid partners in the local communities (focus on USEUCOM AOR)	4.049	5.254	4.836

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
• Finalize the development of a risk analysis tool to help commanders' in the field make sound security decisions • Continue to develop a shared and automated content across the security domains and functional areas, enabling more efficient and accurate personnel vetting, access controls, insider threat prevention and enhanced security operating environments • Analyze the DoD Nuclear Weapons Complex Critical Infrastructure for capability gaps ***FY 2016 Plans:*** • Finalize the development of a shared and automated content across the security domains and functional areas, enabling more efficient and accurate personnel vetting, access controls, insider threat prevention and enhanced security operating environments • Finalize the DoD Nuclear Weapons Complex Critical Infrastructure Analysis			
Title: Analytical Support ***Description:*** This capability area will focus on studies related to physical security topics and operational and management efforts related to day-to-day activities of the DoD Physical Security Equipment/Countering Nuclear Threats RDT&E Program. ***FY 2014 Accomplishments:*** • Provided DOD and industry the means to achieve PSE interoperability through the development of physical security standards and interface control devices • Conducted analyses and review of requirements, evaluates proposed RDT&E solutions and recommends priorities for the integrated investment portfolio ***FY 2015 Plans:*** • Provide DOD and industry the means to achieve PSE interoperability through the development of physical security standards and interface control devices • Develop a comprehensive Physical Security Enterprise Test & Evaluation Program • Conducts analyses and review of requirements, evaluates proposed RDT&E solutions and recommends priorities for the integrated investment portfolio • Analyze alternatives for integrated waterside security for an in transit environment • Enhance global nuclear security and support the US Government for the Nuclear Security Summit ***FY 2016 Plans:*** • Conduct a waterside security stakeholder Table Top Exercise to confirm set of alternatives and select the preferred alternative • Continue to support global nuclear security and support the US Government for the Nuclear Security Summit	3.079	4.601	4.415
Accomplishments/Planned Programs Subtotals	23.534	28.545	28.359

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

The program performance metrics are established/approved through the DoD Physical Security Enterprise and Analysis Group (PSEAG). The cost, schedule and technical progress is reviewed at quarterly PSEAG meetings. Performance variances are addressed and corrective action(s) is(are) implemented as necessary.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

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
Defense Security Enterprise Architecture	Various	Multiple performers : Multiple locations	-	1.324		1.700		1.450		-		1.450	-	-	-
Mission Assurance, Threat Alert, Disaster Resiliency and Response	Various	Multiple performers : Multiple locations	-	1.480		-		-		-		-	-	-	-
Continuous Evaluation Concept Demonstration	MIPR	Army Research Laboratory : Adelphi, MD	-	0.430		-		-		-		-	-	-	-
Keystone EUCOM Project	Various	Multiple Performers : Multiple Locations	-	1.104		1.700		1.900		-		1.900	-	-	-
Joint Risk Decision Support Tool	MIPR	AF Civil Enginnering Center : Tyndall AFB, FL	-	1.019		1.052		1.800		-		1.800	-	-	-
Intregrated Ground Security, Surveillance and Response Capability	MIPR	Naval Surface Warfare Center Dahlgren Division : Dahlgren, VA	-	0.612		-		-		-		-	-	-	-
Ground-Based Operational Surveillance System	MIPR	NSWC Crane : Crane, IN	-	2.102		3.250		-		-		-	-	-	-
Physical Security Enterprise Program	Various	Multiple Performers : Multiple Locations	93.320	-		1.813		8.441		-		8.441	-	-	-
US Navy Spike Weapon System, Improve EO Seeker	MIPR	NAVAIRWARCENWPNDIV : China Lake, CA	-	0.450		-		-		-		-	-	-	-
Near-shore Unified Tactical Response	MIPR	SPAWAR Pacific : San Diego, CA	-	0.554		-		-		-		-	-	-	-
Integrated Waterside Security Concept Demonstration	MIPR	Multiple Performers : Multiple Locations	-	3.204		-		-		-		-	-	-	-
Foliage Penetrating Technology Evaluation	MIPR	Naval Surface Warfare Crane : Crane, Indiana	-	0.504		-		-		-		-	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

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
Radar Assisted Area Protection	MIPR	US Army ARDEC : Picatinny Arsenal, NJ	-	1.105		2.874		2.500		-		2.500	-	-	-
Marine Mammal - Vigilant Localization	MIPR	SPAWAR Pacific : San Diego, CA	-	0.708		-		-		-		-	-	-	-
Marine Mammal - Enhanced Interdiction	MIPR	SPAWAR Pacific : San Diego, CA	-	0.450		-		-		-		-	-	-	-
End of Land-water Interface Sensor Project	MIPR	Applied Research Lab: University of Texas : Austin, TX	-	1.004		1.500		-		-		-	-	-	-
Missile Field Defense C3SA	MIPR	SPAWAR Atlantic : Charleston, SC	-	1.089		-		-		-		-	-	-	-
Semi-Hardened PNAF Secure Transportation Container	IA	Sandia National Labs : Albuquerque, NM	-	0.751		0.324		-		-		-	-	-	-
Secure Transporation Maintenance System Internal Delay	IA	Sandia National Labs : Albuquerque, NM	-	0.741		1.362		-		-		-	-	-	-
Radiological Detection System	Sub Allot	Joint Product Manager - Rad/Nuc Defense : Aberdeen, MD	-	2.965		4.615		-		-		-	-	-	-
Automated Harbor Barrier Gate - Operational Suitability	TBD	TBD : TBD	-	-		1.000		1.250		-		1.250	-	-	-
Detection & Assessment Follow-on	TBD	TBD : TBD	-	-		1.500		2.500		-		2.500	-	-	-
Maritime Expeditionary & Transit Security	TBD	TBD : TBD	-	-		0.760		1.255		-		1.255	-	-	-
US Navy Spike Weapon System, Common Launch Tube	MIPR	NAVAIRWARCENWPNDIV : China Lake, CA	-	-		1.000		1.555		-		1.555	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

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
Thermal Imaging Dual-use for Aerosol Monitoring Alarms and Security	TBD	TBD : TBD	-	-		0.700		1.678		-		1.678	-	-	-
Multi-sensor Detection and Discrimination	MIPR	TBD : TBD	-	-		0.590		0.650		-		0.650	-	-	-
		Subtotal	93.320	21.596		25.740		24.979		-		24.979	-	-	-

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
World Institute for Nuclear Security	MIPR	Defense Threat Reduction Agency : Ft Belvoir, VA	-	0.300		0.350		0.350		-		0.350	-	-	-
International Atomic Energy Agency Suppoirt	IA	Department of State : Washington, DC	-	0.200		0.300		0.300		-		0.300	-	-	-
PSEAG Website and ePSEAG Program Management Tool	MIPR	AF Civil Engineering Center : Tyndall AFB, FL	-	0.265		-		-		-		-	-	-	-
Defense Installation Access Control Support	MIPR	AF Civil Engineering Center : Tyndall AFB, FL	-	0.345		-		-		-		-	-	-	-
Physical Security Subject Matter Experts	MIPR	Naval Sea Systems Command : Washington Navy Yard, DC	-	0.120		0.200		0.250		-		0.250	-	-	-
		Subtotal	-	1.230		0.850		0.900		-		0.900	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

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
Detection & Assessment IPT	MIPR	AF Securiy Forces Center : Lackland AFB, TX	-	0.200		0.250		0.350		-		0.350	-	-	-
PSEAG Top 5 Technical Review	MIPR	Naval Surface Warfare Center Dahlgren Division : Dahlgren, VA	-	0.508		-		-		-		-	-	-	-
DoD Nuclear Weapons Complex Critical Infrastructure Analysis	MIPR	Naval Sea Systems Command : Washington Navy Yard, DC	-	-		0.255		0.455		-		0.455	-	-	-
Explosive Detection Equipment Guide	MIPR	NAVEODTECH : Indian Head, MD	-	-		0.700		0.850		-		0.850	-	-	-
JASON Study	MIPR	Defense Threat Reduction Agency : Ft Belvoir, VA	-	-		0.500		0.525		-		0.525	-	-	-
Monterey Institute of International Studies	MIPR	Defense Threat Reduction Agency : Ft Belvoir, VA	-	-		0.250		0.300		-		0.300	-	-	-
		Subtotal	-	0.708		1.955		2.480		-		2.480	-	-	-

	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	93.320	23.534		28.545		28.359		-		28.359	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Radiological Detection System (RDS) Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 13												FY 14												FY 15 (cont'd on next chart)											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Project Initiation / Kick-off Meeting			Jan 2013				✓																																
IMS/IMP	July 2013	July 2013	July 2013										✓																										
Market Survey	July 2013	July 2013	July 2013										✓																										
RMA Report	Sept 2013	Nov 2013	Nov 2013														✓																						
Acquisition Decision Memorandum	Sept 2013	Nov 2013	Nov 2013														✓																						
Phase 1 Close-out	Oct 2013	Oct 2013	Oct 2013													✓																							
Performance Specification and RFP release	Nov 2013	Aug 2014	Aug 2014																							✓													
Contract Award	Mar 2014	Dec 2014																											△										
Final Requirements Review	Nov 2013	Dec 2014																												△									

PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
- *Please use this format. Minor changes acceptable (i.e. annotations)

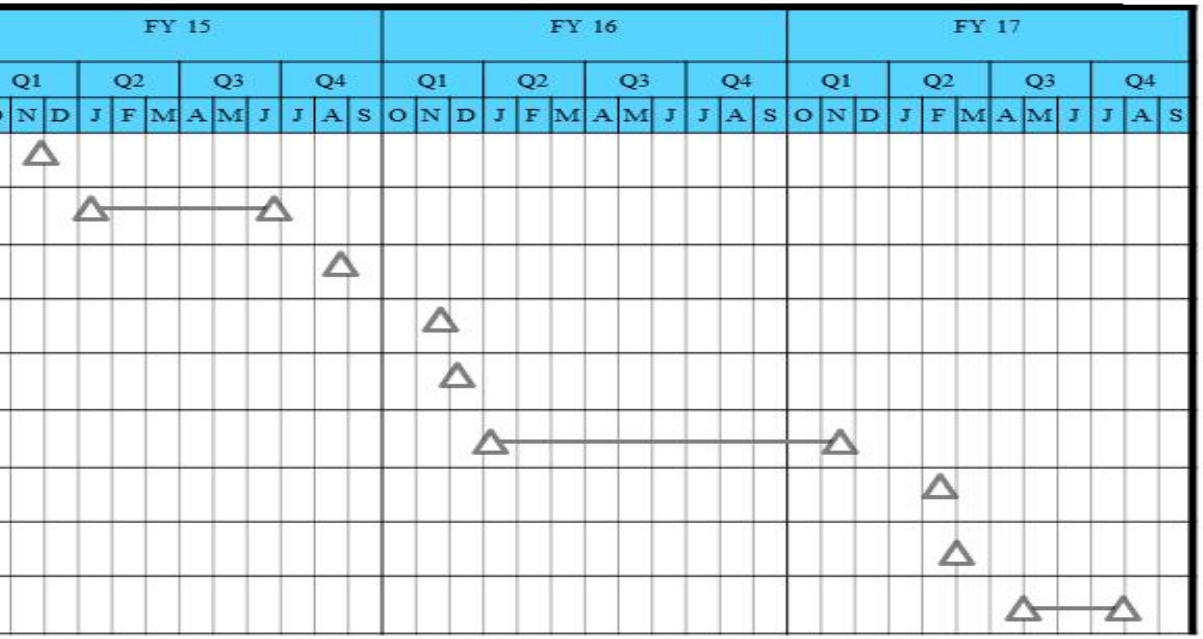
Metrics
- Schedule metrics will be based off of the "Current" Date
- Changes of current dates need to be noted in issues/changes

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Radiological Detection System (RDS) Milestones

Milestones	Baseline Date	Current Date	Completed Date
Phase 2 Close-out	Jun 2014	Nov 2014	
Contractor development + Ctr testing	Jun 2014	Jan 2015 (start)	
Critical Design Reviews	Jan 2015	Aug 2015	
Test Article Deliveries	Feb 2015	Nov 2015	
Phase 3 Close-out	Mar 2015	Dec 2015	
Developmental Testing and OA conducted	Mar 2015	Jan 2016 (start)	
Test Report	Mar 2016	Feb 2017	
Phase 4 Close-out	Mar 2016	Feb 2017	
LRIP Option Award and build	May 2016	Apr 2017 (start)	



PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
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Metrics
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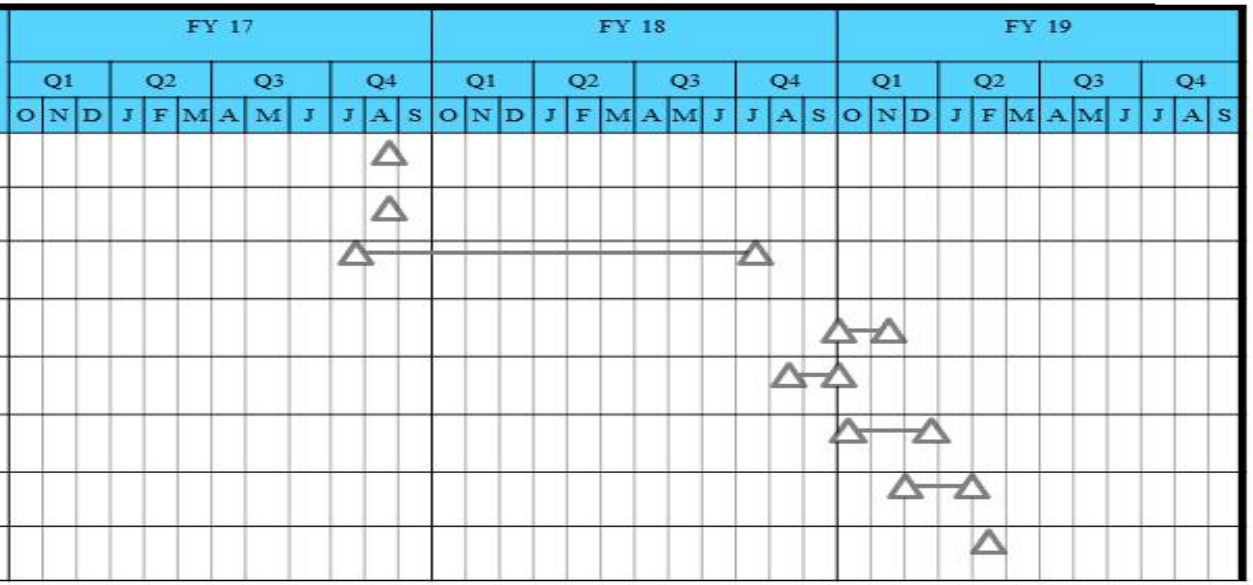
Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Radiological Detection System (RDS) Milestones

Milestones	Baseline Date	Current Date	Completed Date
LRIP Units delivered	Mar 2017	Aug 2017	
Phase 5 Close-out	Apr 2017	Aug 2017	
First Article Test Planning and Test	May 2017	Jul 2017 (start)	
Log Demo (including training) conducted	Jul 2017	Sep 2018 (start)	
MOT&E (including training) conducted	Oct 2017	Aug 2018 (start)	
FRP OTA Evaluation report	May 2018	Oct 2018 (start)	
JILA Report	Feb 2018	Nov 2018 (start)	
FRP Decision	Jun 2018	Feb 2019	



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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Integrated Waterside Security – Concept Demonstration: Project Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 13	FY 14	FY 15
Initiate project coordination with CNIC	05/01/13	07/19/13	05/30/13	100% Complete		
Receive final project approval from NWDC	01/31/2013	07/19/13	01/15/14		100% Complete	
Finalize list of technology inserts	06/15/13	07/19/13	03/30/14		100% Complete	
Conduct IWS concept development conference	08/31/13	07/19/13	11/21/13		100% Complete	
Conduct initial planning conference (IPC)	12/31/13	07/19/13	03/27/14		100 % Complete	
Conduct mid-planning conference (MPC)	03/30/14	07/19/13	06/05/14		100% Complete	
Conduct final planning conference (FPC)	05/30/14	07/19/13	08/14/14		100% Complete	
Conduct final systems integration testing	06/30/14	07/19/13	08/31/14		100% Complete	
Conduct IWS Concept Demonstration	08/31/14	07/19/13	09/26/14		100% Complete	

PSEP Milestones:
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- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

G-BOSS(E) Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 13												FY 14												FY 15											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
SRR/SFR	November 2013	November 2013	December 2013															✓																					
TRADOC CDD Approval	Aug 2013	Aug 2013	Aug 2013											✓																									
CDD 3-Star Approval	Jan 2014	Jan 2014	May 2014																				✓																
MDD	October 2014	October 2014	October 2014																									✓											
PDR	October 2015																																						△
CDR	October 2016																																						

PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

IGSSR-C Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 13	FY 14	FY 15
Integrated Base Defense Software Synch Meetings	Quarterly				TBD	
Fusion Software Comparison Study	03/29/2013	03/29/3013	03/29/3013	Analysis and Report complete.		
Fusion Software Baseline Validation and Test.	08/30/2013	08/30/2013	09/30/2013		Test and Report complete.	
CDD Joint and Army Staffing	06/15/2013	06/15/2013	06/15/2013	Staffing Complete	CDD Approved (09/30/2013).	
Revised Technology Development Strategy	10/31/2013	Unfunded			Unfunded	
Revised MDD Package for staffing and approval	11/22/2013	Unfunded			Unfunded	
Projected MDD and Milestone B	01/31/2014	Unfunded			MDD Unfunded	MS B

