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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b>					<b>R-1 ITEM NOMENCLATURE</b>							
0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>					PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>							
<b>COST (\$ in Millions)</b>	<b>All Prior Years</b>	<b>FY 2012</b>	<b>FY 2013<sup>#</sup></b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO <sup>##</sup></b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	-	201.871	179.023	196.237	-	196.237	186.892	157.824	109.957	82.327	Continuing	Continuing
CA4: <i>CONTAMINATION AVOIDANCE (ACD&amp;P)</i>	-	13.432	3.038	26.853	-	26.853	46.788	40.163	34.595	2.873	Continuing	Continuing
CM4: <i>HOMELAND DEFENSE (ACD&amp;P)</i>	-	16.155	3.003	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	19.158
DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>	-	20.755	12.374	17.870	-	17.870	10.611	13.174	9.337	5.500	Continuing	Continuing
IP4: <i>INDIVIDUAL PROTECTION (ACD&amp;P)</i>	-	0.000	1.102	2.708	-	2.708	6.811	4.680	0.300	0.000	0.000	15.601
IS4: <i>INFORMATION SYSTEMS (ACD&amp;P)</i>	-	5.219	13.831	8.199	-	8.199	2.845	0.360	0.100	0.100	Continuing	Continuing
MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>	-	121.170	133.254	122.936	-	122.936	95.724	78.461	41.661	30.014	Continuing	Continuing
MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&amp;P)</i>	-	7.697	0.000	2.000	-	2.000	3.705	5.114	10.920	24.186	Continuing	Continuing
MR4: <i>MEDICAL RADIOLOGICAL DEFENSE (ACD&amp;P)</i>	-	0.000	4.050	0.000	-	0.000	0.000	0.000	0.000	8.610	Continuing	Continuing
TE4: <i>TEST &amp; EVALUATION (ACD&amp;P)</i>	-	14.458	4.994	15.671	-	15.671	20.408	15.872	13.044	11.044	Continuing	Continuing
TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&amp;P)</i>	-	2.985	3.377	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	6.362

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**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) threat environment across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high-risk missions. This program element supports the

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>
<p>Advanced Component Development and Prototypes (ACD&amp;P) of medical and non-medical CB defensive equipment and materiel. Congress directed centralized management of Department of Defense (DoD) medical and non-medical CB Defense initiatives. 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 are structured to consolidate Joint and Service-unique tasks within four commodity areas: contamination avoidance, individual and collective force protection, decontamination, and medical countermeasures. ADC&amp;P is conducted for an array of chemical, biological, and 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 materiel without damaging combat equipment, personnel, or the environment. CB sensors and diagnostics enhance the Departments environmental and medical surveillance efforts by improving the monitoring and surveillance of threats and forces preparing for and engaged in military operations. These efforts are required to enable military commanders and the Military Health System to prevent, treat, and mitigate threats to individual Service Members and military units. Integration of CB sensor and diagnostic data from the programs in this ACD&amp;P will also be usable within the homeland security and Federal public health common operating pictures.</p> <p>The Department of Defense is responsible for research, development, acquisition, and deployment of medical countermeasures to prevent or mitigate the health effects of CB threats to the Armed Forces and directs strategic planning for and oversight of programs to support medical countermeasures development and acquisition for our Armed Forces personnel. The CB medical threat to the Armed Forces, in contrast with public health threats to U.S. citizens, encompasses all potential or continuing enemy actions that can render a Service Member combat ineffective. CB medical threats, because they apply as a whole to military units deployed on a specific mission and/or operations, may result in the unit being unable to complete its mission. CB medical countermeasures developed by DoD, unlike those developed to support U.S. population, must support military commanders practical operational requirements and deployment strategies and must emphasizes prevention of injury and illness and protection of the force. Preventive measures in this ACD&amp;P, such as vaccines against the most likely biological threat agents and traditional / non-traditional chemical agent prophylaxis, conserves fighting strength, decreases the logistics burden by reducing the need for larger deployed hospital footprint and greater demand for tactical and strategic medical evacuation, and satisfies the need for greater flexibility in military planning and operations. When vaccines and other prophylactic medical countermeasures are not available, efforts on this ACD&amp;P support pre-hospitalization treatment, en-route care, hospital care, and long-term clinical outcomes. Specific items in this category include improvements to CB diagnostics and therapeutics to mitigate the consequences of biologic agents and exposure to ionizing radiation due to nuclear or radiological attacks. DoD is the only Federal activity conducting ACD&amp;P on these prophylactic, diagnostic, and therapeutic CB medical countermeasures.</p> <p>The Department of Defense coordinates its efforts with the Departments of Health and Human Services to promote synergy and minimize redundancy. The Department of Defense ensures coordination by participating in the Public Health Emergency Medical Countermeasures Enterprise interagency strategic planning process ("One Portfolio"). The Department of Defense's longstanding experience and success in CB medical countermeasure research, development, acquisition, and deployment not only ensures protection of the Armed Forces, it also accelerates and improves the overall national efforts in CB medical countermeasure research, development, and acquisition because of its unique facilities, testing capabilities, and trained and experienced personnel.</p> <p>ACD&amp;P also supports 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.</p>		

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Chemical and Biological Defense Program	<b>DATE:</b> April 2013
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>
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Key efforts within this PE are in support of the FY14 policy priorities for Countering Biological Threats. Approximately \$92.9M supports the priority to "Promote global health security efforts through building and improving international capacity to prevent, detect, and respond to infectious disease threats, whether caused by natural, accidental, or deliberate events." Approximately \$45.8M supports the priority to "Expand our capability to prevent, attribute, and apprehend those engaged in biological weapons proliferation or terrorism, with a focus on facilitating data sharing and knowledge discovery to improve integrated capabilities." Approximately \$124.0M supports the priority to "Leverage science, technology, and innovation through domestic and international partnerships and agreements to improve global capacity to respond to and recover from biological incidents."

The projects in this program element support efforts in the technology development phase of the acquisition strategy and are therefore correctly placed in Budget Activity 4.

<b><u>B. Program Change Summary (\$ in Millions)</u></b>	<b><u>FY 2012</u></b>	<b><u>FY 2013</u></b>	<b><u>FY 2014 Base</u></b>	<b><u>FY 2014 OCO</u></b>	<b><u>FY 2014 Total</u></b>
Previous President's Budget	213.155	179.023	267.746	-	267.746
Current President's Budget	201.871	179.023	196.237	-	196.237
Total Adjustments	-11.284	0.000	-71.509	-	-71.509
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-8.354	0.000			
• SBIR/STTR Transfer	-2.930	0.000			
• Other Adjustments	0.000	0.000	-71.509	-	-71.509

**Change Summary Explanation**

Funding: FY14

-\$71.509M Other Adjustments (CA4 +\$7,050K; DE4 +\$7,623K; IP4 -\$1,000K; IS4 +\$2,527K; MB4 -\$71,566K; MC4 -\$14,947K; TE4 +\$2,900K; TT4 -\$4,096K)

Schedule: N/A

Technical: N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT CA4: CONTAMINATION AVOIDANCE (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
CA4: CONTAMINATION AVOIDANCE (ACD&P)	-	13.432	3.038	26.853	-	26.853	46.788	40.163	34.595	2.873	Continuing	Continuing
Quantity of RDT&E Articles												

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

## A. Mission Description and Budget Item Justification

This Advanced Component Development and Prototypes (ACD&P) Project supports Component Advanced Development and System Integration (CAD/SI) of reconnaissance, detection, identification, and hazard prediction equipment, hardware, and software. Individual efforts are: (1) Joint Biological Tactical Detection System (JBTDSD); (2) Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM) Increment 2; (3) Joint Standoff Detection System (JSDS); (4) Next Generation Chemical Detector (NGCD); and (5) Joint Biological Standoff Detection System (JBSDS) Increment 2.

The Joint Biological Tactical Detection System (JBTDSD) will integrate, test, and produce the first lightweight (less than 37 lbs), 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 archive sample for follow-on analyses. JBTDSD will provide near real-time local audio and visual alarm for use by any Military Occupational Specialty (MOS). JBTDSD components will be man-portable, battery-operable, and easy to employ. JBTDSD will be used to provide notification of a hazard and enhanced battle space awareness to protect and preserve the force. When networked, JBTDSD will augment existing biological detection systems to provide a theater-wide seamless array capable of biological detection, identification and warning. Units equipped with JBTDSD will conduct biological surveillance missions to detect BWA aerosol clouds, collect a sample, and identify the agent to support time sensitive force protection decisions.

The Joint Chemical Biological Radiological Agent Water Monitor (JCBRAWM) Increment 2 efforts will evaluate existing and emerging technologies to provide improvement to chemical detection in water to meet Tri-Service Drinking Water Standards and to detect emerging threats in water.

The Joint Standoff Detection System (JSDS), a new start program, will provide near real-time detection of chemical and biological attacks/incidents at a standoff distance. The modular system will be tailorable to the Service and can be employed at Aerial Port of Debarkation (APOD)/Sea Port of Debarkation (SPOD), Forward Operating Base (FOB), and on multiple platforms to include: fixed site, aerostat, and ground systems. The system will be networked to allow for cueing of point sensor arrays. Additionally, Unmanned Aerial Vehicle (UAV) (as demonstrated in the WMD Aerial Collection System (WACS) Advanced Technology Demonstration (ATD))/Unmanned Ground Vehicle (UGV) platforms could be integrated for sampling and identification. This schedule has been synchronized with the WACS ATD schedule to facilitate data exchange and possible excursions.

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program			DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT CA4: CONTAMINATION AVOIDANCE (ACD&P)		
The Next Generation Chemical Detector (NGCD) will detect and identify non-traditional agents, chemical warfare agents (CWAs), toxic industrial chemicals (TICs) in the air and on surfaces. The NGCD will provide improved CWA/TIC selectivity and sensitivity on multiple platforms as well as multiple environments. This sensor will improve detection, consequence management and reconnaissance, and weapons of mass destruction (WMD) interdiction capabilities.					
The Joint Biological Standoff Detection (JBSDS) Increment 2 mission provided near real-time detection of biological attacks/incidents and standoff early detection/warning (Detect to Warn) of Biological Warfare Agents (BWAs) at fixed sites or in static mode on vehicles. This detect-to-warn capability allowed Commanders theater-wide initial early warning capability against BWA attacks. JBSDS 1 was the first standoff early warning biological detection system for the Joint Services. The system demonstrated the capability of providing standoff detection, ranging, tracking, of BWA aerosol clouds for advanced warning, reporting, and protection. The current JBSDS 1 systems was used for training to support JBSDS 2 concept of operations (CONOPs) development and could have been deployed upon receipt of an urgent need statement. JBSDS Increment 2 addressed the requirements beyond the JBSDS 1 interim system. Those key requirements were lower false alarm rate, day/night discrimination sensitivity, and a reduction in overall system size, weight, and power.					
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2013	FY 2014
Title: 1) JBTDS			0.774	0.000	0.000
FY 2012 Accomplishments: Continued and completed Competitive Prototyping (CP) test and evaluation events.					
Title: 2) JBTDS			0.068	0.000	0.000
FY 2012 Accomplishments: Conducted technology readiness assessment of prototypes.					
Title: 3) JBTDS			0.200	0.200	0.000
FY 2012 Accomplishments: Initiated characterization and recreation of ten aerosol interferents for future SDD testing.					
FY 2013 Plans: Continue and finalize characterization and recreation of ten aerosol interferents for future SDD testing.					
Title: 4) JBTDS			0.265	0.000	0.000
FY 2012 Accomplishments: Initiated and completed modeling and simulation study.					
Title: 5) JBTDS			0.114	0.000	0.000
FY 2012 Accomplishments: Initiated and completed interferent method development for CP live agent testing.					
Title: 6) JBTDS			3.577	1.319	0.000

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<b>FY 2012 Accomplishments:</b> Continued to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, and technical support.					
<b>FY 2013 Plans:</b> Complete strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, and technical support.					
<b>Title:</b> 7) JBTDs			0.150	0.000	0.000
<b>FY 2012 Accomplishments:</b> Initiated and completed Material Availability modeling for Sustainment Key Performance Parameter (KPP) in Capability Development Document (CDD).					
<b>Title:</b> 8) JCBRAWM Increment 2			0.000	0.000	0.200
<b>FY 2014 Plans:</b> Evaluate existing and emerging technologies to provide improvement to chemical detection in water and to detect emerging threats in water.					
<b>Title:</b> 9) JSDS			0.000	0.000	5.500
<b>FY 2014 Plans:</b> Initiate early prototype designs, conduct studies, and perform testing to support evaluation of technology concepts.					
<b>Title:</b> 10) JSDS			0.000	0.000	1.500
<b>FY 2014 Plans:</b> Establish program office to conduct strategic, tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, technical support, and milestone documentation.					
<b>Title:</b> 11) NGCD			0.000	1.319	5.853
<b>FY 2013 Plans:</b> Initiate program management, systems engineering, and Integrated Product Team (IPT) support and prepare for MS A.					
<b>FY 2014 Plans:</b> Continue program management, systems engineering and IPT support.					
<b>Title:</b> 12) NGCD			0.000	0.200	13.800
<b>FY 2013 Plans:</b>					

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Initiate Request For Proposal (RFP) preparation.					
<b>FY 2014 Plans:</b> Award multiple contracts to develop competing prototypes and conduct Integrated Product Reviews (IPR).					
<b>Title:</b> 13) JBSDS Increment 2 <b>FY 2012 Accomplishments:</b> Provided strategic/tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, technical support, and milestone documentation.			1.804	0.000	0.000
<b>Title:</b> 14) JBSDS Increment 2 <b>FY 2012 Accomplishments:</b> Completed agent performance assessment, cross section measurements, and agent variability testing.			2.677	0.000	0.000
<b>Title:</b> 15) JBSDS Increment 2 <b>FY 2012 Accomplishments:</b> Provided test planning and test support (continued simulatant variability testing, aerosol modeling, testing, and relative humidity testing).			0.921	0.000	0.000
<b>Title:</b> 16) JBSDS Increment 2 <b>FY 2012 Accomplishments:</b> Initiated and completed algorithm enhancement/optimization and small cloud mapping Light Detection and Ranging (LiDAR) study/demo.			1.520	0.000	0.000
<b>Title:</b> 17) JBSDS Increment 2 <b>FY 2012 Accomplishments:</b> Initiated and completed user workshop on early warning of chemical and biological aerosol.			0.364	0.000	0.000
<b>Title:</b> 18) JBSDS Increment 2 <b>FY 2012 Accomplishments:</b> Provided enhancements to support development of high priority efforts.			0.998	0.000	0.000
<b>Accomplishments/Planned Programs Subtotals</b>			13.432	3.038	26.853

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C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• CA5: CONTAMINATION AVOIDANCE (EMD)	52.854	33.018	36.766		36.766	58.170	68.535	45.458	67.888	Continuing	Continuing
• JF0100: JOINT CHEMICAL AGENT DETECTOR (JCAD)	46.136	15.212	47.598		47.598	47.024	47.971	49.688	0.000	Continuing	Continuing
• JN0900: NON TRADITIONAL AGENT DETECTION (NTAD)	3.687	4.770	8.000		8.000	0.000	0.000	0.000	0.000	0.000	16.457
• MC0101: CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)	6.624	15.080	34.998		34.998	81.258	98.272	105.000	120.326	Continuing	Continuing
• MX0001: JOINT BIO TACTICAL DETECTION SYSTEM (JBTDS)	0.000	0.000	0.000		0.000	0.000	0.000	11.691	37.051	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
JBTDS											
The JBTDS is being developed using an evolutionary acquisition strategy. JBTDS will make maximum use of commercial off-the-shelf (COTS) and Government off-the-shelf (GOTS) technology. The awards for competitive prototyping utilized best value approach via the competitive CBRNE mission support contract to three contractor teams. Full and open competition will be utilized at MS B for the SDD contract with options for Low Rate Initial Production and Full Rate Production. Coordination with other programs (Common Analytical Laboratory System and Next Generation Diagnostic System) is occurring to share information and leverage potential common identification technology solutions to the three programs.											
JCBRAWM											
Current effort is being conducted inhouse to address emerging threats in water and to enhance chemical detection capabilities to meet current Tri-Service Drinking Water Standards. Initial work focuses on determining viability of enhancements to existing kits through analysis of chemical processes. Results will provide data required to develop viable alternative approaches and to develop performance requirements for the Increment 2 program at MS A.											
JSDS											
JSDS will maximize the use of commercial and government off the shelf mature technologies with an expected start at Milestone B. Full and open competition will be utilized for the SDD phase of the program.											



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<p>NGCD</p> <p>The NGCD will build upon the low volatility work conducted under JCAD in FY11 and FY12. The NGCD analysis of alternatives will be used to generate performance specifications that will support contracting for competitive prototype development. The goal for the initial stage of development will be to award multiple contracts for each variant of the NGCD and down select to one contractor per variant by Milestone B.</p> <p>JBSDS</p> <p>Program closed out in FY12.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>N/A</p>		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
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<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** JSDS - HW S - Initiate early prototypes for technology evaluation	C/CPFF	TBD:	0.000	0.000		0.000		2.000	Mar 2014	-		2.000	Continuing	Continuing	0.000
** NGCD - HW S - Competitive Prototype System Design	C/CPIF	TBD:	0.000	0.000		0.000		13.800	Mar 2014	-		13.800	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	0.000		0.000		15.800		0.000		15.800			0.000
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** JBTDS - ES S - Technology Readiness Assessment	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.068	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
ES S - AMSAA Material Availability Modeling	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.150	Apr 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** NGCD - ES S - Initiate IPT Activity	MIPR	TBD:	0.000	0.000		0.300	Jun 2013	1.700	Dec 2013	-		1.700	Continuing	Continuing	0.000
** JBSDS - TD/D SB - Enhancement Developments	PO	Various:	0.000	0.998	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
ES S - Simulant Agent Variability Study (SAVS) Measurements	MIPR	Sandia National Laboratory (SNL):Albuquerque, NM	5.058	1.768	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
TD/D S - User workshop facilitation	FFRDC	MA Institute of Tech - Lincoln Labs (MIT-LL):Lexington, MA	1.120	0.300	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> CA4: <i>CONTAMINATION AVOIDANCE (ACD&amp;P)</i>			
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
TD/D SB - R&T Team for SAVS testing	MIPR	Various:	0.668	0.300	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
<b>Subtotal</b>			6.846	3.584		0.300		1.700		0.000		1.700			0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** JBTDS - DTE S - Competitive Prototyping Testing	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.402	Feb 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE S - CP Testing	MIPR	Dugway Proving Ground (DPG):Dugway, UT	0.000	0.170	Feb 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE S - CP Testing #2	MIPR	Johns Hopkins University - Applied Physics Lab:Laurel, MD	0.000	0.202	Feb 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE S - Modeling and simulation study	MIPR	Institute for Defense Analysis (IDA):Alexandria, VA	0.000	0.265	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE S - Characterization of aerosol interferents	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.200	Feb 2012	0.200	Feb 2013	0.000		-		0.000	Continuing	Continuing	0.000
DTE S - Interferent method development	MIPR	Johns Hopkins University - Applied Physics Lab:Laurel, MD	0.000	0.114	Apr 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** JSDS - OTH S - Initiate testing to support evaluation of technology concepts	MIPR	Dugway Proving Ground (DPG):Dugway, UT	0.000	0.000		0.000		3.500	Mar 2014	-		3.500	Continuing	Continuing	0.000

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> CA4: <i>CONTAMINATION AVOIDANCE (ACD&amp;P)</i>			
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** NGCD - OTH SB - Test & Evaluation IPT	MIPR	Various:	0.000	0.000		0.150	Mar 2013	0.600	Dec 2013	-		0.600	Continuing	Continuing	0.000
** JBSDS - OTH SB - Developmental Testing Support	MIPR	Dugway Proving Ground (DPG):Dugway, UT	2.154	0.460	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
OTH SB - Agent performance analysis and Technology Performance Analysis	MIPR	Johns Hopkins University - Applied Physics Lab:Laurel, MD	2.500	1.161	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE S - Technology Demo	C/CPFF	Various:	0.000	1.254	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE C - DT Test Support	C/CPFF	Camber Corp.:Huntsville, AL	1.825	0.110	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
<b>Subtotal</b>			6.479	4.338		0.350		4.100		0.000		4.100			0.000
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** JBTDS - PM/MS SB - Program Management and System Engineering Support	MIPR	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	3.577	Feb 2012	1.319	Jan 2013	0.000		-		0.000	Continuing	Continuing	0.000
** JCBRAWM - PM/MS S - Program Management and Systems Engineering Support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	0.000	0.000		0.000		0.200	Mar 2014	-		0.200	Continuing	Continuing	0.000
** JSDS - PM/MS SB - Management/Systems Engineering/Support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	0.000	0.000		0.000		1.500	Dec 2013	-		1.500	Continuing	Continuing	0.000

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> CA4: <i>CONTAMINATION AVOIDANCE (ACD&amp;P)</i>			
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** NGCD - PM/MS S - Program Management and Systems Engineering Support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	0.000	0.000		1.069	Mar 2013	3.553	Dec 2013	-		3.553	Continuing	Continuing	0.000
** JBSDS - PM/MS S - Management/Systems Engineering Support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	13.572	1.933	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
<b>Subtotal</b>			13.572	5.510		2.388		5.253		0.000		5.253			0.000
			<b>All Prior Years</b>	<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			26.897	13.432		3.038		26.853		0.000		26.853			0.000
<b>Remarks</b>															

