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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Chemical and Biological Defense Program										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	69.793	209.275	277.062	0.000	277.062	182.351	198.586	169.998	177.657	Continuing	Continuing
CA4: CONTAMINATION AVOIDANCE (ACD&P)	7.703	40.186	63.347	0.000	63.347	9.093	10.754	4.742	3.978	Continuing	Continuing
CM4: HOMELAND DEFENSE (ACD&P)	0.000	0.000	9.526	0.000	9.526	0.000	0.000	0.000	0.000	Continuing	Continuing
CP4: COUNTERPROLIFERATION SUPPORT (ACD&P)	2.373	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
DE4: DECONTAMINATION SYSTEMS (ACD&P)	4.822	1.792	7.051	0.000	7.051	5.748	1.386	0.000	0.000	Continuing	Continuing
IP4: INDIVIDUAL PROTECTION (ACD&P)	0.000	0.000	3.172	0.000	3.172	0.000	0.000	0.000	0.000	Continuing	Continuing
IS4: INFORMATION SYSTEMS (ACD&P)	0.000	0.000	11.221	0.000	11.221	3.404	4.565	4.676	4.741	Continuing	Continuing
MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)	7.910	102.437	136.975	0.000	136.975	130.718	131.347	115.985	113.566	Continuing	Continuing
MC4: MEDICAL CHEMICAL DEFENSE (ACD&P)	19.365	9.438	0.000	0.000	0.000	2.973	3.661	5.035	14.670	Continuing	Continuing
MR4: MEDICAL RADIOLOGICAL DEFENSE (ACD&P)	4.294	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
TE4: TEST & EVALUATION (ACD&P)	6.261	28.773	19.304	0.000	19.304	11.851	28.035	20.266	21.139	Continuing	Continuing
TT4: TECHBASE TECHNOLOGY TRANSITION (ACD&P)	17.065	26.649	26.466	0.000	26.466	18.564	18.838	19.294	19.563	Continuing	Continuing

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>
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A. Mission Description and Budget Item Justification

Operational forces have an immediate need to survive, safely operate, and sustain operations in a Chemical and Biological (CB) agent threat environment across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high risk missions. This program element supports the Advanced Component Development and Prototypes (ACD&P) of CB defensive equipment, both medical and non-medical. DoD missions for civil support operations have recently expanded and have resulted in providing focus to develop technologies to support CB counterterrorism initiatives. Projects within BA4 have been structured to consolidate Joint and Service-unique tasks within four commodity areas: contamination avoidance, force protection (individual and collective), decontamination, and medical countermeasures. ACD&P is conducted for an array of chemical/biological/toxin detection and warning systems providing early warning, collector concentrators, generic detection, improved reagents, and decontamination systems using solutions that will remove and/or detoxify contaminated material without damaging combat equipment, personnel or the environment. In the medical chemical/biological defense area, ACD&P is conducted for improved medical equipment, vaccines, and drugs essential to counteracting lethal and human performance degrading effects of chemical and biological agent threats. Specific items include improvements to nerve agent antidotes, anticonvulsants, biological agent diagnostics, and vaccines to protect against various Biological Warfare (BW) agents. This project funds development of a Transformational Rapid Drug Discovery and Development Capability (TRDDDC). Transformational Medical Technology Initiatives (TMTI) efforts in this area will include the continual build out of both a genomic sequencing and a bio-chemical informatics capability for the DoD. ACD&P also supports the Product Director Test Equipment, Strategy and Support (PD TESS) providing for the development of updated test capabilities to evaluate Chemical, Biological, Radiological and Nuclear Defense systems. Also included is the Techbase Technology Transition effort which validates high-risk/high-payoff technologies that could significantly improve warfighter capabilities. This project also funds development of candidate therapeutic medical countermeasures to mitigate the consequences of exposure to ionizing radiation due to nuclear or radiological attacks.

This Program Element focuses on efforts associated with advanced technology development used to demonstrate general military utility to include ACD&P in the areas of Non-Traditional Agents (NTA) and chemical/biological defense equipment and is correctly placed in BA4.

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APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i>	PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>
BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	62.721	205.952	0.000	0.000	0.000
Current President's Budget	69.793	209.275	277.062	0.000	277.062
Total Adjustments	7.072	3.323	277.062	0.000	277.062
• Congressional General Reductions		-0.877			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		4.200			
• Congressional Directed Transfers		0.000			
• Reprogrammings	7.796	0.000			
• SBIR/STTR Transfer	-0.724	0.000			
• Other Adjustments	0.000	0.000	277.062	0.000	277.062

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: CA4: CONTAMINATION AVOIDANCE (ACD&P)

Congressional Add: 1) *JBSDS Increment 2*

Congressional Add: 2) *JBTD*

Congressional Add Subtotals for Project: CA4

Project: CP4: COUNTERPROLIFERATION SUPPORT (ACD&P)

Congressional Add: 1) *JMDS*

Congressional Add Subtotals for Project: CP4

Project: DE4: DECONTAMINATION SYSTEMS (ACD&P)

Congressional Add: 1) *JMDS*

Congressional Add: 2) *JPID*

Congressional Add: 3) *JPID*

	<u>FY 2009</u>	<u>FY 2010</u>
	1.187	0.000
	0.000	0.797
Congressional Add Subtotals for Project: CA4	1.187	0.797
	2.373	0.000
Congressional Add Subtotals for Project: CP4	2.373	0.000
	1.582	0.000
	1.582	0.000
	0.000	1.792

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>
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Congressional Add Details (\$ in Millions, and Includes General Reductions)	FY 2009	FY 2010
Congressional Add Subtotals for Project: DE4	3.164	1.792
Project: MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)		
Congressional Add: 1) <i>Vacuum Sampling Pathogen Collection and Concentration</i>	3.164	0.000
Congressional Add: 2) <i>Broad Spectrum Therapeutic Countermeasure</i>	0.000	1.593
Congressional Add: 3) <i>CRP</i>	1.582	0.000
Congressional Add: 4) <i>TT Bio</i>	0.791	0.000
Congressional Add: 5) <i>TT Bio</i>	1.582	0.000
Congressional Add: 6) <i>TT Bio</i>	0.791	0.000
Congressional Add Subtotals for Project: MB4	7.910	1.593
Congressional Add Totals for all Projects	14.634	4.182

Change Summary Explanation

Funding: FY09 - SBIR taxes (-\$724K Various), Reprogrammings and realignments between projects (-\$791 thousand CM4; +\$2.4 million CP4; -\$3.75 thousand DE4; +\$2.373 million MB4; +\$11.304 million MC4; -\$3.740 million MR4).

FY11 - Realignment to support Decontamination Family of Systems (+\$7.1 million DE4). Inflation rate adjustment (-\$300 thousand CA4; -\$45 thousand CM4; -\$33 thousand DE4; -\$15 thousand IP4; -\$53 thousand IS4; -\$656 thousand MB4; -\$92 thousand TE4; -\$126 thousand TT4). Realignment of BA5 funding (SDD) to BA4 (ACD&P) due to change in acquisition milestone requirements (+\$57.833 million CA4; +\$9.593 million CM4; +\$3.194 million IP4; +\$11.3 million IS4). Realignment of CBDP to support test infrastructure (+\$7.7 million TE4).

Schedule: N/A

Technical: N/A

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
CA4: <i>CONTAMINATION AVOIDANCE (ACD&P)</i>	7.703	40.186	63.347	0.000	63.347	9.093	10.754	4.742	3.978	Continuing	Continuing
Quantity of RDT&E Articles	0	28	56		56	0	0	0	0		

A. Mission Description and Budget Item Justification

This Advanced Component Development and Prototypes (ACD&P) funding supports Component Advanced Development and System Integration (CAD/SI) of reconnaissance, detection, identification, and hazard prediction equipment, hardware, and software. Individual projects are: (1) Joint Biological Standoff Detector System (JBSDS), (2) Joint Biological Tactical Detection System (JBTDSD), (3) Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD), (4) Major Defense Acquisition Program (MDAP) Support, (5) Next Generation Chemical Standoff Detection (NGCSD), and (6) Chemical Biological Radiological Nuclear Dismounted Reconnaissance Systems (CBRN DRS), formerly JNBCRS Increment 2 .

The JBSDS is employing an incremental acquisition strategy. JBSDS Increment 1 is the first standoff early warning biological detection (BD) system for the Joint Services. The system will be capable of providing near real time detection of biological attacks/incidents and standoff early detection/warning (Detect to Warn) of biological Warfare (BW) agents at fixed sites or in static mode on vehicles. It will be capable of providing standoff detection, ranging, tracking, discrimination (man-made vs. natural occurring aerosols) of BW aerosol clouds for advanced warning, reporting, and protection. The JBSDS will augment and integrate with existing BD systems to provide a BD network capable of near real time detection and warning theater-wide to limit the effects of biological agent hazards against U.S. forces at the tactical and operational levels of war. The JBSDS can be employed in support of various areas (e.g., fixed sites, Air Ports of Debarkation/Sea Ports of Debarkation (APODs/SPODs), amphibious landing sites, etc.), or on platforms (ships, aircraft or ground vehicles).

The JBSDS Increment 2 builds on the capabilities demonstrated during the development of JBSDS Increment 1. The JBSDS Increment 2 system will focus on providing 24-hour operations, improving the false alarm rate and detection sensitivity, while decreasing size, weight and power. The JBSDS Increment 2 will also integrate with the global information network to provide near real time detection and warning theater-wide to limit the effect of biological agent hazards against U.S. forces at the tactical and operational levels of war. JBSDS Increment 3 will build on Increment 2 and focus on the development of a system that will operate on-the-move on mobile platforms as determined by the Warfighter. During the Tech Development phase, JBSDS will hold competitive prototyping and key sub-system development, conduct test and evaluation of prototypes, improve agent-simulant modeling, prepare Milestone B documentation and preliminary designs.

The Joint Biological Tactical Detection System (JBTDSD) Increment 1 will develop, integrate, test and produce a lightweight, low cost biological surveillance system that will detect, collect and identify biological warfare agent aerosols. JBTDSD will provide warning through the Joint Warning And Reporting Network (JWARN) and

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<p>an archive sample for follow-on analyses. JBTDS will provide near real time local audio and visual alarm. JBTDS components will be one man portable and battery operable. JBTDS will be used organically at Brigade and below and at Forward Operating Bases (FOB) to provide notification of a hazard and enhanced battle space awareness to protect and preserve the force. When networked, JBTDS will augment existing biological detection systems to provide a theater-wide seamless array capable of biological detection, identification and warning.</p> <p>The JSLSCAD effort initiated the component improvements and the Technology Readiness Assessment (TRA) for the System of Systems (SoS) approach to address the CB early warning mission within the Next Generation Chemical Standoff Detection (NGCSD) program. The NGCSD SoS approach will increase the range of standoff detection and decrease detection time.</p> <p>The Major Defense Acquisition Program (MDAP) Support program will integrate System of Systems (SoS) solutions across the Armed Services for Major Defense Acquisition Programs (MDAP) having Chemical and Biological Radiological and Nuclear (CBRN) survivability requirements. The program will demonstrate modular, net-centric, "plug and play" capabilities for mounted and dismounted CBRN reconnaissance that will establish a common CBRN reconnaissance architecture across the services.</p> <p>The NGCSD, which was initiated under the JSLSCAD program, will provide early warning for both traditional and non-traditional chemical agent attacks at fixed sites, forward operating bases and on Service designated vehicles and ships. This effort will develop and integrate new standoff sensor technologies for future standoff systems. The detection system will interoperate with the Services and Joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) architectures.</p> <p>The future increments in point detection will focus on capability gaps not addressed by M4 and M4E1 JCAD. Shipboard operation, aircraft operation, unmasking tool as well as improved decontamination verification will be primary focus areas.</p> <p>The CBRN Dismounted Reconnaissance Systems (CBRN DRS) program fills a mission critical need to enhance CBRN reconnaissance platoon capabilities. The program consists of two phases. Phase I is the Dismounted Reconnaissance (DR) Sets, Kits, and Outfits (SKO) configuration which provides an immediate critical need consisting of Commercial Off-The-Shelf (COTS) and Government Off-The-Shelf (GOTS) equipment integrated into a modular, transportable container for dismounted operations. It will form the basis for Phase II, which is the Monitoring and Survey (MS) SKO. The MS SKO will feature technology insertion, the addition of net-centric capability, and tailoring to focus on the Service-specific needs, to include Non Traditional Agent (NTA) detection.</p> <p><u>B. Accomplishments/Planned Program (\$ in Millions)</u></p>		

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
1) CBRN DRS <i>FY 2011 Base Plans:</i> Initiate CBRN DRS program. Initiate technology development and preliminary design to include Non Traditional Agent (NTA) and CBRN Common Sensor Interface (CCSI) efforts.		0.000	0.000	1.986	0.000	1.986
2) JBSDS Increment 2 <i>FY 2010 Plans:</i> Provide strategic, tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, acquisition oversight, technical support and milestone documentation. <i>FY 2011 Base Plans:</i> Continue strategic, tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, acquisition oversight, technical support and milestone documentation.		0.000	4.132	5.443	0.000	5.443
3) JBSDS Increment 2 <i>FY 2010 Plans:</i> Initiate Agent Performance Assessment and Cross Section Measurements. <i>FY 2011 Base Plans:</i> Continue Agent Performance Assessment and Cross Section Measurements.		0.000	1.250	1.500	0.000	1.500
4) JBSDS Increment 2 <i>FY 2010 Plans:</i> Initiate Increment 2 Modeling and Simulation in support of Agent Performance Assessment. <i>FY 2011 Base Plans:</i> Continuing Increment 2 Modeling and Simulation in support of Agent Performance Assessment.		0.000	1.500	2.000	0.000	2.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
5) JBSDS Increment 2 <i>FY 2010 Plans:</i> Initiate Technology Development and Preliminary Designs including competitive prototyping. <i>FY 2011 Base Plans:</i> Continue Technology Development and Preliminary Designs and competitive prototyping.		0.000	9.701	10.336	0.000	10.336
6) JBSDS Increment 2 <i>FY 2010 Plans:</i> Provide developmental test organizations funding to support test planning and test support for evaluation of the competitive prototypes.		0.000	1.100	0.000	0.000	0.000
7) JBSDS Increment 2 <i>FY 2011 Base Plans:</i> Initiate pre-Milestone B contractual activities including development of proposal package, release of draft request for proposal (RFP), update RFP with CDD requirements and comments from industry, conduct government evaluation team source selection training, and system engineering activities leading up to Engineering and Manufacturing Development phase.		0.000	0.000	2.425	0.000	2.425
8) JBSDS Increment 2 <i>FY 2011 Base Plans:</i> Initiate validation of simulants, models, and test support equipment including referee equipment development for the evaluation of competitive prototypes and advance development hardware.		0.000	0.000	6.447	0.000	6.447
9) JBTDS		2.129	3.651	3.698	0.000	3.698

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2009 Accomplishments:</i> Continued network algorithm development/demonstration.						
13) JBTDS <i>FY 2011 Base Plans:</i> Initiate government testing and analysis, to include Manufacturing Readiness Assessment and Technology Readiness Assessment of hardware submitted for evaluation in Competitive Prototyping.		0.000	0.000	2.700	0.000	2.700
14) JBTDS <i>FY 2010 Plans:</i> Initiate competitive prototyping contracts effort for JBTDS Increment 1 prototypes. <i>FY 2011 Base Plans:</i> Continue competitive prototyping contracts effort for JBTDS Increment 1 prototypes.		0.000	1.800	1.500	0.000	1.500
15) JBTDS <i>FY 2011 Base Plans:</i> Initiate technology development phase activities to mature technologies that are at Technology Readiness Level 4 (TRL 4).		0.000	0.000	0.900	0.000	0.900
16) JBTDS <i>FY 2010 Plans:</i> Conduct field demonstration analysis for end to end integrated candidates at government test ranges.		0.000	1.106	0.000	0.000	0.000
17) JBTDS		0.000	0.000	1.434	0.000	1.434

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> Initiate activities to support Milestone B Engineering and Manufacturing Development (EMD) phase requirements and milestone documentation development.						
18) JBTDS <i>FY 2011 Base Plans:</i> Initiate assay transition with Critical Reagents Program (CRP) for identifier to include emerging bio-surveillance threats approved by threat agencies.		0.000	0.000	2.500	0.000	2.500
19) JBTDS <i>FY 2011 Base Plans:</i> Initiate pre-MS B contractual efforts including development of proposal package, release draft Request For Proposal (RFP), prepare final EMD RFP, release RFP, conduct source selection training, conduct source selection and complete proposal evaluations.		0.000	0.000	3.400	0.000	3.400
20) JCAD <i>FY 2011 Base Plans:</i> Initiate Analysis of Alternatives for the future increments in point detection.		0.000	0.000	1.986	0.000	1.986
21) JSLSCAD <i>FY 2009 Accomplishments:</i> Conducted strategic/tactical planning, systems engineering, and technology assessment for Next Generation Chemical Standoff Detection (NGCSD).		0.907	0.000	0.000	0.000	0.000
22) JSLSCAD		0.577	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2009 Accomplishments:</i> Conducted Testing Evaluation and Methodology Analysis for NGCSD.						
23) JSLSCAD <i>FY 2009 Accomplishments:</i> Integrated Requirements Analysis, Development, and Demonstration for NGCSD.		0.123	0.000	0.000	0.000	0.000
24) MDAP SPRT Catalytic Oxidation (CatOx) Technology Demonstration of improved air purification for the Abrams Main Battle Tank. <i>FY 2010 Plans:</i> Initiate transition of CatOx air purification process for design to increase CBRN defensive capability and reduce logistical costs. <i>FY 2011 Base Plans:</i> Initiate developmental (shock, vibration, temperature, dust environment) testing of CatOx prototypes in the Abrams Main Battle Tank operating environment.		0.000	1.100	0.900	0.000	0.900
25) MDAP SPRT Chemical, Biological, Radiological and Nuclear (CBRN) Capabilities Analysis <i>FY 2010 Plans:</i> Conduct CBRN Capabilities Analysis for Ground Combat Vehicle. <i>FY 2011 Base Plans:</i> Conduct CBRN Capabilities Analysis for the Ship to Shore Connector and Ground Combat Vehicle.		0.000	0.200	0.500	0.000	0.500