PSEP Milestones:
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- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Vigilance Localization Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 13												FY 14											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Kickoff Meeting Completed	11/30/2012	11/5/2012	11/5/2012		✓																						
Integrated Master Plan Submitted	11/30/2012	11/30/2012	11/30/2012		✓																						
Planning and prep Complete	12/28/2012	12/28/2012	12/28/2012		✓																						
Design Complete	6/15/2013	6/15/2013	5/31/2013								✓																
Build Complete	7/19/2013	12/9/2013	12/2013															✓									
Tech Demo	10/15/2013	12/11/2013	12/20013															✓									
Ops Demo	7/15/2014	7/15/2014	01/2014																						✓		
Transition	9/30/2014	9/30/2014	9/30/2014																								✓
Final Report Submitted	9/30/2014	9/30/2014	9/30/2014																								✓

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Enhanced Interdiction Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 13						FY 14												FY 15							
				Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3	
				A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
Kickoff Meeting Completed	5/15/2013	5/15/2013	5/15/2013		✓																								
Integrated Master Plan Submitted	5/31/2013	5/31/2013	5/31/2013		✓																								
Planning and prep Complete	5/15/2013	5/15/2013	5/15/2013		✓																								
Design Complete	12/31/2013	12/31/2013	12/31/2013									✓																	
Build Complete	2/21/2014	4/15/2014	4/15/2014												✓														
Tech Demo	5/14/2014	5/22/2014															✓	Bangor on 7 May, KB on 22 May											
Ops Demo	1/5/2015	1/5/2015																							△				
Transition	3/30/2015	3/30/2015																									△		
Final Report Submitted	5/25/2015	5/25/2015																											△

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LEGEND
Planned Actions
In-Progress Actions
Completed Actions

Foliage Penetration Technology Evaluation Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 14												FY 15											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Kickoff Meeting	1/14/2014	1/14/2014	1/14/2014					Jan 14th																			
Visit Test Site	2/11/2014	2/11/2014	2/11/2014																								
Submit Draft Test Plan	3/21/2014	3/21/2014	3/21/2014																								
Finalize Test Site and Vendor Requirements	4/4/2014	4/4/2014	4/16/2014																								
Submit Final Test Plan	5/9/2014	5/16/2014	6/5/2014																								
Demonstration	6/16-26/2014	6/16-26/2014	6/16-26/2014																								
Project Update Meeting	7/18/2014	7/31/2014	7/31/2014																								
Submit Draft Test Report	10/01/2014	10/01/2014	10/01/2014																								
Submit Final Test Report	11/12/2014	11/12/2014	11/12/2014																								

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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Standoff Weapons Defeat IPT Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 14												FY 15												FY 16											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Identify IPT Principals and supporting members	31 July 14																																						
Develop POAM	15 Nov 14 (Final)														Draft		Final																						
Develop Charter	15 Nov 14 (Final)											Draft					Final																						
Identify past and ongoing efforts	15 Sep 14																																						
Hold first IPT principals meeting	8 Aug 14																																						
First IPT meeting	15 Sep 14																																						
Ongoing IPT meetings	Every 2 months																																						
Technology Roadmap	15 Mar 15 (Draft)																				Draft			Final															
Requirements Document	15 Mar 15 (Draft)																				Draft			Final															
Architecture Description	15 May 15 (Draft)																						Draft			Final													
Project Proposals	1 May 15 (Start)																						Ongoing																

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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Mission Assurance, Threat Alert, Disaster Resiliency and Response (MATADRR) Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 12						FY 13												FY 14											
				Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Kick off			08/28/12																														
Tech Demo - Baseline	09/19/12	09/19/12	09/19/12																														
Project Management Plan	10/15/12	01/04/13	01/15/13																														
CONOPS Work Shop	12/06/12	12/06/12	12/06/12																														
Transition Guide	04/30/13	04/30/13	04/30/13																														
Annual Project Review	04/30/13	04/30/13	04/30/13																														
Technical Demo #1	06/25/13	06/25/13	06/25/13																														
CONEMP Work Shop	09/16/13	11/14/13	N/A																			USNORTHCOM MA WG											
Technical Demo #2	11/15/13	03/03/14	3/14/14																														
Final Transition Demonstration (FXD)	02/17/14	03/03/14	3/20/14																														
Transition Decision	6/30/14	4/29/2014	6/17/14																														
Joint TTPs	6/30/14	N/A	N/A							Limited User Test/USFF JTTP Working Group lead pending																							
Final Project Brief	6/16/14	8/20/2014	8/20/2014																														

PSEP Milestones:
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- Demonstrations/Events (Please provide start/end dates as depicted)
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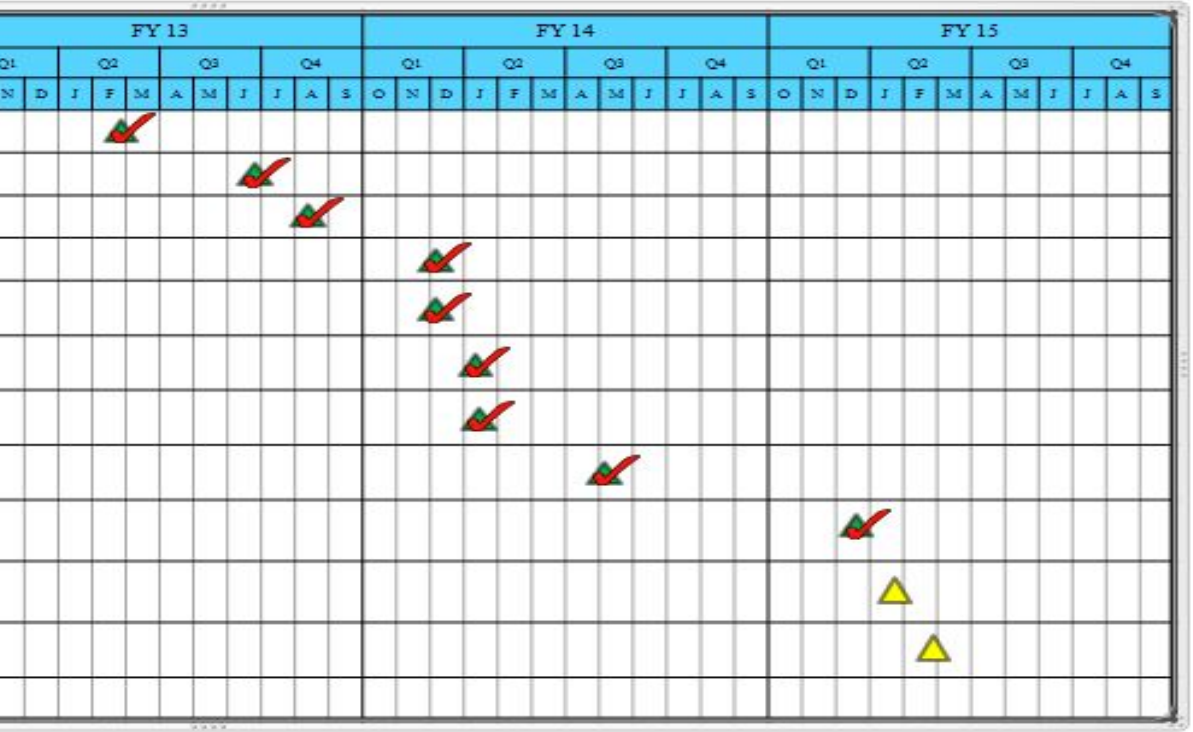
LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Defense Security Enterprise Architecture (DSEA) Milestones

Milestones	Baseline Date	Current Date	Completed Date
DSE Discovery Phase	2/28/13	2/28/13	2/28/13
DSEA Workshop	6/26/13	6/26/13	6/26/13
DSEA Team Charter	8/30/13	8/14/13	8/14/13
DSEA Management Plan	9/30/13	12/4/13	12/4/13
Gather/Socialize/Define Requirements	10/31/13	12/4/13	12/4/13
Conduct Market Survey	1/31/14	1/9/14	1/9/14
Identify Backbone Solution for DSEA	3/31/14	3/31/14	1/13/14
Technical Integration Kick-off Meeting	5/9/14	5/7/14	5/7/14
DSEA Technical Demonstration Plan	6/30/14	8/15/14	12/2014
Conduct Capability Technology Demonstration	9/26/14	9/17/14	
Conduct Operational Demonstration	3/31/15	2/27/15	
Transition to POR	TBD	TBD	



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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