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> CA4: <i>CONTAMINATION AVOIDANCE (ACD&amp;P)</i>
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
** JBTDS - Competitive Prototyping Testing																												
JBTDS - Capability Development Document																												
JBTDS - TEMP																												
JBTDS - MS B Decision																												
JBTDS - SDD Contract Award																												
JBTDS - PDR																												
JBTDS - DT 1																												
JBTDS - CDR																												
JBTDS - DT 2																												
JBTDS - Milestone C																												
JBTDS - PQT																												
** JCBRAWM Incr. 2 - Technology Evaluation																												
JCBRAWM Incr. 2 - Prototype Evaluation																												
JCBRAWM Incr. 2 - Milestone A																												
** JSDS - Initiate early prototypes for technology evaluation																												
JSDS - Materiel Development Decision (MDD)																												
JSDS - Milestone B																												
JSDS - Engineering & Manufacturing Development																												
** NGCD - Milestone A																												
NGCD - Prototype Development Contract Award																												
NGCD - Initial Prototype Build																												
NGCD - Spectrum Collection & Algorithm Test																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Chemical and Biological Defense Program																						DATE: April 2013										
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)										R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)								PROJECT CA4: CONTAMINATION AVOIDANCE (ACD&P)														
					FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
					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
NGCD - Final Prototype Build					<div></div>																											
NGCD - Final Prototype Test					<div></div>																											
NGCD - Preliminary Design Review					<div></div>																											
NGCD - Milestone B					<div></div>																											
NGCD - SDD Contract Award					<div></div>																											
** JBSDS - Program Closeout					<div></div>																											

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

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

Events	Start		End	
	Quarter	Year	Quarter	Year
** JBTDS - Competitive Prototyping Testing	1	2012	1	2013
JBTDS - Capability Development Document	2	2013	3	2013
JBTDS - TEMP	3	2013	3	2013
JBTDS - MS B Decision	3	2013	3	2013
JBTDS - SDD Contract Award	1	2014	1	2014
JBTDS - PDR	2	2014	2	2014
JBTDS - DT 1	2	2014	3	2015
JBTDS - CDR	4	2014	4	2014
JBTDS - DT 2	1	2016	3	2016
JBTDS - Milestone C	3	2017	3	2017
JBTDS - PQT	4	2017	3	2018
** JCBRAWM Incr. 2 - Technology Evaluation	2	2014	2	2014
JCBRAWM Incr. 2 - Prototype Evaluation	1	2015	4	2016
JCBRAWM Incr. 2 - Milestone A	1	2017	1	2017
** JSDS - Initiate early prototypes for technology evaluation	1	2014	4	2015
JSDS - Materiel Development Decision (MDD)	2	2014	2	2014
JSDS - Milestone B	4	2015	4	2015
JSDS - Engineering & Manufacturing Development	1	2016	4	2018
** NGCD - Milestone A	3	2013	3	2013
NGCD - Prototype Development Contract Award	2	2014	2	2014
NGCD - Initial Prototype Build	2	2014	1	2015
NGCD - Spectrum Collection & Algorithm Test	2	2015	1	2016



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program	<b>DATE:</b> April 2013
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> CA4: <i>CONTAMINATION AVOIDANCE (ACD&amp;P)</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
NGCD - Final Prototype Build	2	2016	3	2016
NGCD - Final Prototype Test	4	2016	2	2017
NGCD - Preliminary Design Review	2	2017	2	2017
NGCD - Milestone B	3	2017	3	2017
NGCD - SDD Contract Award	3	2017	3	2017
** JBSDS - Program Closeout	1	2012	3	2013

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT CM4: HOMELAND DEFENSE (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
CM4: HOMELAND DEFENSE (ACD&P)	-	16.155	3.003	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	19.158
Quantity of RDT&E Articles												
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
This Advanced Component Development and Prototypes (ACD&P) Project supports Component Advanced Development and System Integration (CAD/SI) for programs that provide a comprehensive, integrated and layered CBRN protection and response capability for military installations and specialized military consequence management units both at home and abroad. Particular emphasis is placed on improving military-civilian interoperability in CBRN detection and response capabilities; providing tiered levels of CBRN protection and response capabilities to military installations; and tailored modular and integrated Commercial off-the-shelf (COTS) solutions to consequence management units.												
Included in this Project are: Technology 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 the validation and demonstration of desired functional capabilities.												
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
Title: 1) CALS - System Engineering and Program Management										3.793	1.332	0.000
Description: System engineering and technical control, as well as the business management of the system/program. It encompasses the overall planning, direction, and control of the definition, development, and production of the system/program, including functions of logistics engineering and integrated logistics support (ILS) management (e.g., maintenance support, facilities, personnel, training, testing, and activation of the system).												
FY 2012 Accomplishments: Continued System Engineering and Program Management to provide engineering support and program and technical guidance to ongoing System Integration Laboratory efforts. Maintained oversight of component test completion, and contract actions in support of modular design concepts and preparation for Preliminary Design Review.												
FY 2013 Plans:												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> CM4: <i>HOMELAND DEFENSE (ACD&amp;P)</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>
Continue System Engineering and Program Management to provide engineering support and program and technical guidance to ongoing System Integration Laboratory efforts. Maintain oversight of component test completion, and contract actions in support of modular design concepts and conduct the Preliminary Design Review.			
<b>Title:</b> 2) CALS - System Integration Laboratory  <b>Description:</b> Establishment of a System Integration laboratory to assist in the mitigation of programmatic risk and facilitate rapid evaluation of technology, technical approaches and constraints, configuration designs, and logistical issues.  <b>FY 2012 Accomplishments:</b> Continued efforts to mitigate program risk through the use of a system integration laboratory tool set designed to facilitate the rapid evaluation of technology configuration designs and logistical issues.  <b>FY 2013 Plans:</b> Complete efforts to mitigate program risk through the use of a system integration laboratory tool set designed to facilitate the rapid evaluation of technology configuration designs and logistical issues.		0.356	0.122
<b>Title:</b> 3) CALS - Development Engineering - Component Evaluation and Subsystem Design  <b>Description:</b> Studies, analysis, design development, evaluation, testing, and redesign for the system component(s) during system development. Includes the design efforts of preparing specifications, engineering drawings, parts lists, wiring diagrams, test planning and scheduling, analysis of test results, data reduction, report preparations and establishment of reliability, maintainability, and quality assurance control requirements.  <b>FY 2012 Accomplishments:</b> Continued subsystem component evaluation and module design of alternative system module and system configurations.  <b>FY 2013 Plans:</b> Complete subsystem component evaluation and module design of alternative system module and system configurations.		8.940	1.263
<b>Title:</b> 4) CALS - Production Engineering and Planning  <b>Description:</b> Efforts to ensure the producibility of the developmental materiel system, item, or component. Involves engineering tasks necessary to ensure timely, efficient, and economic production of essential materiel and is primarily of a planning nature. Includes efforts related to development of the Technical Data Package (TDP), quality assurance (QA) plans, and special production processes to assess producibility.  <b>FY 2012 Accomplishments:</b>		0.834	0.286
			0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program										<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>				<b>PROJECT</b> CM4: <i>HOMELAND DEFENSE (ACD&amp;P)</i>				
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>										<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Continued producibility, quality assurance and logistics studies required to support development of modules for the CALS.												
<b>FY 2013 Plans:</b> Complete producibility, quality assurance, logistics studies and conduct the preliminary design review required to support development of modules for the CALS.												
<b>Title:</b> 5) CALS - Biodetection - Development and Integration  <b>Description:</b> Development of an integration effort to incorporate biodetection capability with other detection and response technologies to include collective protection while leveraging a variety of associated technologies.										2.232	0.000	0.000
<b>FY 2012 Accomplishments:</b> Initiated development of an integrated biodetection system capability.												
<b>Accomplishments/Planned Programs Subtotals</b>										16.155	3.003	0.000
<b>C. Other Program Funding Summary (\$ in Millions)</b>												
<b>Line Item</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO</b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	
• CM5: <i>HOMELAND DEFENSE (EMD)</i>	8.984	9.952	18.533		18.533	1.600	0.000	0.000	0.000	0.000	39.069	
• JS0004: <i>WMD - CIVIL SUPPORT TEAMS (WMD CST)</i>	15.065	24.025	13.314		13.314	11.657	13.282	13.306	6.027	Continuing	Continuing	
• JS0005: <i>COMMON ANALYTICAL LABORATORY SYSTEM (CALS)</i>	0.000	0.000	0.957		0.957	34.991	54.411	64.946	33.008	Continuing	Continuing	
<b>Remarks</b>												
<b>D. Acquisition Strategy</b>												
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 Joint Program Executive Office for Chemical Biological Defense (JPEO-CBD) to the extent possible. CALS will accommodate these component requirements within a modular and scalable concept framework.												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> CM4: <i>HOMELAND DEFENSE (ACD&amp;P)</i>
<b><u>E. Performance Metrics</u></b> N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide						PE 0603884BP: CHEMICAL/BIOLOGICAL				CM4: HOMELAND DEFENSE (ACD&P)					
BA 4: Advanced Component Development & Prototypes (ACD&P)						DEFENSE (ACD&P)									
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** CALS - HW SB - Module Design	C/CPIF	Science Applications International Corporation (SAIC):Abingdon, MD	0.000	0.000		0.632	Dec 2012	0.000		-		0.000	0.000	0.632	0.000
HW SB - CALS Production Engineering and Planning	Various	Various:	0.000	0.834	Sep 2012	0.286	Dec 2012	0.000		-		0.000	0.000	1.120	0.000
SW S - CALS Biodetection - Development & Integration	C/CPFF	AGENTASE LLC:Pittsburgh, PA	0.000	2.232	Nov 2012	0.000		0.000		-		0.000	0.000	2.232	0.000
Subtotal			0.000	3.066		0.918		0.000		0.000		0.000	0.000	3.984	0.000
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** CALS - ES S - Engineering Support System - CALS	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	2.442	Mar 2012	0.866	Mar 2013	0.000		-		0.000	0.000	3.308	0.000
ES S - System Integration Laboratory Support	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.356	Mar 2012	0.122	Mar 2013	0.000		-		0.000	0.000	0.478	0.000
Subtotal			0.000	2.798		0.988		0.000		0.000		0.000	0.000	3.786	0.000
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** CALS - OTHT C - Analytical Detection Component Testing	C/CPIF	MRIGlobal:Kansas City, MO	0.000	8.940	Mar 2012	0.631	Dec 2012	0.000		-		0.000	0.000	9.571	0.000

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> CM4: <i>HOMELAND DEFENSE (ACD&amp;P)</i>			
<b>Test and Evaluation (\$ in Millions)</b>				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
<b>Subtotal</b>			0.000	8.940		0.631		0.000		0.000		0.000	0.000	9.571	0.000
<b>Management Services (\$ in Millions)</b>				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** CALS - PM/MS S - Program Office - Planning and Programming	MIPR	Various:	0.000	1.351	Mar 2012	0.466	Dec 2012	0.000		-		0.000	0.000	1.817	0.000
<b>Subtotal</b>			0.000	1.351		0.466		0.000		0.000		0.000	0.000	1.817	0.000
			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>			0.000	16.155		3.003		0.000		0.000		0.000	0.000	19.158	0.000
<b>Remarks</b>															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2014 Chemical and Biological Defense Program																<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>								<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>								<b>PROJECT</b> CM4: <i>HOMELAND DEFENSE (ACD&amp;P)</i>			

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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 Component Downselect and Evaluation																												
CALS - CALS Preliminary Design Review																												
CALS - CALS Milestone B																												



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> CM4: <i>HOMELAND DEFENSE (ACD&amp;P)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
** CALS - CALS Component Downselect and Evaluation	2	2012	2	2013
CALS - CALS Preliminary Design Review	2	2013	2	2013
CALS - CALS Milestone B	3	2013	3	2013

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT DE4: DECONTAMINATION SYSTEMS (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
DE4: DECONTAMINATION SYSTEMS (ACD&P)	-	20.755	12.374	17.870	-	17.870	10.611	13.174	9.337	5.500	Continuing	Continuing
Quantity of RDT&E Articles												

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

## **A. Mission Description and Budget Item Justification**

This ACD&P project supports the development of Contamination Mitigation (ConMit) systems utilizing solutions that will remove and/or detoxify contaminated material without damaging combat equipment, personnel, or the environment. ConMit 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 associated with decontamination and contamination mitigation operations.

This funding supports the Decontamination Family of Systems (DFoS) in FY14.

The DFoS program facilitates the rapid transition of mature Science and Technology (S&T) research efforts to existing Decontamination or ConMit Initial Capabilities Document (ICD) Programs of Record and guides S&T community efforts toward meeting the needs of the Warfighter. Leveraging the outcome of the Materiel Development Decision (MDD) (3QFY11) directed Analysis of Alternatives (AoA), DFoS will develop a Family of Systems that includes equipment to improve decontamination processes and decontaminant solutions to meet the capability gaps for decontaminating Non-Traditional Agent (NTA) and Chemical and Biological Warfare Agents (CBWA) from personnel, equipment, vehicle interiors/exterior, terrain, and fixed facilities. DFoS has five initial efforts established to address some of the requirements of the ConMit ICD: the Joint Sensitive Equipment Wipe (JSEW), the General Purpose Decontaminant (GPD), the Contamination Indicator Decontamination Assurance System (CIDAS), Coatings, and Dial-A-Decon.

JSEW will provide immediate/operational decontamination capabilities for sensitive equipment in hostile and non-hostile environments that have been exposed to chemical agents/contamination. The JSEW will decrease the level of gross chemical agent contamination from 10 g/m<sup>2</sup> to less than or equal to 1 g/m<sup>2</sup> in support of thorough decontamination on sensitive equipment. In addition, the JSEW program will investigate the potential for NTA compatibility of JSEW prototypes.

GPD will provide thorough decontamination capabilities for tactical vehicles, shipboard surfaces, crew-served weapons, and individual/personal weapons in hostile and non-hostile environments that have been exposed to traditional and non-traditional CB contamination.

CIDAS will provide a contamination indicator/decontamination assurance technology and an applicator for use on tactical vehicles, shipboard surfaces, and crew-served and individual weapons in hostile and non-hostile environments that have been exposed to traditional and non-traditional chemical contamination.

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT DE4: DECONTAMINATION SYSTEMS (ACD&P)	
<p>The Coatings effort will provide one or more of the following types of coatings: barrier coatings, strippable coatings, reactive coatings, and sealants, for use on tactical vehicles, shipboard surfaces, and crew-served and individual weapons in hostile and non-hostile environments that may be exposed to CB contamination.</p> <p>The Dial-A-Decon effort will provide an adjustable decontamination formulation/mixing system that is generated for point-of-use based on user input of agent threat, actual field conditions, and type of water available. Dial-A-Decon decontaminants will provide decontamination capabilities for tactical vehicles, shipboard surfaces, crew-served weapons, and individual/personal weapons in hostile and non-hostile environments that have been exposed to CB contamination.</p> <p>Additionally, the DFoS Program funded the Contaminated Human Remains Pouch (CHRP) effort in FY12. The CHRP is a recovery and containment system which will protect personnel from the hazards associated with handling human remains that are potentially contaminated with Chemical, Biological, Radiological, and Nuclear (CBRN) agents and Toxic Industrial Materials (TIM) without posing additional risk to the handlers or the environment.</p> <p>The Joint Platform Interior Decontamination (JPID) program will provide decontamination capabilities for interiors of vehicles, ships, fixed-site facilities, mobile maintenance facilities, aircraft, and sensitive equipment inherent to the platform during air, ground, and sea operations in hostile and non-hostile environments that have been exposed to CBRN agents/contamination. To accommodate the array of Service mission sets, the potential for varying system and/or technology configurations may be required. The JPID Preferred System Concept (PSC) may consist of multiple solution sets that provide increments of capability or one solution to address the various platforms and threats identified under the program.</p>			
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
<b>Title:</b> 1) DFoS - Non-Traditional Agent (NTA) <b>FY 2012 Accomplishments:</b> Conducted development of NTA efforts to include initial studies and modeling for effluent decontamination; conducted chemical efficacy and material compatibility for chemical decontaminants; evaluated decontamination wipes for NTA decontamination on equipment. <b>FY 2013 Plans:</b> Continue NTA efforts to include material compatibility testing, environmental testing, and accelerated aging for decontamination assurance spray, chemical decontaminant, decontamination wipes, effluent decontamination, and strippable/sealant coatings.	7.339	3.500	0.000
<b>Title:</b> 2) DFoS - CIDAS <b>FY 2012 Accomplishments:</b> Initiated engineering, testing and logistics planning and contract documentation to support technology development of CIDAS. <b>FY 2013 Plans:</b> Begin Developmental Testing (DT) for the CIDAS program to include indication level, material compatibility, and Environmental, Safety, and Occupational Health (ESOH).	0.633	1.819	0.000
<b>Title:</b> 3) DFoS - CIDAS	0.000	0.504	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>		<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<b>FY 2013 Plans:</b> Award contract(s) to purchase 1,920 gallons of CIDAS technology (at \$200 per gallon) and 12 CIDAS technology applicators (at \$10 thousand each) for Competitive Prototype (CP) testing.					
<b>Title:</b> 4) DFoS - JSEW <b>FY 2012 Accomplishments:</b> Initiated DT for the JSEW program to include chemical efficacy, material compatibility, equipment degradation, durability and byproducts analysis, and Environmental, Safety, and Occupational Health (ESOH). <b>FY 2013 Plans:</b> Continue DT for the JSEW program to include efficacy (hot/cold/relative humidity), accelerated shelf-life, Individual Protective Equipment (IPE) compatibility, detector compatibility, and human factors assessment.			2.081	2.329	0.000
<b>Title:</b> 5) DFoS - JSEW <b>FY 2012 Accomplishments:</b> Awarded 4 contracts to deliver 3,480 prototype JSEW systems (at \$6 to \$44 each) for CP testing. <b>FY 2013 Plans:</b> Purchase 2,600 prototype JSEW systems (at \$17 each) for CP testing and develop programmatic documentation.			0.115	0.450	0.000
<b>Title:</b> 6) DFoS - GPD <b>FY 2012 Accomplishments:</b> Initiated DT for the GPD program to include kinetics/byproducts, material compatibility, thorough efficacy (contact and vapor), accelerated aging, and ESOH. <b>FY 2013 Plans:</b> Continue DT for the GPD program to include high/low temperature kinetics, pot life, efficacy (complex surfaces), accelerated shelf-life, IPE, and detector compatibility.			4.938	3.302	0.000
<b>Title:</b> 7) DFoS - GPD <b>FY 2012 Accomplishments:</b> Awarded 7 contracts to purchase 350 gallons of prototype GPDs (at \$25 to \$336 per gallon) for CP testing. <b>FY 2013 Plans:</b> Purchase 13,280 gallons of prototype GPDs (at \$35 per gallon) for CP testing and develop programmatic documentation.			0.059	0.470	0.000
<b>Title:</b> 8) DFoS - Contaminated Human Remains Pouch (CHRP)			1.498	0.000	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>		<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<b><i>FY 2012 Accomplishments:</i></b> Released Request for Proposal (RFP) to assess vendor capabilities against Service requirements and obtained bid samples for CP testing. Completed CP testing that included vapor live agent swatch, durability, safety, and human factors assessment of the CHRP to identify viable candidates for Engineering and Manufacturing Development (EMD) phase testing. Continued research studies to identify what efficiencies could be gained for EMD testing, based on chemical and physical properties of CBRN agents.					
<b><i>Title:</i></b> 9) DFoS - Coatings <b><i>FY 2014 Plans:</i></b> Finalize engineering, testing and logistics planning, and contract documentation to support technology development of strippable Coatings effort. Begin DT efforts to include chemical efficacy, agent reactivity, materials compatibility, and ESOH assessment.			0.000	0.000	1.998
<b><i>Title:</i></b> 10) DFoS - Coatings <b><i>FY 2014 Plans:</i></b> Purchase 60 gallons of prototype Coatings (at \$200 per gallon) for CP testing and data item deliverables.			0.000	0.000	0.500
<b><i>Title:</i></b> 11) DFoS - Dial-A-Decon (Formulation) <b><i>FY 2014 Plans:</i></b> Finalize engineering, testing and logistics planning, and contract documentation to support Dial-A-Decon effort. Begin DT efforts to include chemical efficacy (materials compatibility) for field adjustable formulations and ESOH analysis.			0.000	0.000	2.471
<b><i>Title:</i></b> 12) DFoS - Dial-A-Decon (Formulation) <b><i>FY 2014 Plans:</i></b> Award contracts to purchase 500 gallons of point-of-use formulation (at \$35 per gallon) for CP testing and data item deliverables.			0.000	0.000	0.300
<b><i>Title:</i></b> 13) DFoS - CIDAS <b><i>FY 2014 Plans:</i></b> Complete Competitive Prototype (CP)/Developmental Testing (DT) to include indication level, material compatibility, human factors assessment, accelerated shelf-life, logistics analysis, Environmental, Safety, and Occupational Health (ESOH) and Individual Protective Equipment (IPE) compatibility.			0.000	0.000	3.921
<b><i>Title:</i></b> 14) DFoS - GPD <b><i>FY 2014 Plans:</i></b> Complete Developmental Testing (DT) to include expanded efficacy, packaging/Military Standard (MIL-STD) 810G, shelf-life, and Product Verification Testing (PVT).			0.000	0.000	5.298
<b><i>Title:</i></b> 15) DFoS - GPD			0.000	0.000	0.692

