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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Office of the Secretary Of Defense **Date:** February 2016

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0604161D8Z I <i>Nuclear and Conventional Physical Security/Countering Nuclear Threats</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	34.663	7.775	8.783	10.324	-	10.324	11.276	12.747	12.816	15.034	Continuing	Continuing
P163: <i>Nuclear and Conventional Physical Security</i>	33.647	3.872	5.118	6.903	-	6.903	7.959	6.943	7.083	7.221	Continuing	Continuing
P042: <i>CNT Rad/Nuc Passive Defense SDD</i>	1.016	3.903	3.665	3.421	-	3.421	3.317	5.804	5.733	7.813	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 system development and demonstration 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 program will develop systems that are producible, supportable, and affordable and to demonstrate system integration, interoperability, and utility prior to full-rate production. The projects under the PE become technology insertions into existing programs or 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.

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Appropriation/Budget Activity	R-1 Program Element (Number/Name)
0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 5: System Development & Demonstration (SDD)</i>	PE 0604161D8Z I <i>Nuclear and Conventional Physical Security/Countering Nuclear Threats</i>

B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	7.925	8.800	9.390	-	9.390
Current President's Budget	7.775	8.783	10.324	-	10.324
Total Adjustments	-0.150	-0.017	0.934	-	0.934
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.003	-			
• SBIR/STTR Transfer	-0.147	-			
• Internal realignment	-	-	1.078	-	1.078
• FFRDC	-	-0.017	-	-	-
• Fiscal Guidance Adjustment	-	-	-0.031	-	-0.031
• Economic Assumptions Adjustment	-	-	-0.080	-	-0.080
• Departmental Efficiency Adjustment	-	-	-0.033	-	-0.033

Change Summary Explanation

Internally realigned funding to this RDT&E Program Element to address additional advanced development for the Radiological Detection System

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense **Date:** February 2016

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604161D8Z / Nuclear and Conventional Physical Security/Countering Nuclear Threats	Project (Number/Name) P163 / Nuclear and Conventional Physical Security
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
P163: Nuclear and Conventional Physical Security	33.647	3.872	5.118	6.903	-	6.903	7.959	6.943	7.083	7.221	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 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.

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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 2015	FY 2016	FY 2017
Title: Detection and Assessment	1.354	3.138	3.138

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Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604161D8Z / Nuclear and Conventional Physical Security/Countering Nuclear Threats	Project (Number/Name) P163 / Nuclear and Conventional Physical Security		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>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.</p> <p>FY 2015 Accomplishments:</p> <ul style="list-style-type: none"> • Test & Evaluation: Comparative Evaluation of Trace Detection Systems for Use at an Entry Control • Develop Millimeter Wave Asymmetric Threat Detection • Develop Sonar Propagation Acoustics Model Transition to Operational Initial Capability • Develop Hand-Held Explosive Detection Equipment for Maritime Operations <p>FY 2016 Plans:</p> <ul style="list-style-type: none"> • Continue to develop Millimeter Wave Asymmetric Threat Detection • Continue to develop Sonar Propagation Acoustics Model Transition to Operational Initial Capability • Continue to develop Hand-Held Explosive Detection Equipment for Maritime Operations <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> • Continue to develop Millimeter Wave Asymmetric Threat Detection • Continue to develop Sonar Propagation Acoustics Model Transition to Operational Initial Capability • Continue to develop Hand-Held Explosive Detection Equipment for Maritime Operations 				
<p>Title: Access Controls</p> <p>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.</p> <p>FY 2015 Accomplishments:</p> <ul style="list-style-type: none"> • Develop an access control capability that leverages information housed in local law enforcement databases <p>FY 2016 Plans:</p> <ul style="list-style-type: none"> • Continue to develop an access control capability that leverages information housed in local law enforcement databases <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> • Continue to develop an access control capability that leverages information housed in local law enforcement databases 		0.660	1.000	1.010
<p>Title: Installation and Transport Security</p>		0.796	-	0.550