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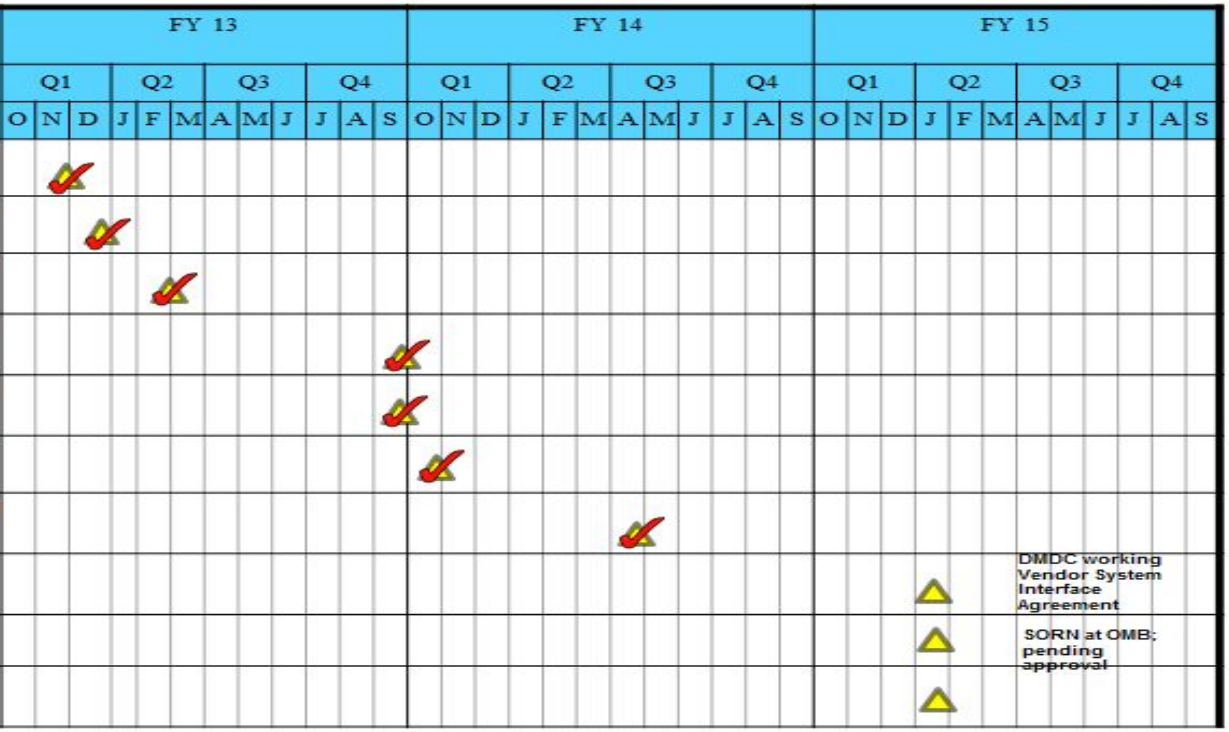
Continuous Evaluation Concept Demonstration Milestones

Milestones	Baseline Date	Current Date	Completed Date
CE Interview/Surveys	11/30/2012	07/15/2013	11/30/2012
CE Workshop	12/11/2012	07/15/2013	12/13/2012
Working Group Kick-off Meetings	02/12/2012	07/15/2013	02/12/2012
Acquire Commercial Data for Demo	07/31/2013	07/31/2013	09/09/2013
Software/Hardware Installed at DMDC		07/09/2014	09/09/2013
Stand-up Analytical Cell		07/09/2014	10/10/2013
Initial System Integration Testing		07/09/2014	04/22/2014
Population Sets for Demo	05/11/2013	12/19/2013	
SORN Legal Review	10/01/2013	1/31/2014	
CE CONOPS Legal/Privacy Review	05/29/2013	04/09/2014	



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LEGEND

- Planned Actions
- In-Progress Actions
- Completed Actions

UNCLASSIFIED

Continuous Evaluation Concept Demonstration Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 13												FY 14												FY 15											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Ops Demo	1/10/2014	1/10/2014																																					
Transition	5/15/2014	5/15/2014																																		TBD			
Final Report Submitted	7/31/2015	7/31/2015																																		TBD			

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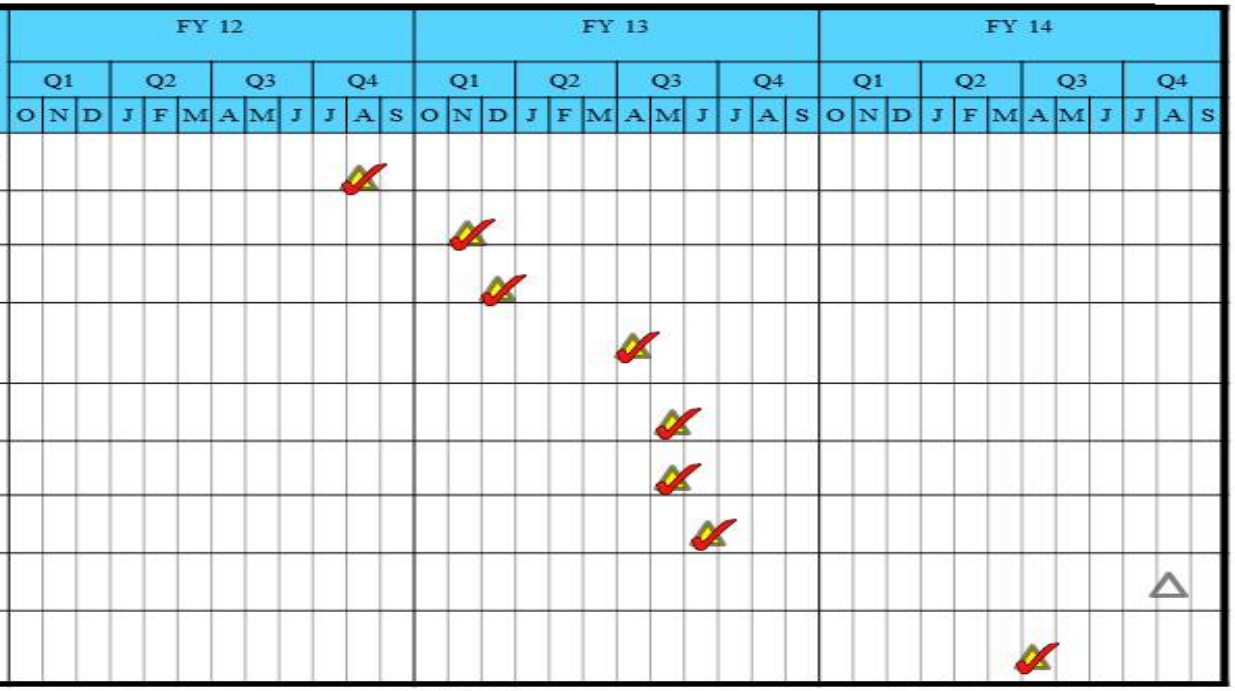
LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Defense Installation Access Control Milestones

Milestones	Baseline Date	Current Date	Completed Date
Kickoff Meeting Completed	08/08/2012	08/08/2012	08/08/2012
Sys Integration Test 1	11/26/2012	11/26/2012	11/26/2012
JCTD Management Plan Submitted	12/05/2013	12/05/2013	12/05/2013
DIAC CONOPS to RFO	04/05/2013	04/05/2013	04/05/2013
Demonstration Execution Document Complete	05/01/2013	05/01/2013	05/01/2013
Sys Integration Test 2	05/30/2013	05/30/2013	05/30/2013
NORTHCOM Test Readiness Review Mtg	06/27/2013	06/27/2013	06/27/2013
RFO Program Review Board	04/15/14	04/15/14	TBD
Base Entry System Test	10/01/13	3/27/14	In Progress



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- Decision/kill points, performance reviews, etc.
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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Defense Installation Access Control Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 12						FY 13												FY 14												FY15					
				Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2		
				A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Ops Demo 1	10/28/2013	06/05/2014	06/05/2014																																				
Tech Demo 2	02/17/2014	Unknown	Not Required																																				
Ops Demo 2	04/21/2014	Unknown	10/2014																																				
Transition	08/30/2014	08/30/2014	TBD																																				
Final Report Submitted	08/30/2014	08/30/2014																																					

PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
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LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

PNAF Transport Container Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 13												FY 14												FY 15											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Developed Project Plan	07 Feb 13	07 Feb 13	27 Mar 13						✓																														
Developed Container Analysis	25 Feb 13	25 Feb 13	20 Sep 13											✓																									
Developed Initial Container Design	23 Sep 13	23 Sep 13	07 Jan 14																✓																				
Phase I final Milestone Review	06 Feb 14	06 Feb 14	06 Feb 14																	✓																			
Initiate Phase II funding Received	06 June 06	06 June 06	06 June 06																							✓													
Produce Prototype	31 Oct 14																															△							