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT DE4: DECONTAMINATION SYSTEMS (ACD&P)				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
FY 2014 Plans: Purchase 6,000 gallons of prototype GPDs (at \$35 per gallon) for CP testing and data item deliverables.												
Title: 16) DFoS - JSEW FY 2014 Plans: Continue Developmental Testing (DT) to include expanded efficacy, materials and detector compatibility as well as additional Individual Protective Equipment (IPE) and shelf-life testing.										0.000	0.000	2.490
Title: 17) DFoS - JSEW FY 2014 Plans: Purchase 1,000 JSEW test assets (at \$17 each) for DT and data item deliverables.										0.000	0.000	0.200
Title: 18) JPID FY 2012 Accomplishments: Completed Large Scale Storage and Operations Area (LSSOA) test article effort and program management.										2.092	0.000	0.000
Title: 19) JPID FY 2012 Accomplishments: Supported high priority requirements to advance technologies for the Special Operations community.										2.000	0.000	0.000
Accomplishments/Planned Programs Subtotals										20.755	12.374	17.870
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
• DE5: DECONTAMINATION SYSTEMS (EMD)	0.000	9.324	2.412		2.412	8.506	17.961	17.417	31.827	Continuing	Continuing	
• JD0050: DECONTAMINATION FAMILY OF SYSTEMS (DFoS)	0.000	0.506	0.000		0.000	4.450	9.754	16.337	28.356	Continuing	Continuing	
• JD0063: CONTAMINATED HUMAN REMAINS POUCH (CHRP)	0.000	0.000	0.000		0.000	1.553	1.542	1.114	0.000	0.000	4.209	
Remarks												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>
<b><u>D. Acquisition Strategy</u></b> DFoS  The DFoS is utilizing an incremental acquisition strategy to transition various developmental technology efforts (Commercial-Off-The-Shelf (COTS), and DoD technology efforts) to meet high priority Warfighter capability gaps. DFoS will support Major Defense Acquisition Programs (MDAPs) and Programs of Record by guiding S&T efforts and transitioning mature technologies to meet program requirements. A multi-phased Analysis of Alternatives (AoA) is being conducted to identify and evaluate the operational effectiveness of potential material solutions to satisfy Service requirements. The first two efforts being evaluated under the AoA are Coatings and Dial-A-Decon. Both of these efforts will employ Competitive Prototyping (CP) to facilitate the identification and evaluation of technologies that can meet the Initial Capabilities Document (ICD) requirements. The JSEW program employs competitive prototyping to facilitate the evaluation of technologies. Candidates will be evaluated from competing vendor prototypes to determine optimal JSEW systems. The JSEW program will continue following an evolutionary acquisition strategy; employing a CP effort to facilitate the identification and evaluation of mature technologies that can meet the JSEW Capabilities Development Document (CDD) requirements. The GPD program employs competitive prototyping to facilitate the evaluation of technologies. Seven contracts were awarded for competing vendors to provide prototype GPDs. Candidates will be evaluated to determine optimal GPD systems to satisfy CBRN user needs. The CIDAS program employs competitive prototyping to facilitate the identification and evaluation of technologies. A request for proposal will solicit industry using a full and open competition best value contract strategy for technologies capable of meeting the CIDAS requirements. It is anticipated that multiple contracts will be awarded for competing vendors to provide CIDAS technologies for Technology Development activities.		
<b><u>E. Performance Metrics</u></b> N/A		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** DFoS - HW S - UNS Effluent Decon for NTA Contaminated Run-off	C/FFP	TBD:	0.000	0.000		0.200	Feb 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - UNS NTA Strippable/Sealant Coatings	C/FFP	TBD:	0.000	0.000		0.200	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - Contamination Indicator/Decon Assurance System (CIDAS)	C/FFP	Various:	0.000	0.000		0.504	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - General Purpose Decon (GPD)	C/FFP	Various:	0.000	0.059	May 2012	0.470	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - Joint Sensitive Equipment Wipes (JSEW)	C/FFP	Various:	0.000	0.115	Mar 2012	0.450	Feb 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - Dial-A-Decon	C/FFP	TBD:	0.000	0.000		0.000		0.300	Apr 2014	-		0.300	Continuing	Continuing	0.000
HW S - Coatings	C/FFP	TBD:	0.000	0.000		0.000		0.400	Mar 2014	-		0.400	Continuing	Continuing	0.000
** DFoS GPD - HW S - General Purpose Decon (GPD)	C/FFP	TBD:	0.000	0.000		0.000		0.692	Dec 2013	-		0.692	Continuing	Continuing	0.000
** DFoS JSEW - HW S - Joint Sensitive Equipment Wipe (JSEW)	C/FFP	TBD:	0.000	0.000		0.000		0.200	Jan 2014	-		0.200	Continuing	Continuing	0.000
** JPID - HW S - Advanced Technologies	Allot	US Special Operations Command: Tampa, FL	0.000	2.000	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	2.174		1.824		1.592		0.000		1.592			0.000



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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program													DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)						PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				DE4: DECONTAMINATION SYSTEMS (ACD&P)					
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** DFoS - TD/D S - DFOS IPT Technical Support	MIPR	Various:	0.000	1.056	Dec 2011	1.000	Jan 2013	1.000	Jan 2014	-		1.000	Continuing	Continuing	0.000
TD/D S - CHRP IPT Technical Support	MIPR	Various:	0.000	0.331	Dec 2011	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** DFoS CIDAS - TD/D SB - IPT Technical Support	MIPR	Various:	0.000	0.000		0.000		0.700	Jan 2014	-		0.700	Continuing	Continuing	0.000
** DFoS GPD - ES S - IPT Technical Support	MIPR	Various:	0.000	0.000		0.000		1.000	Jan 2014	-		1.000	Continuing	Continuing	0.000
** DFoS JSEW - ES S - IPT Technical Support	MIPR	Various:	0.000	0.000		0.000		0.650	Jan 2014	-		0.650	Continuing	Continuing	0.000
Subtotal			0.000	1.387		1.000		3.350		0.000		3.350			0.000
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** DFoS - DTE S - UNS NTA Decon Assurance Spray	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	0.000		0.500	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
DTE S - UNS NTA Chemical Decon	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	3.454	Mar 2012	0.800	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
DTE S - UNS NTA Equipment Wipe	C/FFP	Battelle Memorial Institute:Columbus, OH	0.000	1.322	May 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE S - UNS NTA Effluent Decon for NTA Contaminated Run-off	C/CPFF	TBD:	0.000	0.000		0.800	May 2013	0.000		-		0.000	Continuing	Continuing	0.000
DTE S - UNS NTA Strippable / Sealant Coatings	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	0.000		0.500	Feb 2013	0.000		-		0.000	Continuing	Continuing	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide						PE 0603884BP: CHEMICAL/BIOLOGICAL				DE4: DECONTAMINATION SYSTEMS					
BA 4: Advanced Component Development & Prototypes (ACD&P)						DEFENSE (ACD&P)				(ACD&P)					
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DTE S - General Purpose Decon (GPD)	MIPR	Various:	0.000	1.366	Feb 2012	1.906	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
DTE S - Joint Sensitive Equipment Wipes (JSEW)	MIPR	Various:	0.000	0.820	Feb 2012	1.048	Jan 2013	0.000		-		0.000	Continuing	Continuing	0.000
DTE SB - Contamination Indication/Decontamination Assurance System (CIDAS)	MIPR	Various:	0.000	0.000		0.838	Jan 2013	0.000		-		0.000	Continuing	Continuing	0.000
DTE S - CHRP	MIPR	Various:	0.000	0.061	May 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE S - General Purpose Decon (GPD) #2	C/FFP	Battelle Memorial Institute:Columbus, OH	0.000	1.781	Feb 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE S - Coatings	MIPR	TBD:	0.000	0.000		0.000		0.598	Feb 2014	-		0.598	Continuing	Continuing	0.000
DTE SB - Dial-A-Decon	MIPR	TBD:	0.000	0.000		0.000		0.421	Apr 2014	-		0.421	Continuing	Continuing	0.000
DTE S - Joint Service Equipment Wipe (JSEW)	C/FFP	Battelle Memorial Institute:Columbus, OH	0.000	0.396	Feb 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE S - Contaminated Human Remains Pouch (CHRP)	C/FFP	Battelle Memorial Institute:Columbus, OH	0.000	0.575	May 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** DFoS CIDAS - DTE S - Contamination Indicator Decontamination Assurance System (CIDAS)	MIPR	TBD:	0.000	0.000		0.000		1.436	Dec 2013	-		1.436	Continuing	Continuing	0.000
** DFoS GPD - DTE S - General Purpose Decon (GPD)	MIPR	TBD:	0.000	0.000		0.000		2.100	Jan 2014	-		2.100	Continuing	Continuing	0.000
** DFoS JSEW - DTE S - Joint Sensitive Equipment Wipe (JSEW)	MIPR	TBD:	0.000	0.000		0.000		0.840	Dec 2013	-		0.840	Continuing	Continuing	0.000
Subtotal			0.000	9.775		6.392		5.395		0.000		5.395			0.000

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>			
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** DFoS - PM/MS S - DFoS Program Management Support, Integrated Product Team and Technical Support	MIPR	Various:	0.000	5.327	Oct 2011	3.158	Oct 2012	2.550	Oct 2013	-		2.550	Continuing	Continuing	0.000
** DFoS CIDAS - PM/MS S - Program Management, Integrated Product Team, and Technical Support	MIPR	Various:	0.000	0.000		0.000		1.785	Dec 2013	-		1.785	Continuing	Continuing	0.000
** DFoS GPD - PM/MS S - Program Management, Integrated Product Team, and Technical Support	MIPR	Various:	0.000	0.000		0.000		2.198	Oct 2013	-		2.198	Continuing	Continuing	0.000
** DFoS JSEW - PM/MS S - Program Management, Integrated Product Team, and Technical Support	MIPR	Various:	0.000	0.000		0.000		1.000	Oct 2013	-		1.000	Continuing	Continuing	0.000
** JPID - PM/MS S - Program Management Support, Integrated Product Team and Technical Support and close-out LSSDA test article effort.	MIPR	Various:	0.000	2.092	Dec 2011	0.000		0.000		-		0.000	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	7.419		3.158		7.533		0.000		7.533			0.000
			<b>All Prior Years</b>	<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			0.000	20.755		12.374		17.870		0.000		17.870			0.000
<b>Remarks</b>															

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
** DFoS - NTA Chemical Decon Downselect																												
DFoS - NTA Chemical Decon Coupon Efficacy, Material Compatibility and Detector Compatibility Testing																												
DFoS - NTA Chemical Decon Wipe																												
DFoS - NTA Chemical Decon Operational Assessment																												
DFoS - NTA Chemical Decon Capabilities and Limitations Memo																												
DFoS - NTA Decon Assurance Spray Operational Assessment																												
DFoS - NTA Decon Assurance Spray Capabilities and Limitations Memo																												
DFoS - NTA Decon Assurance Spray Interference and Compatibility testing																												
DFoS - Effluent Decon for NTA Contaminated Run-off Modeling and Simulation Analysis																												
DFoS - Effluent Decon for NTA Contaminated Run-off Transition to DFoS/Milestone Decision																												
DFoS - Coatings MS A																												
DFoS - Coatings Competitive Prototyping																												
DFoS - Coatings PDR																												
DFoS - Coatings TEMP																												
DFoS - Coatings MS B																												
DFoS - Coatings CDR																												
DFoS - Coatings DT																												
DFoS - Coatings MS C																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Chemical and Biological Defense Program																				DATE: April 2013								
APPROPRIATION/BUDGET ACTIVITY										R-1 ITEM NOMENCLATURE										PROJECT								
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)										PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)										DE4: DECONTAMINATION SYSTEMS (ACD&P)								
	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
DFoS - Coatings OT																												
DFoS - Dial-A-Decon MS A																												
DFoS - Dial-A-Decon Competitive Prototyping																												
DFoS - Dial-A-Decon PDR																												
DFoS - Dial-A-Decon TEMP																												
DFoS - Dial-A-Decon MS B																												
DFoS - Dial-A-Decon CDR																												
DFoS - Dial-A-Decon DT																												
DFoS - Dial-A-Decon MS C																												
DFoS - Dial-A-Decon OT																												
** DFoS CIDAS - CPI Testing																												
DFoS CIDAS - PDR																												
DFoS CIDAS - CDD																												
DFoS CIDAS - TEMP																												
DFoS CIDAS - MS B																												
DFoS CIDAS - CDR																												
DFoS CIDAS - DT																												
DFoS CIDAS - MS C/LRIP																												
DFoS CIDAS - LRIP																												
DFoS CIDAS - OT																												
DFoS CIDAS - FRP																												
** DFoS GPD - CPI Testing																												
DFoS GPD - MRA																												
DFoS GPD - CPII Testing																												
DFoS GPD - System Requirements/Design Review																												

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
DFoS GPD - CDD																												
DFoS GPD - DT																												
DFoS GPD - TEMP																												
DFoS GPD - System Verification Review																												
DFoS GPD - MS C																												
DFoS GPD - LRIP																												
DFoS GPD - OT																												
DFoS GPD - FRP																												
DFoS GPD - IOC																												
** DFoS JSEW - CPI testing																												
DFoS JSEW - System Requirements/Design Review																												
DFoS JSEW - CPII Testing																												
DFoS JSEW - CDD																												
DFoS JSEW - DT																												
DFoS JSEW - TEMP																												
DFoS JSEW - System Verification Review																												
DFoS JSEW - MS C/LRIP																												
DFoS JSEW - LRIP																												
DFoS JSEW - OT																												
DFoS JSEW - FRP																												
DFoS JSEW - IOC																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>	

**Schedule Details**

Events	Start		End	
	Quarter	Year	Quarter	Year
** DFoS - NTA Chemical Decon Downselect	2	2012	2	2012
DFoS - NTA Chemical Decon Coupon Efficacy, Material Compatibility and Detector Compatibility Testing	2	2012	2	2013
DFoS - NTA Chemical Decon Wipe	3	2012	2	2013
DFoS - NTA Chemical Decon Operational Assessment	2	2013	2	2013
DFoS - NTA Chemical Decon Capabilities and Limitations Memo	2	2013	3	2013
DFoS - NTA Decon Assurance Spray Operational Assessment	2	2013	2	2013
DFoS - NTA Decon Assurance Spray Capabilities and Limitations Memo	2	2013	3	2013
DFoS - NTA Decon Assurance Spray Interference and Compatibility testing	2	2013	2	2014
DFoS - Effluent Decon for NTA Contaminated Run-off Modeling and Simulation Analysis	3	2013	3	2014
DFoS - Effluent Decon for NTA Contaminated Run-off Transition to DFoS/Milestone Decision	3	2015	4	2017
DFoS - Coatings MS A	2	2014	2	2014
DFoS - Coatings Competitive Prototyping	2	2014	3	2015
DFoS - Coatings PDR	3	2015	3	2015
DFoS - Coatings TEMP	3	2015	3	2015
DFoS - Coatings MS B	1	2016	1	2016
DFoS - Coatings CDR	1	2016	1	2016
DFoS - Coatings DT	2	2016	2	2017
DFoS - Coatings MS C	1	2018	1	2018
DFoS - Coatings OT	2	2018	4	2018
DFoS - Dial-A-Decon MS A	3	2014	3	2014
DFoS - Dial-A-Decon Competitive Prototyping	4	2014	2	2016

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
DFoS - Dial-A-Decon PDR	3	2016	3	2016
DFoS - Dial-A-Decon TEMP	3	2016	3	2016
DFoS - Dial-A-Decon MS B	1	2017	1	2017
DFoS - Dial-A-Decon CDR	2	2017	2	2017
DFoS - Dial-A-Decon DT	2	2017	2	2018
DFoS - Dial-A-Decon MS C	2	2018	2	2018
DFoS - Dial-A-Decon OT	3	2018	4	2018
** DFoS CIDAS - CPI Testing	3	2013	2	2014
DFoS CIDAS - PDR	3	2014	3	2014
DFoS CIDAS - CDD	3	2014	3	2014
DFoS CIDAS - TEMP	3	2014	4	2014
DFoS CIDAS - MS B	1	2015	1	2015
DFoS CIDAS - CDR	2	2015	2	2015
DFoS CIDAS - DT	3	2015	3	2016
DFoS CIDAS - MS C/LRIP	1	2017	1	2017
DFoS CIDAS - LRIP	2	2017	2	2018
DFoS CIDAS - OT	3	2017	1	2018
DFoS CIDAS - FRP	2	2018	2	2018
** DFoS GPD - CPI Testing	3	2012	1	2013
DFoS GPD - MRA	2	2013	2	2013
DFoS GPD - CPII Testing	2	2013	1	2014
DFoS GPD - System Requirements/Design Review	3	2013	3	2013
DFoS GPD - CDD	1	2014	1	2014
DFoS GPD - DT	1	2014	4	2014
DFoS GPD - TEMP	2	2014	2	2014



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**Exhibit R-4A, RDT&E Schedule Details:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> DE4: <i>DECONTAMINATION SYSTEMS (ACD&amp;P)</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
DFoS GPD - System Verification Review	3	2014	3	2014
DFoS GPD - MS C	1	2015	1	2015
DFoS GPD - LRIP	1	2015	1	2015
DFoS GPD - OT	1	2015	4	2015
DFoS GPD - FRP	1	2016	1	2016
DFoS GPD - IOC	1	2018	1	2018
** DFoS JSEW - CPI testing	3	2012	1	2013
DFoS JSEW - System Requirements/Design Review	2	2013	2	2013
DFoS JSEW - CPII Testing	2	2013	1	2014
DFoS JSEW - CDD	4	2013	4	2013
DFoS JSEW - DT	4	2013	3	2014
DFoS JSEW - TEMP	2	2014	2	2014
DFoS JSEW - System Verification Review	2	2014	2	2014
DFoS JSEW - MS C/LRIP	4	2014	4	2014
DFoS JSEW - LRIP	4	2014	4	2014
DFoS JSEW - OT	4	2014	2	2015
DFoS JSEW - FRP	3	2015	3	2015
DFoS JSEW - IOC	3	2017	3	2017

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program									DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT IP4: INDIVIDUAL PROTECTION (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
IP4: INDIVIDUAL PROTECTION (ACD&P)	-	0.000	1.102	2.708	-	2.708	6.811	4.680	0.300	0.000	0.000	15.601
Quantity of RDT&E Articles												
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
This project supports the ACD&P of the following efforts:												
The Joint Service General Purpose Mask (JSGPM) Advanced Respiratory Protection Initiative (ARPI) will address improved mask protection, filter protection against Toxic Industrial Chemicals (TIC)/Toxic Industrial Materials (TIM) and improved profile and breathing resistance; and wearability compatibility/integration. This will be accomplished through class-based analysis, Filtration Advanced Screening Test (FAST), desorption study, and advanced CBRN filtration efforts.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014	
Title: 1) JSGPM (ARPI)									0.000	1.102	2.708	
FY 2013 Plans: Verification of technologies data transition of component base filter media from Tech Base. Verification of TICs criteria and test methodology. Testing of performance specifications.												
FY 2014 Plans: Investigate alternative designs and modifications to ZZAT (Zirconium hydroxide, Zinc, Argentum (Silver), Triethylene di-amine (TEDA)) to further increase filtration of TICs and Chemical Warfare Agents (CWA). ZZAT is a zirconium hydroxide based filtration media that can potentially be layered with carbon. Investigate various applications of nanofiber particulate media.												
Accomplishments/Planned Programs Subtotals									0.000	1.102	2.708	
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
• IP5: INDIVIDUAL PROTECTION (EMD)	13.325	15.971	26.296		26.296	13.672	17.292	9.411	8.522	Continuing	Continuing	

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program										<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>				<b>PROJECT</b> IP4: <i>INDIVIDUAL PROTECTION (ACD&amp;P)</i>			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO</b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• JI0003: <i>JOINT SERVICE GENERAL PURPOSE MASK (JSGPM)</i>	71.214	48.466	77.343		77.343	81.212	88.029	113.681	109.434	0.000	589.379
• MA0401: <i>CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)</i>	0.000	10.376	13.772		13.772	12.948	17.101	17.101	17.101	0.000	88.399
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
JSGPM											
The JSGPM ARPI effort is using the M61 filter contracts awarded to 3M and Avon to develop improved filters for the JSGPM. There is a continual technology refreshment CLIN that allows for filter development tasks to be awarded under this contract. The tasks can be competed between the two awardees.											
<b>E. Performance Metrics</b>											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)						PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				IP4: INDIVIDUAL PROTECTION (ACD&P)					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSGPM - HW C - Filter Prototyping	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.100	Feb 2013	0.000		-		0.000	0.000	0.100	0.000
HW C - Filter Prototyping	C/CPIF	TBD:	0.000	0.000		0.000		1.000	Feb 2014	-		1.000	0.000	1.000	0.000
Subtotal			0.000	0.000		0.100		1.000		0.000		1.000	0.000	1.100	0.000
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSGPM - ES C - Engineering Design Services	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.100	Feb 2013	0.550	Feb 2014	-		0.550	0.000	0.650	0.000
Subtotal			0.000	0.000		0.100		0.550		0.000		0.550	0.000	0.650	0.000
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSGPM - DTE C - Prototype Testing	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.514	Feb 2013	0.550	Nov 2013	-		0.550	0.000	1.064	0.000
Subtotal			0.000	0.000		0.514		0.550		0.000		0.550	0.000	1.064	0.000

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**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> IP4: <i>INDIVIDUAL PROTECTION (ACD&amp;P)</i>
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Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSGPM - PM/MS C - Filter Management	MIPR	Various:	0.000	0.000		0.388	Feb 2013	0.608	Feb 2014	-		0.608	0.000	0.996	0.000
Subtotal			0.000	0.000		0.388		0.608		0.000		0.608	0.000	0.996	0.000
			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	0.000		1.102		2.708		0.000		2.708	0.000	3.810	0.000

Remarks

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

**APPROPRIATION/BUDGET ACTIVITY**

0400: *Research, Development, Test & Evaluation, Defense-Wide*  
BA 4: *Advanced Component Development & Prototypes (ACD&P)*

**R-1 ITEM NOMENCLATURE**

PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*

**PROJECT**

IP4: *INDIVIDUAL PROTECTION (ACD&P)*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
** JSGPM - ARPI Integration Testing																												
JSGPM - TIC Filter TECH Transition																												
JSGPM - ARPI TD Contract Award																												
JSGPM - TIC Prototype Development (JSTO Technology 1)																												
JSGPM - TIC Filter Testing (JSTO Technology 1)																												
JSGPM - Prototype Development (JSTO Technology 2)																												
JSGPM - Prototype Testing (JSTO Technology 2)																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> IP4: <i>INDIVIDUAL PROTECTION (ACD&amp;P)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
** JSGPM - ARPI Integration Testing	2	2012	4	2012
JSGPM - TIC Filter TECH Transition	4	2012	4	2012
JSGPM - ARPI TD Contract Award	1	2013	1	2013
JSGPM - TIC Prototype Development (JSTO Technology 1)	2	2013	3	2014
JSGPM - TIC Filter Testing (JSTO Technology 1)	3	2014	1	2015
JSGPM - Prototype Development (JSTO Technology 2)	1	2015	4	2016
JSGPM - Prototype Testing (JSTO Technology 2)	1	2017	3	2017

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT IS4: INFORMATION SYSTEMS (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
IS4: INFORMATION SYSTEMS (ACD&P)	-	5.219	13.831	8.199	-	8.199	2.845	0.360	0.100	0.100	Continuing	Continuing
Quantity of RDT&E Articles												

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

## **A. Mission Description and Budget Item Justification**

This Project provides for Advanced Component Development and Prototypes (ACD&P).