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
26) MDAP SPRT		0.000	0.216	1.577	0.000	1.577
Chemical, Biological, Radiological and Nuclear (CBRN) Material Solutions Analysis.						
<i>FY 2010 Plans:</i> Conduct CBRN Material Solutions Analysis for Ground Combat Vehicle.						
<i>FY 2011 Base Plans:</i> Complete CBRN Material Solutions Analysis for Ground Combat Vehicle. Initiate the CBRN Material Solutions Analysis for Ship to Shore Connector, Apache Block Three, and Next Generation Cruiser (CG(X)).						
27) NGCSD		0.000	4.500	6.015	0.000	6.015
<i>FY 2010 Plans:</i> Initiate sensor prototype development.						
<i>FY 2011 Base Plans:</i> Continue sensor prototype development.						
28) NGCSD		0.000	1.833	0.300	0.000	0.300
<i>FY 2010 Plans:</i> Conduct Technology Readiness Evaluation (TRE) and support of Analysis of Alternatives (AoA).						
<i>FY 2011 Base Plans:</i> Continue support of Analysis of Alternatives (AoA).						
29) NGCSD		0.000	2.800	1.500	0.000	1.500

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CA4: <i>CONTAMINATION AVOIDANCE (ACD&P)</i>				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2010 Plans:</i> Initiate engineering support.						
<i>FY 2011 Base Plans:</i> Continue engineering support.						
30) NGCSD		0.000	0.000	2.700	0.000	2.700
<i>FY 2011 Base Plans:</i> Initiate Pre-MS B prototype procurement (3 each of 3 technologies at a cost of \$300 thousand each).						
31) NGCSD		0.000	0.000	0.400	0.000	0.400
<i>FY 2011 Base Plans:</i> Initiate planning for Early Operational Assessment (EOA).						
32) NGCSD		0.000	0.000	1.200	0.000	1.200
<i>FY 2011 Base Plans:</i> Initiate prototype Developmental Test (DT) planning and execution.						
33) SBIR		0.000	0.493	0.000	0.000	0.000
<i>FY 2010 Plans:</i> Small Business Innovative Research.						
Accomplishments/Planned Programs Subtotals		6.516	39.389	63.347	0.000	63.347
		FY 2009	FY 2010			
Congressional Add: 1) JBSDS Increment 2		1.187	0.000			

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

	FY 2009	FY 2010
<i>FY 2009 Accomplishments:</i> Initiated Testing and Support Equipment Development.		
Congressional Add: 2) JBTD5 <i>FY 2010 Plans:</i> Initiate Sample Preparation for Biological Detection	0.000	0.797
Congressional Adds Subtotals	1.187	0.797

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• CA5: <i>CONTAMINATION AVOIDANCE (SDD)</i>	46.316	78.042	124.936		124.936	117.729	110.250	89.493	58.830	Continuing	Continuing
• JC0100: <i>JOINT BIO POINT DETECTION SYSTEM (JBPDS)</i>	75.545	41.976	43.555		43.555	41.252	52.776	73.164	71.894	Continuing	Continuing
• JC0101: <i>JS CHEM/BIO/RAD AGENT WATER MONITOR (JCBRAWM)</i>	6.000	3.184	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• JC0250: <i>JOINT BIO STANDOFF DETECTOR SYSTEM (JBSDS)</i>	4.000	0.000	0.000		0.000	0.273	19.840	20.834	35.728	Continuing	Continuing
• JC4500: <i>NEXT GENERATION CHEMICAL STANDOFF DETECTION (NGCSD)</i>	0.000	0.000	0.000		0.000	0.000	9.840	12.120	21.799	Continuing	Continuing
• JF0100: <i>JOINT CHEMICAL AGENT DETECTOR (JCAD)</i>	58.406	27.694	40.071		40.071	45.805	52.762	53.330	63.217	Continuing	Continuing
• JN0900: <i>NON TRADITIONAL AGENT DETECTION (NTAD)</i>	0.000	0.000	4.178		4.178	4.075	3.376	6.745	8.918	Continuing	Continuing

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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• MC0100: <i>JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)</i>	32.699	32.421	22.511		22.511	65.779	122.214	50.385	0.000	Continuing	Continuing
• MC0101: <i>CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)</i>	0.000	11.415	15.414		15.414	24.056	33.504	56.718	53.938	Continuing	Continuing
• MC0102: <i>JOINT CONTAMINATED SURFACE DETECTOR (JCSD)</i>	0.000	0.000	0.000		0.000	0.000	0.000	5.288	40.072	Continuing	Continuing
• MX0001: <i>JOINT BIO TACTICAL DETECTION SYSTEM (JBTDS)</i>	0.000	0.000	0.000		0.000	8.080	19.060	29.237	33.933	Continuing	Continuing

D. Acquisition Strategy

CBRN DRS

The Chemical Biological Radiological Nuclear Dismounted Reconnaissance Systems (CBRN DRS) program uses spiral development with an evolutionary component/suite upgrade acquisition approach. Funding finalizes the design to provide the Services with enhanced full spectrum CBRN detection capability to support strategic, operational, and tactical objectives at lower life cycle costs. CBRN DRS will enhance the Situational Awareness (SA) by providing a dismounted ability to detect chemical, biological and radiological hazards across the Range of Military Operations (ROMO) and employ contamination avoidance activities to prevent disruption to operations and organizations.

JBSDS

The Joint Bio Stand-off Detector System (JBSDS) is employing an incremental acquisition strategy. JBSDS Increment 1 is the first standoff early warning biological detection (BD) system for the Joint Services. The JBSDS Increment 2 system will focus on providing 24-hour operations (Increment 1 is night-time only), improving the false alarm rate and detection sensitivity, while decreasing size, weight and power. The JBSDS Increment 2 will also integrate with the global information network to provide near real time detection and warning theater-wide to limit the effect of biological agent hazards against U.S. forces at the tactical and operational levels of war. JBSDS Increment 3 will build on Increment 2 and focus on the development of a system that will operate on-the-move on mobile platforms as determined by the Warfighter.

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<p>JBTDS</p> <p>The Joint Biological Tactical Detection (JBTDS) program will pursue an evolutionary incremental approach to provide capability to the Warfighter. The JBTDS program will develop, integrate, test, procure and field systems that improve biological aerosol detection, identification, and sampling capabilities. The JBTDS program will also reduce size, weight, power consumption, and logistic footprint over current systems. Test Readiness Evaluations (TRE) and Competitive Prototyping will support the JBTDS Engineering and Manufacturing Development (EMD) phase by identifying mature technologies and reducing overall risk. Modeling and simulation tools will be used in order to lower program risks, reduce costs and ensure a higher confidence in selected technologies.</p> <p>JCAD</p> <p>The current strategy employs a product improvement of the M4 JCAD to reduce Life Cycle costs, transition to a competitive procurement contract, and attain objective capability. Three competitive fixed-price contracts for the M4E1 were awarded in Sep 2007 for prototypes and options for full rate production. Competitive prototype testing was conducted and one system was selected for continued development. The production options will be exercised in FY11 following a successful production cut-in decision.</p> <p>JSLSCAD</p> <p>The acquisition strategy for the Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD) production phase focused upon a dual path to procure required systems and concurrently develop and test system improvements to increase the military utility. The Milestone Decision Authority (MDA) approved procurement of additional JSLSCAD LRIP systems in February 2008. The Government awarded a Fixed Price Incentive contract to GD-ATP in July 2008 for production of systems to fulfill the Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Extended LRIP requirements and additional delivery orders will be exercised for full rate production of systems to fulfill the remaining NBCRV requirements. The JSLSCAD program office awarded multiple contracts to support system engineering, software development, test and evaluation, and system support efforts to increase standoff detection capabilities to rapidly respond to evolving system integration requirements with minimal contractual lead time. All these efforts are being integrated into the Next Generation Chemical Standoff Detection (NGCSD) program.</p> <p>MDAP SPRT</p> <p>Major Defense Acquisition Program (MDAP) Support program will integrate System of Systems (SoS) solutions across the Armed Service's for Major Defense Acquisition Programs (MDAP) having Chemical and Biological Radiological and Nuclear (CBRN) survivability requirements. The MDAP program will achieve these SoS solutions by: (1) leading CBRN architecture development and System Engineering efforts that result in enterprise concepts that address requirements; (2) establishing agreements with the MDAPs on roles and responsibilities with respect to funding deliverables and integration; (3) demonstrating modular, net-centric,</p>		

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<p>"plug and play" capabilities for mounted and dismounted CBRN reconnaissance requirements; (4) developing design and test schedules which synchronize support for CBRN capability integration with MDAPs' schedules; and (5) providing integrated program management across the CBRN commodity areas to deliver capabilities on time that support MDAP goals.</p> <p>NGCSD</p> <p>The Next Generation Chemical Standoff Detection (NGCSD) program, which was initiated under the JSLSCAD program, will award Indefinite Delivery/Indefinite Quantity contract(s) to support system engineering, software development, test and evaluation, and system support efforts to increase standoff detection capabilities. This contract type will allow the program office to rapidly respond to evolving system integration requirements and emerging test results with minimal contractual lead time. This will optimize the program goal of inserting the latest software and standoff detection technology into the host platforms in the shortest possible time.</p> <p><u>E. Performance Metrics</u> N/A</p>		

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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** CBRN DRS - HW C - CBRN DRS Preliminary Design	C/FP	TBD	0.000	0.000		1.386	Jan 2011	0.000		1.386	0.000	1.386	0.000
** JBSDS - HW SB - Technology Development and Preliminary Designs	C/FPI	TBD	0.000	9.701	Jan 2010	10.336	Oct 2010	0.000		10.336	0.000	20.037	0.000
** JBTDS - HW S - Competitive Prototype Contract	C/FFP	TBD	0.000	1.800	Jul 2010	1.500	Oct 2010	0.000		1.500	0.000	3.300	0.000
HW S - EMD Contract development and Source Selection Activities	C/CPIF	TBD	0.000	0.000		3.400	Apr 2011	0.000		3.400	0.000	3.400	0.000
HW S - Tech Development	C/FP	TBD	0.000	0.000		0.900	Jan 2011	0.000		0.900	0.000	0.900	0.000
HW S - Automated Sample Prep	SS/FFP	TBD	0.000	0.797	Jul 2010	0.000		0.000		0.000	0.000	0.797	0.000
** JCAD - SW SB - Initiate Sensor Prototype Development	C/CPFF	TBD	0.000	0.000		0.750	Jan 2011	0.000		0.750	0.000	0.750	0.000
** MDAP SPRT - HW S - Catalytic Oxidation (CatOx) Technology Demonstration	C/CPFF	Honeywell Corporation Phoenix, AZ	0.000	1.100	Jan 2010	0.900	Jan 2011	0.000		0.900	0.000	2.000	0.000
** NGCSD - HW SB - Initiate Sensor Prototype Development	C/CPFF	TBD	0.000	4.500	Apr 2010	6.015	Apr 2011	0.000		6.015	0.000	10.515	0.000

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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
SW SB - Pre-MS B Prototype Acquisition (3 each of 3 technologies)	C/CPFF	TBD	0.000	0.000		2.700	Jan 2011	0.000		2.700	0.000	2.700	0.000
Subtotal			0.000	17.898		27.887		0.000		27.887	0.000	45.785	0.000

Remarks

Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** JBSDS - ES S - INC 2 - Modeling & Simulation Test Support	C/CPFF	Bricks Sigal & Miller Inc., Kennett Square	0.000	0.400	Jan 2010	0.500	Jan 2011	0.000		0.500	0.000	0.900	0.000
ES S - INC 2 - Modeling & Simulation Test Support	C/CPFF	NAVSEA Johns Hopkins Applied Physics Lab, Baltimore	0.000	1.500	Jan 2010	1.436	Jan 2011	0.000		1.436	0.000	2.936	0.000
ES S - INC 2 - Modeling & Simulation Test Support #2	MIPR	Sandia National Lab Albuquerque, NM	0.000	0.500	Jan 2010	0.936	Jan 2011	0.000		0.936	0.000	1.436	0.000
ES S - INC 2 - Modeling, Simulation & Data Analysis	MIPR	Various	0.000	0.350	Oct 2009	0.000		0.000		0.000	0.000	0.350	0.000

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Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** JBTD S - ES S - Pre MS A Analysis & Activities	MIPR	Various	1.714	3.229	Jan 2010	0.000		0.000		0.000	0.000	4.943	0.000
ES S - EMD Activities & Analysis and Document Development	MIPR	Various	0.000	0.000		1.434	Jan 2011	0.000		1.434	0.000	1.434	0.000
ES S - Assay Development	MIPR	CRP Frederick, MD	0.000	0.000		2.500	Apr 2011	0.000		2.500	0.000	2.500	0.000
ES S - MS A Document Development	C/FFP	TBD	0.000	0.778	Jan 2010	0.000		0.000		0.000	0.000	0.778	0.000
** JCAD - TD/D SB - MS A	MIPR	TBD	0.000	0.000		0.500	Oct 2010	0.000		0.500	0.000	0.500	0.000
** MDAP SPRT - ES S - CBRN Capability Analysis	MIPR	Various	0.000	0.200	Jan 2010	0.500	Jan 2011	0.000		0.500	0.000	0.700	0.000
ES S - CBRN Material Solutions Analysis	MIPR	Various	0.000	0.216	Jan 2010	1.577	Jan 2011	0.000		1.577	0.000	1.793	0.000
** NGCSD - TD/D S - AoA	MIPR	TBD	0.000	0.500	Jan 2010	0.300	Jan 2011	0.000		0.300	0.000	0.800	0.000
Subtotal			1.714	7.673		9.683		0.000		9.683	0.000	19.070	0.000

Remarks

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Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** JBSDS - OTHT SB - INC 2 - Developmental Testing Support	MIPR	DPG Dugway, UT	0.000	1.100	Jan 2010	5.000	Jan 2011	0.000		5.000	0.000	6.100	0.000
OTHT SB - Networking algorithm development	MIPR	MA Institute of Technology - Lincoln Labs Boston, MA	0.000	0.000		0.500	Jan 2011	0.000		0.500	0.000	0.500	0.000
OTHT SB - Requirements Testing	MIPR	WSMR Nevada Test Site, NV	0.000	0.000		1.000	Jan 2011	0.000		1.000	0.000	1.000	0.000
OTHT SB - Agent performance analysis support	MIPR	DPG Dugway, UT	0.000	0.000		1.000	Jan 2011	0.000		1.000	0.000	1.000	0.000
OTHT SB - Agent performance analysis	MIPR	Johns Hopkins - Applied Physics Lab Baltimore, MD	0.000	0.000		2.000	Jan 2011	0.000		2.000	0.000	2.000	0.000
** JBTDS - OTHT SB - Competitive Prototype Testing	MIPR	DPG Dugway, UT	0.000	0.000		2.700	Oct 2010	0.000		2.700	0.000	2.700	0.000
DTE SB - Field Demonstration	MIPR	DPG Dugway, UT	0.000	1.106	Jan 2010	0.000		0.000		0.000	0.000	1.106	0.000
** JCAD - OTHT SB - Technology Demo	MIPR	Various	0.000	0.000		0.500	Apr 2011	0.000		0.500	0.000	0.500	0.000
** NGCSD - OTHT SB - Conduct TRE	MIPR	Various	0.000	1.333	Apr 2010	0.000		0.000		0.000	0.000	1.333	0.000

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Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
OTHT S - Conduct EOA	MIPR	Various	0.000	0.000		0.400	Jan 2011	0.000		0.400	0.000	0.400	0.000
DTE S - DT Planning and Execution	MIPR	Various	0.000	0.000		1.200	Jan 2011	0.000		1.200	0.000	1.200	0.000
Subtotal			0.000	3.539		14.300		0.000		14.300	0.000	17.839	0.000

