

OSD RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)						February 2008		
APPROPRIATION/ BUDGET ACTIVITY RDTE, Defense Wide BA 05			PE NUMBER AND TITLE 0604161D8Z - Nuclear & Conventional Phys Sec Equip					
COST (\$ in Millions)		FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
P163	Nuclear & Conventional Phys Sec Equip	11.735	3.252	4.355	4.515	4.524	4.612	4.735
A. Mission Description and Budget Item Justification: The purpose of this program is the system development and validation of conventional and nuclear physical security equipment (PSE) systems for all DoD components. This program supports the protection of tactical, fixed, and nuclear weapons systems, DoD personnel and DoD facilities. The funds are used to provide PSE RDT&E for continuing and evolving individual Service and joint PSE requirements that provide capability in the areas of force protection and tactical security equipment; robotic security systems integration; waterside security systems; explosive detection equipment; locks, safes and vaults; commercial-off-the-shelf (COTS) testing; and nuclear weapons security. A number of RDT&E efforts arising from PE 603161D8Z will transition to this PE for system demonstration and validation. The PSE program is organized so that representatives from the Army, Navy, Air Force, and Defense Threat Reduction Agency (DTRA) monitor, direct and prioritize potential and existing PSE programs through the auspices of the Physical Security Equipment Action Group (PSEAG) and the Security Policy Verification Committee (SPVC). With few exceptions, each Service sponsors RDT&E efforts for technologies and programs that have multi-service application. This program element supports: 1) the Army's PSE RDT&E efforts in the areas of Interior and Exterior Detection, Security Lighting, Security Barriers and Security Display Units; 2) the Air Force's PSE RDT&E effort in the areas of Exterior Detection/Surveillance, Entry Control, Delay/Denial, Tactical Systems and Airborne Intrusion; 3) the Navy's PSE RDT&E efforts in the areas of Waterside Security, Explosive Detection, and improved technology for Locks, Safes and Vaults; and 4) DTRA's PSE RDT&E efforts that enhance the security of Navy and Air Force nuclear assets. The program element also supports all four Services' identification and redesign of developmental, non-developmental, and commercial-off-the-shelf equipment to meet physical security requirements. Activities within this program will seek to reduce risk associated with integrating, fielding, and supporting the equipment once it becomes a part of the overall security system.								
B. Program Change Summary		FY 2007	FY 2008	FY 2009				
Previous President's Budget (FY 2008)		12.008	3.281	4.332				
Current BES/President's Budget (FY 2009)		11.735	3.252	4.355				
Total Adjustments		-0.273	-0.029	0.023				
Congressional Program Reductions								
Congressional Rescissions								
Congressional Increases								
Reprogrammings								
SBIR/STTR Transfer								
Other		-0.273	-0.029	0.023				

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<u>C. Other Program Funding Summary</u> Not applicable for this item.						
<u>D. Acquisition Strategy</u> Not applicable for this item.						
<u>E. Performance Metrics:</u>						
FY	Strategic Goals Supported	Existing Baseline	Planned Performance Improvement / Requirement Goal	Actual Performance Improvement	Planned Performance Metric / Methods of Measurement	Actual Performance Metric / Methods of Measurement
08						
Comment: The program performance metrics are established/approved through the DoD Physical Security Equipment Action Group (PSEAG) and the Security Policy Verification Committee (SPVC). The cost, schedule and technical progress of each project is reviewed at quarterly PSEAG and SPVC meetings. Performance variances are addressed and corrective action is implemented as necessary.						

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COST (\$ in Millions)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
P163 Nuclear & Conventional Phys Sec Equip	11.735	3.252	4.355	4.515	4.524	4.612	4.735
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B. Accomplishments/Planned Program:							
<u>Accomplishments/Planned Program Title:</u>				<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	
Robotic Security Systems Integration				7.530	1.000	2.025	
FY 2007 Accomplishments: - Conducted Pre-planned Program Improvements (P3I) for Mobile Detection Assessment and Response System (MDARS) for greater sensing distance. - Increased MDARS speed and response feed to support Remote Detection Challenge and Response (REDCAR). - Executed a congressional add to develop the Transportable Under Vehicle Inspection System. - Continued to integrate unmanned systems to meet physical security requirements. - Continued to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products. - Continued to manage sensor and assessment product developments and tests. - Continued to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture. - Continued to test, develop, and integrate equipment to improve security and access to facilities.							
FY 2008 Plans:							