Efforts included in this project are: (1) Joint Effects Model (JEM) Increment 2; (2) the Joint Warning and Reporting Network (JWARN) Increment 2; and (3) Software Support Activity (SSA).

The Joint Effects Model (JEM) is the DoD's only accredited model that has been operationally tested and deemed effective for predicting hazards associated with the release of contaminants into the environment. JEM is a software-only, ACAT III program that 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; high altitude releases, incident source prediction to include NTA events, urban CBRN/Toxic Industrial Hazard environments, human inhalation, contagious/infectious disease, population movements, efficacy of medical countermeasures, industrial transport; building interiors, and human performance degradation. Battlespace 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 interfaces and communicates with the other programs such as JWARN, weather systems, intelligence systems, and various databases.

The Joint Warning and Reporting Network (JWARN) provides the Joint Forces with a comprehensive Integrated Early Warning, Analysis and Response capability to minimize the effects of hostile CBRN attacks, as well as accidents and incidents. It provides the operational capability to employ CBRN warning technology which collects, analyzes, identifies, locates, reports, and disseminates warnings. JWARN is compatible and integrated with Joint Service C4ISR Systems. JWARN transitions from platform specific Common Operating Environment (COE) standards to a Web-based Service Oriented Architecture (SOA). JWARN facilitates data transfer from additional sensors to tactical networks, increased automation of message handling, improved false alarm filtering, integration of enhanced route-planning calculators, and improved interoperability with additional C2 systems. JWARN is located in Command and Control Centers at the appropriate level and is be employed by CBRN defense specialists and other designated personnel. This employment transfers data automatically from existing and future sensors to provide commanders with the capability to support operational decision making in a CBRN environment. JWARN provides additional data processing to support the production of plans and reports, and access to specific CBRN information to improve the efficiency of limited CBRN personnel assets. JWARN integrates existing sensors into a sensor network or host



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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT IS4: INFORMATION SYSTEMS (ACD&P)		
<p>C2 system, but does not provide the sensors that will be employed in the operating environment. The JWARN capability described above has been developed utilizing an incremental approach based on Service requirements and host system architecture.</p> <p>JEM and JWARN Increment 2 will utilize the Joint Capabilities Integration and Development System (JCIDS) Manual prescribed Agile Information Technology Box "IT Box" concept for managing requirements for the follow-on increments of capability development. Use of the "IT Box" acquisition approach increases flexibility and will expedite fielding of Information System products through build decisions versus traditional DoD Milestone Decisions. Each program will use an Information Systems Initial Capabilities Document (IS ICD) to describe the overall development effort. After the IS ICD is approved, future requirement details will be captured in Requirements Definition Packages (RDP) and will be approved at the Functional Capability Board (FCB) level. In order to support an agile incremental approach, each program will ensure that the "IT Box" describes the entire IT program and not just a single increment. As software-intensive systems both JEM and JWARN have no separately identifiable unit production components. Both are designated ACAT III programs and unit cost calculations including Program Acquisition Unit Cost/Average Procurement Unit Cost (PAUC/APUC) and Operations and Sustainment (O&amp;S) average annual per unit costs are not applicable.</p> <p>The SSA is a user developmental support and service organization focusing on development assistance and net-centric interoperability. The SSA provides the CBRN Warfighter with Joint Service solutions for Integrated Architectures, Information Assurance, Verification, Validation and Accreditation (VV&amp;A) and Data Management; interoperable and integrated net-centric, Service-oriented, composable solutions for CBD; and infusion of latest technologies into programs of record. CBRN user community and related communities of interest have need for CBRN "plug and play" capability to allow interoperability and re-configurability across the enterprise. The requirement for net-centric, composable solutions provides the near term foundation for the Warfighter's ability to communicate his CBRN solutions and interoperate with other Service operational systems. It also supports a longer term ability to interoperate with related agencies and to reduce the Warfighter's CBRN footprint as technologies improve.</p> <p>The SSA also directly supports various Bio-Surveillance efforts in training and logistics coordination. The SSA is re-baselining the entire Information Management/Information Technology (IM/IT) work-flow in support of the Bio-Surveillance Portal. By creating a catalog of portlets a user will be able to select the portlets that they need/use and will have access to data that is appropriate for them in a customizable format.</p>				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Title: 1) JEM Increment 2 Description: Prototyping  FY 2013 Plans: Award competitive prototyping contracts for development and integration of JEM Increment 2 capabilities.  FY 2014 Plans: Continue competitive prototyping down-select and award option for development and integration of JEM Increment 2 capabilities.		0.000	4.301	1.103
Title: 2) JEM Increment 2 Description: Test & Evaluation (T&E)		0.000	1.626	0.646

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT IS4: INFORMATION SYSTEMS (ACD&P)		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
FY 2013 Plans: Initiate governmental development testing in support of competitive prototypes. Prepare T&E documentation for the Preliminary Design Review (PDR) and down-select decision.				
FY 2014 Plans: Continue governmental development testing in support of competitive prototyping contract and down-select. Prepare T&E documentation for the Preliminary Design Review (PDR) and down-select decision.				
Title: 3) JEM Increment 2  Description: Management Support		0.000	1.341	0.307
FY 2013 Plans: Provide program planning, financial management, contracting, schedule, and acquisition oversight support. Update JEM Integrated Master Schedule. Coordinate Preliminary Design Review (PDR) with stakeholders.				
FY 2014 Plans: Continue to provide program planning, financial management, contracting, schedule, and acquisition oversight support. Coordinate Preliminary Design Review (PDR), Critical Design Review (CDR), and Milestone B (MS B) with stakeholders.				
Title: 4) JEM Increment 2  Description: Technical Support		0.000	0.994	0.472
FY 2013 Plans: Prepare technical documentation to support the Preliminary Design Review (PDR). Develop Verification and Validation Plan for the next increment of JEM capability. Provide technical support during the competitive prototyping phase and requirements analysis processes.				
FY 2014 Plans: Continue preparation and review of technical documentation to support Milestone B (MS B) and the competitive prototyping contract down-select decision. Finalize Verification and Validation Plan for the next increment of JEM capability. Provide technical support during the competitive prototyping phase and technical assessment.				
Title: 5) JWARN - Increment 2  Description: Analysis of Alternatives (AoA) - Support and Analysis of Technical Alternatives (ATA) Evaluation		0.669	0.218	0.000
FY 2012 Accomplishments:				

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> IS4: <i>INFORMATION SYSTEMS (ACD&amp;P)</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Initiated programmatic and Chemical, Biological, Radiological and Nuclear (CBRN) subject matter expertise supporting the AoA for the next increment of JWARN capabilities.  <b>FY 2013 Plans:</b> Complete evaluation of the AoA/ATA results and conduct a Technology Readiness Assessment of the candidate technologies. Analyze impact of implementing the emerging technologies into the JWARN architecture.				
<b>Title:</b> 6) JWARN Increment 2  <b>Description:</b> Prototyping  <b>FY 2013 Plans:</b> Initiate prototyping contracting efforts for JWARN to reduce technical risk, validate design and cost estimates as well as refine requirements.  <b>FY 2014 Plans:</b> Continue prototyping contracting efforts for JWARN to select candidate(s) for baseline development.		0.000	1.607	1.971
<b>Title:</b> 7) JWARN Increment 2  <b>Description:</b> Technology Demonstrations and User Assessments  <b>FY 2013 Plans:</b> Prepare for JWARN Technology Demonstrations and User Assessments to evaluate and prove component and subsystem maturity of critical science and technology, system performance, and validate requirements within the developed software prototype(s).  <b>FY 2014 Plans:</b> Conduct JWARN Technology Demonstrations and User Assessments to evaluate and prove component and subsystem maturity of critical science and technology, system performance, and validate requirements within the developed software prototype(s).		0.000	0.598	0.884
<b>Title:</b> 8) JWARN Increment 2  <b>Description:</b> Test and Evaluation  <b>FY 2012 Accomplishments:</b>		0.890	0.225	1.213

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> IS4: <i>INFORMATION SYSTEMS (ACD&amp;P)</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Initiated evaluation, testing, and analysis of components and subsystems, to include Technology Readiness Assessments (TRAs), of Science and Technology (S&T) capabilities targeted for the next Increment of JWARN software. Initiated development of the Test and Evaluation Strategy (TES) with the Test and Evaluation (T&E) Working Integrated Product Team (WIPT).				
<b>FY 2013 Plans:</b> Continue evaluation, testing, and analysis of components and subsystems, to include Technology Readiness Assessments (TRAs), of Science and Technology (S&T) capabilities targeted for the next increment of JWARN software. Complete development of the Test and Evaluation Strategy (TES) with the Test and Evaluation (T&E) Working Integrated Product Team (WIPT).				
<b>FY 2014 Plans:</b> Initiate government developmental testing and analysis of component and subsystem maturity, to include Technology Readiness Assessment(s), of software submitted for evaluation during prototyping. Prepare required documentation to support the DoD Information Assurance Certification and Accreditation Process and Joint Interoperability Certification process. Complete development of the Test and Evaluation Master Plan (TEMP).				
<b>Title:</b> 9) JWARN Increment 2 <b>Description:</b> Development Contract		0.892	0.843	0.000
<b>FY 2012 Accomplishments:</b> Initiated contractual efforts to support Technology Development (TD) Phase efforts including: developing and releasing the Request for Proposal (RFP)/Performance Work Statement (PWS), and conducted source selection training.				
<b>FY 2013 Plans:</b> Complete proposal evaluations, draft and finalize technical evaluation report for contract award and award contract to develop the next increment of capability.				
<b>Title:</b> 10) JWARN Increment 2 <b>Description:</b> Management Support		1.455	1.074	0.668
<b>FY 2012 Accomplishments:</b> Provided strategic, tactical planning, program/financial management, costing, contracting, scheduling, acquisition oversight, and milestone documentation for the program.				
<b>FY 2013 Plans:</b>				

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program									DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT IS4: INFORMATION SYSTEMS (ACD&P)			
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014
Continue strategic, tactical planning, program/financial management, costing, contracting, scheduling, acquisition oversight, and milestone documentation for the program.											
FY 2014 Plans: Continue strategic, tactical planning, program/financial management, costing, contracting, scheduling, acquisition oversight, and milestone documentation for the program.											
Title: 11) JWARN Increment 2 Description: Technical Support  FY 2012 Accomplishments: Provided requirements and engineering analysis and technical support preparing for JWARN development efforts by identifying critical technology elements, potential system designs, external interfaces and interoperability to determine end-to-end system performance needs of the system. Determined requirements for independent system verification, validation and class type accreditation efforts.  FY 2013 Plans: Continue requirements and engineering analysis and technical support for JWARN development efforts. Initiate independent system verification, validation and class type accreditation efforts as required.  FY 2014 Plans: Continue engineering and technical support JWARN development. Continue independent system verification, validation, and class type accreditation as required.									1.313	1.004	0.835
Title: 12) SSA Integrated Architecture FY 2014 Plans: Initiate required modifications to the integrated Architecture on host platforms and document the infrastructure and technical standards. Conduct Net-Centric Assessments for programs.									0.000	0.000	0.100
Accomplishments/Planned Programs Subtotals									5.219	13.831	8.199
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• IS5: INFORMATION SYSTEMS (EMD)	4.699	2.045	9.267		9.267	17.636	20.643	15.471	17.508	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT IS4: INFORMATION SYSTEMS (ACD&P)			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• IS7: INFORMATION SYSTEMS (OP SYS DEV)	8.917	10.091	6.518		6.518	3.990	7.734	11.995	13.034	Continuing	Continuing
• G47101: JOINT WARNING & REPORTING NETWORK (JWARN)	4.676	2.646	1.112		1.112	0.766	0.456	4.589	6.589	Continuing	Continuing
• JC0208: JOINT EFFECTS MODEL (JEM)	0.000	0.000	0.000		0.000	1.242	3.417	5.069	3.086	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
JEM											
The program plans to award multiple development contracts in a competitive prototyping phase prior to downselecting a single JEM developer and integrator.											
JWARN											
JWARN Increment 2 will structure itself in conjunction with the JROC's IT Box concept. JWARN Increment 2 will incorporate all current and future technologies planned for incorporation into JWARN in their IS ICD. This will reduce future trips to the JROC for approval of improved capabilities and ultimately move the program away from incrementalization. Future JWARN development efforts will be acquired via a Request for Proposal (RFP) under full and open competition. Using full and open competitive procedures, a single contract will be awarded to the responsible offeror who provides the best value in maintaining current JWARN software and developing future JWARN software. This contract will apply a Cost-Plus-Award-Fee (CPAF) or Cost-Plus-Fixed-Fee (CPFF) pending results of discussion with the contracting office.											
SSA											
The SSA provides enterprise-wide services and coordination across all CBDP programs that contain data or software, or are capable of linking to the Global Information Grid (GIG). The SSA facilitates interoperability, integration, and supportability of existing and developing IT and National Security Systems (NSS). Phase 1a identifies CBDP programs that deal with data or software, and have an IT component. This will be followed by coordination to facilitate the concepts of interoperability, integration and supportability of enterprise-wide services. Next follows work with user communities to develop and demonstrate enterprise-wide common architectures, products and services. (BA5 - System Development and Demonstration). Phase 2 will support the application of the enterprise-wide architectures, products and services into the programs, with verification of compliance with the defined products and services. (BA7 - Operational Systems Development).											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> IS4: <i>INFORMATION SYSTEMS (ACD&amp;P)</i>
<b><u>E. Performance Metrics</u></b> N/A		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>								<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>				<b>PROJECT</b> IS4: <i>INFORMATION SYSTEMS (ACD&amp;P)</i>			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** JEM - SW SB - JEM Increment 2 - Prototype development	C/CPFF	TBD:	0.000	0.000		4.301	Mar 2013	1.103	Mar 2014	-		1.103	Continuing	Continuing	0.000
** JWARN - SW SB - JWARN Increment 2 - Prototype development	SS/CPAF	TBD:	0.000	0.000		1.607	Mar 2013	1.971	Mar 2014	-		1.971	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	0.000		5.908		3.074		0.000		3.074			0.000
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** JEM - TD/D SB - JEM Increment 2 - Engineering support	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	0.000	0.000		0.994	Mar 2013	0.472	Mar 2014	-		0.472	Continuing	Continuing	0.000
** JWARN - TD/D SB - JWARN Increment 2 - Engineering support	MIPR	Various:	0.000	2.874	Mar 2012	2.290	Mar 2013	0.835	Mar 2014	-		0.835	Continuing	Continuing	0.000
** SSA - ES S - Engineering Support	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	0.000	0.000		0.000		0.100	Mar 2014	-		0.100	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	2.874		3.284		1.407		0.000		1.407			0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** JEM - OTHT SB - JEM Increment 2 - govt developmental testing	MIPR	Naval Surface Warfare Center (NSWC) - Dahlgren Center:Dahlgren, VA	0.000	0.000		1.626	Mar 2013	0.646	Mar 2014	-		0.646	Continuing	Continuing	0.000



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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> IS4: <i>INFORMATION SYSTEMS (ACD&amp;P)</i>			
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** JWARN - OTHT SB - JWARN Increment 2 - govt developmental testing	MIPR	Various:	0.000	0.890	Mar 2012	0.598	Mar 2013	2.097	Mar 2014	-		2.097	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	0.890		2.224		2.743		0.000		2.743			0.000
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** JEM - PM/MS S - JEM Increment 2 - Program management	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	0.000		1.341	Mar 2013	0.307	Mar 2014	-		0.307	Continuing	Continuing	0.000
** JWARN - PM/MS SB - JWARN Increment 2 - Program management	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	1.455	Dec 2011	1.074	Mar 2013	0.668	Mar 2014	-		0.668	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	1.455		2.415		0.975		0.000		0.975			0.000
<b>Project Cost Totals</b>			<b>All Prior Years</b>	<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			0.000	5.219		13.831		8.199		0.000		8.199			0.000
<b>Remarks</b>															

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

**APPROPRIATION/BUDGET ACTIVITY**

0400: *Research, Development, Test & Evaluation, Defense-Wide*  
BA 4: *Advanced Component Development & Prototypes (ACD&P)*

**R-1 ITEM NOMENCLATURE**

PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*

**PROJECT**

IS4: *INFORMATION SYSTEMS (ACD&P)*

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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 Incr. 2 - Technology Development																												
JEM Incr. 2 - Analysis of Alternatives																												
JEM Incr. 2 - Prototype Development & Test (Contractor)																												
JEM Incr. 2 - Information System Initial Capability Document (IS ICD)																												
JEM Incr. 2 - Requirements Definition Package (RDP) Development and Approval																												
JEM Incr. 2 - Prototype Development Test (Gov't)																												
JEM Incr. 2 - Baseline Requirements Definition Package (RDP) Build Decision (BD)																												
JEM Incr. 2 - C2 Integration Requirements Definition Package (RDP) Build Decision																												
JEM Incr. 2 - Analyst Support Requirements Definition Package (RDP) Build Decision (BD)																												
JEM Incr. 2 - Integrated Development Test & Operational Test																												
** JWARN Incr. 2 - Materiel Development Decision																												
JWARN Incr. 2 - Analysis of Alternatives (Sensor Connectivity Capability)																												
JWARN Incr. 2 - Milestone A Decision (Software)																												
JWARN Incr. 2 - Test and Evaluation Master Plan (Software)																												

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> IS4: <i>INFORMATION SYSTEMS (ACD&amp;P)</i>
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
JWARN Incr. 2 - Information System Initial Capability Document																												
JWARN Incr. 2 - Baseline Preliminary Design Review (Software)																												
JWARN Incr. 2 - Baseline Requirements Definition Package (RDP) Build Decision (BD)																												
JWARN Incr. 2 - Baseline Requirements Definition Package (RDP) Development and Approval																												
JWARN Incr. 2 - Development Testing																												
JWARN Incr. 2 - Baseline Critical Design Review (Software)																												
JWARN Incr. 2 - Multi-Service Operational Test and Evaluation (MOT&E)/LOG Demo																												
JWARN Incr. 2 - Initial Multi-Service Operational Testing (MOT&E)																												
JWARN Incr. 2 - Full Operational Capability (C2 Host System Dependent)																												
** SSA - Sustain Common Components products, process and services																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> IS4: <i>INFORMATION SYSTEMS (ACD&amp;P)</i>	

**Schedule Details**

<b>Events</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
** JEM Incr. 2 - Technology Development	1	2012	2	2014
JEM Incr. 2 - Analysis of Alternatives	1	2012	1	2012
JEM Incr. 2 - Prototype Development & Test (Contractor)	1	2012	1	2014
JEM Incr. 2 - Information System Initial Capability Document (IS ICD)	1	2013	3	2013
JEM Incr. 2 - Requirements Definition Package (RDP) Development and Approval	3	2013	1	2017
JEM Incr. 2 - Prototype Development Test (Gov't)	4	2013	2	2014
JEM Incr. 2 - Baseline Requirements Definition Package (RDP) Build Decision (BD)	2	2014	2	2014
JEM Incr. 2 - C2 Integration Requirements Definition Package (RDP) Build Decision	4	2014	4	2014
JEM Incr. 2 - Analyst Support Requirements Definition Package (RDP) Build Decision (BD)	4	2015	4	2015
JEM Incr. 2 - Integrated Development Test & Operational Test	2	2014	2	2018
** JWARN Incr. 2 - Materiel Development Decision	2	2012	2	2012
JWARN Incr. 2 - Analysis of Alternatives (Sensor Connectivity Capability)	3	2012	3	2013
JWARN Incr. 2 - Milestone A Decision (Software)	2	2013	2	2013
JWARN Incr. 2 - Test and Evaluation Master Plan (Software)	2	2013	2	2015
JWARN Incr. 2 - Information System Initial Capability Document	2	2013	3	2014
JWARN Incr. 2 - Baseline Preliminary Design Review (Software)	2	2014	4	2014
JWARN Incr. 2 - Baseline Requirements Definition Package (RDP) Build Decision (BD)	2	2014	4	2014
JWARN Incr. 2 - Baseline Requirements Definition Package (RDP) Development and Approval	2	2014	3	2015
JWARN Incr. 2 - Development Testing	2	2014	3	2018
JWARN Incr. 2 - Baseline Critical Design Review (Software)	3	2014	1	2015
JWARN Incr. 2 - Multi-Service Operational Test and Evaluation (MOT&E)/LOG Demo	4	2015	4	2016

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>		<b>PROJECT</b> IS4: <i>INFORMATION SYSTEMS (ACD&amp;P)</i>
		<b>Start</b>		<b>End</b>
<b>Events</b>		<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>
				<b>Year</b>
JWARN Incr. 2 - Initial Multi-Service Operational Testing (MOT&E)		4	2015	4
JWARN Incr. 2 - Full Operational Capability (C2 Host System Dependent)		3	2018	4
** SSA - Sustain Common Components products, process and services		1	2012	4
				2018

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)	-	121.170	133.254	122.936	-	122.936	95.724	78.461	41.661	30.014	Continuing	Continuing
Quantity of RDT&E Articles												

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**A. Mission Description and Budget Item Justification**

This Advanced Component Development and Prototypes (ACD&P) Project supports:

The Medical Countermeasures Advanced Development and Manufacturing (ADM) program (formerly called MCMI) was established to provide a dedicated, agile, flexible, and enduring capability to the Department of Defense (DoD) to support the development, licensure, and production of biological warfare Medical Countermeasures (MCMs). The ADM will provide an integrated infrastructure to support a medical countermeasures pipeline, and respond to Warfighter and National security needs. The ADM effort is being executed in two phases. Phase I is a two year base period to establish, commission, and validate facilities and equipment for two ADM suites using single use, disposable, modular, and multi-product technologies for medical countermeasures advanced development and manufacturing. Both suites must meet Biological Safety Level-3 (BSL-3) standards. Phase 2 consists of four (4) two-year options to support and maintain ADM capability in a state of readiness to support medical countermeasures development (under the 'Animal Rule' as applicable) and manufacturing and assist in training personnel in its use. Once commissioned, the ADM will support transition of enabling science and technology (S&T) and novel platform and expression systems for delivery of products by leveraging technological and regulatory science advancements.