Remarks

Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** CBRN DRS - PM/MS S - JPM CA	MIPR	JPM CA APG, MD	0.000	0.000		0.600	Oct 2010	0.000		0.600	0.000	0.600	0.000
** JBSDS - PM/MS S - JPM BD	MIPR	JPM BD APG, MD	0.000	1.600	Jan 2010	2.207	Jan 2011	0.000		2.207	0.000	3.807	0.000
PM/MS S - PM/MS Other Government Agencies	MIPR	USN USMC, USAF	0.000	1.632	Jan 2010	0.548	Jan 2011	0.000		0.548	0.000	2.180	0.000
PM/MS S - JPEO Management Support	Allot	JPEO Falls Church, VA	0.000	0.900	Jul 2010	2.688	Jul 2011	0.000		2.688	0.000	3.588	0.000
** JBTD S - PM/MS S - JPM BD, APG, MD	MIPR	JPM BD APG, MD	3.059	3.651	Jan 2010	3.698	Oct 2010	0.000		3.698	0.000	10.408	0.000

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Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** JCAD - PM/ MS SB - Program Management and Systems Engineering Support	MIPR	JPM NBC CA APG, MD	0.000	0.000		0.236	Oct 2010	0.000		0.236	0.000	0.236	0.000
** NGCSD - PM/ MS S - Program Management and Systems Engineering Support	MIPR	JPM NBC CA APG, MD	0.000	2.800	Oct 2009	1.500	Oct 2010	0.000		1.500	0.000	4.300	0.000
** ZSBIR - SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	MIPR	HQ AMC, Alexandria	0.000	0.493		0.000		0.000		0.000	0.000	0.493	0.000
Subtotal			3.059	11.076		11.477		0.000		11.477	0.000	25.612	0.000

Remarks

	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	4.773	40.186	63.347	0.000	63.347	0.000	108.306	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CA4: <i>CONTAMINATION AVOIDANCE (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
** CBRN DRS - Monitoring and Survey (MS) Material Development Decision											■																	
Monitoring and Survey (MS) Milestone B																												
** JBSDS - Increment 2 - Technology Modeling	■	■	■	■	■	■	■																					
Increment 2 - Pre-Milestone A	■	■	■	■	■	■	■																					
Increment 2 - Milestone A							■																					
Increment 2 - Technology Development							■	■	■	■	■	■	■	■	■													
Increment 2 - Preliminary Design Review																												
Increment 2 - Milestone B																												
Increment 2 - Engineering & Manufacturing Development																												
Increment 2 - Milestone C																												
Increment 2 - LRIP																												
** JBTDS - Materiel Development Decision				■																								
MS A Decision							■																					
Competitive Prototyping Contract Award																												
Competitive Prototyping Testing																												
Capability Development Document																												
PDR																												
MS B Decision																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CA4: <i>CONTAMINATION AVOIDANCE (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
EMD Contract Award											■																	
Developmental Testing											■	■	■	■	■	■	■	■	■									
CDR															■													
MS C Decision																			■									
MS C Contract Award																			■									
Production Verification Test																				■								
IOT&E																				■	■	■						
FRP Decision																					■							
FRP Contract Award																						■						
IOC																											■	
** JCAD - Future Generation Chemical Point Detection - Materiel Development Decision (MDD)											■																	
Future Generation Chemical Point Detection - MS A											■																	
Future Generation Chemical Point Detection - Prototype Development and Demo											■	■																
** JSLSCAD - SoS Technology Demo	■																											
SoS Program	■	■	■	■																								
SoS Operational Demo			■	■																								
** MDAP SPRT - Catox Tech Demonstration for Abrams Main Battle Tank					■	■	■	■	■	■	■	■	■															

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CA4: <i>CONTAMINATION AVOIDANCE (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
Advance Component Prototype Development of JSF Decontamination				■	■	■	■	■	■	■	■	■	■															
** NGCSD - Material Development Decision (MDD)						■																						
Analysis of Alternatives (AoA)							■	■																				
MS A										■																		
Competitive Prototyping										■	■	■	■															
Preliminary Design Review (PDR)																■												
MS B																■												

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CA4: <i>CONTAMINATION AVOIDANCE (ACD&P)</i>
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** CBRN DRS - Monitoring and Survey (MS) Material Development Decision	2	2011	2	2011
Monitoring and Survey (MS) Milestone B	4	2012	4	2012
** JBSDS - Increment 2 - Technology Modeling	4	2004	3	2010
Increment 2 - Pre-Milestone A	1	2008	3	2010
Increment 2 - Milestone A	3	2010	3	2010
Increment 2 - Technology Development	3	2010	3	2012
Increment 2 - Preliminary Design Review	2	2012	2	2012
Increment 2 - Milestone B	3	2012	3	2012
Increment 2 - Engineering & Manufacturing Development	3	2012	1	2015
Increment 2 - Milestone C	1	2015	1	2015
Increment 2 - LRIP	1	2015	2	2017
** JBTDS - Materiel Development Decision	4	2009	4	2009
MS A Decision	3	2010	3	2010
Competitive Prototyping Contract Award	4	2010	4	2010
Competitive Prototyping Testing	1	2011	2	2011
Capability Development Document	1	2011	1	2011
PDR	2	2011	2	2011
MS B Decision	3	2011	3	2011

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CA4: <i>CONTAMINATION AVOIDANCE (ACD&P)</i>
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Event	Start		End	
	Quarter	Year	Quarter	Year
EMD Contract Award	3	2011	3	2011
Developmental Testing	3	2011	3	2013
CDR	4	2012	4	2012
MS C Decision	3	2013	3	2013
MS C Contract Award	3	2013	3	2013
Production Verification Test	1	2014	1	2014
IOT&E	1	2014	3	2014
FRP Decision	3	2014	3	2014
FRP Contract Award	3	2014	3	2014
IOC	3	2015	3	2015
** JCAD - Future Generation Chemical Point Detection - Materiel Development Decision (MDD)	1	2011	1	2011
Future Generation Chemical Point Detection - MS A	1	2011	1	2011
Future Generation Chemical Point Detection - Prototype Development and Demo	2	2011	3	2011
** JSLSCAD - SoS Technology Demo	4	2008	1	2009
SoS Program	4	2008	4	2009
SoS Operational Demo	3	2009	4	2009
** MDAP SPRT - Catox Tech Demonstration for Abrams Main Battle Tank	1	2010	4	2011
Advance Component Prototype Development of JSF Decontamination	4	2009	1	2012
** NGCSD - Material Development Decision (MDD)	2	2010	2	2010
Analysis of Alternatives (AoA)	3	2010	4	2010

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CA4: <i>CONTAMINATION AVOIDANCE (ACD&P)</i>
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Event	Start		End	
	Quarter	Year	Quarter	Year
MS A	1	2011	1	2011
Competitive Prototyping	1	2011	4	2011
Preliminary Design Review (PDR)	4	2011	4	2011
MS B	1	2012	1	2012

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program									DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>				PROJECT CM4: <i>HOMELAND DEFENSE (ACD&P)</i>				
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost	
CM4: <i>HOMELAND DEFENSE (ACD&P)</i>	0.000	0.000	9.526	0.000	9.526	0.000	0.000	0.000	0.000	Continuing	Continuing	
Quantity of RDT&E Articles												
A. Mission Description and Budget Item Justification												
This project funds initial development of the Common Analytical Laboratory System (CALs) to include evaluation and selection of subsystems (analytical detection, laboratory information management, data fusion, engineering controls) as well as development of a set of modular designed configurations for system level prototyping utilizing open system architecture. In addition, it provides for validation and demonstration of desired functional capabilities.												
B. Accomplishments/Planned Program (\$ in Millions)												
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
1) CALS <i>FY 2011 Base Plans:</i> Continue program office planning and programming.						0.000	0.000	0.513	0.000	0.513		
2) CALS <i>FY 2011 Base Plans:</i> Continue system engineering and logistics support.						0.000	0.000	1.017	0.000	1.017		
3) CALS <i>FY 2011 Base Plans:</i> Complete subsystem design and development - open architecture design analytics and laboratory information management.						0.000	0.000	1.837	0.000	1.837		
4) CALS						0.000	0.000	5.511	0.000	5.511		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CM4: <i>HOMELAND DEFENSE (ACD&P)</i>
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B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> Develop system prototypes - alternative system configuration approaches.					
5) CALS <i>FY 2011 Base Plans:</i> Initiate system demonstration and validation.	0.000	0.000	0.648	0.000	0.648
Accomplishments/Planned Programs Subtotals	0.000	0.000	9.526	0.000	9.526

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• CM5: <i>HOMELAND DEFENSE (SDD)</i>	3.897	8.638	1.166		1.166	3.822	0.000	2.361	2.413	Continuing	Continuing
• JS0004: <i>WMD - CIVIL SUPPORT TEAMS (WMD CST)</i>	8.300	11.765	39.862		39.862	33.402	37.398	44.817	47.159	Continuing	Continuing
• JS0500: <i>CB INSTALLATION/ FORCE PROTECTION PROGRAM (FORCE PROT)</i>	80.103	53.623	50.773		50.773	60.324	59.836	57.840	54.455	Continuing	Continuing

D. Acquisition Strategy

CALS

The Common Analytical Laboratory System (CALs) will follow an incremental approach designed to address known joint force capability requirements for Chemical, Biological, Radiological and Nuclear (CBRN) detection which includes Toxic Industrial Chemicals (TICs), Toxic Industrial Materials (TIMs), Chemical Warfare Agents (CWAs), Biological Warfare Agents (BWAs). CALs will address situational awareness by leveraging efforts underway with JPEO-CBD to the extent possible. CALs will accommodate these component requirements within a modular and scalable concept framework.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CM4: <i>HOMELAND DEFENSE (ACD&P)</i>

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CM4: <i>HOMELAND DEFENSE (ACD&P)</i>
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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** CALS - HW SB - Analytical Subsystem Evaluation and Selection	C/CPIF	TBD	0.000	0.000		0.473	Jan 2011	0.000		0.473	0.000	0.473	0.000
SW SB - Information Technology Subsystem Evaluation and Selection	C/CPIF	TBD	0.000	0.000		0.480	Jan 2011	0.000		0.480	0.000	0.480	0.000
HW S - Analytical Protocol Development	MIPR	TBD	0.000	0.000		0.884	Jan 2011	0.000		0.884	0.000	0.884	0.000
HW S - CALS Prototype Systems	C/CPIF	TBD	0.000	0.000		5.511	Jan 2011	0.000		5.511	0.000	5.511	0.000
Subtotal			0.000	0.000		7.348		0.000		7.348	0.000	7.348	0.000

Remarks

Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** CALS - ES S - Engineering Support System - CALS	MIPR	TBD	0.000	0.000		0.513	Oct 2010	0.000		0.513	0.000	0.513	0.000
Subtotal			0.000	0.000		0.513		0.000		0.513	0.000	0.513	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CM4: <i>HOMELAND DEFENSE (ACD&P)</i>
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Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

Remarks

Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** CALS - OTHT S - CALS Prototype Demonstration and Validation	MIPR	TBD	0.000	0.000		0.648	Apr 2011	0.000		0.648	0.000	0.648	0.000
Subtotal			0.000	0.000		0.648		0.000		0.648	0.000	0.648	0.000

Remarks

Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** CALS - PM/MS S - Program Office	MIPR	TBD	0.000	0.000		1.017	Jan 2011	0.000		1.017	0.000	1.017	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CM4: <i>HOMELAND DEFENSE (ACD&P)</i>
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Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
- Planning and Programming													
Subtotal			0.000	0.000		1.017		0.000		1.017	0.000	1.017	0.000

Remarks

Project Cost Totals	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
		0.000	0.000	9.526	0.000	9.526	0.000	9.526

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CM4: <i>HOMELAND DEFENSE (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
** CALS - CALS Design, Development and Integration					■	■	■	■	■	■	■	■	■	■														
CALS System Demonstration														■														
CALS MDD					■																							
CALS Milestone A							■																					
CALS Milestone C														■														

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CM4: <i>HOMELAND DEFENSE (ACD&P)</i>
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** CALS - CALS Design, Development and Integration	1	2010	2	2012
CALS System Demonstration	2	2012	2	2012
CALS MDD	1	2010	1	2010
CALS Milestone A	3	2010	3	2010
CALS Milestone C	2	2012	2	2012

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CP4: <i>COUNTERPROLIFERATION SUPPORT (ACD&P)</i>
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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
CP4: <i>COUNTERPROLIFERATION SUPPORT (ACD&P)</i>	2.373	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project provides for the Joint Material Decontamination System (JMDS) as a Congressional Interest Item in FY09.

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

	FY 2009	FY 2010
Congressional Add: 1) JMDS <i>FY 2009 Accomplishments:</i> Congressional Interest Item - CATOX system. Developed, conducted testing, and integrated a CATOX system into a U.S. Army vehicle.	2.373	0.000
Congressional Adds Subtotals	2.373	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

JMDS

Joint Material Decontamination System (JMDS) - Congressional Interest Item.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CP4: <i>COUNTERPROLIFERATION SUPPORT (ACD&P)</i>

E. Performance Metrics

N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CP4: <i>COUNTERPROLIFERATION SUPPORT (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015							
	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				
** JMDS - Catalytic Oxidation Integrated Demonstration			■	■	■	■	■																									

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT CP4: <i>COUNTERPROLIFERATION SUPPORT (ACD&P)</i>
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** JMDS - Catalytic Oxidation Integrated Demonstration	3	2009	3	2010

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>				PROJECT DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>	4.822	1.792	7.051	0.000	7.051	5.748	1.386	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This ACD&P project supports the development of decontamination systems utilizing solutions that will remove and/or detoxify contaminated material without damaging combat equipment, personnel, or the environment. Decontamination systems provide a force restoration capability for units that become contaminated. Development efforts will provide systems that reduce operational impact and logistics burden, reduce sustainment costs, increase safety, and minimize environmental effects over currently fielded decontaminants.

This funding supports Human Remains Decontamination System (HRDS) and Joint Platform Interior Decontamination/Joint Service Sensitive Equipment Decontamination (JPID/JSSSED) Congressional Interest Item programs.

The HRDS, Increment I, will utilize mature technologies to provide the capability for safe intra-theater handling and storage of Contaminated Human Remains (CHR) associated with a Chemical Warfare Agent (CWA) event. HRDS will be a Family-of-Systems (FoS) designed to leverage differing technology and requirements readiness across three systems: (1) a Contaminated Human Remains Pouch (CHRP) to support the initial recovery of CHR from Point of Fatality to a Mortuary Affairs Decontamination Collection Point (MADCP); (2) a Contaminated Remains Transfer Case System (CHRTS) capability to store or transport CHR post MADCP operations; and (3) a Remains Decontamination System (RDS) to support the capability to store or transport CHR post MADCP operations. The HRDS will provide the Services the capability to: 1) Safely recover, handle, and transport contaminated human remains prior to decontamination at a MADCP; 2) Enable mortuary affairs units to safely perform their mission with a critical task being that of extensively documenting decedent data and obtaining DNA samples to facilitate positive identification of remains; 3) Fully decontaminate human remains (external), and; 4) Safely allow transport of decontaminated human remains from the MADCP to a final destination in the continental United States for final disposition.

The JPID/JSSSED will fill the capability gap to decontaminate chemical and biological warfare agents from vehicle/aircraft/building interiors, sensitive equipment within, and the associated cargo. This is a new capability that currently does not exist in the DoD. The program goal is to use multiple technologies to provide sensitive equipment and platform interiors decontamination capability.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>
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The Decontamination Family of Systems (DFoS) program facilitates the rapid transition of mature Science and Technology (S&T) research developments to existing JPM - Decon Program of Record (PoR) and guides S&T community efforts toward meeting the needs of the Warfighter. Leveraging the outcomes of the Analysis of Alternatives scheduled for FY10, DFoS will develop a FoS, to include equipment, to improve decontamination processes and decontaminant solutions to meet the capability gaps for decontaminating NTA and chemical and biological warfare agents from personnel, equipment, vehicle, ship, and aircraft interiors/exterior, terrain and fixed facility interiors/exterior.