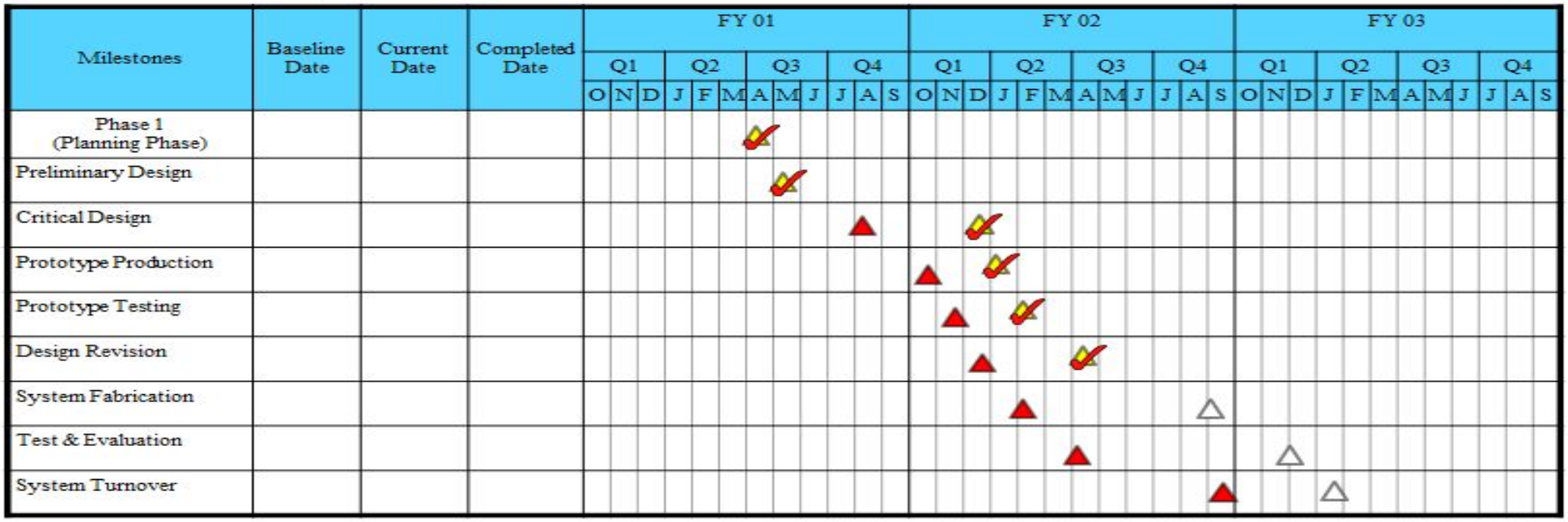
PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
- *Please use this format. Minor changes acceptable (i.e. annotations)

Metrics
- Schedule metrics will be based off of the "Current" Date
- Changes of current dates need to be noted in issues/changes

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Missile Field Defense Force Command, Control, Communications and Situational Awareness



PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Missile Field Defense Force Command, Control, Communications and Situational Awareness

Milestones	Baseline Date	Current Date	Completed Date	FY 01												FY 02												FY 03											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Phase 1 (Planning Phase)																																							
Preliminary Design																																							
Critical Design																																							
Prototype Production																																							
Prototype Testing																																							
Design Revision																																							
System Fabrication																																							
Test & Evaluation																																							
System Turnover																																							

Today

PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
- *Please use this format. Minor changes acceptable (i.e. annotations)

Metrics
- Schedule metrics will be based off of the "Current" Date
- Changes of current dates need to be noted in issues/changes

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Intregrated Ground Security, Surveillance and Response Capability				
Intregrated Ground Security, Surveillance and Response Capability	1	2014	2	2015
Secure Transportable Maintenance System Safe Internal Delay Capability				
Secure Transportable Maintenance System Safe Internal Delay Capability	1	2014	4	2015
PNAF Transport Container				
PNAF Transport Container	1	2014	1	2015
Defense Installation Access Control				
Defense Installation Access Control	1	2014	4	2014
Continuous Evaluation Concept Demonstration				
Continuous Evaluation Concept Demonstration	1	2014	4	2014
Defense Security Enterprise Architecture				
Defense Security Enterprise Architecture	1	2014	2	2015
Mission Assurance, Threat Alert, Disaster Resiliency and Response				
Mission Assurance, Threat Alert, Disaster Resiliency and Response	1	2014	4	2014
Navy Spike Weapon System EO Seeker Upgrade				
Navy Spike Weapon System EO Seeker Upgrade	1	2014	4	2014
Standoff Weapons Defeat IPT				
Standoff Weapons Defeat IPT	1	2014	4	2015
Radar Assisted Area Protection				
Radar Assisted Area Protection	1	2014	4	2014
Foliage Penetration Technology Evaluation				

Exhibit R-4A, **RDT&E Schedule Details:** PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P162 / *Nuclear and Conventional Physical Security*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Foliage Penetration Technology Evaluation	1	2014	2	2015
Marine Mammal Enhanced Interdiction				
Marine Mammal Enhanced Interdiction	1	2014	3	2015
Marine Mammal Vigilance Localization				
Marine Mammal Vigilance Localization	1	2014	4	2014
Integrated Waterside Security – Concept Demonstration				
Integrated Waterside Security – Concept Demonstration	1	2014	4	2014
Ground-Based Operational Surveillance System (Expeditionary)				
Ground-Based Operational Surveillance System (Expeditionary)	1	2014	4	2015
Missile Field Defense Force Command, Control,				
Missile Field Defense Force Command, Control,	1	2014	2	2015

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

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
P041: *CNT Rad/Nuc Passive Defense ADC&P*	-	1.927	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project establishes a Defense-wide Countering Nuclear Threats (CNT) Materiel development Program. The CNT acquisition strategy directly applies to a Joint requirement for CNT materiel development and addresses the materiel and sustainment gaps for general purpose Joint Forces, including the US Army 20th Support Command and Navy Visit, Board, Search, and Seizure, as well as the Technical Support Groups; NIMBLE ELDER and the US Special Operations Command where required.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: CNT Rad/Nuc Passive Defense	1.927	-	-
Description: Advanced Development of Joint Radiological and Nuclear passive defense systems (i.e. Radiological Detection System and the Joint Personal Dosimeter). The Radiological Detection System will provide a ruggedized Radiation Detection, Indication, and Computation for real time gamma radiation monitoring and low energy x-ray, beta, alpha, and neutron detection. The Joint Personal Dosimeter will provide a joint solution to increase capability and reduce life-cycle costs. Both systems will address Operation TOMODACHI lessons learned for common, interoperable equipment with adequate sensitivity and common units of measure. ***FY 2014 Accomplishments:*** Developed Joint Radiological and Nuclear passive defense systems (i.e. Radiological Detection System and the Joint Personal Dosimeter)			
Accomplishments/Planned Programs Subtotals	1.927	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

The program performance metrics are established/approved through the Countering Nuclear Threats Program Manager. The cost, schedule and technical progress is reviewed on a quarterly basis. Performance variances are addressed and corrective action(s) is(are) implemented as necessary.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

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
Joint Personal Dosimeter	Sub Allot	Joint Product Manager - Rad / Nuc Defense : Aberdeen, MD	-	1.247		-		-		-		-	-	-	-
Radiological Detection System	Sub Allot	Joint Product Manager - Rad / Nuc Defense : Aberdeen, MD	-	0.680		-		-		-		-	-	-	-
		Subtotal	-	1.927		-		-		-		-	-	-	-

	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	-	1.927		-		-		-		-	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Radiological Detection System (RDS) Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 13												FY 14												FY 15 (cont'd on next chart)											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Project Initiation / Kick-off Meeting			Jan 2013				✓																																
IMS/IMP	July 2013	July 2013	July 2013										✓																										
Market Survey	July 2013	July 2013	July 2013										✓																										
RMA Report	Sept 2013	Nov 2013	Nov 2013														✓																						
Acquisition Decision Memorandum	Sept 2013	Nov 2013	Nov 2013														✓																						
Phase 1 Close-out	Oct 2013	Oct 2013	Oct 2013													✓																							
Performance Specification and RFP release	Nov 2013	Aug 2014	Aug 2014																							✓													
Contract Award	Mar 2014	Dec 2014																											△										
Final Requirements Review	Nov 2013	Dec 2014																												△									

PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
- *Please use this format. Minor changes acceptable (i.e. annotations)