The ADM current Good Laboratory Practices (cGLP) Bio-Safety Level (BSL)- 4 Test and Evaluation (T&E) capability will provide a capability to develop medical countermeasures in a safe environment. The mission of the BSL-4 T&E facility will be to provide a capability that is appropriately resourced with personnel and equipment to conduct test and evaluation on medical countermeasures that are being developed for biological agents that require BSL-4 containment. There is a national shortage of cGLP BSL-4 availability within the U.S. This capability will be Government provided within a current Government owned and operated facility. The intent of this facility is to compliment the ADM T&E capability at the BSL-4 level.

Biosurveillance (BSV) requirements address medical and physical CBRN mission needs spanned in over 11 requirements documents, and through Combatant Commander (COCOM) identified needs. Funds will support Joint USFK Portal and Integrated Threat recognition (JUPITR) ATD/BSV ATD which will find, demonstrate, transition, and transfer the best operational concepts and technology solutions in support of a holistic approach to countering biological threats from the laboratory to operational use. The JUPITR ATD will provide the USFK with a holistic Biosurveillance capability to provide early warning, detection, collection, identification and theater confirmation of a Biological event. The JUPITR ATD consists of filling capability gaps through information sharing and communication systems and detection/diagnostic systems for the USFK. Depending on the maturity, outputs will focus on proving component, CONOPS, and subsystem transition into programs of record (PORs) and/or integration into existing PORs.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>
<p>The Emerging Infectious Disease - Influenza (EID-Flu) Medical Countermeasure Acquisition Program is developing and will deliver an FDA-approved, broad-spectrum medical countermeasure to the Warfighter for protection against naturally occurring or biologically engineered influenza viruses. The emergence of a new pandemic strain with no existing effective vaccine or therapeutic is highly likely. The focus of the program is on a treatment option that is more effective than currently available drugs and has the potential to be an effective therapeutic not just for multiple strains of the flu, but many other biological warfare agents/viruses as well. Ongoing EID-Flu drug development will be leveraged to demonstrate additional broad-spectrum MCM's against naturally occurring and/or engineered biowarfare threats. Completion of activities required to enter Phase 3 clinical trials are the focus of the ACD&amp;P phase. FDA approval for an influenza treatment is anticipated in FY16 following completion of the SDD phase.</p> <p>The Hemorrhagic Fever Virus (HFV) Medical Countermeasure Acquisition Program develops platform-based medical countermeasures (MCMs), using high threat, extremely lethal Biological Warfare Agents (BWAs) of the Filoviridae family agents (Ebola and Marburg) as model systems. Platform-based medical countermeasures will be advanced through the Food and Drug Administration (FDA) licensure/approval via the FDA 'Animal Rule', which allows for the demonstration of efficacy in relevant animal model(s) when human testing is not ethically feasible. HFV will also conduct animal model development, refinement and FDA qualification to support the pivotal animal efficacy testing required under the FDA 'Animal Rule'. Animal models will be developed and qualified for parenteral and aerosol indications. Aerosol models are needed to meet the Warfighter requirement to counter BWAs encountered on the battlefield or as a result of terrorist activities. Completion of Phase I trials, animal model development, and manufacturing scale up are the focus of the ACD&amp;P phase. FDA approval for Filovirus therapeutics are expected in FY18 following completion of the SDD phase.</p> <p>The Next Generation Diagnostics System (NGDS) addresses the mission needs identified in the CBRN Field Analytics ICD (2010). The NGDS is envisioned to be an evolutionary acquisition family of systems to provide increments of capability over time across many echelons of the Combat Health Support System. The mission of the NGDS is to provide CBRN threat identification and FDA-cleared diagnostics to inform individual patient treatment and CBRN situational awareness and disease surveillance. NGDS Increment 1 Deployable Component will significantly improve diagnostic capabilities for deployable combat health support units (role 3) while also improving operational suitability and affordability. The NGDS Increment 1 Deployable Component is intended to replace the legacy Joint Biological Agent Identification and Diagnostic System (JBAIDS) beginning in FY17. The NGDS Increment 1 Service Laboratory Component is intended to provide high throughput biological threat identification, characterization, and diagnostics to fixed site CONUS and OCONUS laboratories operated by the Army, Navy, and Air Force in coordination with the Armed Forces Health Surveillance Center. NGDS Increment 2 is intended to provide advanced diagnostics for biological pathogens and toxins, diagnostics for chemical and radiological exposures, and to provide capability to lower echelons of care.</p> <p>The Department of Defense (DoD) 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 biological warfare (BW) agents are urgently needed. Vaccines have been identified as the most efficient countermeasure against the validated threat of BW weapons. The Trivalent Filovirus Vaccine Program will offer protection against the threat of Ebola and Marburg viruses. The Trivalent Filovirus Vaccine Program was initiated in FY10 at Milestone A. The current budget supports development of two prototypes through the Technology Development Phase. The DoD anticipates that the Federal Drug Administration (FDA) will approve this vaccine using the 'Animal Rule', which allows for the demonstration of efficacy on relevant animal model(s). During this phase a scalable manufacturing process is developed. This process will be used to develop current Good Manufacturing Practices (cGMP) lots suitable for a Phase 1 clinical trial. In addition, animal safety and</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)	PROJECT MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)
efficacy studies will be conducted to support Investigational New Drug (IND) submission to the FDA. These efforts will support a Milestone B decision and entry into the Engineering, Manufacturing, and Development (EMD) phase. The DoD is the Public Health Emergency Countermeasures lead for the advanced development of the Filovirus Vaccine.		
The DoD plans to initiate a Ricin Vaccine Program in FY13. The current budget supports development of competitive prototypes through the Technology Development Phase. The efforts to be conducted during this period include developing a pilot scale manufacturing process and manufacture cGMP lots to support nonclinical and clinical studies; develop vaccine formulation that meets the logistical requirements of the DoD; conduct nonclinical GLP Safety studies and submit Investigational New Drug (IND) applications. The DoD anticipates that the FDA will approve these products using the 'Animal Rule', which allows for the demonstration of efficacy in relevant animal model(s). During this phase, the vaccine candidates will be evaluated for safety and immunogenicity in a small human clinical trial (Phase 1). These efforts will support a Milestone B decision and entry into the EMD Phase. The DoD is the Public Health Emergency Countermeasures lead for the advanced development of the Ricin Vaccine.		
The DoD plans to initiate a Western, Eastern, and Venezuelan Equine Encephalitis vaccine (WEVEE) vaccine program in FY13. To satisfy the competitive prototyping requirement and to reduce program risk, the DoD will develop two prototypes through the Technology Development Phase. The efforts to be conducted during this period include develop pilot scale manufacturing processes and manufacture cGMP lots to support nonclinical and clinical studies; develop vaccine formulation that meets the logistical requirements of the DoD; conduct non-clinical GLP Safety studies; submit Investigational New Drug (IND) applications; and conduct Phase 1 clinical human safety studies. The DoD anticipates that the FDA will approve these products using the 'Animal Rule', which allows for the demonstration of efficacy in relevant animal model(s). These efforts will support a Milestone B decision and entry into the EMD phase. The DoD is the Public Health Emergency Countermeasures lead for the advanced development of the WEVEE Vaccine.		
B. Accomplishments/Planned Programs (\$ in Millions)		
Title: 1) ADM - Bridging Studies		
FY 2012 Accomplishments: Initiated studies and manufacturing to support single use, flexible and modular manufacturing technologies. These studies are needed to support the transition of medical countermeasure (MCM) manufacturing from stainless steel technology to single use system technologies. Conducting these studies will result in a shorter time to transition these MCMs into the ADM. Performed advanced process development activities for selected MCMs to be manufactured in the ADM. MCMs supported include a Ricin vaccine candidate (RVEc) and Filovirus virus like particle (VLP), Venezuelan equine encephalitis (VEE) virus replicon particles (VRP), Bioscavenger, and Alphavirus vaccine. Conducted building automation studies to analyze gaps between instrumentation and building and process automation systems (BAS/PAS). Characterized compatibility of Single Use Technology (SUT)/Single Use Instrumentation (SUI) with BAS/PAS. The automation studies reduce risk for the ADM, as they provide a state of automation for single use systems in an industrial manufacturing facility.		
FY 2013 Plans:		
	FY 2012	FY 2013
	10.155	12.764
		FY 2014
		0.000



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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>		<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Continue studies and manufacturing to support single use, flexible and modular manufacturing technologies. Perform advanced process development activities for selected medical countermeasures to be manufactured in the ADM.					
<b>Title:</b> 2) ADM - Candidate Manufacturing Platform Processes  <b>FY 2013 Plans:</b> Continue good manufacturing practice (GMP) engineering and design studies to support Food and Drug Administration (FDA) regulatory sciences and/or manufacturing technology insertion (drug development, single use flexible manufacturing) into the ADM capability. Continue evaluation of candidate manufacturing platform processes to be transitioned to the ADM. Activities will support technology transfer and process optimization.			0.000	8.573	0.000
<b>Title:</b> 3) ADM - Program Management and Contract Administration  <b>FY 2012 Accomplishments:</b> Provided oversight for the day-to-day program execution including guidance and direction, financial management and tracking, budget preparation, schedule planning and monitoring, and higher headquarters reporting requirements including but not limited to weekly highlight reports, monthly Acquisition Status Reports and quarterly program review briefs. Performed contract management and administration. Supported source selection activities.  <b>FY 2013 Plans:</b> Maintain a Government Program Management Office that includes Government and contractor personnel with expertise in flexible, modular, single use system technologies. Identify, hire and retain Government personnel to oversee the MCM ADM. Initiate and maintain contract support to oversee the MCM ADM capability.			6.118	3.948	0.000
<b>Title:</b> 4) ADM - BSL-4 GLP T&E  <b>FY 2012 Accomplishments:</b> Initiated a Bio-Safety Level BSL-4 Good Laboratory Practice (GLP) Test and Evaluation (T&E) capability to develop medical countermeasures in a safe environment. The BSL-4 GLP T&E capability will provide a capability that is appropriately resourced with personnel and equipment to conduct test and evaluation on medical countermeasures that are being developed for biological agents that require BSL-4 containment.			5.200	0.000	0.000
<b>Title:</b> 5) ADM - Maintain BSL4 GLP T&E  <b>FY 2014 Plans:</b> Continue to maintain a Bio-Safety Level BSL-4 Test and Evaluation (T&E) capability to develop medical countermeasures in a safe environment.			0.000	0.000	5.899
<b>Title:</b> 6) BSV  <b>FY 2013 Plans:</b>			0.000	5.123	3.364

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013		
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Initiate Advanced Technology Demonstration (ATD) for Biosurveillance using the BSV Portal (BSP) as a baseline to address the development and integration of information sharing and communication systems.  <b>FY 2014 Plans:</b> Initiate test planning activities and logistics for the BSV Portal (BSP). Continue to refine system development and engineering efforts based on lessons learned from the BSV Portal baseline testing and field use.				
<b>Title:</b> 7) BSV  <b>FY 2013 Plans:</b> Initiate strategy for Biosurveillance concept of operations (CONOPs) development and requirement refinement in coordination with CBDP community. Initiate the transition of S&T surveillance systems and enhanced detection technologies into Advance Development.  <b>FY 2014 Plans:</b> Establish a test bed for possible tools and detection technologies. Further refine Biosurveillance CONOPs and requirements.		0.000	7.144	7.974
<b>Title:</b> 8) EID FLU  <b>FY 2012 Accomplishments:</b> Released a Request for Proposal (RFP) for the advanced development of a medical countermeasure against drug-resistant and emerging strains of influenza. Conducted full and open competition and awarded a cost-plus-fixed-fee contract to MediVector, Inc. of Boston, MA on 14 Mar 2012. Established an Earned Value Management System (EVMS) including a Program Management Baseline (PMB) and held an Integrated Baseline Review (IBR). Initiated preparations for Phase 3 clinical trials to be conducted in FY13-FY16.  <b>FY 2013 Plans:</b> Successful Milestone B decision was received in FY13, with approval to move into the SDD phase. Conduct clinical trials to include toxicity, bioequivalence, renal function, dosing and efficacy studies as required by the FDA to inform Phase 3 clinical trials and gain FDA approval. Leveraging broad-spectrum characteristics of this drug, we will evaluate efficacy against other naturally occurring and engineered biowarfare agents.		13.539	10.655	0.000
<b>Title:</b> 9) HFV  <b>FY 2012 Accomplishments:</b> Filed and gained IND status for a platform based MCM against the highly lethal Ebola Zaire Virus. Initiated Phase 1 Clinical trials for platform-based MCMs against the Ebola Zaire Virus and Marburg Virus. Demonstrated efficacy of each platform-based MCM against lethal doses of Ebola (2 MCMs) and Marburg (1 MCM) Viruses in non-human primates. Demonstrated the ability to scale up ten-fold the manufacturing capability of one platform-based MCM against Ebola. Submitted a qualification package for a non-		38.253	19.158	0.000

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
human primate model for aerosolized Ebola to the FDA. This is the first package of its kind submitted to the FDA Qualification of Product Development Tools process.  <b>FY 2013 Plans:</b> Complete Phase 1 Trials for platform-based MCMs against the Ebola Zaire Virus and Marburg Virus. Scale up manufacturing ten-fold to progress to commercial scale to support Initial Operating Capability (IOC). Continue the FDA qualification of the non-human primate model for aerosolized Ebola. Initiate and continue the FDA qualification of a Marburg Virus animal model. Transition from the ACD&P phase to the SDD phase in 3Q FY 13 at the successful conclusion of all Phase 1 Clinical Trial activities via a Milestone B Decision.				
<b>Title:</b> 10) IBP  <b>Description:</b> Intracellular Bacterial Pathogens (IBPs) - Upon Milestone A approval, the program will advance experimental broad-spectrum drug resistant candidates against naturally occurring and genetically engineered biowarfare/bacterial agents such as Anthrax and Burkholderia through the ACD&P phase. The program will initiate and complete Phase I clinical studies, where drug candidates are introduced into humans and early evidence is gathered on drug safety. The program will conclude the ACD&P phase by completing all activities associated with Phase 2 clinical studies where drug candidates are evaluated for efficacy. The results of the ACD&P phase clinical studies will support a Milestone B decision to continue toward a New Drug Application (NDA) and FDA approval/licensure.  <b>FY 2012 Accomplishments:</b> Provided support for program documentation and management efforts.		4.590	0.000	0.000
<b>Title:</b> 11) NGDS Increment 1  <b>FY 2012 Accomplishments:</b> Initiated and completed market research report, developed competitive prototyping test plans, acquired long lead test materials, established inter-Service and interagency working integrated product teams, and conducted source selection for contract award. Began diagnostic assay optimization of anthrax and viral hemorrhagic fever in vitro diagnostics.		3.886	0.000	0.000
<b>Title:</b> 12) NGDS Increment 1  <b>FY 2012 Accomplishments:</b> Initiated planning and execution of government testing, manufacturing readiness assessment, and Biological Warfare Agent (BWA) challenges in Bio Safety Level 3 (BSL-3) facility during the technology development phase.		3.300	0.000	0.000
<b>Title:</b> 13) NGDS Increment 1  <b>FY 2012 Accomplishments:</b>		5.600	0.000	0.000

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2012</b>	<b>FY 2013</b>
Initiated competitive prototyping candidate contract strategy and award. Initiated and continued operational assessment of 51 commercial prototype candidates, 17 each from three competitors at approx. \$43k per system. Initiate Government pre-clinical trial. Conduct assay optimization and complete pre-clinical trial.			<b>FY 2014</b>
<b>Title:</b> 14) NGDS Increment 1  <b>FY 2014 Plans:</b> Initiate development of the Anthrax and Viral Hemorrhagic Fever in-vitro diagnostic (IVD) assays and clinical trials and prepare and submit FDA clearance 510(k) package. Initiate development of 14 environmental screening assays currently fielded on the Joint Biological Agent Identification and Diagnostic System and required to be on NGDS Inc 1 as the replacement to JBAIDS.		0.000	11.110
<b>Title:</b> 15) NGDS Increment 1  <b>FY 2014 Plans:</b> Conduct Multi Service Operational Test and Evaluation under DOT&E oversight for NGDS Inc 1 land-based diagnostic users. Initiate additional assay optimization.		0.000	7.200
<b>Title:</b> 16) NGDS Increment 2  <b>FY 2014 Plans:</b> Conduct MS A for NGDS Increment 2 and initiate technology development.		0.000	1.012
<b>Title:</b> 17) TMT/PLTFM  <b>Description:</b> TMT/Platform Technologies: Biological Warning and Impact Projection Models (WIPM) Development, Biological Intelligence Database Upgrades and Technical Readiness Assessments (TRAs) in support of FY13 Biosurveillance initiatives.  <b>FY 2012 Accomplishments:</b> Executed Biological Warning and Impact Projection Models (WIPM) Development, Biological Intelligence Database Upgrades and Technical Readiness Assessments (TRAs) in support of FY13 Biosurveillance initiatives. The WIPM initiative addressed the breadth of the biosurveillance operating environment and delivered capabilities building on predictive models (pre-event), projection/forecast models (post-event) and situational awareness tools. The Biological Intelligence Database Upgrade updated the existing biological databases to include the most up-to-date intelligence data. The TRAs included: 1. Biological Sample Collection, Preparation and Preservation Assessment; 2. Biological Hardware Assessment (Handheld Devices, Mobile Devices and Genomic Sequencing Devices); 3. Data Management and Fusion Assessment; and 4. Warning and Impact Projection Models (WIPM) Concept of Operation Development. These initiatives are continued under Biosurveillance (BSV).		14.255	0.000
<b>Title:</b> 18) VAC FILO  <b>FY 2012 Accomplishments:</b>		7.374	17.817

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
Continued non-clinical efficacy studies. Continued procedures for safeguarding biological select agents and toxins. <b>FY 2013 Plans:</b> Continue non-clinical efficacy studies and initiate non-clinical safety studies. <b>FY 2014 Plans:</b> Complete non-clinical efficacy studies and non-clinical safety studies.				
<b>Title:</b> 19) VAC FILO <b>FY 2012 Accomplishments:</b> Continued small-scale manufacturing process development for 2 prototypes. <b>FY 2013 Plans:</b> Continue small-scale manufacturing process development for 2 prototypes. Initiate cGMP Pilot Scale Production for 1 prototype. <b>FY 2014 Plans:</b> Complete small-scale manufacturing process development. Continue cGMP Pilot Scale Production.		5.579	8.699	5.964
<b>Title:</b> 20) VAC FILO <b>FY 2013 Plans:</b> Initiate assay development and qualification for 2 prototypes. <b>FY 2014 Plans:</b> Continue assay development and qualification for 2 prototypes.		0.000	6.984	6.854
<b>Title:</b> 21) VAC FILO <b>FY 2013 Plans:</b> Initiate final drug product formulation for 2 prototypes. <b>FY 2014 Plans:</b> Continue final drug product formulation for 2 prototypes.		0.000	2.200	3.004
<b>Title:</b> 22) VAC FILO <b>FY 2012 Accomplishments:</b> Continued to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. <b>FY 2013 Plans:</b>		1.550	5.245	5.098

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Continue to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.					
<b>FY 2014 Plans:</b> Continue to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.					
<b>Title:</b> 23) VAC FILO <b>FY 2012 Accomplishments:</b> Planned and prepared for pre-Investigational New Drug (IND) application meeting with FDA for two vaccine prototypes. <b>FY 2013 Plans:</b> Continue preparation for pre-IND meeting with FDA for two vaccine prototypes. Conduct quality audits of manufacturing facilities. <b>FY 2014 Plans:</b> Conduct two pre-IND meetings with FDA. Initiate the preparation of Chemistry Manufacturing & Controls (CMC) section for IND submission. Conduct quality audit of clinical sites.			1.771	4.500	5.923
<b>Title:</b> 24) VAC RIC <b>FY 2013 Plans:</b> Conduct Milestone A. Initiate manufacturing process development. <b>FY 2014 Plans:</b> Continue manufacturing process development.			0.000	7.500	5.000
<b>Title:</b> 25) VAC RIC <b>FY 2013 Plans:</b> Initiate non-clinical safety and efficacy studies. <b>FY 2014 Plans:</b> Continue non-clinical safety and efficacy studies.			0.000	6.032	8.594
<b>Title:</b> 26) VAC RIC <b>FY 2013 Plans:</b> Initiate manufacturing and non-clinical assay development. <b>FY 2014 Plans:</b>			0.000	1.500	2.000