Tactical, Cargo, and Rotary Wing Aircraft Decon (Congressional Interest Item): Develop the capability to decontaminate a broad range of military aircraft in the event of a chemical or biological attack.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
1) DFS <i>FY 2011 Base Plans:</i> Initiate development of non-traditional agent (NTA) efforts to include initial studies and modeling for decontamination assurance spray, chemical decontaminant, reactive skin decontamination lotion/oxime evaluation for NTA decontamination on equipment, effluent decontamination and strippable/sealant coatings.	0.000	0.000	7.051	0.000	7.051
2) HRDS <i>FY 2009 Accomplishments:</i> Developed and refined metrics to support Analysis of Alternatives. Began development of Technology Development Strategy (TDS), Test and Evaluation Strategy (TES) and Systems Engineering Plan (SEP).	1.658	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	1.658	0.000	7.051	0.000	7.051
	FY 2009	FY 2010			
Congressional Add: 1) JMDS	1.582	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>
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B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010
<i>FY 2009 Accomplishments:</i> Congressional Interest Item - Reactive Overlay and Removable Coatings.		
Congressional Add: 2) JPID <i>FY 2009 Accomplishments:</i> Congressional Interest Item - Environmentally Friendly Aircraft Decontamination System (EFADS). Developed a VHP/Hot Air Prototype Decon System to support the decontamination of Tactical and Cargo Aircraft.	1.582	0.000
Congressional Add: 3) JPID <i>FY 2010 Plans:</i> Congressional Interest Item - Tactical, Cargo, & Rotary Wing Aircraft Decontamination.	0.000	1.792
Congressional Adds Subtotals	3.164	1.792

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• DE5: <i>DECONTAMINATION SYSTEMS (SDD)</i>	16.611	36.786	28.499		28.499	23.944	25.770	14.701	5.928	Continuing	Continuing
• JD0055: <i>JOINT SERVICE PERSONNEL/SKIN DECON SYSTEM (JSPDS)</i>	8.280	4.466	0.000		0.000	0.000	0.000	8.645	9.105	Continuing	Continuing
• JD0056: <i>JS TRANS DECON SYSTEM - SMALL SCALE (JSTDS-SS)</i>	12.124	21.940	18.160		18.160	12.924	7.900	5.455	4.459	Continuing	Continuing
	0.000	0.000	0.000		0.000	4.097	14.064	18.977	25.604	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• JD0060: <i>JOINT PLATFORM INTERIOR DECON (JPID)</i>											
• JD0061: <i>JS SENSITIVE EQUIP DECON (JSSSED)</i>	0.000	0.000	0.000		0.000	14.648	0.000	0.000	0.000	Continuing	Continuing
• JD0062: <i>HUMAN REMAINS DECON SYSTEM (HRDS)</i>	0.000	0.000	3.410		3.410	3.064	2.936	0.992	0.000	Continuing	Continuing

D. Acquisition Strategy

DFS

DFoS will utilize an incremental acquisition strategy to transition various developmental technology efforts (COTS, JSTO, DTRA efforts, etc.) to fill current and future capability gaps. DFoS will support MDAPs and Programs of Record (POR) by guiding S&T efforts and transitioning mature technologies to meet program requirements. The DFoS acquisition will be managed as a Family-of-Systems (FoS), leveraging differing technologies in each subsystem to fulfill Warfighter capability gaps. A multi-phased Analysis of Alternatives (AoA) will be conducted to identify and evaluate the operational effectiveness of potential material solutions to satisfy Service requirements. As each AoA phase is completed, individual systems and their respective phases of entry will be identified. Industry will be solicited and through competitive prototyping, material solutions will be down-selected for continued development and fielding as a new joint force capability.

HRDS

The Human Remains Decontamination System (HRDS) acquisition will be managed as a Family-of-Systems (FoS), leveraging differing technologies in each subsystem to fulfill Warfighter capability gaps. A multi-phased Analysis of Alternatives (AoA) is being conducted for the HRDS FoS to identify and evaluate the operational effectiveness of potential material solutions to satisfy Service requirements. As each AoA phase is completed, individual systems and their respective phases of entry will be identified. Industry will be solicited and through competitive prototyping, material solutions will be down-selected for continued development and fielding as a new joint force capability.

JMDS

Joint Material Decontamination System (JMDS) - Congressional Interest Item.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>
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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** DFS - NTA Decon Assurance Spray	C/FFP	TBD	0.000	0.000		1.000	Jan 2011	0.000		1.000	0.000	1.000	0.000
NTA Chemical Decon	C/FFP	TBD	0.000	0.000		0.850	Jan 2011	0.000		0.850	0.000	0.850	0.000
RSDL/Oxime for NTA Decon on Equipment	C/FFP	TBD	0.000	0.000		1.000	Jan 2011	0.000		1.000	0.000	1.000	0.000
Effluent Decon for NTA Contaminated Run-off	C/FFP	TBD	0.000	0.000		0.859	Jan 2011	0.000		0.859	0.000	0.859	0.000
NTA Strippable / Sealant Coatings	C/FFP	TBD	0.000	0.000		0.950	Jan 2011	0.000		0.950	0.000	0.950	0.000
** JPID - Congressional Interest Item - Tactical, Cargo & Rotary Wing Aircraft Decontamination	SS/FFP	Steris Corp Mentor, Ohio	0.000	1.792	Jan 2010	0.000		0.000		0.000	0.000	1.792	0.000
Subtotal			0.000	1.792		4.659		0.000		4.659	0.000	6.451	0.000

Remarks
DFoS funding increased for NTAs in FY11.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>
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Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** DFS - IPT Technical Support	MIPR	RDECOM-Natick MA	0.000	0.000		0.400	Jan 2011	0.000		0.400	0.000	0.400	0.000
Subtotal			0.000	0.000		0.400		0.000		0.400	0.000	0.400	0.000

Remarks

Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** DFS - NTA Decon Assurance Spray	MIPR	TBD	0.000	0.000		0.420	Jan 2011	0.000		0.420	0.000	0.420	0.000
NTA Chemical Decon	MIPR	TBD	0.000	0.000		0.320	Jan 2011	0.000		0.320	0.000	0.320	0.000
RSDL/Oxime evaluation for NTA Decon on Equipment	MIPR	TBD	0.000	0.000		0.420	Jan 2011	0.000		0.420	0.000	0.420	0.000
Effluent Decon for NTA Contaminated Run-off	MIPR	TBD	0.000	0.000		0.300	Jan 2011	0.000		0.300	0.000	0.300	0.000
NTA Strippable / Sealant Coatings	MIPR	TBD	0.000	0.000		0.532	Jan 2011	0.000		0.532	0.000	0.532	0.000
Subtotal			0.000	0.000		1.992		0.000		1.992	0.000	1.992	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
** DFS - NTA Decon Assurance Spray									■	■	■	■	■	■	■	■	■											
NTA Chemical Decon									■	■	■	■	■	■	■	■	■	■	■	■								
RSDL/Oxime evaluation for NTA Decon on Equipment									■	■	■	■	■	■	■	■	■											
Effluent Decon for NTA Contaminated Run-off									■	■	■	■	■	■	■	■	■	■	■	■								
NTA Strippable / Sealant Coatings									■	■	■	■	■	■	■	■	■	■	■	■								
** HRDS - CHRT Market Survey	■																											
HRDS MDD				■																								
HRDS Document Preparation, technical support, and test planning						■	■	■	■	■																		
CHRP/CHRT Development Testing									■	■																		
CHRP/CHRT MS C											■	■																
CHRP/CHRT Fielding												■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
** JMDS - Catalytic Oxidation Integrated Demonstration			■	■	■	■																						
** JPID - Cong Interest Item - Environmentally Friendly Aircraft Decon System				■	■	■	■																					
Cong Interest Item - Tactical, Cargo & Rotary Wing Aircraft Decontamination						■	■	■	■	■	■	■																

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT DE4: <i>DECONTAMINATION SYSTEMS (ACD&P)</i>
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** DFS - NTA Decon Assurance Spray	2	2011	1	2013
NTA Chemical Decon	2	2011	4	2013
RSDL/Oxime evaluation for NTA Decon on Equipment	2	2011	1	2013
Effluent Decon for NTA Contaminated Run-off	2	2011	4	2013
NTA Strippable / Sealant Coatings	2	2011	4	2013
** HRDS - CHRT Market Survey	1	2009	1	2009
HRDS MDD	4	2009	4	2009
HRDS Document Preparation, technical support, and test planning	2	2010	2	2011
CHRP/CHRT Development Testing	1	2011	2	2011
CHRP/CHRT MS C	3	2011	4	2011
CHRP/CHRT Fielding	4	2011	2	2014
** JMDS - Catalytic Oxidation Integrated Demonstration	3	2009	3	2010
** JPID - Cong Interest Item - Environmentally Friendly Aircraft Decon System	4	2009	4	2010
Cong Interest Item - Tactical, Cargo & Rotary Wing Aircraft Decontamination	2	2010	4	2011

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IP4: <i>INDIVIDUAL PROTECTION (ACD&P)</i>
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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
IP4: <i>INDIVIDUAL PROTECTION (ACD&P)</i>	0.000	0.000	3.172	0.000	3.172	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project funds ACD&P of a Lightweight Chemical Biological Ensemble (LCBE) aimed at improving current protection levels while reducing physiological and logistical burdens. The goal is to provide equipment that allows the individual soldier, sailor, airman, or marine to operate in a contaminated chemical and biological (CB) environment with no or minimal degradation to his/her performance.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
1) LCBE <i>FY 2011 Base Plans:</i> Prepare Request for Information (RFI)/Request for Proposal (RFP); initiate developmental testing (DT) efforts for LCBE Increment 1. Acquire prototypes and perform physical testing and chemical agent testing. Initiates development to reduce thermal burden/bulk/weight over existing CB ensemble, increase cooling/venting potential, improve operational capabilities.	0.000	0.000	3.172	0.000	3.172
Accomplishments/Planned Programs Subtotals	0.000	0.000	3.172	0.000	3.172

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• IP5: <i>INDIVIDUAL PROTECTION (SDD)</i>	18.363	21.094	9.678		9.678	4.833	3.044	0.756	0.563	Continuing	Continuing
	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IP4: <i>INDIVIDUAL PROTECTION (ACD&P)</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• JSM001: <i>JOINT SERVICE MASK LEAKAGE TESTER (JSMLTS)</i>											
• MA0400: <i>PROTECTIVE CLOTHING (JSLIST)</i>	37.484	20.393	17.887		17.887	18.208	9.429	6.943	6.944	Continuing	Continuing

D. Acquisition Strategy

LCBE

The Lightweight Chemical Biological Ensemble (LCBE) program will pursue an evolutionary incremental approach to provide capability to the Warfighter. Each increment of LCBE will provide technologies with military utility that are modular in function, and offer improvement in form and fit over current systems. The LCBE program will develop, integrate, test, procure and field systems that increase Warfighter operational performance in a CBRN environment via the use of emerging technologies and by leveraging tradespace in areas such as protection level, heat stress, durability, antimicrobial properties, launderability, self-detoxification, protection time, etc. Where appropriate, modeling and simulation tools will be used to lower LCBE program risks, reduce costs and ensure a high confidence in selected technologies.

LCBE INCREMENT 1

The LCBE will use an evolutionary acquisition strategy with phased development. The first LCBE increment will provide an operationally useful and supportable capability in as short a time as possible. Accordingly, Increment 1 of LCBE will incorporate an accelerated development cycle leveraging existing COTS technologies that will, at a minimum, provide a lightweight CB protective garment capability. Gate testing and down-selection of prototypes will comprise the initial phases of the Government's testing program. A competitively awarded contract is planned for DT and Operational Assessment (OA) will occur prior to MS C. Appropriate system requirements reviews, test readiness reviews, producibility reviews and audits will be scheduled as required prior to each milestone.

Future increments of LCBE shall be defined via separate Capability Development Document (CDDs)/Capability Production Document (CPDs) and will follow a similar path/process from MS A or MS B through MS C/FRP and will leverage preceding efforts to the greatest extent possible, maintaining commonality and synergy across all increments.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

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Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** LCBE - ES S - Engineering IPT	MIPR	Various	0.000	0.000		0.600	Jan 2011	0.000		0.600	0.000	0.600	0.000
ES S - Tech Demos	MIPR	Various	0.000	0.000		1.993	Apr 2011	0.000		1.993	0.000	1.993	0.000
Subtotal			0.000	0.000		2.593		0.000		2.593	0.000	2.593	0.000

Remarks

Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** LCBE - PM/MS S - JPM IP Program Management	MIPR	Various	0.000	0.000		0.579	Jan 2011	0.000		0.579	0.000	0.579	0.000
Subtotal			0.000	0.000		0.579		0.000		0.579	0.000	0.579	0.000

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		0.000	0.000		3.172		0.000	3.172	0.000	3.172	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

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	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
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Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IP4: <i>INDIVIDUAL PROTECTION (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
** LCBE - LCBE Start DT											■	■	■															
LCBE Tech Demo									■	■	■	■	■															

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IP4: <i>INDIVIDUAL PROTECTION (ACD&P)</i>
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** LCBE - LCBE Start DT	3	2011	1	2012
LCBE Tech Demo	4	2010	1	2012

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>
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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>	0.000	0.000	11.221	0.000	11.221	3.404	4.565	4.676	4.741	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This Advanced Component Development and Prototypes (ACD&P) funding supports the Joint Effects Model (JEM) Program.

The JEM is DoD's only accredited model for predicting hazards associated with the release of contaminants into the environment. JEM is being developed in separate increments and is capable of modeling hazards in a variety of scenarios including: counterforce, passive defense, accident and/or incidents (Increment 1); high altitude releases, urban NBC environments (Increment 2); building interiors, and human performance degradation (Increment 3). Battle space commanders and first responders must have a CBRN hazard prediction capability in order to make decisions that will minimize risks of CBRN contamination and enable them to continue mission operations. JEM operates in an integrated fashion with operational and tactical Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems, and in a standalone mode. JEM will interface and communicate with the other programs such as JWARN, JOEF, weather systems, intelligence systems, and various databases.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
1) JEM Analysis of Alternatives Support <i>FY 2011 Base Plans:</i> Provide Chemical, Biological, Radiological and Nuclear subject matter experts to support the Analysis of Technical Alternatives (ATA).	0.000	0.000	0.689	0.000	0.689
2) JEM	0.000	0.000	0.643	0.000	0.643

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Analysis of Technical Alternatives (ATA) Evaluation <i>FY 2011 Base Plans:</i> Evaluate and assess results of ATA including a Technology Readiness Assessment of the candidate technologies. Analyze the impact of implementing the emerging technologies in the JEM architecture.						
3) JEM Prototyping <i>FY 2011 Base Plans:</i> Conduct competitive prototyping contracting efforts for JEM Increment 2.		0.000	0.000	4.863	0.000	4.863
4) JEM Increment 2 User Assessments and Demonstrations <i>FY 2011 Base Plans:</i> Prepare for and conduct JEM Increment 2 User Assessments and Demonstrations to validate requirements and system performance, and to evaluate critical science and technology within software prototype(s).		0.000	0.000	1.326	0.000	1.326
5) JEM <i>FY 2011 Base Plans:</i> Conduct government developmental testing and analysis, to include Technology Readiness Assessment of software submitted for evaluation during competitive prototyping.		0.000	0.000	0.961	0.000	0.961
6) JEM Administrative Preparation for Development Contract		0.000	0.000	0.396	0.000	0.396

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>
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B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> Initiate pre-MS B contractual efforts: develop proposal package, release draft Request for Proposal (RFP), prepare final EMD request for proposal, release RFP, conduct source selection training, conduct source selection and complete proposal evaluations.					
7) JEM Management Support <i>FY 2011 Base Plans:</i> Provide strategic, tactical planning, program/financial management, costing, contracting, scheduling, acquisition oversight, and milestone documentation.	0.000	0.000	1.349	0.000	1.349
8) JEM Technical Support <i>FY 2011 Base Plans:</i> Provide engineering and technical support to Increment 2 development. Provide system independent verification and validation.	0.000	0.000	0.994	0.000	0.994
Accomplishments/Planned Programs Subtotals	0.000	0.000	11.221	0.000	11.221

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• G47101: <i>JOINT WARNING & REPORTING NETWORK (JWARN)</i>	4.375	6.551	6.903		6.903	8.078	5.590	8.183	8.423	Continuing	Continuing
	45.694	27.301	13.844		13.844	24.984	24.872	25.345	25.775	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• IS5: <i>INFORMATION SYSTEMS (SDD)</i>					0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• IS6: <i>INFORMATION SYSTEMS (RDT&E MGT SUPPORT)</i>	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>	0.897	1.302	1.821		1.821	1.669	1.518	1.555	1.577	Continuing	Continuing
• JC0208: <i>JOINT EFFECTS MODEL (JEM)</i>	5.546	3.482	3.482		3.482	0.000	0.000	3.369	3.568	Continuing	Continuing
• JC0209: <i>JOINT OPERATIONAL EFFECTS FEDERATION (JOEF)</i>	0.000	0.000	0.000		0.000	0.000	2.482	2.480	3.716	Continuing	Continuing

D. Acquisition Strategy

JEM

The Joint Effects Model (JEM) is following an evolutionary acquisition approach that will allow rapid fielding of existing technologies while further research and development (R&D) continues in order to mature the technologies required for subsequent versions of JEM. It is now being fielded in increments of capabilities. Each increment will retain the functionality of the preceding increment. The JEM development effort will be aligned with the evolving JPEO-CBD architectures and technologies, as well as with Service C2 systems. JEM is expected to develop three distinct increments of software. JEM will define and publish its web-services interface; the JEM interface will be the same on all systems, utilizing data definitions from the approved CBRN data model as appropriate. A cost plus award fee contract was awarded for the follow-on JEM contract for integration and development.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>
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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** JEM - SW SB - JEM	MIPR	San Diego CA	0.000	0.000		7.521	Jan 2011	0.000		7.521	0.000	7.521	0.000
Subtotal			0.000	0.000		7.521		0.000		7.521	0.000	7.521	0.000

Remarks

Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** JEM - ES S - JEM System	MIPR	Various	0.000	0.000		0.994	Jan 2011	0.000		0.994	0.000	0.994	0.000
Subtotal			0.000	0.000		0.994		0.000		0.994	0.000	0.994	0.000

Remarks

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>
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Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** JEM - DTE S - JEM	MIPR	Various	0.000	0.000		0.961	Jan 2011	0.000		0.961	0.000	0.961	0.000
Subtotal			0.000	0.000		0.961		0.000		0.961	0.000	0.961	0.000

Remarks

Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** JEM - PM/MS S - JEM	MIPR	Various	0.000	0.000		1.745	Jan 2011	0.000		1.745	0.000	1.745	0.000
Subtotal			0.000	0.000		1.745		0.000		1.745	0.000	1.745	0.000