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- Refurbish the MDARS patrol unit vehicle. - Continue Mobile Detection Assessment and Response System (MDARS) modernization effort of Detection-On-The-Move, intrusion detection, and less than lethal capabilities. - Continue to integrate unmanned systems to meet physical security requirements. - Continue to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products. - Continue to manage sensor and assessment product developments and tests. - Continue to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture. - Continue to test, develop, and integrate equipment to improve security and access to facilities. FY 2009 Plans: - Continue to integrate unmanned systems to meet physical security requirements. - Continue to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products. - Continue to manage sensor and assessment product developments and tests. - Continue to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture. - Continue to test, develop, and integrate equipment to improve security and access to facilities.				
<u>Accomplishments/Planned Program Title:</u>		<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Force Protection/Tactical Security Equipment		4.205	2.252	2.330
FY 2007 Accomplishments: - Continued the spiral development/modernization of the Battlefield Anti-Intrusion System (BAIS). - Developed BAIS two-way communications capability by developing and testing a Handheld Monitor/Transceiver. - Continued to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products. - Continued to manage sensor and assessment product developments and tests. - Continued to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture. - Continued to test, develop, and integrate equipment to improve security and access to facilities. FY 2008 Plans: - Continue the spiral development/modernization of the Battlefield Anti-Intrusion System (BAIS). - Develop BAIS remote sensor activation/deactivation capability. - Continue to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products. - Continue to manage sensor and assessment product developments and tests. - Continue to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture. - Continue to test, develop, and integrate equipment to improve security and access to facilities. FY 2009 Plans: - Continue the spiral development/modernization of the Battlefield Anti-Intrusion System (BAIS). - Develop BAIS sensor-to-sensor communications capability. - Begin Production Qualification Testing (PQT2)of the BAIS. - Continue to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products. - Continue to manage sensor and assessment product developments and tests.				

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- Continue to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture. - Continue to test, develop, and integrate equipment to improve security and access to facilities.		
<u>C. Other Program Funding Summary</u> Not applicable for this item.		
<u>D. Acquisition Strategy</u> Not applicable for this item.		
<u>E. Major Performers</u> Not applicable for this item.		

OSD RDT&E COST ANALYSIS (R3)										February 2008		
BUDGET ACTIVITY				PE NUMBER AND TITLE						PROJECT		
5 - System Development and Demonstration (SDD)				0604161D8Z - Nuclear & Conventional Phys Sec Equip						P163		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
MDARS	MIPR	PM-FPS (USA), Ft. Belvoir, VA		4330		1000	1-2Q	2000		Cont.	Cont.	
BAIS	MIPR	PM-FPS (USA), Ft. Belvoir, VA		3970						Cont.	Cont.	
TUVIS (Congressional Add)	MIPR	AFRL (USAF), Tyndall, AFB, FL		2500							2500	
Subtotal:				10800		1000		2000		Cont.	Cont.	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:												
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
BAIS	MIPR	PM-FPS (USA), Ft. Belvoir, VA				2052	1-2Q	1955	1-2Q		4007	
Subtotal:						2052		1955			4007	
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
MDARS	MIPR	PM-FPS (USA), Ft.		320		100	1-2Q		1-4Q		420	

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BUDGET ACTIVITY			PE NUMBER AND TITLE								PROJECT	
5 - System Development and Demonstration (SDD)			0604161D8Z - Nuclear & Conventional Phys Sec Equip								P163	
		Belvoir, VA										
BAIS	MIPR	PM-FPS (USA), Ft. Belvoir, VA		365		100	1-2Q	200	1-2Q		665	
TUVIS (Congressional Add)	MIPR	AFRL (USAF), Tyndall, AFB, FL		250							250	
MDARS	MIPR	PM-FPS (USA), Ft. Belvoir, VA						200			200	
Subtotal:				935		200		400			1535	
Project Total Cost:				11735		3252		4355		Cont.	Cont.	

Schedule Profile (R4 Exhibit)																	February 2008												
BUDGET ACTIVITY					PE NUMBER AND TITLE																	PROJECT							
5 - System Development and Demonstration (SDD)					0604161D8Z - Nuclear & Conventional Phys Sec Equip																	P163							
Event Name	FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
(1) Complete Pre-planned Product Improvements (P3I) for MDARS.					1																								
(2) Reurbish Patrol Unit Vehicle (PUV).	2																												
Execute Transportable Under Vehicle Inspection System (TUVIS) Congressional Add.																													
(3) Final coordination of Milestone C Full Rate Production of MDARS.	3																												
(4) Begin Qualification testing of the Battlefield Anti-Intrusion System (BAIS).		4																											
(5) Begin preliminary qualification testing on BAIS handheld monitor.		5																											
Begin preliminary qualification testing on BAIS sensors.						5																							
Continue spiral development/modernization of BAIS., Continue MDARS Modernization.																													

Schedule Detail (R4a Exhibit)						February 2008	
BUDGET ACTIVITY 5 - System Development and Demonstration (SDD)			PE NUMBER AND TITLE 0604161D8Z - Nuclear & Conventional Phys Sec Equip			PROJECT P163	
<u>Schedule Detail</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>
Complete Pre-planned Product Improvements (P3I) for MDARS.		1Q - 4Q					
Reburbish Patrol Unit Vehicle (PUV).	1Q - 2Q						
Execute Transportable Under Vehicle Inspection System (TUVIS) Congressional Add.	2Q - 4Q	1Q - 4Q					
Final coordination of Milestone C Full Rate Production of MDARS.	1Q - 2Q						
Begin Qualification testing of the Battlefield Anti-Intrusion System (BAIS).	2Q - 3Q						
Begin preliminary qualification testing on BAIS handheld monitor.	1Q - 4Q	1Q					
Begin preliminary qualification testing on BAIS sensors.		1Q - 4Q	1Q				
Continue spiral development/modernization of BAIS.	1Q - 4Q	1Q - 4Q					
Continue MDARS Modernization.		1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q	