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Complete assay development and test samples.					
<b>Title:</b> 27) VAC RIC  <b>FY 2013 Plans:</b> Initiate providing strategic/tactical planning, government system engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.  <b>FY 2014 Plans:</b> Continue to provide strategic/tactical planning, government system engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.			0.000	1.000	3.100
<b>Title:</b> 28) VAC WEVEE  <b>FY 2013 Plans:</b> Conduct Milestone A. Initiate non-clinical efficacy studies.  <b>FY 2014 Plans:</b> Continue non-clinical efficacy studies.			0.000	2.966	8.164
<b>Title:</b> 29) VAC WEVEE  <b>FY 2013 Plans:</b> Initiate small-scale manufacturing process development.  <b>FY 2014 Plans:</b> Continue small-scale manufacturing process development.			0.000	2.790	8.730
<b>Title:</b> 30) VAC WEVEE  <b>FY 2013 Plans:</b> Initiate non-clinical and manufacturing assay development.  <b>FY 2014 Plans:</b> Complete non-clinical and manufacturing assay development.			0.000	1.126	4.129
<b>Title:</b> 31) VAC WEVEE  <b>FY 2013 Plans:</b> Initiate strategic/tactical planning, government system engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.  <b>FY 2014 Plans:</b>			0.000	1.000	2.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program										<b>DATE:</b> April 2013		
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>										<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Continue strategic/tactical planning, government system engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.												
<b>Accomplishments/Planned Programs Subtotals</b>										121.170	133.254	122.936
<b>C. Other Program Funding Summary (\$ in Millions)</b>												
<b>Line Item</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO</b>	<b>FY 2014 Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	
• MB5: <i>MEDICAL BIOLOGICAL DEFENSE (EMD)</i>	197.907	212.056	263.443		263.443	228.199	183.390	151.455	184.222	Continuing	Continuing	
• MB7: <i>MEDICAL BIOLOGICAL DEFENSE (OP SYS DEV)</i>	5.371	0.498	0.499		0.499	13.414	14.551	9.816	3.277	Continuing	Continuing	
• JM2222: <i>BIOSCAVENGER (BSCAV)</i>	0.000	0.000	0.000		0.000	0.000	0.000	0.000	24.828	Continuing	Continuing	
• JM5597: <i>HEMORRHAGIC FEVER VIRUS (HFV)</i>	0.000	0.000	0.000		0.000	0.000	0.000	0.000	2.725	Continuing	Continuing	
• JM6677: <i>ADVANCED ANTICONVULSANT SYSTEM (AAS)</i>	0.000	4.466	8.951		8.951	2.500	0.000	0.000	0.000	0.000	15.917	
• JM8788: <i>NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)</i>	2.380	26.934	3.311		3.311	10.682	10.391	5.154	4.080	0.000	62.932	
• JX0005: <i>DOD BIOLOGICAL VACCINE PROCUREMENT</i>	0.180	0.185	0.185		0.185	6.991	25.058	41.716	39.410	Continuing	Continuing	
• JX0210: <i>CRITICAL REAGENTS PROGRAM (CRP)</i>	0.998	1.012	0.000		0.000	0.000	0.000	0.000	0.000	0.000	2.010	
• JX0300: <i>BIOSURVEILLANCE (BSV)</i>	0.000	0.000	1.000		1.000	3.000	2.000	1.000	7.000	Continuing	Continuing	
<b>Remarks</b>												
<b>D. Acquisition Strategy</b>												
ADM												
The ADM Capability will use a FAR based ten (10) year [two (2) year base with four (4) two (2) year options] Cost Plus Fixed fee (CPFF) contract - Full and Open competition with best value to the government. A Request for Proposal (RFP) was released in August 2011; final source selection delayed due to a pre-contract award												



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<p>protest filed with the U.S. Government Accountability Office in June 2012. Contract award is now planned for 2QFY13. The establishment of the CMO component of the ADM will occur within the base period while the other core service components (CRO, T&amp;E, F&amp;F) will be available shortly after the contract award. The CMO will utilize modular and disposable/single use equipment to allow for flexibility in manufacturing various MCM products within the same facility. The contractor will complete facility commissioning, support independent validation, and attain Current Good Manufacturing Practice (cGMP) and Current Good Laboratory Practice (cGLP) status within 24 months following contract award and provide expertise necessary to maintain the facility in readiness to support the development and manufacture of MCMs, and conduct training. The DoD will continue to issue future separate contracts for specific MCM products - i.e. the MCM pipeline .</p> <p>BSV</p> <p>Objective is the delivery of a set of capabilities to acquire, integrate, and analyze medical, environmental, and incident management data using existing and next generation systems, medical and non-medical sample collection tools and identifiers/diagnostics; and transition hardware/software tools and devices from the Biosurveillance Advanced Technology Demonstration (ATD). The acquisition strategy will address the materiel solutions identified out of the multiple Biosurveillance (BSV) related Analysis of Alternatives (AoA's). Through evaluation and maturation of hardware/software tools and devices from the Biosurveillance ATD, this project office will emphasize opportunities from common component technology and modularity. After the Materiel Development Decision, AoAs, and Milestone A, a Request for Proposal will be released selecting the best value for the government for development of the CBRN Biosurveillance capability. Operational testing of competitive prototypes in the relevant environment will be conducted following MS B. After Milestone C, during the Production and Deployment phase, the system will achieve operational capability that satisfies mission needs; conduct a Low-Rate Production Decision Review and a Full Rate Production Decision Review, leading to Full-Rate production and deployment.</p> <p>EID FLU</p> <p>EID-Flu MCM program is utilizing a single step acquisition approach to reach FDA Approval. A single step approach, which is the acquisition of a defined capability in one increment, is necessary for this acquisition as a result of the FDA regulatory process and maturity of the product. To accelerate drug development and reduce risk to the program, the MCM entered the program with active IND-status. It is the intent of the EID-Flu program to utilize the MCM Advanced Development and Manufacturing (ADM) capabilities. If the FDA mandates post-marketing surveillance studies, they will be conducted during Production and Deployment. In addition, the current contractor has the capability to manufacture the quantities currently required for DoD use should the need arise.</p> <p>HFV</p> <p>The acquisition strategy uses a parallel evaluation of drug candidates against the lethal Ebola Zaire and Marburg viruses to achieve competitive prototyping in the ACD&amp;P phase. Following a successful Milestone B and entry into SDD phase, the program will conduct expanded human clinical safety studies, definitive animal efficacy, and toxicology studies, required for FDA approval. The performer(s) will submit a New Drug Application(s) for the Ebola Zaire and Marburg therapeutics during the SDD Phase. During the Production and Deployment phase, full rate manufacturing and stockpile production will be pursued. If the FDA mandates post-marketing surveillance studies, they will be conducted during Production and Deployment. The DoD Acquisition strategy for the HFV program has been uniquely tailored to a MCM class approach designed to provide a more efficient mechanism for pursuing additional MCM candidates as required.</p>		

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<p>NGDS</p> <p>The Next Generation Diagnostics System (NGDS) will develop and field an enhanced CBRN analytical and diagnostic system to the Joint force through an evolutionary acquisition strategy. NGDS Increment 1 Deployable Component will follow a developmental acquisition strategy to field Biological Warfare Agent diagnostic analytical devices. Additional DoD-unique BWA diagnostic and environmental surveillance capabilities will be added to the downselected platform capabilities. BA4 funds were used to conduct competitive prototyping and early operational assessments on the commercial hardware diagnostic systems immediately following MS A to support downselect to the final NGDS Increment 1 system.</p> <p>VAC FILO</p> <p>The Government will develop two Filovirus vaccine candidates through a Phase 1 clinical trial. The Government will serve as the integrator for the Technology Development Phase by managing and coordinating the various vaccine development contracts. At MS B, the best prototype will be selected through a full and open competition to transition to the System Development and Demonstration (SDD) Phase with delivery of a FDA licensed Filovirus Vaccine. The development contracts will be a mix of Cost Plus and Firm Fixed Price. In addition, the Program Office will partner with DoD agencies and laboratories to include U.S. Army Medical Research Institute of Infectious Diseases, Medical Countermeasure Initiative (MCMI) Advanced Development Manufacturing, and the MCMI Test &amp; Evaluation Facility. This Department of Defense program is the Public Health Emergency Countermeasures lead for the advanced development of this vaccine, and is leveraging expertise across the Federal and International sectors to ensure programmatic success.</p> <p>VAC RIC</p> <p>The technology development stage includes the manufacture of candidate current Good Manufacturing Practices (cGMP) lots, animal safety testing, and initial clinical trials. During this phase, the vaccine is evaluated for safety and immunogenicity in a small human trial (Phase 1). During the System Development and Demonstration phase (SDD), the product sponsor will stabilize the vaccine formulation, validate the manufacturing processes and testing protocols, optimize the delivery systems and manufacture consistency lots. Phase 2 clinical trials are performed during this phase to provide additional safety data and determine dose ranging and scheduling. Phase 3 human safety trials are initiated and Animal Rule studies conducted to demonstrate efficacy against battlefield challenge. At the Milestone C, approval is granted to produce the Initial Operational Capability (IOC) of vaccine material. A Biologics Licensure Application is submitted to the FDA with all clinical, nonclinical, and manufacturing data. The FDA grants licensure to products that are determined to be safe and efficacious.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>N/A</p>		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** ADM - HW SB - Bridging Study - Filovirus VRP	C/FFP	BioFactura Inc.:Rockville, MD	0.000	1.778	May 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW S - Studies & Engineering to Support Early Stage Clinical Trials	Various	TBD:	0.000	0.000		12.764	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW SB - Bridging Study - Filovirus Animal Modeling	C/FFP	Texas BioMedical Research Institute:San Antonio, TX	0.000	2.399	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW SB - Bridging Study - Prophylactic Bioscavengers	C/FFP	Oligasis LLC:Palo Alto, CA	0.000	2.364	May 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW SB - Bridging Study - ADM Equipment & Process Flow	C/FFP	DME Alliance Inc.:Allentown, PA	0.000	2.459	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW SB - Bridging Study - VLP Production Platform Optimization	MIPR	National Institute of Allergy & Infectious Diseases:Bethesda, MD	0.000	1.105	Jul 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW SB - Bridging Study - Ricin IP Search	MIPR	US Army Medical Research Material Command (USAMRMC):Fort Detrick, MD	0.000	0.050	Apr 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW S - Engineering & Design Studies	Various	TBD:	0.000	0.000		8.573	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
** BSV - SW SB - BSV Portal SW Design & Integration	Various	TBD:	0.000	0.000		2.506	Mar 2013	0.991	Mar 2014	-		0.991	Continuing	Continuing	0.000
HW C - BSV Portal Hardware Component	Various	TBD:	0.000	0.000		0.000		0.058	Mar 2014	-		0.058	Continuing	Continuing	0.000
SW SB - SW Design & Integration	Various	TBD:	0.000	0.000		1.035	Mar 2013	1.035	Mar 2014	-		1.035	Continuing	Continuing	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide						PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)					
BA 4: Advanced Component Development & Prototypes (ACD&P)															
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
HW SB - HW Component Design	Various	TBD:	0.000	0.000		1.840	Mar 2013	2.070	Mar 2014	-		2.070	Continuing	Continuing	0.000
** EID FLU - SW SB - EID-Flu Advanced Development Contract	C/CPFF	MediVector Inc.:Boston, MA	0.000	8.878	Mar 2012	8.710	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** HFV - SW SB - Conduct Phase I Clinical Trials	C/CPIF	Tekmira Pharmaceuticals Corp.:Vancouver British Columbia, CN	0.000	4.600	Jun 2012	4.000	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000
SW SB - Animal Models	Allot	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	4.222	Mar 2012	2.394	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
SW SB - Conduct Phase I Clinical Trials	C/CPIF	Serepta:Bothell, WA	0.000	23.654	Apr 2012	8.500	Feb 2013	0.000		-		0.000	Continuing	Continuing	0.000
** NGDS - HW C - Network Integration	MIPR	JPM Information Systems (JPM IS):San Diego, CA	0.000	0.000		0.000		2.372	Mar 2014	-		2.372	Continuing	Continuing	0.000
HW C - Begin diagnostic assay optimization for Plague and Tularemia IVD	Allot	TBD:	0.000	0.000		0.000		1.000	Mar 2014	-		1.000	Continuing	Continuing	0.000
HW C - Begin development of 14 agent environmental BWA Screening assay panels	Allot	TBD:	0.000	0.000		0.000		5.000	Mar 2014	-		5.000	Continuing	Continuing	0.000
HW C - Complete development of Anthrax and Viral Hemorrhagic Fever IVD, clinical trials, prepare FDA submission	Allot	TBD:	0.000	0.000		0.000		5.000	Mar 2014	-		5.000	Continuing	Continuing	0.000
HW C - Procure 51 test systems for clinical trials	Various	Various:	0.000	2.200	Mar 2013	0.000		0.000		-		0.000	Continuing	Continuing	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)						R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** PLTFM - SW SB - Platform Technology - Bioinformatics	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	3.900	May 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
SW S - Predictive Systems	MIPR	JPM Information Systems (JPM IS):San Diego, CA	0.000	2.500	May 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
SW SB - Response Systems TRE	MIPR	Various:	0.000	2.025	Jul 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
SW S - WIPM	MIPR	Various:	0.000	1.400	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
SW GFPR - Response Systems TRE	MIPR	National Assessment Group:Kirkland, NM	0.000	0.467	Dec 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
SW SB - Response Systems Intel Data Base	MIPR	Johns Hopkins University - Applied Physics Lab:Laurel, MD	0.000	1.429	May 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
SW SB - Response Systems	MIPR	Lawrence Livermore:Livermore, CA	0.000	0.611	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** VAC FILO - HW S - Non Clinical Studies	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	2.000	Mar 2012	2.775	Dec 2012	2.290	Dec 2013	-		2.290	Continuing	Continuing	0.000
HW S - Manufacturing Process Development Prototype 1	C/CPIF	Paragon Bioservices Inc.:Baltimore, MD	0.000	3.711	Dec 2011	7.154	Mar 2013	1.500	Dec 2013	-		1.500	Continuing	Continuing	0.000
HW S - Manufacturing cGMP Pilot Prototype 1	C/FPIF	Paragon Bioservices Inc.:Baltimore, MD	0.000	0.000		5.546	Dec 2012	4.500	Dec 2013	-		4.500	Continuing	Continuing	0.000
HW S - Formulation Development Prototype 1	C/FPIF	Paragon Bioservices Inc.:Baltimore, MD	0.000	0.000		1.513	Dec 2012	1.000	Dec 2013	-		1.000	Continuing	Continuing	0.000
HW S - Manufacturing cGMP Pilot Prototype 2	C/FPIF	TBD:	0.000	0.000		0.000		1.010	Dec 2013	-		1.010	Continuing	Continuing	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)						PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
HW S - Manufacturing Formulation Development Prototype 2	C/FPIF	TBD:	0.000	0.000		0.000		1.015	Mar 2014	-		1.015	Continuing	Continuing	0.000
HW S - Manufacturing Process Development Prototype 2	C/CPIF	TBD:	0.000	0.000		0.500	Jun 2013	6.019	Mar 2014	-		6.019	Continuing	Continuing	0.000
** VAC RIC - HW S - Manufacturing and Process Development	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.000		5.240	Mar 2013	4.000	Mar 2014	-		4.000	Continuing	Continuing	0.000
** VAC WEVEE - HW S - Manufacturing and Process Development	C/CPIF	TBD:	0.000	0.000		3.079	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - Manufacturing and Process Development	C/CPIF	TBD:	0.000	0.000		0.000		8.545	Jun 2014	-		8.545	Continuing	Continuing	0.000
HW S - Non-Clinical Studies	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.000		1.097	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - Non-Clinical Studies #2	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.000		0.000		6.239	Mar 2014	-		6.239	Continuing	Continuing	0.000
Subtotal			0.000	71.752		77.226		53.644		0.000		53.644			0.000
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** BSV - ILS S - BSV Portal ILS & Systems Engr	Various	TBD:	0.000	0.000		0.462	Mar 2013	0.162	Mar 2014	-		0.162	Continuing	Continuing	0.000

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>			
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
ILS SB - Transition of tools ILS & Systems Engr	Various	TBD:	0.000	0.000		0.642	Mar 2013	0.620	Mar 2014	-		0.620	Continuing	Continuing	0.000
ILS SB - Transition of detection devices ILS & Systems Engr	Various	TBD:	0.000	0.000		0.656	Mar 2013	0.625	Mar 2014	-		0.625	Continuing	Continuing	0.000
** NGDS - TD/D SB - Test Preparation and Support	MIPR	Battelle Memorial Institute:Aberdeen, MD	0.000	3.250	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
ES C - Test and Training Preparation	MIPR	Various:	0.000	0.353	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
ES C - Challenge Materials	MIPR	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.836	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
ES C - Standard Sample Materials	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.082	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
ES C - Service TE WIPT Support	MIPR	Various:	0.000	0.795	Jun 2012	0.000		1.000	Feb 2014	-		1.000	Continuing	Continuing	0.000
** VAC FILO - ES S - Regulatory Integration	MIPR	US Army Medical Materiel Development Activity (USAMMDA):Fort Detrick, MD	0.000	0.000		4.028	Dec 2012	4.493	Dec 2013	-		4.493	Continuing	Continuing	0.000
ES S - Regulatory Integration (Environmental and FDA Documentation) and Delivery System	MIPR	US Army Medical Materiel Development Activity (USAMMDA):Fort Detrick, MD	0.000	0.250	Mar 2012	2.805	Dec 2012	2.945	Dec 2013	-		2.945	Continuing	Continuing	0.000
** VAC RIC - ES S - Regulatory Integration	MIPR	US Army Medical Materiel Development Activity	0.000	0.000		0.917	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>			
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
		(USAMMDA):Fort Detrick, MD													
ES S - Regulatory Integration	MIPR	US Army Medical Materiel Development Activity (USAMMDA):Fort Detrick, MD	0.000	0.000		0.000		1.105	Mar 2014	-		1.105	Continuing	Continuing	0.000
** VAC WEVEE - ES S - Regulatory Integration	MIPR	US Army Medical Materiel Development Activity (USAMMDA):Fort Detrick, MD	0.000	0.000		0.000		0.500	Mar 2014	-		0.500	Continuing	Continuing	0.000
ES S - Regulatory Integration #2	MIPR	US Army Medical Materiel Development Activity (USAMMDA):Fort Detrick, MD	0.000	0.000		0.950	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	5.566		10.460		11.450		0.000		11.450			0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** ADM - DTE SB - BSL - 4 GLP T&E	Allot	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	5.200	Oct 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** BSL4 GLP T&E - DTE SB - T&E Facility	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.000		0.000		5.899	Dec 2013	-		5.899	Continuing	Continuing	0.000



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APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)						PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)					
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** BSV - DTE S - BSV Portal Development Testing	Various	TBD:	0.000	0.000		0.104	Mar 2013	0.052	Mar 2014	-		0.052	Continuing	Continuing	0.000
OTE S - BSV Portal Technology demonstration	Various	TBD:	0.000	0.000		0.265	Mar 2013	0.276	Mar 2014	-		0.276	Continuing	Continuing	0.000
DTE SB - Detection Devices Developmental Testing	Various	TBD:	0.000	0.000		0.863	Mar 2013	0.813	Mar 2014	-		0.813	Continuing	Continuing	0.000
OTE SB - Detection Devices User Assessment	Various	TBD:	0.000	0.000		0.000		0.690	Mar 2014	-		0.690	Continuing	Continuing	0.000
** NGDS - OTHT SB - MIL- STD 810 and MIL-STD 461 Testing	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.420	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE C - Conduct Operational Testing under DOT&E oversight	MIPR	TBD:	0.000	0.000		0.000		1.000	Feb 2014	-		1.000	Continuing	Continuing	0.000
DTE C - Procure 13 systems for testing	MIPR	TBD:	0.000	0.000		0.000		1.000	Feb 2014	-		1.000	Continuing	Continuing	0.000
OTHT SB - Conduct Increment 1 Competitive Prototyping DT Testing	MIPR	Various:	0.000	3.400	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** VAC FILO - OTHT SB - Testing, Evaluation, and Clinical Trials	MIPR	Battelle Memorial Institute:Columbus, OH	0.000	7.586	Mar 2012	8.608	Mar 2013	9.014	Mar 2014	-		9.014	Continuing	Continuing	0.000
OTE C - Assay Development Prototype 1	C/CPIF	Paragon Bioservices Inc.:Baltimore, MD	0.000	0.000		2.792	Dec 2012	2.500	Dec 2013	-		2.500	Continuing	Continuing	0.000
DTE C - Manufacturing Pilot Scale Prototype 1	C/CPIF	Paragon Bioservices Inc.:Baltimore, MD	0.000	0.000		1.290	Dec 2012	1.045	Dec 2013	-		1.045	Continuing	Continuing	0.000
OTE C - Assay Development Prototype 2	C/CPIF	TBD:	0.000	0.000		0.200	Jun 2013	1.000	Mar 2014	-		1.000	Continuing	Continuing	0.000