Remarks

Project Cost Totals	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
		Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Project Cost Totals	0.000	0.000		11.221		0.000		11.221	0.000	11.221	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
** JEM - Increment 1 - Pre-planned Product Improvement (P3I)	■	■	■	■	■	■	■	■	■	■	■																	
Increment 1 - Production and Deployment	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■												
Increment 1 - Developmental Maintenance	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■												
Increment 1 - Follow-on Test and Evaluation				■	■	■																						
Increment 2 - Material Development Decision (MDD)					■																							
Increment 2 - Technology Development	■	■	■	■	■	■	■	■	■	■																		
Increment 2 - Analysis of Alternatives					■	■	■	■	■																			
Increment 2 - DT (Cont)							■	■	■	■	■	■	■	■	■	■	■	■										
Increment 2 - DT (Gov't)							■	■	■	■	■	■	■	■	■	■	■	■	■	■								
Increment 2 - User Assessments									■	■	■	■																
Increment 2 - Milestone A (MS A)									■																			
Increment 2 - Prototype Development/Testing									■	■	■	■																
Increment 2 - Capability Development Document (CDD)									■	■	■																	
Increment 2 - Engineering and Manufacturing Development									■	■	■	■	■	■														
Increment 2 - Milestone B (MS B)													■															
Increment 2 - Capability Production Document (CPD)														■	■	■												
Increment 2 - Operational Assessment (OA)																■												

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015							
	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				
Increment 2 - Milestone C (MS C)																																
Increment 2 - Multi-Service Operational Test and Evaluation (MOT&E)/LOG Demo																																
Increment 2 - Standalone Full Rate Production (FRP)																																

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** JEM - Increment 1 - Pre-planned Product Improvement (P3I)	3	2008	3	2011
Increment 1 - Production and Deployment	4	2007	4	2012
Increment 1 - Developmental Maintenance	3	2008	4	2012
Increment 1 - Follow-on Test and Evaluation	4	2009	2	2010
Increment 2 - Material Development Decision (MDD)	1	2010	1	2010
Increment 2 - Technology Development	3	2008	2	2011
Increment 2 - Analysis of Alternatives	1	2010	1	2011
Increment 2 - DT (Cont)	3	2010	2	2013
Increment 2 - DT (Gov't)	3	2010	3	2013
Increment 2 - User Assessments	4	2010	3	2011
Increment 2 - Milestone A (MS A)	1	2011	1	2011
Increment 2 - Prototype Development/Testing	1	2011	4	2011
Increment 2 - Capability Development Document (CDD)	1	2011	3	2011
Increment 2 - Engineering and Manufacturing Development	1	2011	2	2012
Increment 2 - Milestone B (MS B)	2	2012	2	2012
Increment 2 - Capability Production Document (CPD)	2	2012	4	2012
Increment 2 - Operational Assessment (OA)	4	2012	4	2012
Increment 2 - Milestone C (MS C)	2	2013	2	2013

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT IS4: <i>INFORMATION SYSTEMS (ACD&P)</i>
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Event	Start		End	
	Quarter	Year	Quarter	Year
Increment 2 - Multi-Service Operational Test and Evaluation (MOT&E)/LOG Demo	4	2013	4	2013
Increment 2 - Standalone Full Rate Production (FRP)	2	2014	2	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>				PROJECT MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&P)</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&P)</i>	7.910	102.437	136.975	0.000	136.975	130.718	131.347	115.985	113.566	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Joint Vaccine Acquisition Program (JVAP) under Chemical Biological Medical Systems (CBMS) funds the technology development phase for vaccines that are directed against validated biological warfare (BW) weapons to include bacteria, viruses, and toxins of biological origin. Effective medical countermeasures to negate the threat of these BW agents are urgently needed. Vaccines have been identified as the most efficient countermeasure against the validated threat of BW weapons. Efforts for medical biological defense product development involve manufacturing process development, formulation development, non-clinical studies, pilot lot manufacturing, Investigational New Drug (IND) application submission and Phase 1 clinical human safety studies. Vaccine effectiveness, will be evaluated in animals to satisfy the requirements of the FDA's "Animal Rule". Products under development in this budget item include Filovirus vaccine.

The Transformational Medical Technologies Initiative (TMTI) was launched to respond to the threat of emerging or intentionally bioengineered biological threats. TMTI's mission is to protect the Warfighter from genetically engineered biological threats by providing a rapid response capability from identification of pathogens to the delivery of medical countermeasures. This mission is accomplished by developing broad spectrum (multi-agent) therapeutics against biological warfare (BW) agents (e.g. one drug that treats multiple agents). The development of broad spectrum therapeutics involves developing a capability to treat exposure to hemorrhagic fever viruses (HFVs) (e.g. Ebola virus) and intracellular bacterial pathogens (ICBs) (e.g. Tularemia). Efforts are further classified as host-directed therapeutics (e.g. drugs that target common pathways within a human to prevent or treat a variety of diseases) or pathogen-directed therapeutics (e.g. drugs that attack a common pathway found in multiple threat agents). Attrition is high throughout the drug development process. Less than 10% of all preclinical compounds become a licensed drug. Causes for attrition include scientific failures, Food and Drug Administration (FDA) rejection at major milestone reviews, and loss through down-selection at DoD Milestone Decision points. The development of medical countermeasures is an arduous process that requires extensive interaction with the FDA, from pre-clinical research to safety tests in human subjects (Phase 1 clinical studies), efficacy tests in humans/animals (Phase 2 clinical studies or pivotal animal efficacy studies), and expanded safety or efficacy studies (Phase 3 clinical studies), which culminate with a request to the FDA to license, market, and produce a drug. This interaction between the Department of Defense (DoD) and the FDA results in a coordinated, unified, and safe effort.

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

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program				DATE: February 2010		
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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2010 Plans:</i> Prepare supporting acquisition documentation, conduct Milestone A, and enter into Advanced Component Development and Prototypes.						
4) JVAP - Filovirus Vaccine <i>FY 2010 Plans:</i> Prepare solicitation documentation and conduct pre-solicitation conference. <i>FY 2011 Base Plans:</i> Release solicitation documentation and conduct source selection to award contract.		0.000	0.200	0.100	0.000	0.100
5) JVAP - Filovirus Vaccine <i>FY 2010 Plans:</i> Initiate non-clinical studies through Interagency Agreements. Initiate procedures for safeguarding biological select agents and toxins. <i>FY 2011 Base Plans:</i> Continue non-clinical studies through Interagency Agreements. Continue procedures for safeguarding biological select agents and toxins.		0.000	10.569	9.108	0.000	9.108
6) JVAP - Filovirus Vaccine <i>FY 2011 Base Plans:</i> Initiate small-scale manufacturing process development.		0.000	0.000	7.410	0.000	7.410
7) SBIR <i>FY 2010 Plans:</i> Small Business Innovative Research.		0.000	1.264	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&P)</i>				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals		0.000	100.844	136.975	0.000	136.975
		FY 2009	FY 2010			
Congressional Add: 1) Vacuum Sampling Pathogen Collection and Concentration <i>FY 2009 Accomplishments:</i> Congressional Interest Item - Vacuum Sampling Pathogen Collection and Concentration. Continued development of the M-Vac System, a field pathogen collection system, along with the Bacteria Reduction System (BRS) to enhance the current capability to find, extract and elute potentially deadly pathogens from unique surfaces. A tube sampler was developed, which enable customers and inspectors to reach and sample inaccessible surfaces and areas. An effort began to miniaturize the sampling platform in order to meet DoD requirements.		3.164	0.000			
Congressional Add: 2) Broad Spectrum Therapeutic Countermeasure <i>FY 2010 Plans:</i> Congressional Interest Item - Broad Spectrum Therapeutic Countermeasure to Organophosphorus Nerve Agents. Initiate development of a broad-spectrum therapeutic capable of protecting both the central and peripheral nervous systems from injury by nerve agents and reducing reliance on pretreatments.		0.000	1.593			
Congressional Add: 3) CRP <i>FY 2009 Accomplishments:</i> Congressional Interest Item - Biological Threat Antibody Research.		1.582	0.000			
		0.791	0.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

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

	FY 2009	FY 2010
Congressional Add: 4) TT Bio <i>FY 2009 Accomplishments:</i> Congressional Interest Item - IM Formulation Development of Anthrax Therapeutic.		
Congressional Add: 5) TT Bio <i>FY 2009 Accomplishments:</i> Congressional Interest Item - Recombinant Bche Formulation Program.	1.582	0.000
Congressional Add: 6) TT Bio <i>FY 2009 Accomplishments:</i> Congressional Interest Item - Large scale single-use bio reactor for rapid response to bioterrorism.	0.791	0.000
Congressional Adds Subtotals		
	7.910	1.593

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• JM0001: <i>JOINT BIO AGENT IDENT AND DIAG SYSTEM (JBAIDS)</i>	0.479	0.000	5.571		5.571	0.000	0.000	0.000	0.000	Continuing	Continuing
• JX0005: <i>DOD BIOLOGICAL VACCINE PROCUREMENT</i>	38.109	12.701	12.824		12.824	3.385	3.466	56.416	98.759	Continuing	Continuing
• JX0210: <i>CRITICAL REAGENTS PROGRAM (CRP)</i>	0.000	0.000	0.994		0.994	0.993	0.993	0.992	0.000	Continuing	Continuing
• MB5: <i>MEDICAL BIOLOGICAL DEFENSE (SDD)</i>	87.676	57.558	141.680		141.680	161.732	159.144	141.481	111.671	Continuing	Continuing
	180.425	203.723	115.233		115.233	125.666	109.737	115.049	117.289	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program	DATE: February 2010
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&P)</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• TB3: <i>MEDICAL BIOLOGICAL DEFENSE (ATD)</i>											

D. Acquisition Strategy

CRP

The Critical Reagents Program's (CRP) strategy establishes a core research and development capability to develop biological threat agent, genomic reference materials (antigens, nucleic acids, and antibodies) and detection and diagnostic assays for biothreat agent detection that shall be horizontally inserted across multiple detection and diagnostic platforms. In addition, this strategy will implement a formal, validated advanced development process to transition new assays into production and integration with the appropriate detection/diagnostic platform.

TMTI

Transformational Medical Technology Initiative's (TMTI) ultimate goal is the delivery of FDA-licensed, therapeutics to the Warfighter. This goal can be reached through any one of the following three acquisition approaches: 1) through the discovery of new drugs; 2) through application of new drug indications (i.e., through a commercial off-the-shelf (COTS) approach); or, 3) through the re-engineering of previously developed drugs (i.e., through a Modified COTS approach). This may involve FDA-approved drugs or previously developed drug compounds that do not have an FDA license. Each of these approaches will require different entry points into both the drug development process and the defense acquisition management timeline. Moreover, each of these approaches will likely experience a different set of FDA regulatory requirements. In order to execute the overall acquisition strategy, TMTI has partnered with other elements within the DoD Chemical and Biological Defense Program, DoD agencies, private industry, and other DoD laboratories for the development of TMTI products. The contract types used to execute the program will depend on the circumstances, including maturity of the science, the legalities surrounding Intellectual Property (IP) and patent rights, and even the size of the performer. Cost Plus Fixed Fee and Cost Plus Incentive Fee contracts will be used with traditional or nontraditional defense contractors for most advanced development contracts. Finally, developing platform technologies, such as modeling and simulation to predict drug-to-drug interaction effects prior to actual clinical trials, and the use of genetic sequencing and a bioinformatics backbone, are examples of how TMTI managers intend to augment private industry best practices to streamline the program management, test and evaluation, and overall TMTI product development.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&P)</i>

Contract will be competed at Milestone A. Developer(s) and candidate(s) will be selected based on existing test data, technical approach and business case considerations. Because of inherent risk in development of vaccines for viral hemorrhagic fevers, funding requested will support development of two vaccine candidates through Milestone B, at which time, a down-select to a single candidate will be conducted. If technologically feasible, a combined Ebola/Marburg vaccine will be developed. In addition to efforts conducted under a contract, portions of the non-clinical work will be conducted under an Interagency Agreement with the US Army Medical Research Institute of Infectious Diseases (USAMRIID), because of the limited number of Biological Safety Level (BSL) 4 facilities.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&P)</i>
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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** TMTI - SW SB - Therapeutic validation Contract #1	C/CPIF	TBD	0.000	5.257	Apr 2010	5.765	Apr 2011	0.000		5.765	0.000	11.022	0.000
SW SB - Therapeutic validation Contract #2	C/CPIF	TBD	0.000	5.256	Apr 2010	5.764	Apr 2011	0.000		5.764	0.000	11.020	0.000
SW SB - Therapeutic validation Contract #3	C/CPIF	TBD	0.000	5.257	Apr 2010	5.764	Apr 2011	0.000		5.764	0.000	11.021	0.000
SW SB - Therapeutic validation Contract #4	C/CPIF	TBD	0.000	5.256	Apr 2010	5.765	Apr 2011	0.000		5.765	0.000	11.021	0.000
SW SB - Therapeutic validation Contract #5	C/CPIF	TBD	0.000	5.256	Apr 2010	5.764	Apr 2011	0.000		5.764	0.000	11.020	0.000
SW SB - Therapeutic validation Contract #6	C/CPIF	TBD	0.000	5.256	Apr 2010	5.765	Apr 2011	0.000		5.765	0.000	11.021	0.000
SW S - Technology Contract	C/CPIF	TBD	0.000	0.000		7.635	Oct 2010	0.000		7.635	0.000	7.635	0.000
** VAC FILO - Manufacturing, Validation, Pilot Lot, and Consistency Lot Production	C/CPIF	TBD	0.000	0.000		4.398	Jan 2011	0.000		4.398	0.000	4.398	0.000
Non Clinical Studies	MIPR	USAMRIID Fort Detrick, MD	0.000	10.569	Apr 2010	3.250	Jan 2011	0.000		3.250	0.000	13.819	0.000
Subtotal			0.000	42.107		49.870		0.000		49.870	0.000	91.977	0.000

Remarks

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&P)</i>
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Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** TMTI - TD/D SB - Regulatory Integration, Quality Assurance, & FDA Support Efforts - Contract #1	C/CPIF	TBD	0.000	3.754	Apr 2010	4.117	Apr 2011	0.000		4.117	0.000	7.871	0.000
TD/D SB - Regulatory Integration, Quality Assurance, & FDA Support Efforts - Contract #2	C/CPIF	TBD	0.000	3.755	Apr 2010	4.118	Apr 2011	0.000		4.118	0.000	7.873	0.000
ES C - Regulatory Integration, Quality Assurance, & FDA Support Efforts - Contract #3	C/CPIF	TBD	0.000	3.754	Apr 2010	4.117	Apr 2011	0.000		4.117	0.000	7.871	0.000
ES C - Regulatory Integration, Quality Assurance, & FDA Support Efforts - Contract #4	C/CPIF	TBD	0.000	3.755	Apr 2010	4.118	Apr 2011	0.000		4.118	0.000	7.873	0.000
ES C - Regulatory Integration, Quality Assurance, & FDA Support Efforts - Contract #5	C/CPIF	TBD	0.000	3.755	Apr 2010	4.117	Apr 2011	0.000		4.117	0.000	7.872	0.000
ES C - Regulatory Integration, Quality Assurance, & FDA	C/CPIF	TBD	0.000	3.754	Apr 2010	4.117	Apr 2011	0.000		4.117	0.000	7.871	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&P)</i>
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Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Support Efforts - Contract #6													
TD/D C - Technologies	C/CPIF	TBD	0.000	0.000		5.453	Oct 2010	0.000		5.453	0.000	5.453	0.000
** VAC FILO - Regulatory Integration (Environmental and FDA Documentation) and Delivery System	C/CPIF	TBD	0.000	0.000		2.288	Jan 2011	0.000		2.288	0.000	2.288	0.000
Subtotal			0.000	22.527		32.445		0.000		32.445	0.000	54.972	0.000

Remarks

Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** CONG - Congressional Interest Item - Broad Spectrum Therapeutic	SS/FFP	TBD	0.000	1.513	Apr 2010	0.000		0.000		0.000	0.000	1.513	0.000
** TMTI - DTE C - Phase I trials - Contract #1	C/CPIF	TBD	0.000	6.007	Apr 2010	4.588	Apr 2011	0.000		4.588	0.000	10.595	0.000
	C/CPIF	TBD	0.000	6.007	Apr 2010	4.588	Apr 2011	0.000		4.588	0.000	10.595	0.000