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
<p>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.</p> <p>FY 2015 Accomplishments:</p> <ul style="list-style-type: none"> Integrate detection options and response capabilities previously identified, to include the full spectrum of non-lethal to lethal tactical weapon systems, to protect personnel and assets against the terrorist threat in a waterside security environment. <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> Integrate detection options and response capabilities previously identified, to include the full spectrum of non-lethal to lethal tactical weapon systems, to protect personnel and assets against the terrorist threat in an in transit maritime environment. 			
<p>Title: Storage and Safeguards</p> <p>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.</p> <p>FY 2015 Accomplishments:</p> <ul style="list-style-type: none"> Develop RFID Tagging for Items in Extreme Cold Storage (OCONUS) 	0.164	-	-
<p>Title: Prevention</p> <p>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.</p> <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> Develop capability to share and automate content across the defense security, biosurveillance, and countering weapons of mass destruction integration mission areas 	-	-	0.660
<p>Title: Decision Support Systems</p> <p>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</p>	0.569	0.980	0.880

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
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.			
<p>FY 2015 Accomplishments:</p> <ul style="list-style-type: none"> Develop a Defense Security Enterprise Architecture that would link/harmonize disparate and sub-optimal capabilities utilizing existing and emerging Component capabilities to better close known physical security gaps <p>FY 2016 Plans:</p> <ul style="list-style-type: none"> Continue to develop a Defense Security Enterprise Environment that would link/harmonize disparate and sub-optimal capabilities utilizing existing and emerging Component capabilities to better close known physical security gaps <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> Finalize the development of a Defense Security Enterprise Environment that would link/harmonize disparate and sub-optimal capabilities utilizing existing and emerging Component capabilities to better close known physical security gaps 			
<p>Title: Analytical Support</p> <p>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 Enterprise RDT&E Program.</p> <p>FY 2015 Accomplishments:</p> <ul style="list-style-type: none"> Conduct physical security test and evaluation efforts Provide DOD and industry the means to achieve PSE interoperability <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> Conduct physical security test and evaluation efforts Provide DOD and industry the means to achieve PSE interoperability 	0.329	-	0.665
Accomplishments/Planned Programs Subtotals	3.872	5.118	6.903

C. Other Program Funding Summary (\$ in Millions)
N/A
Remarks
D. Acquisition Strategy
N/A

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E. Performance Metrics

The program performance metrics are established/approved through the Office of the Deputy Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs / Nuclear Matters. The cost, schedule and technical progress of each project is reviewed at quarterly PSEAG. Performance variances are addressed and corrective action is implemented as necessary.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Office of the Secretary Of Defense **Date:** February 2016

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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Hand-Held Explosive Detection Equipment for Maritime Operations	MIPR	NAVEODTECH : Indian Head, MD	0.840	0.310		0.000		-		-		-	-	-	-
Sonar Propagation Acoustics Model Transition to Operational Initial Capability	MIPR	SPAWAR Pacific : San Diego, CA	0.642	0.450		0.000		-		-		-	-	-	-
RFID Tagging for Items in Extreme Cold Storage	MIPR	Army Medical Research Institute of Infectious Diseases : Ft. Detrick, MD	0.462	0.167		-		-		-		-	-	-	-
Hailing Acoustic, Laser and Light Tactical System	MIPR	NSWC, DAHLGREN DIVISION : Dahlgren, VA	1.982	-		-		-		-		-	-	-	-
Joint Detection & Assessment	TBD	TBD : TBD	-	-		2.283		-		-		-	-	-	-
Radar Processing Dynamic Filter	MIPR	SPAWAR Pacific : San Diego, CA	0.587	-		-		-		-		-	-	-	-
Joint Explosive Detection Equipment	TBD	TBD : TBD	-	-		1.181		1.083		-		1.083	-	-	-
Physical Security Enterprise RDT&E	Various	Various : Various	23.280	-		-		0.615		-		0.615	-	-	-
Radiological Detection System	MIPR	JPM-RND : Aberdeen, MD	-	-		-		2.835		-		2.835	-	-	-
Subtotal			27.793	0.927		3.464		4.533		-		4.533	-	-	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Nuclear Matters Contract Support	MIPR	Washington Headquarters	-	0.575		-		-		-		-	-	-	-