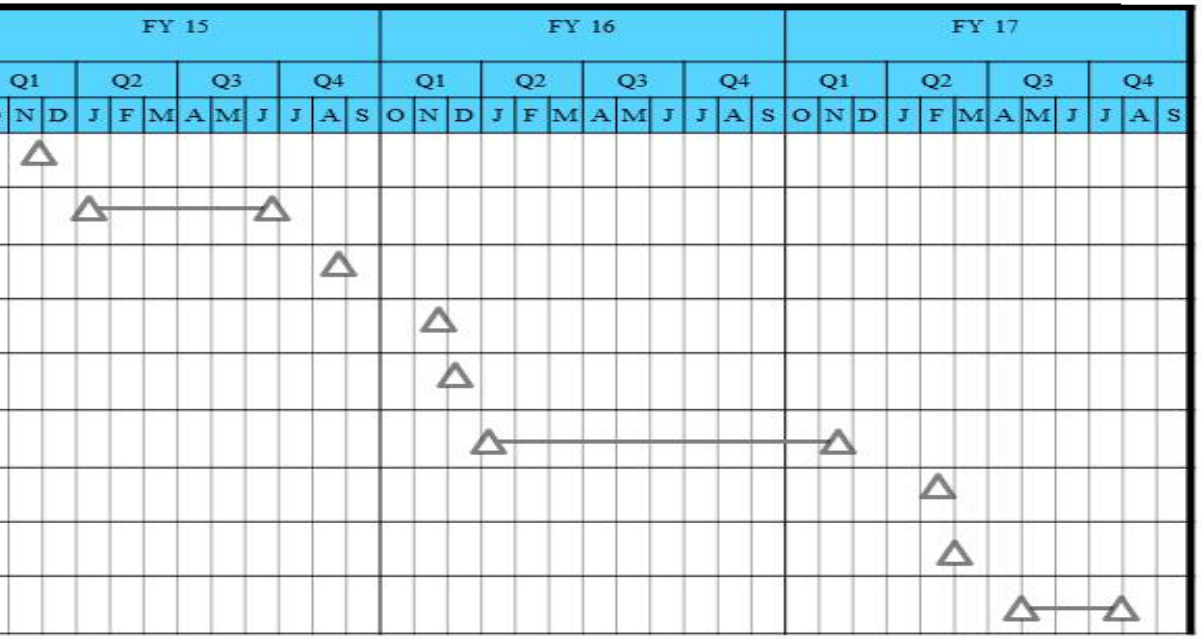
Metrics
- Schedule metrics will be based off of the "Current" Date
- Changes of current dates need to be noted in issues/changes

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Radiological Detection System (RDS) Milestones

Milestones	Baseline Date	Current Date	Completed Date
Phase 2 Close-out	Jun 2014	Nov 2014	
Contractor development + Ctr testing	Jun 2014	Jan 2015 (start)	
Critical Design Reviews	Jan 2015	Aug 2015	
Test Article Deliveries	Feb 2015	Nov 2015	
Phase 3 Close-out	Mar 2015	Dec 2015	
Developmental Testing and OA conducted	Mar 2015	Jan 2016 (start)	
Test Report	Mar 2016	Feb 2017	
Phase 4 Close-out	Mar 2016	Feb 2017	
LRIP Option Award and build	May 2016	Apr 2017 (start)	



PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Radiological Detection System (RDS) Milestones

Milestones	Baseline Date	Current Date	Completed Date
LRIP Units delivered	Mar 2017	Aug 2017	
Phase 5 Close-out	Apr 2017	Aug 2017	
First Article Test Planning and Test	May 2017	Jul 2017 (start)	
Log Demo (including training) conducted	Jul 2017	Sep 2018 (start)	
MOT&E (including training) conducted	Oct 2017	Aug 2018 (start)	
FRP OTA Evaluation report	May 2018	Oct 2018 (start)	
JILA Report	Feb 2018	Nov 2018 (start)	
FRP Decision	Jun 2018	Feb 2019	

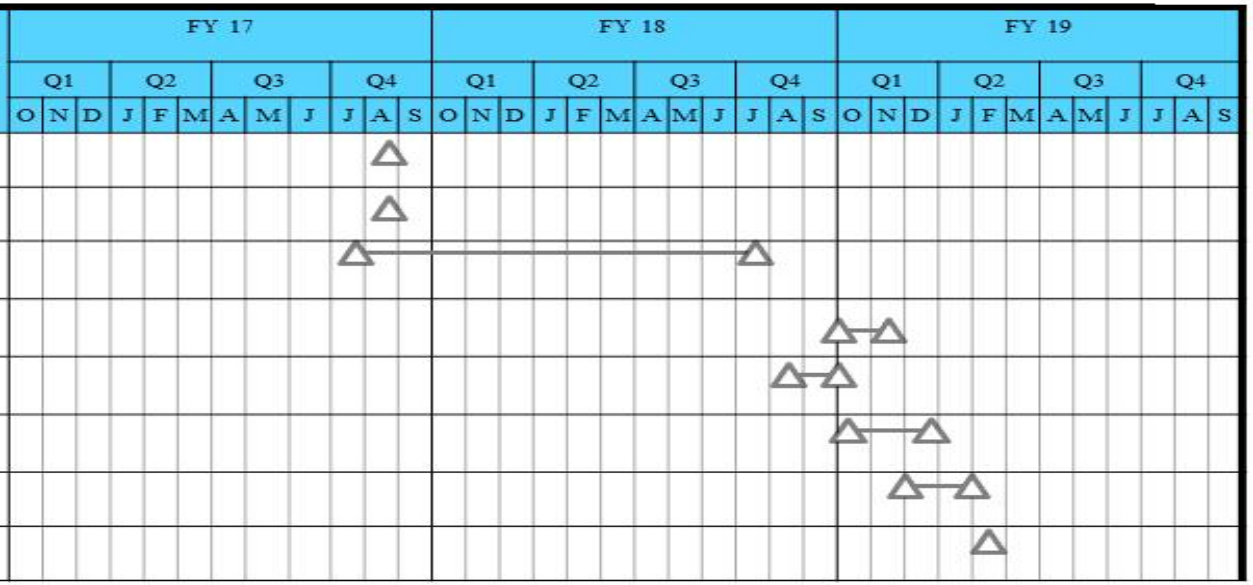
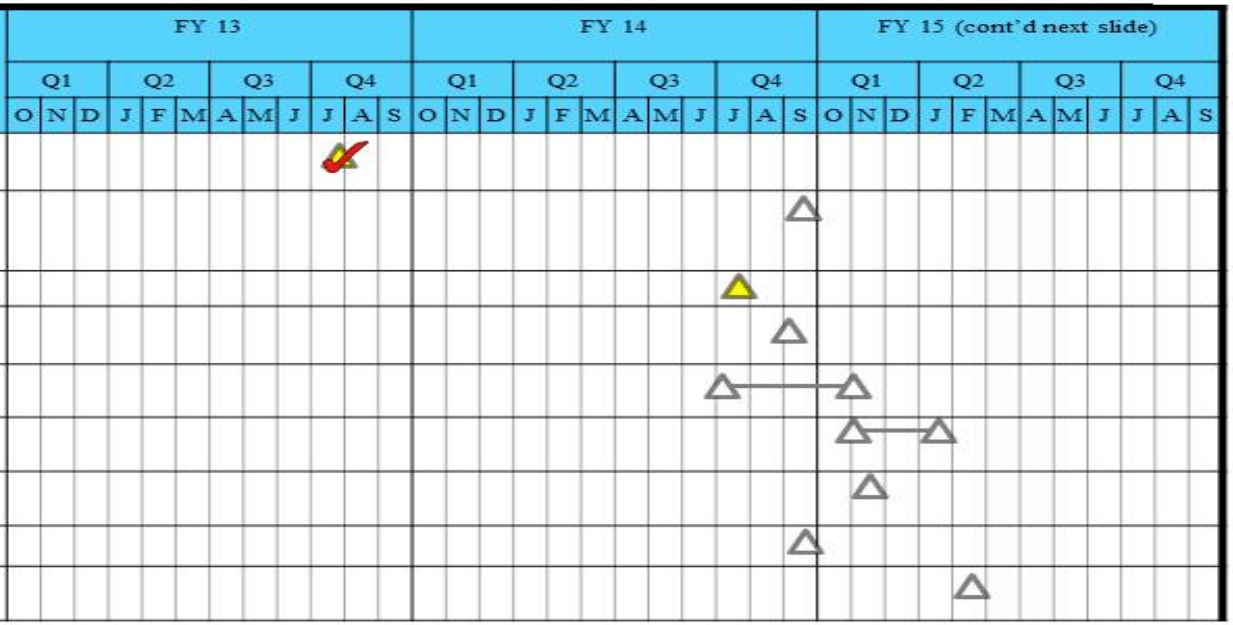


Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Joint Personal Dosimeter (JPD) Milestones

Milestones	Baseline Date	Current Date	Completed Date
Project Initiation / Kick-off Meeting			July 2013
Navy Battlefield Dosimeter System Contract Award	Mar 2014	Sep 2014	
IMS/IMP	Jan 2013	Jul 2014	
Performance Specification	Mar 2014	Sep 2014	
Installation Study	Apr 2014 (start)	July 2014 (start)	
NVLAP Accreditation	May 2014 (start)	Nov 2014 (start)	
Phase 2 Close-out	May 2014	Nov 2014	
Critical Design Review	July 2014	Sep 2014	
Phase 1 Close-out	Dec 2014	Feb 2015	



PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
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Metrics
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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Joint Personal Dosimeter (JPD) Milestones