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Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
DTE C - Phase I trials - Contract #2													
DTE C - Phase I trials - Contract #3	C/CPIF	TBD	0.000	6.007	Apr 2010	4.588	Apr 2011	0.000		4.588	0.000	10.595	0.000
DTE C - Phase I trials - Contract #4	C/CPIF	TBD	0.000	6.007	Apr 2010	4.588	Apr 2011	0.000		4.588	0.000	10.595	0.000
DTE C - Phase I trials - Contract #5	C/CPIF	TBD	0.000	6.009	Apr 2010	4.588	Apr 2011	0.000		4.588	0.000	10.597	0.000
DTE C - Phase I trials - Contract #6	C/CPIF	TBD	0.000	4.509	Apr 2010	4.588	Apr 2011	0.000		4.588	0.000	9.097	0.000
OTHT C - Technologies	C/CPIF	TBD	0.000	0.000		8.450	Apr 2011	0.000		8.450	0.000	8.450	0.000
DTE C - Phase I trials - IBP Contract #1	C/CPIF	TBD	0.000	0.000		3.000	Apr 2011	0.000		3.000	0.000	3.000	0.000
DTE C - Phase I trials - IBP Contract #2	C/CPIF	TBD	0.000	0.000		3.000	Apr 2011	0.000		3.000	0.000	3.000	0.000
DTE C - Phase I trials - IBP Contract #3	C/CPIF	TBD	0.000	0.000		3.000	Apr 2011	0.000		3.000	0.000	3.000	0.000
DTE C - Phase I trials - IBP Contract #4	C/CPIF	TBD	0.000	0.000		3.000	Apr 2011	0.000		3.000	0.000	3.000	0.000
** VAC FILO - Testing, Evaluation, and Clinical Trials	C/CPIF	TBD	0.000	0.000		4.958	Jan 2011	0.000		4.958	0.000	4.958	0.000
Subtotal			0.000	36.059		52.936		0.000		52.936	0.000	88.995	0.000

Remarks

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

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Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** CONG - Congressional Interest Item - Broad Spectrum Therapeutic	Allot	TBD	0.000	0.080	Apr 2010	0.000		0.000		0.000	0.000	0.080	0.000
** VAC FILO - PM/MS S - Program Management/ Program Manager Support	Allot	CBMS Frederick, MD	0.000	0.200	Jul 2010	1.035	Jul 2011	0.000		1.035	0.000	1.235	0.000
PM/MS S - Contractor Systems Engineering/ Program Management Support	SS/FFP	Goldbelt Raven LLC, Frederick	0.000	0.200	Apr 2010	0.689	Apr 2011	0.000		0.689	0.000	0.889	0.000
** ZSBIR - SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	MIPR	HQ AMC, Alexandria	0.000	1.264		0.000		0.000		0.000	0.000	1.264	0.000
Subtotal			0.000	1.744		1.724		0.000		1.724	0.000	3.468	0.000

Remarks

	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	102.437	136.975	0.000	136.975	0.000	239.412	0.000

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
** CONG - Tactical, Cargo & Rotary Wing Aircraft Decon							■	■	■	■	■	■	■	■	■	■												
** TMTI - Milestone A Decision (Hemorrhagic Fever Virus MCM)			■																									
Contract #1-6 (HFV) Phase I trials							■	■	■	■	■	■																
Milestone A Decision (Intracellular Bacteria Pathogen MCM)								■																				
Contract 1-4 (IBP) Phase I Trials											■	■	■	■	■	■												
Milestone B Decision (Hemorrhagic Fever Viruses)											■																	
** TT Bio - Large Scale Single Use Bio Reactor for Rapid Response to Bioterrorism			■	■																								
Biological Threat Antibody Research			■	■																								
Recombinant Bche Formulation Program			■	■																								
IM Formulation development of Anthrax Therapeutic			■	■																								
** VAC FILO - Prepare Acquisition Documentation						■	■	■	■																			
Prepare and release solicitation						■	■	■	■	■																		
VAC FILO - Milestone A								■																				
VAC FILO - Manufacturing Process Development - Small Scale														■	■	■	■	■	■	■	■	■	■	■				

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
VAC FILO - Non-clinical Studies							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■							

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** CONG - Tactical, Cargo & Rotary Wing Aircraft Decon	3	2010	4	2012
** TMTI - Milestone A Decision (Hemorrhagic Fever Virus MCM)	4	2009	4	2009
Contract #1-6 (HFV) Phase I trials	3	2010	4	2011
Milestone A Decision (Intracellular Bacteria Pathogen MCM)	4	2010	4	2010
Contract 1-4 (IBP) Phase I Trials	3	2011	4	2012
Milestone B Decision (Hemorrhagic Fever Viruses)	3	2011	3	2011
** TT Bio - Large Scale Single Use Bio Reactor for Rapid Response to Bioterrorism	3	2009	4	2009
Biological Threat Antibody Research	3	2009	4	2009
Recombinant Bche Formulation Program	3	2009	4	2009
IM Formulation development of Anthrax Therapeutic	3	2009	4	2009
** VAC FILO - Prepare Acquisition Documentation	1	2010	4	2010
Prepare and release solicitation	1	2010	2	2011
VAC FILO - Milestone A	4	2010	4	2010
VAC FILO - Manufacturing Process Development - Small Scale	3	2011	1	2014
VAC FILO - Non-clinical Studies	3	2010	1	2014

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>				PROJECT MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&P)</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&P)</i>	19.365	9.438	0.000	0.000	0.000	2.973	3.661	5.035	14.670	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project funds Advanced Component Development and Prototypes (ACD&P) of countermeasures for chemical agents including life support equipment, diagnostic equipment, prophylactic and therapeutic drugs, and individual/casualty decontamination compounds. A system of medical defense against chemical agents is required to provide protection, to sustain performance in a chemical environment, and to provide for self-aid/buddy-aid and medical treatment of chemical casualties. Fielding of prophylactic and therapeutic drugs requires Food and Drug Administration (FDA) approval. Multiple long-term studies are required to obtain FDA approval resulting in longer program timelines and greater program cost than other non-pharmaceutical product programs. Efficacy testing of most candidate drugs against chemical warfare (CW) agents cannot be conducted in humans; therefore, animal surrogate models must be developed. The program currently funds the: (1) Bioscavenger Increment 2 (BSCAV Inc. 2), which will be used as a prophylaxis against nerve agents; (2) Inhalational Atropine (IA), which will be used to treat continuing nerve agent induced effects after the patient has been evacuated to a medical treatment facility; and (3) Improved Nerve Agent Treatment System (INATS), which will be used as a treatment for nerve agent intoxication to include new indications for Pyridostigmine Bromide (PB) that will be integrated with current therapeutic regimens. Time Temperature Indicators (TTI), Item Unique Identification (IUID), and Radio-Frequency Identification (RFID) will be part of the development effort for incorporation on all medical countermeasures being developed by CBMS-MITS. A TTI is a human readable tab that will provide the Warfighter immediate knowledge if the product is still useable or not. IUID and RFID labels placed on the product will improve inventory management and strategic purchasing, and enable reliable visibility, and capability-based operational readiness.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
1) BSCAV Increment 2 <i>FY 2009 Accomplishments:</i> Completed Phase 1 clinical safety studies and prepared documentation for Milestone B in 1QFY10.	4.686	0.000	0.000	0.000	0.000
2) BSCAV Increment 2	4.050	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2009 Accomplishments:</i> Continued large scale manufacturing, process development, and assay validation. Prepared for transition to Engineering and Manufacturing Development phase.						
3) BSCAV Increment 2 <i>FY 2009 Accomplishments:</i> Completed NTA studies at US Army Medical Research Institute of Chemical Defense (USAMRICD).		0.400	0.000	0.000	0.000	0.000
4) Inhalational Atropine <i>FY 2010 Plans:</i> Initiate process development and cGMP requirements.		0.000	0.800	0.000	0.000	0.000
5) Inhalational Atropine <i>FY 2010 Plans:</i> Initiate formulation, analytical methods and device development and transition to Engineering Manufacturing and Development phase.		0.000	1.167	0.000	0.000	0.000
6) INATS <i>FY 2009 Accomplishments:</i> Completed Investigational New Drug (IND) application effort. <i>FY 2010 Plans:</i> Initiate and complete IND amendment.		0.630	0.552	0.000	0.000	0.000
7) INATS		3.750	3.411	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&P)</i>
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B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Continued process development and small scale Current Good Manufacturing Practices (cGMP) efforts.</p> <p><i>FY 2010 Plans:</i> Complete process development and small scale cGMP efforts.</p>					
<p>8) INATS</p> <p><i>FY 2009 Accomplishments:</i> Continued efficacy, safety, and toxicology studies of candidate oximes.</p> <p><i>FY 2010 Plans:</i> Complete efficacy, safety, and toxicology studies of candidate oximes.</p>	5.849	3.390	0.000	0.000	0.000
<p>9) SBIR</p> <p><i>FY 2010 Plans:</i> Small Business Innovative Research.</p>	0.000	0.118	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals					
	19.365	9.438	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• JM6500: <i>INHALATIONAL ATROPINE (IA)</i>	0.000	0.000	0.000		0.000	0.000	0.000	0.496	0.991	Continuing	Continuing
• JM6555: <i>IMPROVED NERVE AGENT TREATMENT SYSTEM (INATS)</i>	0.000	0.000	0.000		0.000	0.000	0.000	3.966	4.954	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&P)</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• JM6677: <i>ADVANCED ANTICONVULSANT SYSTEM (AAS)</i>	0.000	0.000	0.000		0.000	0.000	4.466	9.126	5.187	Continuing	Continuing
• MC5: <i>MEDICAL CHEMICAL DEFENSE (SDD)</i>	14.203	14.027	51.856		51.856	47.835	28.771	12.122	8.171	Continuing	Continuing

D. Acquisition Strategy

BSCAV

The Bioscavenger acquisition strategy consists of a developmental program with three distinct increments.

Increment 1 is butyrylcholinesterase purified from human plasma (i.e., plasma-derived Bioscavenger or pBioscavenger). The Medical Identification and Treatment Systems (MITS) Joint Product Management Office exercises management oversight, and a commercial partner serves as the system integrator during the Technology Development Phase, which includes small scale manufacturing, pre-clinical animal studies, Investigational New Drug (IND) application, and Phase 1 human clinical safety studies.

The Bioscavenger Increment 2 strategy includes a proof-of-concept study followed by an initial down-selection between two different technologies: Recombinant human butyrylcholinesterase (rHuBChE) and small synthetic molecule, awarded to two different contractors. The chosen technology, rHuBChE, will continue to a formal down-selection with the plasma-derived Bioscavenger at Milestone B prior to transition to the Engineering and Manufacturing Development (EMD) phase. Following Milestone B into EMD, MITS will continue to exercise management oversight with system integration support of a commercial partner to ensure manufacturing of the product is in accordance with Food and Drug Administration (FDA) regulations and guidelines. Prior to FDA licensure, the commercial partner will perform a Phase 2 human clinical safety study, definitive animal efficacy studies, and toxicology studies. The SDD phase will culminate in obtaining FDA licensure of the Bioscavenger. During the Production and Deployment phase, the MITS JPMO, in conjunction with a commercial partner, will pursue full rate and stockpile production and conduct any FDA-mandated post-marketing surveillance.

Unlike Bioscavenger Increment 1 and 2 technology, where the Bioscavenger becomes ineffective after binding with nerve agents, Increment 3 will include products that continuously degrade nerve agents while retaining their effectiveness (catalytic Bioscavenger). Because the technology for Increment 3 is immature, a candidate product will not be ready for transition to advanced development until late in the next decade. Therefore, CBMS MITS is exploring alternative technologies to reduce the costs of producing Bioscavenger Increment 2.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&P)</i>
<p>IA</p> <p>Medical Identification and Treatment Systems (MITS) Joint Product Management Office (JPMO) will manage the development of Inhalational Atropine (IA) for the DoD. For this Advanced Development effort, the competitively selected contractor will serve as the systems integrator throughout development and shall be responsible for conducting the activities associated with drug development in a manner consistent with eventual approval by the Food and Drug Administration (FDA), including: human clinical safety studies; pharmacokinetic studies; and validated manufacturing. The contractor shall sponsor the drug product to the FDA and hold all approvals and/or licenses.</p> <p>INATS</p> <p>Medical Identification and Treatment Systems (MITS) Joint Product Management Office will serve as the system integrator during the Technology Development Phase that includes pre-clinical animal studies and Phase 1 human clinical safety studies. After Milestone B, during the System Development and Demonstration Phase, MITS and/or a commercial partner (product dependent) will serve as the system integrator to ensure that products are manufactured in accordance with Food and Drug Administration (FDA) regulations and guidelines, appropriate Phase 2 human clinical safety and definitive animal efficacy studies are conducted, and required toxicology studies are performed. During the Production and Deployment Phase, FDA approval will be obtained and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance will be conducted.</p> <p><u>E. Performance Metrics</u> N/A</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&P)</i>
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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** IA - cGMP Manufacturing requirements	C/CPIF	TBD	0.000	0.767	Jan 2010	0.000		0.000		0.000	0.000	0.767	0.000
** INATS - INATS - Pilot Lot & Small Scale Manufacturing	C/CPFF	Southwest Research Institute San Antonio, TX	6.653	1.790	Jan 2010	0.000		0.000		0.000	0.000	8.443	0.000
INATS - Scale-Up Manufacturing of Candidate Oximes	C/CPIF	TBD	0.000	2.375	Apr 2010	0.000		0.000		0.000	0.000	2.375	0.000
Subtotal			6.653	4.932		0.000		0.000		0.000	0.000	11.585	0.000

Remarks

Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** INATS - INATS - Regulatory Integration, IND, and NDA Support Efforts	MIPR	Defense Technical Information Center Edgewood, MD	1.890	0.372	Jan 2010	0.000		0.000		0.000	0.000	2.262	0.000
Subtotal			1.890	0.372		0.000		0.000		0.000	0.000	2.262	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

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Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			

Remarks

Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** IA - Inhalational Atropine - Formulation, Analytical Methods & Device Optimization	C/CPIF	TBD	0.000	1.200	Jan 2010	0.000		0.000		0.000	0.000	1.200	0.000
** INATS - INATS - Conduct Studies of Candidate Oximes	MIPR	Defense Technical Information Center Edgewood, MD	0.000	2.500	Apr 2010	0.000		0.000		0.000	0.000	2.500	0.000
Subtotal			0.000	3.700		0.000		0.000		0.000	0.000	3.700	0.000

Remarks

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&P)</i>
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Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** INATS - INATS - Product Management Support	MIPR	USAMMDA Fort Detrick, MD	0.380	0.148	Jan 2010	0.000		0.000		0.000	0.000	0.528	0.000
INATS - Chem Bio Medical Systems	Allot	CBMS Frederick, MD	1.242	0.168	Apr 2010	0.000		0.000		0.000	0.000	1.410	0.000
** ZSBIR - SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	MIPR	HQ AMC, Alexandria	0.000	0.118		0.000		0.000		0.000	0.000	0.118	0.000
Subtotal			1.622	0.434		0.000		0.000		0.000	0.000	2.056	0.000

Remarks

	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	10.165	9.438	0.000	0.000	0.000	0.000	19.603	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
** BSCAV - BSCAV Inc. 2 - Phase 1 Clinical Safety Studies	■	■	■	■																								
BSCAV Inc. 2 - Large Scale Manufacturing, Process Development & Assay Validation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
BSCAV Inc. 2 - Milestone B					■																							
BSCAV Inc. 2 - Conduct GLP Animal Efficacy Studies							■	■	■	■	■	■	■	■	■	■	■	■	■	■								
BSCAV - NTA Studies	■	■	■	■																								
** IA - IA - Process Development and current Good Manufacturing Practices (cGMP) requirements							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
IA - Formulation, analytical assay, and device development							■	■	■	■	■	■	■	■	■	■												
IA - Milestone B								■																				
** INATS - INATS - Process development & small scale cGMP	■	■	■	■	■	■	■	■																				
INATS - IND Application/Amendment	■	■	■	■	■	■	■	■																				
INATS - Efficacy, Safety & Toxicology Studies of Candidate Oximes		■	■	■	■	■	■	■																				
INATS - Process Development and small scale cGMP Manufacturing	■	■	■	■	■	■	■	■																				

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&P)</i>
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** BSCAV - BSCAV Inc. 2 - Phase 1 Clinical Safety Studies	4	2007	4	2009
BSCAV Inc. 2 - Large Scale Manufacturing, Process Development & Assay Validation	1	2008	4	2014
BSCAV Inc. 2 - Milestone B	2	2010	2	2010
BSCAV Inc. 2 - Conduct GLP Animal Efficacy Studies	3	2010	4	2013
BSCAV - NTA Studies	4	2008	4	2009
** IA - IA - Process Development and current Good Manufacturing Practices (cGMP) requirements	3	2010	3	2015
IA - Formulation, analytical assay, and device development	3	2010	4	2012
IA - Milestone B	4	2010	4	2010
** INATS - INATS - Process development & small scale cGMP	2	2008	3	2010
INATS - IND Application/Amendment	2	2008	4	2010
INATS - Efficacy, Safety & Toxicology Studies of Candidate Oximes	2	2009	4	2010
INATS - Process Development and small scale cGMP Manufacturing	1	2008	4	2010

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>			R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>				PROJECT MR4: <i>MEDICAL RADIOLOGICAL DEFENSE (ACD&P)</i>				
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
MR4: <i>MEDICAL RADIOLOGICAL DEFENSE (ACD&P)</i>	4.294	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project funds the advanced development of candidate therapeutic medical countermeasures to mitigate the consequences of exposure to ionizing radiation due to nuclear or radiological attacks. Exposure to ionizing radiation causes damage to blood-forming cells (hematopoietic system) and gastrointestinal system, leading to Acute Radiation Syndrome (ARS). Medical countermeasures must be approved by the Food and Drug Administration (FDA) for human use prior to fielding. Testing the efficacy of candidate drugs against normally lethal radiation exposure cannot be conducted in humans; therefore, surrogate animal models must be used to obtain FDA approval.