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Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604161D8Z / Nuclear and Conventional Physical Security/Countering Nuclear Threats	Project (Number/Name) P163 / Nuclear and Conventional Physical Security
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Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
		Services : Arlington, VA													
Applied Research Laboratories: University of Texas	MIPR	Naval Sea Systems Command : Washington Navy Yard, DC	0.328	-		-		0.225		-		0.225	-	-	-
Subtotal			0.328	0.575		-		0.225		-		0.225	-	-	-

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Millimeter Wave Asymmetric Threat Detection	MIPR	NAVEODTECH : Indian Head, MD	-	0.220		1.344		-		-		-	-	-	-
Comparative Evaluation of Trace Detection Systems for Use at an Entry Control	MIPR	NAVEODTECH : Indian Head, MD	-	0.869		-		0.700		-		0.700	-	-	-
Smith Detection's HazMatID Elite and HazMatID 360	MIPR	NAVEODTECH : Indian Head, MD	0.801	-		-		-		-		-	-	-	-
Trace Detection and Identification of Explosives using Thin Layer Chromatography	MIPR	NAVEODTECH : Indian Head, MD	-	-		-		0.250		-		0.250	-	-	-
Detection of Desensitized Homemade Explosives	MIPR	NAVEODTECH : Indian Head, MD	-	-		-		0.150		-		0.150	-	-	-
Detection and Assessment T&E	MIPR	SPAWAR Atlantic : Charleston, SC	-	-		-		0.621		-		0.621	-	-	-
Subtotal			0.801	1.089		1.344		1.721		-		1.721	-	-	-

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Office of the Secretary Of Defense **Date:** February 2016

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604161D8Z / Nuclear and Conventional Physical Security/Countering Nuclear Threats	Project (Number/Name) P163 / Nuclear and Conventional Physical Security
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LEGEND	
	Planned Actions
	In-Progress Actions
	Completed Actions

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Radar Processing Dynamic Structure Filter

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
Kickoff	08/04/14	08/04/14					△																
Project Plan, Development Environ.							△																
Algorithms Adapted															△								
Verification & Validation															△								
Findings Resolved																			△				
IV&V Complete																			△				
In-Situ Demonstration																						△	
ECO Complete																						△	
Project Complete																							△

- 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

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Office of the Secretary Of Defense		Date: February 2016
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Detection and Assessment IPT



CAPABILITY

- Joint approach to Detection and Assessment portfolio
- Ensure focused and efficient use of limited resources
- Capability gap resolution
- Joint testing for Joint employment
- Inception to transition analysis on all projects to ensure fielding and sustainment for persistent employment

SIGNIFICANT ACCOMPLISHMENTS

- IPT Kickoff meeting scheduled 12 – 13 August

PROJECTED ACCOMPLISHMENTS

- IPT Kickoff Meeting scheduled 12 – 13 August, Lackland AFB, San Antonio, Texas

TRANSITION PLAN

- N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Office of the Secretary Of Defense		Date: February 2016
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LEGEND

-  Planned Actions
-  In-Progress Actions
-  Completed Actions

Sensor Fusion 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
Phase 1 – Requirements, Design Concept, and Technical Feasibility	10/22/12 – 3/31/13	N/A	10/22/12 – 4/30/13																																				
End of Phase 1 Report	3/31/13	N/A	4/30/13																																				
Phase 2 – Engineering Development and Prototyping	4/1/13 – 12/15/13	4/31/13 – 06/25/14	6/25/2014																																				
Solid Plastic Concept Model	6/1/13	N/A	5/17/13																																				
Preliminary Design Review (PDR)	6/1/13	N/A	5/28/13																																				
Critical Design Review/Final Thermo Report	Fall 2013	2/14/2014	2/14/14																																				
(Alpha) Prototype Delivery	12/15/13	12/31/13	12/31/13																																				
NSWC IHEODTD Testing	12/15/13 – 3/15/13	07/07/14 – 09/30/14																																					