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>			
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
DTE C - Manufacturing Pilot Scale Prototype 2	C/CPIF	TBD:	0.000	0.000		0.000		1.000	Mar 2014	-		1.000	Continuing	Continuing	0.000
** VAC RIC - DTE C - Test and Evaluation Animal Model	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.000		3.000	Mar 2013	4.214	Mar 2014	-		4.214	Continuing	Continuing	0.000
DTE C - Assay Development	MIPR	Battelle Memorial Institute:Columbus, OH	0.000	0.000		3.500	Mar 2013	7.000	Mar 2014	-		7.000	Continuing	Continuing	0.000
** VAC WEVEE - OTE C - Test and Evaluation Assay Development	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.000		0.000		6.434	Mar 2014	-		6.434	Continuing	Continuing	0.000
OTE C - Test and Evaluation Assay Development	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.000		2.393	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	16.606		23.015		41.937		0.000		41.937			0.000
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** ADM - PM/MS S - Program Management	MIPR	Various:	0.000	5.070	Mar 2012	3.948	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000
PM/MS S - Program Support	C/CPFF	Gryphon Technologies:Greenbelt, MD	0.000	0.389	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS S - Program Support #2	C/CPFF	Noblis Inc.:Falls Church, VA	0.000	0.659	Jul 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>			
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** BSV - PM/MS S - Management Support	Allot	Various:	0.000	0.000		3.894	Mar 2013	3.946	Mar 2014	-		3.946	Continuing	Continuing	0.000
** EID FLU - PM/MS SB - Management Support	Allot	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	4.661	Mar 2012	1.945	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** HFV - PM/MS SB - Management Support	Allot	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	5.777	Mar 2012	2.843	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
PM/MS SB - A&AS CONTRACT	C/FFP	Kalman & Company Inc.:Virginia Beach, VA	0.000	0.000		1.421	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** IBP - PM/MS SB - Management Support	Allot	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	1.211	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS SB - JPM-TMT	C/FFP	Kalman & Company Inc.:Virginia Beach, VA	0.000	3.244	May 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS SB - Management Support	Allot	Various:	0.000	0.135	Aug 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** NGDS - PM/MS SB - Product Management Systems Support	Various	Various:	0.000	1.450	Mar 2012	0.000		2.950	Feb 2014	-		2.950	Continuing	Continuing	0.000
** PLTFM - PM/MS SB - BSV - Management Support	Allot	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	1.240	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS SB - JPM-TMT Management Support	Allot	JPM Transformational Medical Technologies (JPM	0.000	0.683	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)						PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)					
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		TMT):Fort Belvoir, VA													
** VAC FILO - PM/MS S - Contractor Support	C/FFP	TBD:	0.000	0.000		0.595	Jun 2013	0.605	Jun 2014	-		0.605	Continuing	Continuing	0.000
PM/MS S - Program Manager Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.763	Dec 2012	0.817	Dec 2013	-		0.817	Continuing	Continuing	0.000
PM/MS S - Program Management/Program Manager Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		1.305	Mar 2013	1.400	Mar 2014	-		1.400	Continuing	Continuing	0.000
PM/MS S - JVAP Program Management	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.563	Dec 2012	0.707	Dec 2013	-		0.707	Continuing	Continuing	0.000
PM/MS S - Contractor Systems Engineering/ Program Management Support	SS/FFP	Goldbelt Raven LLC.:Frederick, MD	0.000	1.000	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS - Joint Vaccine Acquisition Program Management	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	1.727	Mar 2012	0.838	Mar 2013	1.000	Mar 2014	-		1.000	Continuing	Continuing	0.000
PM/MS SB - PM/MS S - Contractor Systems Engineering/Program Management Support	C/FP	TBD:	0.000	0.000		0.700	Mar 2013	0.800	Mar 2014	-		0.800	Continuing	Continuing	0.000
** VAC RIC - PM/MS S - Program Management	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		1.000	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000
PM/MS S - Contractor Systems Program Management Support	C/FP	TBD:	0.000	0.000		0.687	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>			
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
PM/MS S - Program Management	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		1.000	Dec 2012	1.000	Dec 2013	-		1.000	Continuing	Continuing	0.000
PM/MS S - Contractor Systems Program Management Support #2	C/FP	TBD:	0.000	0.000		0.000		0.687	Jun 2014	-		0.687	Continuing	Continuing	0.000
PM/MS S - Joint Vaccine Acquisition Program Management	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.000		0.688	Dec 2013	-		0.688	Continuing	Continuing	0.000
PM/MS S - Joint Vaccine Acquisition Program Management #2	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.688	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000
** VAC WEVEE - PM/MS S - Program Manger Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.000		0.533	Dec 2013	-		0.533	Continuing	Continuing	0.000
PM/MS S - Contractor Systems Engineering Program Support	C/FFP	TBD:	0.000	0.000		0.000		0.317	Jun 2014	-		0.317	Continuing	Continuing	0.000
PM/MS S - Joint Vaccine Acquisition Program Management #3	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.000		0.455	Dec 2013	-		0.455	Continuing	Continuing	0.000
PM/MS S - Joint Vaccine Acquisition Program Management #4	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.363	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000
<b>Subtotal</b>			0.000	27.246		22.553		15.905		0.000		15.905			0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program											DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)					PROJECT MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)				
		All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		0.000	121.170		133.254		122.936		0.000		122.936			0.000

Remarks

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

## APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide  
BA 4: Advanced Component Development & Prototypes (ACD&P)

## R-1 ITEM NOMENCLATURE

PE 0603884BP: CHEMICAL/BIOLOGICAL  
DEFENSE (ACD&P)

## PROJECT

MB4: MEDICAL BIOLOGICAL DEFENSE  
(ACD&P)

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
** ADM - Bridging Studies																												
ADM - Technology Transfer and Process Optimization																												
ADM - Engineering & Design Studies																												
ADM - Contract Award																												
ADM - Support Early Clinical Trials																												
** BSV - AoA																												
BSV - ATD																												
BSV - ATD MDD																												
BSV - MS B - ATD BSP																												
BSV - MS C - ATD BSP																												
** EID FLU - Conduct toxicity, bioequivalence, and renal function studies to support FDA approval																												
EID FLU - Milestone B Decision																												
** HFV - Phase 1 Clinical Trials for HFV MCMs																												
HFV - Milestone B Decision																												
** NGDS - Increment 1 MS A																												
NGDS - Conduct market research, CP planning and Source Selection																												
NGDS - Conduct government testing																												
NGDS - Increment 1 Competitive Prototyping Phase																												
NGDS - Anthrax/Viral Hemorrhagic Fever Assay optimization																												
NGDS - Anthrax/VHF clinical trials																												

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

APPROPRIATION/BUDGET ACTIVITY												R-1 ITEM NOMENCLATURE												PROJECT											
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)												PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)												MB4: MEDICAL BIOLOGICAL DEFENSE (ACD&P)											
	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018										
	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							
NGDS - Increment 1 Development and FDA approval of Anthrax/VHF assays	<div></div>																																		
NGDS - Increment 1 Tularemia and Plague IVD assay development	<div></div>																																		
NGDS - FOC	<div></div>																																		
NGDS - IOC	<div></div>																																		
NGDS - Increment 1 MS C	<div></div>																																		
** IBP - AoA	<div></div>																																		
IBP - MS A	<div></div>																																		
** VAC FILO - Non-clinical studies	<div></div>																																		
VAC FILO - Manufacturing process development	<div></div>																																		
VAC FILO - Planned for Pre-IND application meeting	<div></div>																																		
VAC FILO - Pre-IND meetings with FDA (2 prototypes)	<div></div>																																		
VAC FILO - Implementation of Phase 1 Clinical Trials (2 prototypes)	<div></div>																																		
VAC FILO - IND Submissions (2 prototypes)	<div></div>																																		
VAC FILO - Phase 1 Clinical Trials (2 prototypes)	<div></div>																																		
VAC FILO - Milestone B	<div></div>																																		
** VAC RIC - Milestone A	<div></div>																																		
VAC RIC - Assay Development	<div></div>																																		
VAC RIC - Non-Clinical Efficacy Studies	<div></div>																																		
VAC RIC - Manufacturing Process Development and Pilot Lots	<div></div>																																		



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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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 RIC - Pre-IND																												
VAC RIC - IND Submission																												
VAC RIC - Phase 1 Clinical Trials (competitive prototypes)																												
VAC RIC - Milestone B																												
** VAC WEVEE - Milestone A																												
VAC WEVEE - Non-Clinical Studies																												
VAC WEVEE - Assay Development																												
VAC WEVEE - Manufacturing Process Development and Pilot Lots																												
VAC WEVEE - Pre-IND																												
VAC WEVEE - Phase 1 Clinical Trials																												
VAC WEVEE - IND Submission																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>	

**Schedule Details**

<b>Events</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
** ADM - Bridging Studies	3	2012	4	2013
ADM - Technology Transfer and Process Optimization	3	2012	3	2014
ADM - Engineering & Design Studies	2	2013	2	2014
ADM - Contract Award	2	2013	2	2013
ADM - Support Early Clinical Trials	3	2013	1	2015
** BSV - AoA	2	2013	4	2013
BSV - ATD	3	2013	3	2015
BSV - ATD MDD	3	2015	3	2015
BSV - MS B - ATD BSP	2	2016	2	2016
BSV - MS C - ATD BSP	3	2017	3	2017
** EID FLU - Conduct toxicity, bioequivalence, and renal function studies to support FDA approval	4	2012	2	2016
EID FLU - Milestone B Decision	1	2013	1	2013
** HFV - Phase 1 Clinical Trials for HFV MCMs	1	2012	1	2014
HFV - Milestone B Decision	2	2014	2	2014
** NGDS - Increment 1 MS A	2	2012	2	2012
NGDS - Conduct market research, CP planning and Source Selection	2	2012	1	2013
NGDS - Conduct government testing	4	2012	2	2013
NGDS - Increment 1 Competitive Prototyping Phase	1	2013	3	2013
NGDS - Anthrax/Viral Hemorrhagic Fever Assay optimization	1	2013	2	2013
NGDS - Anthrax/VHF clinical trials	4	2013	1	2015
NGDS - Increment 1 Development and FDA approval of Anthrax/VHF assays	3	2013	2	2015

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> MB4: <i>MEDICAL BIOLOGICAL DEFENSE (ACD&amp;P)</i>
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Events	Start		End	
	Quarter	Year	Quarter	Year
NGDS - Increment 1 Tularemia and Plague IVD assay development	2	2015	1	2016
NGDS - FOC	4	2018	4	2018
NGDS - IOC	1	2017	1	2017
NGDS - Increment 1 MS C	3	2015	3	2015
** IBP - AoA	1	2012	1	2012
IBP - MS A	2	2014	2	2014
** VAC FILO - Non-clinical studies	1	2012	4	2014
VAC FILO - Manufacturing process development	1	2012	4	2014
VAC FILO - Planned for Pre-IND application meeting	3	2013	3	2013
VAC FILO - Pre-IND meetings with FDA (2 prototypes)	3	2014	3	2014
VAC FILO - Implementation of Phase 1 Clinical Trials (2 prototypes)	3	2015	1	2016
VAC FILO - IND Submissions (2 prototypes)	2	2016	3	2016
VAC FILO - Phase 1 Clinical Trials (2 prototypes)	3	2016	3	2017
VAC FILO - Milestone B	1	2017	1	2017
** VAC RIC - Milestone A	2	2013	2	2013
VAC RIC - Assay Development	2	2013	2	2014
VAC RIC - Non-Clinical Efficacy Studies	2	2013	4	2016
VAC RIC - Manufacturing Process Development and Pilot Lots	2	2013	3	2015
VAC RIC - Pre-IND	3	2014	1	2015
VAC RIC - IND Submission	1	2015	1	2015
VAC RIC - Phase 1 Clinical Trials (competitive prototypes)	2	2015	3	2017
VAC RIC - Milestone B	4	2016	4	2016
** VAC WEVEE - Milestone A	2	2013	2	2013
VAC WEVEE - Non-Clinical Studies	2	2013	1	2017
VAC WEVEE - Assay Development	2	2013	1	2015

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**Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program**

DATE: April 2013

**APPROPRIATION/BUDGET ACTIVITY**

0400: Research, Development, Test & Evaluation, Defense-Wide  
BA 4: Advanced Component Development & Prototypes (ACD&P)

### R-1 ITEM NOMENCLATURE

PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*

PROJECT
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MB4: *MEDICAL BIOLOGICAL DEFENSE*  
(ACD&P)

	Start		End	
Events	Quarter	Year	Quarter	Year
VAC WEVEE - Manufacturing Process Development and Pilot Lots	2	2013	2	2016
VAC WEVEE - Pre-IND	2	2015	2	2015
VAC WEVEE - Phase 1 Clinical Trials	1	2016	1	2018
VAC WEVEE - IND Submission	3	2016	3	2016

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT MC4: MEDICAL CHEMICAL DEFENSE (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MC4: MEDICAL CHEMICAL DEFENSE (ACD&P)	-	7.697	0.000	2.000	-	2.000	3.705	5.114	10.920	24.186	Continuing	Continuing
Quantity of RDT&E Articles												

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**A. Mission Description and Budget Item Justification**

This Project provides for the development of medical materiel and other medical equipment items necessary for the Technology Development phase of the acquisition life cycle for the advanced development of medical countermeasures (MCMs) for chemical warfare agents including diagnostic equipment, prophylactic, pre-treatment, and therapeutic drugs, and individual/casualty decontamination compounds. A family-of-systems approach for medical defense against chemical warfare 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, pre-treatment, and therapeutic drugs and medical devices requires Food and Drug Administration (FDA) approval. Given the family-of-systems approach for development of chemical MCMs for the treatment of nerve agent intoxication, multiple long-term studies are required to obtain FDA approval to deliver products that effectively integrate with current and projected therapeutic regimens. Efficacy testing of most candidate drugs against chemical warfare agents cannot be conducted in humans; therefore, animal surrogate models must be developed and employed. The program currently funds: (1) Bioscavenger, a new capability, to be used as a prophylaxis against nerve agents; (2) Improved Nerve Agent Treatment System (INATS) an enhanced nerve agent treatment regimen consisting of an improved oxime to replace the current fielded oxime 2-pralidoxime chloride (2-PAM) and expanded pretreatment indications for the use of pyridostigmine bromide (PB), the active component of Soman Nerve Agent Pretreatment Pyridostigmine (SNAPP).

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<b>Title:</b> 1) BSCAV	2.000	0.000	0.000
<b>FY 2012 Accomplishments:</b> Initiated source selection activities for SDD contract award and initiated re-establishment of a manufacturing line (NTA).			
<b>Title:</b> 2) BSCAV	0.926	0.000	0.000
<b>FY 2012 Accomplishments:</b> Continued studies for alternative manufacturing technologies (NTA).			
<b>Title:</b> 3) INATS	2.953	0.000	0.000
<b>FY 2012 Accomplishments:</b> Continued and completed Phase 1 Clinical Trial.			
<b>Title:</b> 4) INATS	1.247	0.000	1.165

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT MC4: MEDICAL CHEMICAL DEFENSE (ACD&P)				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Continued non-clinical toxicology and NTA efficacy studies.												
FY 2014 Plans: Complete non-clinical toxicology and NTA efficacy studies.												
Title: 5) INATS										0.571	0.000	0.835
FY 2012 Accomplishments: Continued enhanced formulation stability studies and process optimization efforts.												
FY 2014 Plans: Complete enhanced formulation stability studies and process optimization efforts and conduct MS B.												
Accomplishments/Planned Programs Subtotals										7.697	0.000	2.000
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
• MC5: MEDICAL CHEMICAL DEFENSE (EMD)	2.336	9.642	55.087		55.087	58.342	57.675	47.340	28.759	0.000	259.181	
• JM6677: ADVANCED ANTICONVULSANT SYSTEM (AAS)	0.000	4.466	8.951		8.951	2.500	0.000	0.000	0.000	0.000	15.917	
Remarks												
D. Acquisition Strategy												
BSCAV												
The Bioscavenger acquisition strategy used a serial evaluation of candidates to achieve competitive prototyping in the Technology Development Phase which culminated in a down-select decision. The Bioscavenger program issued a Request For Proposal (RFP) to select the best value for the government for a prophylaxis to support an initial limited user group. During the System Development and Demonstration (SDD) phase the program will continue to exercise management oversight with system integration support of a commercial partner to ensure that manufacturing of the product is in accordance with Food and Drug Administration (FDA) regulations and guidelines. The RFP for product manufacturing includes options for transition to the Medical Countermeasures Initiative (MCMI) Advanced Development and Manufacturing (ADM) capability. Prior to FDA licensure, a commercial partner will perform a Phase 2 human clinical safety study, definitive animal efficacy studies, and toxicology studies. The system integrator will also develop and manufacture a product formulation and delivery system and will submit a New												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&amp;P)</i>
<p>Drug Application and seek FDA approval. The SDD phase will culminate in FDA licensure of the Bioscavenger. During the Production and Deployment phase, the Bioscavenger program, in conjunction with a commercial partner, will pursue full rate production and conduct any FDA-mandated post-marketing surveillance studies. Concurrently the Bioscavenger program will conduct an analysis of alternative manufacturing technologies, investigate additional product indications, and pursue an expanded force prophylaxis once alternate technologies have matured.</p> <p>INATS</p> <p>During the Technology Development Phase, the INATS acquisition strategy has the Government serving as the system integrator directly overseeing completion of small-scale manufacturing, execution of nonclinical animal safety studies, submission of an Investigational New Drug (IND) application, and conduct of a Phase 1 clinical safety study. Following a successful Pre-EMD Review and Milestone B, the INATS program will continue to exercise management oversight in the System Development and Demonstration (SDD) Phase with system integration support from a commercial partner. Prior to FDA licensure, the commercial partner will perform a Phase 2 human clinical safety study toxicology and definitive animal efficacy studies for an improved oxime. The system integrator will also manufacture an improved formulation in an autoinjector delivery system. As part of a second line of effort, the INATS program will conduct nonclinical studies to obtain FDA approval for expand the indications for PB under task order vehicles. During the Production and Deployment Phase, the INATS program, in collaboration with the contracted system integrator, will pursue full rate and stockpile production as well as conduct any FDA-mandated post-marketing studies. After delivery of the Full Operational Capability quantities, the INATS program will transfer contracting and logistical responsibilities to the Defense Logistics Agency - Troop Support during the Operations and Support Phase.</p> <p><b><u>E. Performance Metrics</u></b></p> <p>N/A</p>		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&amp;P)</i>			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** BSCAV - HW C - pBSCAV - Small Scale Manufacturing	C/CPFF	PharmAthene Inc.:Annapolis, MD	4.354	1.710	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
<b>Subtotal</b>			4.354	1.710		0.000		0.000		0.000		0.000			0.000
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** INATS - ES S - Regulatory Integration, IND, and NDA Support Efforts	MIPR	Battelle Memorial Institute:Columbus, OH	1.056	0.300	Mar 2012	0.000		0.145	Mar 2014	-		0.145	Continuing	Continuing	0.000
<b>Subtotal</b>			1.056	0.300		0.000		0.145		0.000		0.145			0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** BSCAV - DTE S - Alternate Manufacturing Technology Studies	C/CPFF	PharmAthene Inc.:Annapolis, MD	0.000	0.850	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** INATS - DTE S - Conduct Formulation and Stability Studies	C/CPFF	Southwest Research Institute:San Antonio, TX	1.068	0.376	Mar 2012	0.000		0.720	Feb 2014	-		0.720	Continuing	Continuing	0.000
DTE C - Phase 1 Clinical Trial	MIPR	Battelle Memorial Institute:Columbus, OH	0.000	2.335	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW S - Toxicological and Efficacy Studies	MIPR	Battelle Memorial Institute:Columbus, OH	0.000	1.045	Mar 2012	0.000		0.990	Mar 2014	-		0.990	Continuing	Continuing	0.000
<b>Subtotal</b>			1.068	4.606		0.000		1.710		0.000		1.710			0.000



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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&amp;P)</i>			
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** BSCAV - PM/MS C - Product Management Support	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.245	0.216	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS C - Chem Bio Medical Systems	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	2.487	0.150	Dec 2011	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** INATS - PM/MS S - Product Management Support	SS/FFP	Goldbelt Raven LLC.:Frederick, MD	0.503	0.570	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS S - Chem Bio Medical Systems	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.670	0.145	Mar 2012	0.000		0.145	Dec 2013	-		0.145	Continuing	Continuing	0.000
<b>Subtotal</b>			3.905	1.081		0.000		0.145		0.000		0.145			0.000
			<b>All Prior Years</b>	<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			10.383	7.697		0.000		2.000		0.000		2.000			0.000
<b>Remarks</b>															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&amp;P)</i>