Medical Radiological Countermeasures (MRADC) efforts include multiple countermeasures required to restore casualties to pre-exposure health and to protect U.S. Forces against injury caused by exposure to radiation. MRADC shall reverse or limit radiation injury resulting in increased survival, decreased incapacity, and sustained operational effectiveness. In addition, MRADC shall be effective against a broad range of radiation sources and types and shall be useable in the battle space, including evacuation.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
1) MRADC <i>FY 2009 Accomplishments:</i> Completed initial non-clinical efficacy studies.	2.557	0.000	0.000	0.000	0.000
2) MRADC <i>FY 2009 Accomplishments:</i> Completed product formulation studies.	1.737	0.000	0.000	0.000	0.000

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals	4.294	0.000	0.000	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• MR5: <i>MEDICAL RADIOLOGICAL DEFENSE (SDD)</i>	3.002	8.276	1.143		1.143	4.817	2.265	0.000	0.000	Continuing	Continuing

D. Acquisition Strategy

MRADC

Medical Identification and Treatment Systems (MITS) Joint Product Management Office will manage the development of Medical Radiation Countermeasures (MRADC) for the Department of Defense (DoD). A contractor will serve as the product integrator throughout development and shall be responsible for conducting activities associated with drug development in a manner consistent with eventual approval by the Food and Drug Administration (FDA). The contractor shall sponsor the drug to the FDA and hold all approvals and/or licenses. The Technology Development phase includes pre-clinical studies and Phase 1 human clinical safety studies. During the Engineering and Manufacturing Development (EMD) phase, large scale manufacturing, Phase 2 human clinical safety studies and definitive animal efficacy studies will be conducted. FDA approval of the countermeasure is an exit criterion for the EMD phase. During the Production and Deployment Phase, sufficient quantities of product to meet Initial Operational Capability and Full Operational Capability will be purchased. Subsequent purchases will be made by the Defense Logistics Agency. Any post-marketing surveillance requested by the FDA will be conducted.

MRADC will be developed using a system-of-systems approach to provide a full spectrum capability to protect against the radiation threat. Individual countermeasure solutions will be developed using a single step to a full capability (FDA approval) strategy. The DoD is working very closely with the Department of Health and Human Services (HHS), which also has a radiation countermeasure program. The establishment of an interagency working group provides oversight and guidance to both agency programs to ensure that their efforts are non-duplicative and are directed to meeting the requirement of both agencies.

E. Performance Metrics

N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
** MRADC - MRADC - Initial Non-Clinical Animal Efficacy Studies for 2 Candidates	■	■	■	■																								
MRADC - Product Formulation on Candidate 1	■	■	■	■																								
MRADC - Milestone B							■																					

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT MR4: <i>MEDICAL RADIOLOGICAL DEFENSE (ACD&P)</i>
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** MRADC - MRADC - Initial Non-Clinical Animal Efficacy Studies for 2 Candidates	2	2008	4	2009
MRADC - Product Formulation on Candidate 1	2	2008	4	2009
MRADC - Milestone B	3	2010	3	2010

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>				PROJECT TE4: <i>TEST & EVALUATION (ACD&P)</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
TE4: <i>TEST & EVALUATION (ACD&P)</i>	6.261	28.773	19.304	0.000	19.304	11.851	28.035	20.266	21.139	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This funding supports the Joint Project Manager Nuclear, Biological, Chemical Contamination Avoidance Product Director, Test Equipment, Strategy, and Support (PD TESS) efforts. PD TESS provides test infrastructure products for testing and evaluating chemical and biological defense systems throughout the life cycle acquisition process in support of the Milestone Decision Authority, Joint Project Managers, and the Test and Evaluation (T&E) community. PD TESS test infrastructure products are aligned in four groups to include: (1) Chemical Laboratory (Sense); (2) Biological Laboratory (Sense); (3) Individual Protection, Collective Protection and Decontamination (Shield and Sustain); and (4) Field Simulant (Sense).

(1) Chemical Laboratory (Sense): Products for this area include a Non-Traditional Agent (NTA) Test Facility. The NTA Facility provides a new capability at the Edgewood Chemical Biological Center (ECBC) to conduct highly toxic materials testing using new, emerging threat agents. The NTA facility supports testing of decontamination, collective protection, individual protection, and contamination avoidance products. Major CBDP acquisition programs supported are: the Joint Chemical Agent Detector (JCAD); the Joint Service General Purpose Mask (JSGPM); the Lightweight CB Ensemble (LCBE); Joint Expeditionary Collective Protection (JECP); Joint Collective Protection Equipment (JCPE); Joint Service Transportable Decontamination System (JSTDS); Joint Warning and Reporting Network (JWARN) hardware components; the Joint Protective Aircrew Ensemble (JPACE); the Joint Service Aircrew Mask (JSAM); and the Joint Chemical Ensemble (JCE).

(2) Sense Laboratory (Biological): Products for this area include a biological live agent standoff chamber. The Chamber supports Joint Biological standoff detection testing in biological live agent environments. Major CBDP acquisition program support is the Joint Biological Standoff Detection System (JBSDS) Block II.

(3) Individual Protection, Collective Protection and Decontamination (Shield and Sustain): Products for this area include: Chemical, Biological Agent Resistance Test (CBART) fixture and Decontamination Coupon Validation Effort. CBART fixture provides a near real time testing capability under a range of environmental conditions for individual and collective protection materials. The Decontamination Coupon Validation Effort develops laboratory procedures to reduce variability in decontamination coupon testing. Acquisition Programs supported are: Joint Platform Interior Decontamination/Joint Material Decontamination System (JPID/JMDS); Joint Service Transportable Decontamination System (JSTDS); Joint Expeditionary Collective Protection (JECP); Joint Collective Protection Equipment (JCPE); Protective Clothing; Joint Protective Aircrew Ensemble (JPACE); Joint Service General Purpose Mask (JSGPM); Joint Service Aircrew Mask (JSAM); and the Joint Chemical Ensemble (JCE).

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TE4: <i>TEST & EVALUATION (ACD&P)</i>				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
1) PD TESS - Non-Traditional Agent (NTA) Test System <i>FY 2009 Accomplishments:</i> Evaluated/optimized mock-up performance. Initiated test fixtures design and procedures development. <i>FY 2010 Plans:</i> Complete NTA Test Facility final design and initiate fabrication. Continue procedure and test fixtures development. <i>FY 2011 Base Plans:</i> Continue facility fabrication.		4.915	22.908	16.000	0.000	16.000
2) PD TESS - Bio Standoff Facility <i>FY 2010 Plans:</i> Initiate and complete Bio Standoff Facility feasibility effort. <i>FY 2011 Base Plans:</i> Initiate Bio Standoff Facility design.		0.000	0.600	0.900	0.000	0.900
3) PD TESS - Chemical Biological Agent Resistance Test (CBART) <i>FY 2011 Base Plans:</i> Initiate design.		0.000	0.000	0.900	0.000	0.900
4) PD TESS		1.346	3.904	1.504	0.000	1.504

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TE4: <i>TEST & EVALUATION (ACD&P)</i>
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B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Continued systems engineering support for integration and execution of Advanced Component Development & Prototype development.</p> <p><i>FY 2010 Plans:</i> Continue systems engineering support.</p> <p><i>FY 2011 Base Plans:</i> Continue systems engineering support.</p>					
5) PD TESS - Decon Coupon Validation <i>FY 2010 Plans:</i> Complete lab procedures for reduced variability.	0.000	1.000	0.000	0.000	0.000
6) SBIR <i>FY 2010 Plans:</i> Small Business Innovative Research.	0.000	0.361	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals					
	6.261	28.773	19.304	0.000	19.304

C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• TE5: <i>TEST & EVALUATION (SDD)</i>	37.444	36.593	15.901		15.901	12.243	4.238	14.614	15.300	Continuing	Continuing
	7.037	4.870	4.813		4.813	4.779	4.750	5.660	5.615	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program	DATE: February 2010
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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TE4: <i>TEST & EVALUATION (ACD&P)</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• TE7: <i>TEST & EVALUATION (OP SYS DEV)</i>											

D. Acquisition Strategy

PD TESS

The PD TESS program provides for the development and acquisition of new and enhanced test infrastructure to support the sense, shield, shape, and sustain mission areas for the Joint Service Chemical and Biological Defense Program (CBDP). The efforts are supported through competitive contract actions, academia, and other Government agencies. Infrastructure solutions will leverage commercially available systems to provide state-of-the-art capabilities that address current and future CBDP test and evaluation needs.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TE4: <i>TEST & EVALUATION (ACD&P)</i>
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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** PD TESS - HW S - NTA Test Facility Procedures/Fixtures	MIPR	Various	8.505	5.190	Jan 2010	2.000	Jan 2011	0.000		2.000	0.000	15.695	0.000
HW S - NTA Test System Design/Fabrication/Installation	C/FFP	TBD	3.997	18.018	Jan 2010	14.900	Jan 2011	0.000		14.900	0.000	36.915	0.000
HW S - Bio Standoff Facility Feasibility/Design	Reqn	TBD	0.000	0.600	Jan 2010	0.900	Jan 2011	0.000		0.900	0.000	1.500	0.000
HW S - CBART - Design	C/CPPF	TBD	0.000	0.700	Apr 2010	0.000		0.000		0.000	0.000	0.700	0.000
Subtotal			12.502	24.508		17.800		0.000		17.800	0.000	54.810	0.000

Remarks

Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** PD TESS - PM/MS S - Program Management/Systems Engineering Support	MIPR	JPM NBC CA APG, MD	4.694	3.904	Oct 2009	1.504	Oct 2010	0.000		1.504	0.000	10.102	0.000
	MIPR	HQ	0.000	0.361		0.000		0.000		0.000	0.000	0.361	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TE4: <i>TEST & EVALUATION (ACD&P)</i>
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Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** ZSBIR - SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR		AMC, Alexandria											
Subtotal			4.694	4.265		1.504		0.000		1.504	0.000	10.463	0.000

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract		
		Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost					
Project Cost Totals		17.196	28.773			19.304		0.000		19.304	0.000	65.273	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TE4: <i>TEST & EVALUATION (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
** PD TESS - Bio Standoff Facility Design/ Fabrication/Installation						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DECON Coupon Validation					■	■	■	■																				

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TE4: <i>TEST & EVALUATION (ACD&P)</i>
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** PD TESS - Bio Standoff Facility Design/Fabrication/Installation	2	2010	4	2015
DECON Coupon Validation	1	2010	4	2010

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>				PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>	17.065	26.649	26.466	0.000	26.466	18.564	18.838	19.294	19.563	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project (TT4) validates high-risk/high-payoff technologies, concepts-of-operations, and reconnaissance and surveillance platforms that could significantly improve Warfighter capabilities in preparation for transition of mature technologies to advanced development programs requiring chemical and biological (CB) defense technologies. These programs offer an opportunity to identify and efficiently mature emerging technologies from laboratory experiments to acquisition programs through risk reduction, engineering and integration. These Advanced Technology Demonstrations (ATDs) and Advanced Concept Technology Demonstrations (ACTDs) seek to demonstrate the potential for enhanced military operational capability and/or cost effectiveness. Upon conclusion of the technical and operational demonstrations, the user or sponsor provides a determination of the military utility and operational impact of the technology and capability demonstrated. Successfully demonstrated technologies with proven military utility can either be left in place for extended user evaluations, accepted into advanced stages of the formal acquisition process, proceed directly into limited or full-scale production or be returned to the technical base for further development. This project funds three major thrust areas (two of which are new thrust areas that consolidate legacy systems and are annotated as such below): Advanced Remediation Technologies (ART), Early Warning Military Application in Reconnaissance Systems (EW-MARS), and Comprehensive Innovative Protection (CIP). The ART addresses Chemical, Biological, and Radiological (CBR) remediation and decontamination processes and demonstrates technologies and methods to restore assets such as mobile equipment, fixed sites, critical infrastructures, personal, and equipment to operational status as a result of having reduced or eliminated CBR contamination. The EW-MARS (new thrust area) achieves enhanced command and control decision making capabilities as a result of a combined and orchestrated family of chemical and biological defense systems deployed on various platforms in remote locations. The CIP (new thrust area) transitions mature technologies to improve individual and collective protection capabilities for U.S. and coalition Warfighters. The following is a description of specific efforts funded under each thrust area:

ART:

Interagency Biological Restoration Demonstration (IBRD) - A Department of Defense (DoD)/Department of Homeland Security (DHS) collaborative effort that will provide a coordinated, systems approach to the recovery and restoration of wide urban areas. This will include Department of Defense (DoD) infrastructures and high traffic areas (transit/transportation facilities) following the aerosol release of a biological agent.

Special Platform Interior Decontamination and Equipment Restoration (SPIDER) - A concept exploration effort that focused on decontaminating the interior of an aircraft following the release of a chemical agent. This effort merged into the Decontamination Family of Systems, also known as HaMMER (see below for description).

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program		DATE: February 2010
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<p>Automated Detailed Equipment Decontamination for Land Vehicles (Auto Decon) - A chemical and biological decontamination process for land vehicles, which will prototype an improved decontamination process and will evaluate the current Detailed Equipment Decontamination (DED), which is the most thorough of Joint Service decontamination procedures. This effort will merge into the Decontamination Family of Systems, also known as HaMMER (see below for description).</p> <p>Hazard Mitigation Material and Equipment Restoration (HaMMER) - A layered strategy to identify individual technologies that may be collectively applied to reduce or eliminate chemical and biological hazards. It includes a Decontamination Family of Systems that gives the Warfighter multiple capabilities to reduce or eliminate chemical hazards. This effort leverages upon and consolidates Auto Decon and SPIDER efforts described above.</p> <p>EW-MARS:</p> <p>Military Applications in Reconnaissance Systems for Joint Force Protection (MARS-JFP) - A data fusion ATD that leverages early warning technologies developed in Budget Activity 3 (Project TT3) to improve the capability to detect and react to an initial chemical and biological attack, as well as prevent a second attack. Specifically, this effort focuses on force protection decision making for external, cross domain sensors for cueing/tipping, and managing resources of dynamically deployable high quality chemical and biological sensors.</p> <p>Rapid Area Surveillance Reconnaissance (RASR) - A sensitive-site exploration, standoff reconnaissance, ATD that leverages early warning technologies developed in Budget Activity 3 (Project TT3) to survey large areas (whole rooms, courtyards, fields) and assess and identify contamination with Chemical Warfare Agents (CWAs), Toxic Industrial Chemicals (TICs) and Non-Traditional Agents (NTAs).</p> <p>Post Intercept Weapons of Mass Destruction Identification (PIWID) - An ATD that leverages early warning technologies developed in Budget Activity 3 (Project TT3), which addresses both operational and technical issues associated with the capability to determine the presence of Weapons of Mass Destruction (WMD) in the threat payload of ballistic or cruise missile delivery systems after a successful active defense intercept.</p> <p>CIP:</p> <p>Demo-Low Burden Individual Protection Demonstration (IP Demo) - An ATD that leverages lightweight chemical and biological protective textiles developed in Budget Activity 3 (Project CB3, Protection and Hazard Mitigation), and will support the next generation Joint Chemical Ensemble. This effort will provide significantly decreased thermal burden correlated with acceptable levels of chemical and biological protection, as well as significantly increase the ability of the Warfighter to accomplish a mission in a contaminated environment.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program				DATE: February 2010		
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Joint Medical Distance Support and Evaluation (JMDSE) - A Joint Concept Technology Demonstration (JCTD) that leverages the results of the EBD (see above for description) and seeks new detect-to-treat concept of operations (CONOPS) enabled by the deployment of new chemical and biological detection and identification capabilities to front line forces.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
1) TT DEMO ART (Interagency Biological Restoration Demonstration (IBRD)): <i>FY 2009 Accomplishments:</i> Continued development of restoration plans. Continued risk assessment. Conducted decontamination technologies efficacy testing relevant to an outdoor urban environment. Conducted agent fate and transport studies and demonstrations. Continued development and demonstration of system tools. Conducted table top exercises, field exercises, and workshops. <i>FY 2010 Plans:</i> Complete IBRD development of restoration plans. Complete established risk assessment and clearance goals. Develop sampling, characterization, and long term monitoring plans. Develop and exercise wide-area decontamination methods. Develop and demonstrate restoration system tools and conduct table top exercises, field exercises, and workshops. Plan, coordinate, and execute the IBRD Final Demo/Table Top Exercise (TTX) in the Seattle urban area. Transition decontamination methods, restoration tools, agent fate and transport data to the advanced developer (Joint Program Manager for Guardian and Decontamination - see Budget Activities 4 and 5).		5.827	2.716	0.000	0.000	0.000
2) TT DEMO ART (Automated Detailed Equipment Decontamination for Land Vehicles (Auto Decon)): <i>FY 2009 Accomplishments:</i> Initiated and conducted Test and Evaluation (T&E) of current detailed equipment decontamination processes and prototype automated decontamination solutions.		3.000	2.951	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program				DATE: February 2010		
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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2010 Plans:</i> Complete T&E of current detailed equipment decontamination processes and prototype automated decontamination solutions. Recommend optimized process for automated decontamination. Transition detailed decontamination system to the advanced developer (Joint Program Manager for Decontamination - see Budget Activities 4 and 5).</p>						
<p>3) TT DEMO ART (Hazard Mitigation Material and Equipment Restoration (HaMMER)):</p> <p><i>FY 2009 Accomplishments:</i> Initiated identification of system and component technologies, established test protocols, and established performance metrics.</p> <p><i>FY 2010 Plans:</i> Conduct component decontamination processes in which collective applications can be employed to eliminate or reduce chemical and biological decontamination.</p> <p><i>FY 2011 Base Plans:</i> Conduct and complete total system decontamination processes to ensure collective applications can be employed to eliminate or reduce chemical and biological decontamination. The completed project will define and provide a flexible system design that leverages individual technologies that address both hazard mitigation and dose-based risk assessment concepts. Transition system of systems chemical/biological decontamination apparatus, TTPs, and CONOPS to JPM-Decontamination.</p>		0.500	7.772	7.982	0.000	7.982
<p>4) TT DEMO EW-MARS (Military Applications in Reconnaissance Systems for Joint Force Protection (MARS-JFP)):</p>		2.000	2.951	3.336	0.000	3.336