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- Completion of major phases, task items, or deliverables
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 - Demonstrations/Events (Please provide start/end dates as depicted)
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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Office of the Secretary Of Defense		Date: February 2016
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Detection & Assessment Integrated Process Team</i>				
Detection & Assessment Integrated Process Team	4	2014	4	2017
<i>Joint Explosive Detection Equipment</i>				
Joint Explosive Detection Equipment	1	2014	1	2021
<i>Hailing Acoustic, Laser and Light Tactical System</i>				
Hailing Acoustic, Laser and Light Tactical System	1	2014	1	2015
<i>Handheld Explosive Detection System for Maritime Environment</i>				
Handheld Explosive Detection System for Maritime Environment	2	2014	3	2015
<i>Radar Processing Dynamic Structure Filter</i>				
Radar Processing Dynamic Structure Filter	4	2014	4	2016
<i>Radio Frequency Identification Technology in Biological Specimen Labels</i>				
Radio Frequency Identification Technology in Biological Specimen Labels	2	2014	4	2016
<i>Sonar Propagation Acoustics Model Transition to Operational Initial Capability</i>				
Sonar Propagation Acoustics Model Transition to Operational Initial Capability	3	2014	3	2016

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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
P042: CNT Rad/Nuc Passive Defense SDD	1.016	3.903	3.665	3.421	-	3.421	3.317	5.804	5.733	7.813	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 2015	FY 2016	FY 2017
Title: CNT Rad/Nuc Passive Defense	3.903	3.665	3.421
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 2015 Accomplishments: Continue with the development of Joint Radiological and Nuclear passive defense systems (i.e. Radiological Detection System and the Joint Personal Dosimeter)			
FY 2016 Plans: Continue with the development of Joint Radiological and Nuclear passive defense systems (i.e. Radiological Detection System and the Joint Personal Dosimeter)			
FY 2017 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Office of the Secretary Of Defense		Date: February 2016
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604161D8Z / Nuclear and Conventional Physical Security/Countering Nuclear Threats	Project (Number/Name) P042 / CNT Rad/Nuc Passive Defense SDD

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
complete the development of Joint Radiological and Nuclear passive defense systems (i.e. Radiological Detection System and the Joint Personal Dosimeter)			
Accomplishments/Planned Programs Subtotals	3.903	3.665	3.421

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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Office of the Secretary Of Defense											Date: February 2016				
Appropriation/Budget Activity 0400 / 5				R-1 Program Element (Number/Name) PE 0604161D8Z / Nuclear and Conventional Physical Security/Countering Nuclear Threats					Project (Number/Name) P042 / CNT Rad/Nuc Passive Defense SDD						

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Radiological Detection System	Sub Allot	Joint Product Manager - Rad / Nuc Defense : Aberdeen, MD	0.000	0.585		0.449		0.205		-		0.205	-	-	-
Joint Personal Dosimeter	Sub Allot	Joint Product Manager - Rad / Nuc Defense : Aberdeen, MD	1.016	3.318		3.216		3.216		-		3.216	-	-	-
Subtotal			1.016	3.903		3.665		3.421		-		3.421	-	-	-
Project Cost Totals			1.016	3.903		3.665		3.421		-		3.421	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Office of the Secretary Of Defense		Date: February 2016
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604161D8Z / Nuclear and Conventional Physical Security/Countering Nuclear Threats	Project (Number/Name) P042 / CNT Rad/Nuc Passive Defense SDD

LEGEND	
	Planned Actions
	In-Progress Actions
	Completed Actions

Radiological Detection System (RDS) Milestones

Milestones	Baseline Date	Current Date	Completed Date	FY 15				FY 16				FY 17											
				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
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)
- *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

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Office of the Secretary Of Defense		Date: February 2016
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604161D8Z / <i>Nuclear and Conventional Physical Security/Countering Nuclear Threats</i>	Project (Number/Name) P042 / <i>CNT Rad/Nuc Passive Defense SDD</i>

Schedule Details

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