Milestones	Baseline Date	Current Date	Completed Date
Project Initiation / Kick-off Meeting			July 2013
Navy Battlefield Dosimeter System Contract Award	Mar 2014	Sep 2014	
IMS/IMP	Jan 2013	Jul 2014	
Performance Specification	Mar 2014	Sep 2014	
Installation Study	Apr 2014 (start)	July 2014 (start)	
NVLAP Accreditation	May 2014 (start)	Nov 2014 (start)	
Phase 2 Close-out	May 2014	Nov 2014	
Critical Design Review	July 2014	Sep 2014	
Phase 1 Close-out	Dec 2014	Feb 2015	

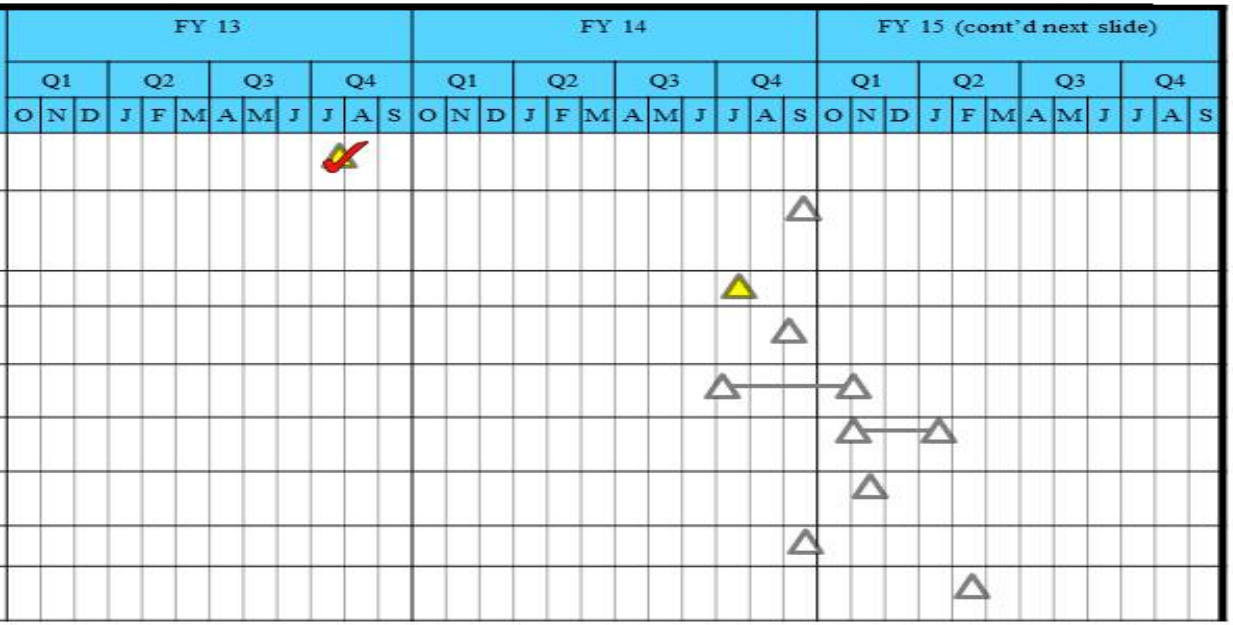

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Joint Personal Dosimeter (JPD) Milestones

May 2014

Milestones	Baseline Date	Current Date	Completed Date	FY 15												FY 16												FY 17 (next slide)											
				Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
System Verification Review	July 2015	Jan 2015					△																																
Functional Configuration Audit	Mar 2016	Jan 2015					△																																
JPD MS C	Oct 2016	Jun 2015											△																										
Phase 3 Close-out	Sep 2015	Sep 2015													△																								
Product Qualification Testing	Dec 2016 (start)	Jul 2015 (start)											△					△																					
IOT&E	July 2016 (start)	Feb 2016 (start)																		△		△																	
Log Demo	Sep 2016	May 2016																					△																
JILA Memo	Feb 2017	Sep 2016																									△												
Full Rate Production Decision	Apr 2017	Dec 2017																												△									

PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
- *Please use this format. Minor changes acceptable (i.e. annotations)

Metrics
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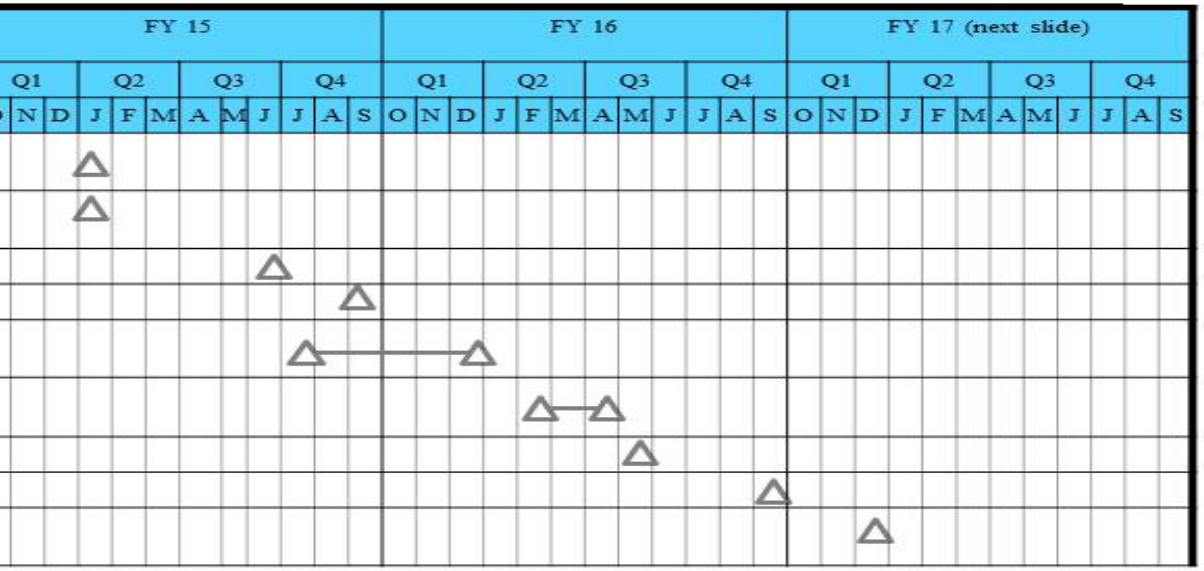
Exhibit R-4, RDT&E Schedule Profile: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Joint Personal Dosimeter (JPD) Milestones

Milestones	Baseline Date	Current Date	Completed Date
System Verification Review	July 2015	Jan 2015	
Functional Configuration Audit	Mar 2016	Jan 2015	
JPD MS C	Oct 2016	Jun 2015	
Phase 3 Close-out	Sep 2015	Sep 2015	
Product Qualification Testing	Dec 2016 (start)	Jul 2015 (start)	
IOT&E	July 2016 (start)	Feb 2016 (start)	
Log Demo	Sep 2016	May 2016	
JILA Memo	Feb 2017	Sep 2016	
Full Rate Production Decision	Apr 2017	Dec 2017	



PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
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Metrics
- Schedule metrics will be based off of the "Current" Date
- Changes of current dates need to be noted in issues/changes

Exhibit R-4A, **RDT&E Schedule Details:** PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P041 / *CNT Rad/Nuc Passive Defense ADC&P*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Radiological Detection System				
Radiological Detection System	1	2014	2	2019
Joint Personal Dosimeter				
Joint Personal Dosimeter	4	2014	1	2017

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense			Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P040 / *National Technical Nuclear Forensics Systems*	

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
P040: *National Technical Nuclear Forensics Systems*	-	21.428	12.469	3.351	-	3.351	3.568	6.977	7.192	7.337	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Nuclear forensics is the thorough collection, analysis and evaluation of radiological and nuclear material in a pre-detonation state and post-detonation radiological or nuclear materials, devices and debris, as well as the immediate effects created by a nuclear detonation. The ability to identify the source of nuclear material from radioactive debris is critical to our national defense and security. Swift and accurate forensic and attribution (identification) capabilities are vital to developing an appropriate national response to a nuclear event and preventing future attacks in a timely manner.

Nuclear Terrorism is one of the most significant and pressing threats identified by national leadership. A credible nuclear forensics program is essential to preventing nuclear terrorism by deterring nations from sponsoring nuclear terrorism. During the Deputy Management Advisory Group process shortfalls and resources to close these gaps were identified and supported by the Deputy Secretary of Defense. The purpose of this program is to develop systems such as ground based Prompt Diagnostic sensors and Particulate Airborne Collection Systems to provide timely and accurate information to national leadership in the area of Nuclear Forensics.

Per DoDI 2060.04 OSD AT&L NCB is the program lead for the Department of Defense in Nuclear Forensics. NCB represents DoD interests in all areas of nuclear forensics but focuses heavily on post-detonation applications due to Presidential guidance assigning the department the lead role in develop, providing, and maintaining post detonation Nuclear Forensics capability.