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2010 Plans:</i> Perform and complete system level technical performance measure evaluations. Initiate and complete a system level user demonstration. Conduct and complete component level testing. Transition low burden individual protection overgarment to the advanced developer (Joint Program Manager for Individual Protection and the Program Manager for Soldier Equipment). Initiate risk reduction activities to demonstrate Catalytic Oxidation air purification prototypes, to include initial system and tank test bed designs.</p>						
<p>8) TT DEMO CIP (Joint Medical Distance Support and Evaluation (JMSDE)):</p> <p><i>FY 2009 Accomplishments:</i> Initiated internal planning, program management, and documentation. Conducted overlay scenarios and initiated JMDSE to Joint Biological Tactical Detection System (JBTDs) interface evaluation.</p> <p><i>FY 2010 Plans:</i> Complete JMDSE to JBTDs interface evaluation. Conduct field demonstrations and military utility assessments. Develop CONOPS, training, test and security plans. Initiate software development.</p> <p><i>FY 2011 Base Plans:</i> Complete field demonstrations and military utility assessments; complete CONOPS and training, test, and security plans. Complete software development and integration. Transition to JPM-Bio Detection.</p>		0.738	0.984	1.505	0.000	1.505
<p>9) SBIR <i>FY 2010 Plans:</i> Small Business Innovative Research.</p>		0.000	0.322	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		17.065	26.649	26.466	0.000	26.466

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u> <u>Base</u>	<u>FY 2011</u> <u>OCO</u>	<u>FY 2011</u> <u>Total</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• TE3: <i>TEST & EVALUATION (ATD)</i>	25.761	13.307	11.875		11.875	11.267	11.160	0.000	0.000	Continuing	Continuing
• TT3: <i>TECHBASE TECHNOLOGY TRANSITION</i>	8.127	7.357	4.504		4.504	8.117	8.169	8.390	8.528	Continuing	Continuing

D. Acquisition Strategy

TT DEMO

The Advanced Technology Demonstrations (ATDs) and Advanced Concept Technology Demonstrations (ACTDs) exploit mature and maturing technologies to solve important military problems. ATDs and ACTDs emphasize technology assessment and integration rather than technology development. The goal is to provide a prototype capability to the Warfighter and to support in the evaluation of that capability. The Warfighters evaluate the capabilities in real military exercises and at a scale sufficient to fully assess military utility. When possible, the ATDs will leverage results from existing chemical and biological science and technology (S&T) efforts and prior ATDs. Market research/baselining is performed prior to ATD initiation to determine if a suitable solution exists or whether a solicitation/sole source is required to develop a solution. The ATDs are typically managed by DoD, Federally Funded Research Development Centers (FFRDCs) or University Affiliated Research Centers (UARC)s. This is done through the Military Interdepartmental Purchase Request (MIPR) or the Interagency Cost Reimbursable Order (IACRO) in accordance with the Economy Act. The ATD manager, who is typically responsible for total system development, can subcontract industry, academia, or other government agencies to perform individual component development.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>
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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** TT DEMO - HW S - (ART) IBRD System Design and Integration	PO	Pacific Northwest National Laboratory Seattle, WA	0.375	0.791	Jan 2010	0.000		0.000		0.000	0.187	1.353	0.000
HW C - (ART) Auto Decon	MIPR	Army- ECBC Edgewood, MD	0.000	0.300	Oct 2009	0.000		0.000		0.000	0.000	0.300	0.000
HW C - (ART) HaMMER Product Development	MIPR	Army- ECBC Edgewood, MD	0.000	2.950	Oct 2009	2.850	Oct 2010	0.000		2.850	0.000	5.800	0.000
HW S - (ART) Hammer Product Development-SME	MIPR	Army- ECBC Edgewood, MD	0.000	0.200	Oct 2009	0.200	Oct 2010	0.000		0.200	0.000	0.400	0.000
HW C - (EW) MARS JFP Product Development	PO	MITRE Bedford, MA	0.000	0.200	Jan 2010	0.200	Jan 2011	0.000		0.200	0.000	0.400	0.000
HW C - (EW) MARS JFP Product Development #2	PO	Johns Hopkins Univ/Applied Physics Lab (JHU-APL) Laurel, MD	0.000	0.200	Jan 2010	0.200	Jan 2011	0.000		0.200	0.000	0.400	0.000
HW C - (EW) MARS JFP Product Development #3	PO	MIT/Lincoln Labs Lexington, MA	0.000	0.200	Jan 2010	0.200	Jan 2011	0.000		0.200	0.000	0.400	0.000
HW C - (EW) RASR Product Development	PO	MIT/Lincoln Labs Lexington, MA	0.000	1.700	Jan 2010	1.650	Jan 2011	0.000		1.650	0.000	3.350	0.000
HW C - (EW) RASR Product Development #2	PO	Georgia Tech Institute of Technology Atlanta, GA	0.000	0.500	Jan 2010	0.500	Jan 2011	0.000		0.500	0.000	1.000	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>
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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
HW C - (EW) RASR Product Development #3	PO	MITRE Bedford, MA	0.000	0.000		1.150	Jan 2011	0.000		1.150	0.000	1.150	0.000
HW C - (EW) RASR Product Development #4	PO	John Hopkins University/ Applied Physics Laboratory Laurel, MD	0.000	0.000		1.150	Jan 2011	0.000		1.150	0.000	1.150	0.000
HW C - (EW) RASR Product Development #5	PO	Kansas City Plant (DOE) Kansas City, MO	0.000	0.000		1.150	Jan 2011	0.000		1.150	0.000	1.150	0.000
HW C - (EW) RASR Product Development #6	PO	Naval Postgraduate School Monterey, CA	0.000	0.000		1.150	Jan 2011	0.000		1.150	0.000	1.150	0.000
HW C - (EW) PIWID Product Development	MIPR	JLENS Huntsville, AL	0.000	0.500	Oct 2009	0.500	Oct 2010	0.000		0.500	0.000	1.000	0.000
HW C - (CIP) IP Demo Product Development	MIPR	US Army Natick Soldier RD&E Center Natick, MA	0.000	0.300	Oct 2009	0.200	Oct 2010	0.000		0.200	0.000	0.500	0.000
HW C - (CIP) JMDSE Product Development	MIPR	US Army Natick Soldier RD&E Center Natick, MA	0.000	0.150	Oct 2009	0.150	Oct 2010	0.000		0.150	0.000	0.300	0.000
Subtotal			0.375	7.991		11.250		0.000		11.250	0.187	19.803	0.000

Remarks

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>
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Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** TT DEMO - ILS C - (ART) IBRD TTP and CONOPS Development	MIPR	SPAWAR San Diego, CA	1.028	0.250	Oct 2009	0.000		0.000		0.000	0.371	1.649	0.000
ILS C - (ART) Auto Decon Support	MIPR	Edgewood Chemical and Biological Center (ECBC) Edgewood, MD	0.000	0.800	Oct 2009	0.000		0.000		0.000	0.000	0.800	0.000
ILS S - (ART) HaMMER System Support	MIPR	Research Development & Engineering Cmd (RDECOM), Edgewood	0.000	1.400	Oct 2009	1.414	Oct 2010	0.000		1.414	0.000	2.814	0.000
ILS S - (ART) Hammer OM Support	MIPR	US European Command (USEUCOM) Stuttgart, GE	0.000	0.150	Oct 2009	0.150	Oct 2010	0.000		0.150	0.000	0.300	0.000
ILS S - (ART) HaMMER Support	MIPR	Edgewood Chemical and Biological Center Edgewood, MD	0.000	0.500	Oct 2009	0.500	Oct 2010	0.000		0.500	0.000	1.000	0.000
ILS C - (EW) MARS JFP Support	MIPR	Edgewood Chemical and Biological Center Edgewood, MD	0.000	0.465	Oct 2009	0.965	Oct 2010	0.000		0.965	0.000	1.430	0.000
ILS C - (EW) RASR OM Support	MIPR	20th Support Command	0.000	0.215	Oct 2009	0.215	Oct 2010	0.000		0.215	0.000	0.430	0.000

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Support (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
		Aberdeen Proving Ground, MD											
ILS C - (EW) RASR OM Support #2	MIPR	MARFORPAC (PACOM) Camp Smith, HI	0.000	0.220	Oct 2009	0.220	Oct 2010	0.000		0.220	0.000	0.440	0.000
ILS C - (EW) PIWID Support-Data Analysis	MIPR	Air Force Research Laboratory Wright Patterson AFB, OH	0.000	0.200	Oct 2009	0.200	Oct 2010	0.000		0.200	0.000	0.400	0.000
ILS C - (EW) PIWID Support-Data Analysis #2	MIPR	JLENS Huntsville, AL	0.000	0.200	Oct 2009	0.200	Oct 2010	0.000		0.200	0.000	0.400	0.000
ILS C - (CIP) IP Demo Component Support	MIPR	US Army Natick Soldier RD&E Center Natick, MA	0.000	0.275	Oct 2009	0.110	Oct 2010	0.000		0.110	0.000	0.385	0.000
ILS C - (CIP) JMDSE Support	MIPR	US Army Natick Soldier RD&E Center Natick, MA	0.000	0.200	Oct 2009	0.200	Oct 2010	0.000		0.200	0.000	0.400	0.000
Subtotal			1.028	4.875		4.174		0.000		4.174	0.371	10.448	0.000

Remarks

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>
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Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** TT DEMO - OTE C - (ART) IBRD Operational Test	Allot	DTRA Test and Evaluation (DTRA CXT) Albuquerque, NM	1.500	0.809	Oct 2009	0.000		0.000		0.000	0.590	2.899	0.000
OTE S - (ART) Auto Decon System Testing	MIPR	Army- ECBC Edgewood, MD	0.000	0.800	Jan 2010	0.000		0.000		0.000	0.000	0.800	0.000
OTE S - (ART) HaMMER System Testing	MIPR	Army- ECBC Edgewood, MD	0.000	0.750	Oct 2009	0.750	Oct 2010	0.000		0.750	0.000	1.500	0.000
OTE S - (ART) HaMMER T&E Oversight	MIPR	Army- ECBC Edgewood, MD	0.000	0.400	Oct 2009	0.400	Oct 2010	0.000		0.400	0.000	0.800	0.000
OTE C - (EW) MARS JFP Support	MIPR	US Army Environmental Command (AEC) Aberdeen, MD	0.000	0.400	Oct 2009	0.200	Oct 2010	0.000		0.200	0.000	0.600	0.000
OTE C - (EW) MARS JFP Support #2	MIPR	Dugway Proving Ground (DPG) DPG, UT	0.000	0.500	Oct 2009	0.300	Oct 2010	0.000		0.300	0.000	0.800	0.000
OTE C - (EW) RASR Component Testing	MIPR	US Army Environmental Command (AEC) Aberdeen, MD	0.000	0.225	Oct 2009	0.675	Oct 2010	0.000		0.675	0.000	0.900	0.000
OTE C - (EW) RASR Component Testing #2	MIPR	DPG DPG, UT	0.000	0.225	Oct 2009	0.675	Oct 2010	0.000		0.675	0.000	0.900	0.000
OTE C - (EW) RASR Component Testing #3	MIPR	US Army Developmental Test Command	0.000	0.226	Oct 2009	0.729	Oct 2010	0.000		0.729	0.000	0.955	0.000

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APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>
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Test and Evaluation (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
		Aberdeen, MD											
OTE C - (EW) PIWID Component Testing	MIPR	DPG DPG, UT	0.000	0.400	Oct 2009	0.400	Oct 2010	0.000		0.400	0.000	0.800	0.000
OTE C - (EW) PIWID Component Testing #2	MIPR	JLENS Huntsville, AL	0.000	0.400	Oct 2009	0.400	Oct 2010	0.000		0.400	0.000	0.800	0.000
OTE C - (CIP) IP Demo T&E	MIPR	US Army Natick Soldier RD&E Center Natick, MA	0.000	1.745	Oct 2009	1.200	Oct 2010	0.000		1.200	0.000	2.945	0.000
OTE C - (CIP) JMDSE Demo and Evaluation	MIPR	US Army Natick Soldier RD&E Center Natick, MA	0.000	0.400	Oct 2009	0.400	Oct 2010	0.000		0.400	0.000	0.800	0.000
Subtotal			1.500	7.280		6.129		0.000		6.129	0.590	15.499	0.000

Remarks

Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
	MIPR	Space and Naval Warfare Systems	1.326	0.950	Oct 2009	0.000		0.000		0.000	0.469	2.745	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>
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Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** TT DEMO - PM/MS S - IBRD Program Management		Command (SPAWAR) San Diego, CA											
PM/MS S - Auto Decon Management Support	MIPR	Army - ECBC Edgewood, MD	0.000	0.950	Oct 2009	0.000		0.000		0.000	0.000	0.950	0.000
PM/MS S - HaMMER System Management	MIPR	Army - ECBC Edgewood, MD	0.000	0.700	Oct 2009	0.740	Oct 2010	0.000		0.740	0.000	1.440	0.000
PM/MS S - HaMMER System Program Management	MIPR	Army - ECBC Edgewood, MD	0.000	0.875	Oct 2009	0.940	Oct 2010	0.000		0.940	0.000	1.815	0.000
PM/MS S - MARS JFP Program Management	MIPR	Army - ECBC Edgewood, MD	0.000	0.950	Oct 2009	0.985	Oct 2010	0.000		0.985	0.000	1.935	0.000
PM/MS S - RASR Program Management	MIPR	Army - ECBC Edgewood, MD	0.000	0.675	Oct 2009	1.500	Oct 2010	0.000		1.500	0.000	2.175	0.000
PM/MS S - PIWID System Program Management	MIPR	JLENS Huntsville, AL	0.000	0.270	Oct 2009	0.300	Oct 2010	0.000		0.300	0.000	0.570	0.000
PM/MS C - IP Demo Program Management	MIPR	US Army Natick Soldier RD&E Center Natick, MA	0.000	0.580	Oct 2009	0.200	Oct 2010	0.000		0.200	0.000	0.780	0.000
PM/MS C - JMDSE Program Management	MIPR	US Army Natick Soldier RD&E Center Natick, MA	0.000	0.231	Oct 2009	0.248	Oct 2010	0.000		0.248	0.000	0.479	0.000
	MIPR	HQ	0.000	0.322		0.000		0.000		0.000	0.000	0.322	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>
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Management Services (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** ZSBIR - SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR		AMC, Alexandria											
Subtotal			1.326	6.503		4.913		0.000		4.913	0.469	13.211	0.000

Remarks
Management service costs cover all ten ATDs described in the R2a of this project (TT4).

	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	4.229	26.649	26.466	0.000	26.466	1.617	58.961	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>
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	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015							
	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				
** TT DEMO - (ART) Interagency Biological Restoration Demonstration (IBRD)	■	■	■	■	■	■	■	■																								
(ART) Automated Detailed Equipment Decontamination for Land Vehicles (Auto Decon)	■	■	■	■	■	■	■	■																								
(ART) Hazard Mitigation, Material and Equipment Restoration (HaMMER)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■																
(EW) Military Applications in Reconnaissance/Support (MARS JFP)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■												
(EW) Rapid Area-Scan Sensitive-site Reconnaissance (RASR)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■																
(EW) Post Intercept WMD Identification (PIWID)	■	■	■	■	■	■	■	■	■	■	■	■																				
(CIP) IP Demo	■	■	■	■	■	■	■	■	■	■	■	■																				
(CIP) JMDSE	■	■	■	■	■	■	■	■	■	■	■	■																				

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Chemical and Biological Defense Program **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)</i>	PROJECT TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&P)</i>
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** TT DEMO - (ART) Interagency Biological Restoration Demonstration (IBRD)	1	2007	4	2010
(ART) Automated Detailed Equipment Decontamination for Land Vehicles (Auto Decon)	1	2008	4	2010
(ART) Hazard Mitigation, Material and Equipment Restoration (HaMMER)	1	2009	4	2012
(EW) Military Applications in Reconnaissance/Support (MARS JFP)	1	2009	4	2013
(EW) Rapid Area-Scan Sensitive-site Reconnaissance (RASR)	1	2009	4	2012
(EW) Post Intercept WMD Identification (PIWID)	1	2009	4	2011
(CIP) IP Demo	1	2009	4	2011
(CIP) JMDSE	1	2009	4	2011

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