This PE can fund travel to support the requirements of this program.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: National Technical Nuclear Forensics Systems	21.428	12.469	3.351
Description: Advanced development of ground based diagnostic and collection systems. This next generation technology will provide new information that increases accuracy and provides an improved timeline in support of senior leadership decision making.			
FY 2014 Accomplishments: • Developed a Particulate Airborne Collection System that allows additional airborne sampling flexibility to reduce the risk in providing samples for the forensics process • Installed, tested and integrated a ground based Prompt Diagnostic systems in various key metropolitan areas			

Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense		Date: February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P040 / *National Technical Nuclear Forensics Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
• Developed a Gaseous Airborne Collection System that provides the Department of Defense with mobile nuclear air sampling capability to support collection requirements for treaty verification and National Technical Nuclear Forensics. ***FY 2015 Plans:*** • Finalize the installation, testing, and operational support and integration of ground based Prompt Diagnostic systems in various key metropolitan areas • Continue to develop a Gaseous Airborne Collection System that provides the Department of Defense with mobile nuclear air sampling capability to support collection requirements for treaty verification and National Technical Nuclear Forensics. ***FY 2016 Plans:*** • Finalize the development of a Gaseous Airborne Collection System that provides the Department of Defense with mobile nuclear air sampling capability to support collection requirements for treaty verification and National Technical Nuclear Forensics.			
Accomplishments/Planned Programs Subtotals	21.428	12.469	3.351

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

The program performance metrics are established/approved through the Countering Nuclear Threats Program Manager. The cost, schedule and technical progress is reviewed on a quarterly basis. Performance variances are addressed and corrective action(s) is(are) implemented as necessary. This is new program focusing on advanced development to meet critical needs.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P040 / *National Technical Nuclear Forensics Systems*

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
DISCREET OCULUS	Sub Allot	Defense Threat Reduction Agency : Ft. Belvoir, VA	-	12.500		6.000		-		-		-	-	-	-
Modular Whole Air Collection System	Sub Allot	Air Force Technical Applications Center : Patrick AFB, FL	-	0.750		0.678		-		-		-	-	-	-
Particular Airborne Collection System	Sub Allot	Air Force Technical Applications Center : Patrick AFB, FL	-	5.271		5.791		-		-		-	-	-	-
Gobal Initiative Information Portal	IA	Department of State : Washington, DC	-	0.656		-		-		-		-	-	-	-
SOCOM Render Safe	Various	Multiple performers : Multiple locations	-	1.951		-		-		-		-	-	-	-
Airborne Radiation Detection, Identification and Measurement Systems	Sub Allot	Joint Product Manager - Rad / Nuc Defense : Aberdeen, MD	-	-		-		3.351		-		3.351	-	-	-
		Subtotal	-	21.128		12.469		3.351		-		3.351	-	-	-

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
Nuclear Testing, Diagnostics, Forensics and Stockpile Stewardship Course	IA	Lawrence Livermore National Laboratory : Livermore, CA	-	0.300		-		-		-		-	-	-	-
		Subtotal	-	0.300		-		-		-		-	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Office of the Secretary Of Defense			**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P040 / *National Technical Nuclear Forensics Systems*	

	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	-	21.428		12.469		3.351		-		3.351	-	-	-

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P040 / *National Technical Nuclear Forensics Systems*

LEGEND
- Planned Actions
- In-Progress Actions
- Completed Actions

Build & Deploy DISCREET OCULUS Sensor Systems in Washington DC and New York, NY

Milestones	Baseline Date	Current Date	Completed Date
Washington DC installation Complete	Dec 30, 2014	Dec 30, 2014	
New York installation Complete	April 30, 2016	April 30, 2016	

FY 14 (Q1: O N D; Q2: J F M; Q3: A M J; Q4: J A S) — FY 15 (Q1: O N D; Q2: J F M; Q3: A M J; Q4: J A S) — FY 16 (Q1: O N D; Q2: J F M; Q3: A M J; Q4: J A S)

PSEP Milestones:
- Completion of major phases, task items, or deliverables
- Decision/kill points, performance reviews, etc.
- Demonstrations/Events (Please provide start/end dates as depicted)
- *Please use this format. Minor changes acceptable (i.e. annotations)

Metrics
- Schedule metrics will be based off of the "Current" Date
- Changes of current dates need to be noted in issues/changes

Exhibit R-4, **RDT&E Schedule Profile:** PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P040 / *National Technical Nuclear Forensics Systems*

Particulate Airborne Collection System and Modular Whole-air Collection System Timeline

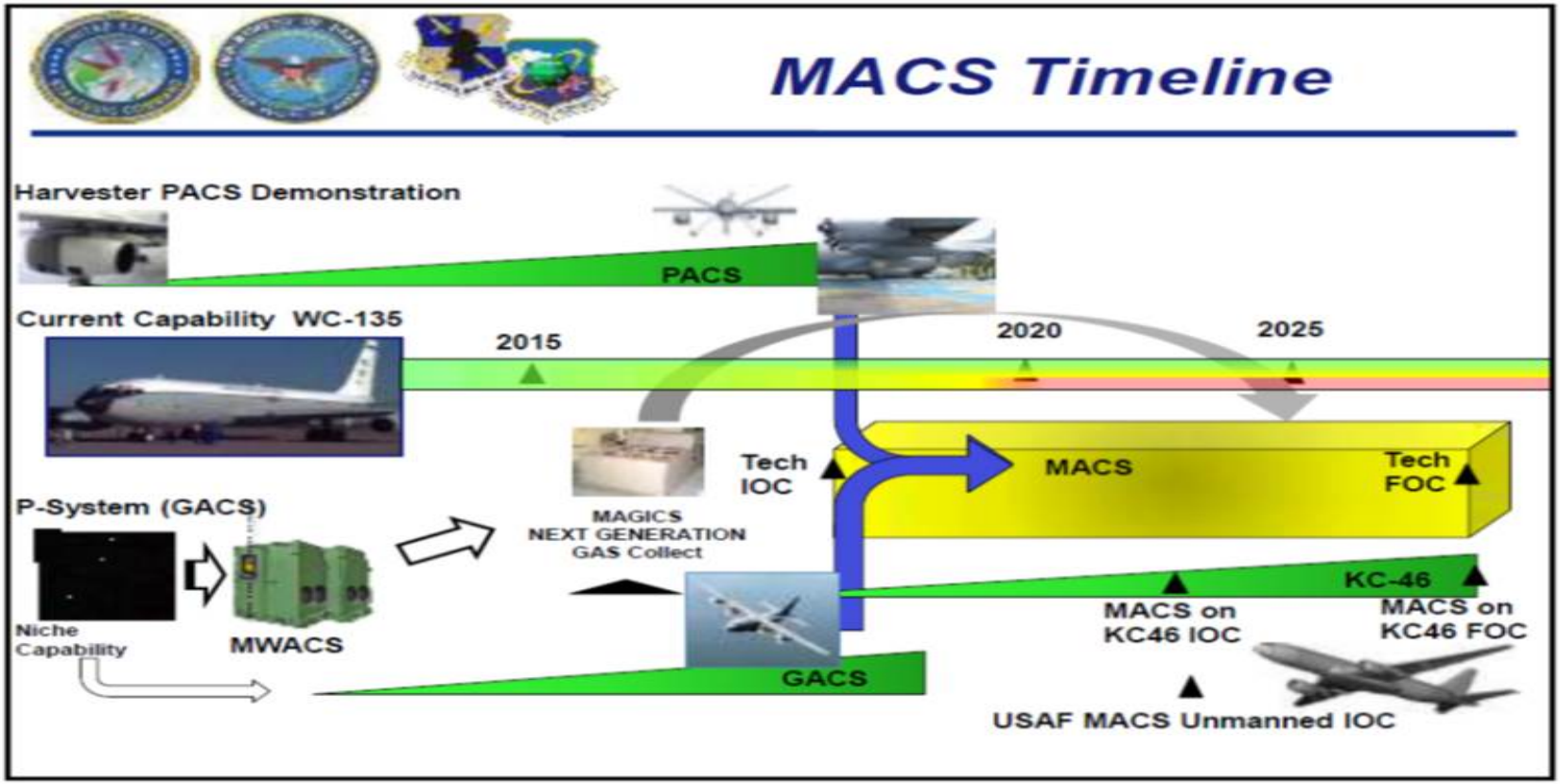

Exhibit R-4A, **RDT&E Schedule Details:** PB 2016 Office of the Secretary Of Defense		**Date:** February 2015
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0603161D8Z / *Nuclear and Conventional Physical Security/Countering Nuclear Threats*	**Project (Number/Name)** P040 / *National Technical Nuclear Forensics Systems*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
DISCREET OCULUS				
DISCREET OCULUS	1	2014	3	2016
Harvester Particulate Airborne Collection System				
Harvester Particulate Airborne Collection System	1	2014	1	2016
Modular Whole Air Collection System				
Modular Whole Air Collection System	1	2014	1	2016