	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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 - Alternate Manufacturing Studies																												
BSCAV - Pre SDD Review																												
BSCAV - Milestone B																												
** INATS - Phase 1 Clinical Safety Studies																												
INATS - Nonclinical Studies																												
INATS - Formulation / Stability Studies																												
INATS - Pre SDD Review																												
INATS - Milestone B																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> MC4: <i>MEDICAL CHEMICAL DEFENSE (ACD&amp;P)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
** BSCAV - Alternate Manufacturing Studies	1	2012	4	2013
BSCAV - Pre SDD Review	1	2012	1	2012
BSCAV - Milestone B	4	2012	4	2012
** INATS - Phase 1 Clinical Safety Studies	1	2012	4	2012
INATS - Nonclinical Studies	1	2012	4	2014
INATS - Formulation / Stability Studies	1	2012	4	2014
INATS - Pre SDD Review	3	2013	3	2013
INATS - Milestone B	1	2014	1	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT MR4: MEDICAL RADIOLOGICAL DEFENSE (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
MR4: MEDICAL RADIOLOGICAL DEFENSE (ACD&P)	-	0.000	4.050	0.000	-	0.000	0.000	0.000	0.000	8.610	Continuing	Continuing
Quantity of RDT&E Articles												
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
Operational forces have an immediate need to survive, safely operate, and sustain operations in a radiological/nuclear (R/N) threat environment across a continuum of global, contingency, special operations/low intensity conflict, homeland defense, and other high-risk missions.												
Exposure to ionizing radiation causes acute radiation syndrome (ARS) which includes damage to blood-forming cells (hematopoietic system), gastrointestinal system, and central nervous system. Treatment of R/N casualties depends on effective use of multiple medical capabilities in an integrated manner. There are currently no FDA-approved prophylactic, therapeutic, or biodosimetry capabilities against ARS. Thus, this program supports the development of medical radiological countermeasures (MRADC) using a family-of-systems approach to provide a full spectrum medical capability including prophylactics, therapeutics, and biodosimetry to protect Warfighters against the radiation threat and to mitigate the medical consequences of exposure to ionizing radiation.												
MRADC efforts include development of multiple countermeasures to prevent, limit, or reverse the myriad of injuries caused by exposure to radiation resulting in increased survival, decreased incapacity, and sustained operational effectiveness of U.S. Forces. In addition, MRADC will be effective against a broad range of ionizing radiation sources and types and will be useable throughout the full spectrum of healthcare operations.												
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
Title: 1) MRADC										0.000	1.829	0.000
FY 2013 Plans: Conduct development of Department of Health and Human Services (HHS) prototypes for DoD requirements.												
Title: 2) MRADC										0.000	2.221	0.000
FY 2013 Plans: Conduct preliminary animal efficacy studies to test HHS prototypes for DoD requirements.												
Accomplishments/Planned Programs Subtotals										0.000	4.050	0.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program										<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>				<b>PROJECT</b> MR4: <i>MEDICAL RADIOLOGICAL DEFENSE (ACD&amp;P)</i>			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
			<b>FY 2014</b>	<b>FY 2014</b>	<b>FY 2014</b>					<b>Cost To</b>	
<b>Line Item</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>Base</b>	<b>OCO</b>	<b>Total</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>Complete</b>	<b>Total Cost</b>
• MR5: <i>MEDICAL RADIOLOGICAL DEFENSE (EMD)</i>	0.000	2.027	0.000		0.000	0.000	0.000	0.000	0.000	0.000	2.027
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
MRADC											
<p>The DoD is synchronizing its investments and harmonizing its portfolio with the Department of Health and Human Services (HHS) which also has a radiation countermeasure program. DoD investments will focus on DoD-unique requirements. In support of the Integrated National Biodefense Portfolio, a Memorandum of Understanding (MOU) was established between HHS and DoD to prevent duplication of efforts and create synergies in the development of MRADC. In support of the MOU, the DoD will enter into Interagency Agreements (IAAs) with the Biomedical Advanced Research and Development Authority (BARDA), HHS' advanced developer, to promote the development of MRADC and the Strategic National Medical Radiation Countermeasures Portfolio. Each contract performer whose work is supported through these IAAs will sponsor its drug to the FDA and hold all approvals and or licenses. In accordance with the MRADC revised acquisition strategy, the DoD will harmonize DoD investments with HHS investments. The DoD will invest via IAAs in HHS prototypes focusing on DoD-unique requirements as HHS, in its role as the lead developer for the Technology Development phase in a whole-of-government approach, matures the prototypes to support a DoD down-select at Milestone B.</p>											
<b>E. Performance Metrics</b>											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program													DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)						PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				MR4: MEDICAL RADIOLOGICAL DEFENSE (ACD&P)					
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** MRADC - HW C - Development of candidates	C/CPIF	TBD:	0.000	0.000		1.480	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
Subtotal			0.000	0.000		1.480		0.000		0.000		0.000			0.000
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** MRADC - DTE C - Animal Efficacy Studies	C/CPIF	TBD:	0.000	0.000		1.796	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
Subtotal			0.000	0.000		1.796		0.000		0.000		0.000			0.000
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** MRADC - PM/MS C - MRADC - Management Support	C/FFP	TBD:	0.000	0.000		0.629	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
PM/MS C - MRADC - Management Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.145	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000
Subtotal			0.000	0.000		0.774		0.000		0.000		0.000			0.000
			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	0.000		4.050		0.000		0.000		0.000			0.000
Remarks															

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2014 Chemical and Biological Defense Program	<b>DATE:</b> April 2013
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> MR4: <i>MEDICAL RADIOLOGICAL DEFENSE (ACD&amp;P)</i>
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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 - Animal Efficacy Studies																												
MRADC - Testing of HHS Prototypes																												
MRADC - Milestone B																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> MR4: <i>MEDICAL RADIOLOGICAL DEFENSE (ACD&amp;P)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
** MRADC - Animal Efficacy Studies	3	2013	4	2013
MRADC - Testing of HHS Prototypes	3	2013	4	2013
MRADC - Milestone B	1	2018	1	2018



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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				TE4: TEST & EVALUATION (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
TE4: TEST & EVALUATION (ACD&P)	-	14.458	4.994	15.671	-	15.671	20.408	15.872	13.044	11.044	Continuing	Continuing
Quantity of RDT&E Articles												

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

**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 three groups to include: (1) Sense Laboratory (Chemical); (2) Sense Laboratory (Biological); and (3) Individual Protection, Collective Protection and Decontamination (Shield and Sustain).

(1) Sense Laboratory (Chemical): The product for this area is the Non-Traditional Agent Defense Test System (NTADTS). The NTADTS provides a new capability at the Edgewood Chemical Biological Center (ECBC) to conduct highly toxic materials testing using new, emerging threat agents. The NTADTS supports testing of decontamination, collective protection, individual protection, and contamination avoidance products. The CBD acquisition program supported are Dismounted Reconnaissance Sets Kits and Outfits (DR SKO), Next Generation Chemical Detector (NGCD), Decon Family of Systems (DFoS), Joint Expeditionary Collective Protection (JECp), Joint Service Aircrew Mask - Fixed and Rotary Wing (JSAM-FW), (JSAM-RW), and Common Analytical Laboratory System (CALS).

(2) Sense Laboratory (Biological): The product for this area is the Standoff Detection Test System (SDTS). The SDTS, as a new start, will provide test and evaluation capability for the Joint Standoff Detection System (JSDS) acquisition program.

(3) Individual Protection, Collective Protection and Decontamination (Shield and Sustain): The product for this area is the Chemical Biological Agent Resistance Test Fixture (CBART). Projected location for these T&E capabilities is Dugway Proving Ground (DPG), Utah. CBART provides state of the art material swatch test fixture for individual and collective protection systems.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<b>Title:</b> 1) PD TESS - Non-Traditional Agent Defense Test System (NTADTS)	4.070	4.794	4.929
<b>FY 2012 Accomplishments:</b> Initiated laboratory revitalization. Fabricated test chambers. Performed decontamination studies.			
<b>FY 2013 Plans:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>		<b>PROJECT</b> TE4: <i>TEST &amp; EVALUATION (ACD&amp;P)</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
Complete laboratory revitalization and fabrication of test chambers. Install test chambers and integrate test fixtures. Initiate commissioning and verification.  <b>FY 2014 Plans:</b> Complete commissioning and verification. Conduct validation of facility.					
<b>Title:</b> 2) PD TESS - Bio Standoff Facility (BIOSFAC)  <b>FY 2012 Accomplishments:</b> Conducted closeout of Biological Standoff Facility design activities.			1.291	0.000	0.000
<b>Title:</b> 3) PD TESS - Chemical Biological Agent Resistance Test Fixture (CBART)  <b>FY 2013 Plans:</b> Transition technology from techbase and conduct studies.  <b>FY 2014 Plans:</b> Initiate laboratory revitalization.			0.000	0.200	5.328
<b>Title:</b> 4) PD TESS - Standoff Detection Test System (SDTS)  <b>FY 2014 Plans:</b> Initiate laboratory revitalization.			0.000	0.000	5.414
<b>Title:</b> 5) Edgewood Chemical Biological Center  <b>FY 2012 Accomplishments:</b> Provided T&E infrastructure project upgrades and equipment in support of key T&E systems to advance to the current state-of-the-art capabilities. Provided enhancements for T&E safety and surety efforts at Edgewood Chemical Biological Center.			3.198	0.000	0.000
<b>Title:</b> 6) ATEC - Dugway Proving Ground  <b>FY 2012 Accomplishments:</b> Provided enhancements for T&E safety and surety efforts at Dugway Proving Ground. Supported Dugway Proving Ground T&E equipment development in support of special operations forces equipment testing.			5.899	0.000	0.000
<b>Accomplishments/Planned Programs Subtotals</b>			14.458	4.994	15.671

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program										<b>DATE:</b> April 2013	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>					<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>			<b>PROJECT</b> TE4: <i>TEST &amp; EVALUATION (ACD&amp;P)</i>			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
			<u>FY 2014</u>	<u>FY 2014</u>	<u>FY 2014</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Complete</u>	<u>Total Cost</u>
• TE5: <i>TEST &amp; EVALUATION (EMD)</i>	16.235	6.394	26.202		26.202	20.033	20.200	15.700	14.200	Continuing	Continuing
• TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>	3.549	4.156	3.690		3.690	3.642	2.846	2.846	2.846	Continuing	Continuing
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
PD TESS											
PD TESS 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.											
<b>E. Performance Metrics</b>											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide						PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				TE4: TEST & EVALUATION (ACD&P)					
BA 4: Advanced Component Development & Prototypes (ACD&P)															
Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** PD TESS - HW S - NTA Defense Test System Design/Fabrication/ Installation	C/CPFF	MRIGlobal:Kansas City, MO	29.500	2.348	Mar 2012	1.800	Jun 2012	2.700	Mar 2014	-		2.700	Continuing	Continuing	0.000
HW S - NTA Defense Test System Design/ Fabrication/Installation	MIPR	Various:	8.141	0.795	Mar 2012	0.592	Mar 2013	1.833	Mar 2014	-		1.833	Continuing	Continuing	0.000
HW S - Bio Standoff Facility Feasibility/Design	MIPR	Dugway Proving Ground (DPG):Dugway, UT	3.276	1.000	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW S - Standoff Detection Test System - Initiation/ Design	MIPR	TBD:	0.000	0.000		0.000		5.333	Mar 2014	-		5.333	Continuing	Continuing	0.000
HW S - Chemical Biological Agent Resistance Test Fixture - Initiation/Design	MIPR	TBD:	0.000	0.000		0.100	Mar 2013	2.334	Mar 2014	-		2.334	Continuing	Continuing	0.000
HW C - T&E safety and surety efforts	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	3.198	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW C - T&E infrastructure project upgrades and equipment	MIPR	Dugway Proving Ground (DPG):Dugway, UT	0.000	5.899	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
Subtotal			40.917	13.240		2.492		12.200		0.000		12.200			0.000
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** PD TESS - ES S - Integrated Product Team (IPT) Support	MIPR	Various:	3.667	0.932	Mar 2012	1.753	Mar 2013	1.556	Dec 2013	-		1.556	Continuing	Continuing	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)						R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)						PROJECT TE4: TEST & EVALUATION (ACD&P)			
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			3.667	0.932		1.753		1.556		0.000		1.556			0.000
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** PD TESS - PM/MS S - Management/Systems/ Engineering Support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	1.467	0.286	Dec 2011	0.749	Mar 2013	1.915	Dec 2013	-		1.915	Continuing	Continuing	0.000
Subtotal			1.467	0.286		0.749		1.915		0.000		1.915			0.000
			All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			46.051	14.458		4.994		15.671		0.000		15.671			0.000
Remarks															

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> TE4: <i>TEST &amp; EVALUATION (ACD&amp;P)</i>
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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 - NTA Defense Test System (NTADTS) laboratory revitalization and test chamber design																												
PD TESS - NTA Defense Test System (NTADTS) Facility Upgrades for Next Class of Agents																												
PD TESS - Biological Standoff Facility (BIOSFAC) Closeout Activities																												
PD TESS - CBART- Fixture Initiation/Design																												
PD TESS - Standoff Detection Test System (SDTS) Initiation/Design																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program	<b>DATE:</b> April 2013
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> TE4: <i>TEST &amp; EVALUATION (ACD&amp;P)</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
** PD TESS - NTA Defense Test System (NTADTS) laboratory revitalization and test chamber design	1	2012	4	2014
PD TESS - NTA Defense Test System (NTADTS) Facility Upgrades for Next Class of Agents	4	2014	4	2018
PD TESS - Biological Standoff Facility (BIOSFAC) Closeout Activities	1	2012	4	2012
PD TESS - CBART- Fixture Initiation/Design	1	2013	4	2016
PD TESS - Standoff Detection Test System (SDTS) Initiation/Design	1	2014	4	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)				PROJECT TT4: TECHBASE TECHNOLOGY TRANSITION (ACD&P)			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
TT4: TECHBASE TECHNOLOGY TRANSITION (ACD&P)	-	2.985	3.377	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	6.362
Quantity of RDT&E Articles												
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
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 demonstrations and programs 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 family of products areas (one of which is a new thrust areas to address DoD emphasis on an interagency collaboration for biological detection, surveillance, recovery and resilience and is annotated as such below): Hazard Mitigation, Early Warning, and Biological Resiliency. Hazard Mitigation 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 Early Warning family of products achieve 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. Biological Resiliency efforts are targeted to reduce biological threats by: (1) improving DoD access to the life sciences to combat infectious disease regardless of its cause; (2) establishing and reinforcing DoD concept of operations (CONOPS) against the misuse of the life sciences; and (3) instituting a suite of coordinated DoD and interagency activities that collectively will help influence, identify, inhibit, and/or interdict those who seek to misuse the life sciences.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2012	FY 2013	FY 2014	
Title: 1) TT DEMO - Hazard Mitigation									0.415	0.000	0.000	
Description: Hazard Mitigation Material and Equipment Restoration (HaMMER)												
FY 2012 Accomplishments:												



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Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603884BP: CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)					PROJECT TT4: TECHBASE TECHNOLOGY TRANSITION (ACD&P)		
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2012	FY 2013	FY 2014
Conducted operational demonstration and final Technology Readiness Assessment (TRA).												
Title: 2) TT DEMO - Early Warning  Description: Rapid Area Surveillance/Reconnaissance (RASR)  FY 2012 Accomplishments: Conducted operational and technical reachback demonstrations. Conducted final Technology Readiness Assessment (TRA).										0.241	0.000	0.000
Title: 3) TT DEMO - Biological Resiliency  Description: Transatlantic Collaborative Biological Recovery Demonstration (TaCBRD)  FY 2012 Accomplishments: Initiated concept exploration and risk reduction efforts through several Technology Transition Exercise (TTX). Completed baseline study to understand capability gaps associated with partner nation recovery and resilience in an overseas environment. In FY13, this research area was realigned within TT4 to TECHTRAN.										2.329	0.000	0.000
Title: 4) TECHTRAN - TaCBRD  Description: Transatlantic Collaborative Biological Recovery Demonstration (TaCBRD)  FY 2013 Plans: Initiate Coalition Warfare Program S&T efforts with international partner in EUCOM Area Of Responsibility (AOR). Conduct persistent agent fate and contagious bio agent information systems studies, technical demonstrations and exercises. Initiate bio-resiliency planning efforts in a second AOR. In FY13, this research area was realigned within TT4 from TT DEMO.										0.000	3.377	0.000
Accomplishments/Planned Programs Subtotals										2.985	3.377	0.000
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
• TE3: TEST & EVALUATION (ATD)	10.306	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	10.306	
• TT3: TECHBASE TECHNOLOGY TRANSITION	0.000	0.000	6.706		6.706	6.257	6.575	8.196	7.852	Continuing	Continuing	
Remarks												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Chemical and Biological Defense Program		<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&amp;P)</i>
<b><u>D. Acquisition Strategy</u></b> TECHTRAN  <p>The Advanced Technology Demonstrations (ATDs) and Joint Capability Technology Demonstrations (JCTDs) exploit mature and maturing technologies to solve important military problems. ATDs and JCTDs 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&amp;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 (UARCs). This is done through the Military Interdepartmental Purchase Request (MIPR) or the Interagency Cost Reimbursable Order (IACRO) in accordance with the Economy Act. In addition, the ATDs utilize the Defense Threat Reduction Agency (DTRA) Broad Area Announcement process to fund promising technologies between Technology Readiness Level (TRL) 4 and TRL 6. The ATD manager, who is typically responsible for total system development, can subcontract industry, academia, or other government agencies to perform individual component development.</p>		
<b><u>E. Performance Metrics</u></b> N/A		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&amp;P)</i>			
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** TT DEMO - HW C - HaMMER Product Development	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.125	Jan 2012	0.000		0.000		-		0.000	0.000	0.125	0.000
HW C - (EW) RASR Product Development	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	1.150	0.075	Jan 2012	0.000		0.000		-		0.000	0.000	1.225	0.000
HW C - TaCBRD ATD	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.500	Dec 2011	0.000		0.000		-		0.000	0.000	0.500	0.000
HW C- TaCBRD ATD	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	0.000	0.394	Dec 2011	0.000		0.000		-		0.000	0.000	0.394	0.000
** TECHTRAN - HW C- TaCBRD ATD	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.792	Dec 2012	0.000		-		0.000	0.000	0.792	0.000
HW C-TaCBRD ATD	MIPR	Air Force Research Laboratory (AFRL):Wright Patterson AFB, OH	0.000	0.000		0.485	Dec 2012	0.000		-		0.000	0.000	0.485	0.000
<b>Subtotal</b>			1.150	1.094		1.277		0.000		0.000		0.000	0.000	3.521	0.000
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** TT DEMO - ILS S - HaMMER System Support	MIPR	USA Research Dev & Engr Cmd (RDECOM):Aberdeen Proving Ground, MD	0.000	0.125	Jan 2012	0.000		0.000		-		0.000	0.000	0.125	0.000

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&amp;P)</i>			
<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
ILS C- TaCBRD ATD	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	0.000	0.240	Dec 2011	0.000		0.000		-		0.000	0.000	0.240	0.000
ILS C-TaCBRD ATD	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.445	Dec 2011	0.000		0.000		-		0.000	0.000	0.445	0.000
ILS S - RASR ATD	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.075	Jan 2012	0.000		0.000		-		0.000	0.000	0.075	0.000
** TECHTRAN - ILS C - TaCBRD ATD	MIPR	Air Force Research Laboratory (AFRL):Wright Patterson AFB, OH	0.000	0.000		0.300	Dec 2012	0.000		-		0.000	0.000	0.300	0.000
ILS C -TaCBRD ATD	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.500	Dec 2012	0.000		-		0.000	0.000	0.500	0.000
ILS C -TaCBRD ATD #2	MIPR	US European Command (USEUCOM):Stuttgart Baden-Wurttemberg, GE	0.000	0.000		0.300	Dec 2012	0.000		-		0.000	0.000	0.300	0.000
<b>Subtotal</b>			0.000	0.885		1.100		0.000		0.000		0.000	0.000	1.985	0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
** TT DEMO - OTE S - HaMMER System Testing	MIPR	Edgewood Chemical Biological Center	0.000	0.125	Jan 2012	0.000		0.000		-		0.000	0.000	0.125	0.000

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**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>				<b>PROJECT</b> TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&amp;P)</i>			
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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		(ECBC):Aberdeen Proving Ground, MD													
OTE S - RASR System Testing	MIPR	Army Test and Evaluation Command (ATEC):Aberdeen Proving Ground, MD	0.000	0.075	Jan 2012	0.000		0.000		-		0.000	0.000	0.075	0.000
OTE C-TaCBRD ATD	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.400	Dec 2011	0.000		0.000		-		0.000	0.000	0.400	0.000
OTE C-TaCBRD ATD #2	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	0.000	0.200	Dec 2011	0.000		0.000		-		0.000	0.000	0.200	0.000
** TECHTRAN - OTE C-TaCBRD ATD	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.750	Dec 2012	0.000		-		0.000	0.000	0.750	0.000
OTE C-TaCBRD ATD #3	MIPR	Air Force Research Laboratory (AFRL):Wright Patterson AFB, OH	0.000	0.000		0.250	Dec 2012	0.000		-		0.000	0.000	0.250	0.000
<b>Subtotal</b>			0.000	0.800		1.000		0.000		0.000		0.000	0.000	1.800	0.000

Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
** TT DEMO - PM/MS S - HaMMER System Program Management	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.040	Jan 2012	0.000		0.000		-		0.000	0.000	0.040	0.000

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Chemical and Biological Defense Program												<b>DATE:</b> April 2013			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>						<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>						<b>PROJECT</b> TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&amp;P)</i>			
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>All Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
PM/MS S - RASR Program Management	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.016	Jan 2012	0.000		0.000		-		0.000	0.000	0.016	0.000
PM/MS C - TaCBRD ATD	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	0.000	0.050	Dec 2011	0.000		0.000		-		0.000	0.000	0.050	0.000
PM/MS C -TaCBRD ATD	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.100	Dec 2011	0.000		0.000		-		0.000	0.000	0.100	0.000
<b>Subtotal</b>			0.000	0.206		0.000		0.000		0.000		0.000	0.000	0.206	0.000
			<b>All Prior Years</b>	<b>FY 2012</b>		<b>FY 2013</b>		<b>FY 2014 Base</b>		<b>FY 2014 OCO</b>		<b>FY 2014 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			1.150	2.985		3.377		0.000		0.000		0.000	0.000	7.512	0.000
<b>Remarks</b>															

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**Exhibit R-4, RDT&E Schedule Profile:** PB 2014 Chemical and Biological Defense Program **DATE:** April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&amp;P)</i>
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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 - (EW) Rapid Area-Scan Sensitive-site Reconnaissance (RASR)																												
TT DEMO - Hazard Mitigation, Material and Equipment Restoration (HaMMER)																												
TT DEMO - TaCBRD ATD																												
** TECHTRAN - TT DEMO TaCBRD ATD																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Chemical and Biological Defense Program			<b>DATE:</b> April 2013
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603884BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (ACD&amp;P)</i>	<b>PROJECT</b> TT4: <i>TECHBASE TECHNOLOGY TRANSITION (ACD&amp;P)</i>	

## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
** TT DEMO - (EW) Rapid Area-Scan Sensitive-site Reconnaissance (RASR)	1	2012	4	2012
TT DEMO - Hazard Mitigation, Material and Equipment Restoration (HaMMER)	1	2012	4	2012
TT DEMO - TaCBRD ATD	1	2012	4	2012
** TECHTRAN - TT DEMO TaCBRD ATD	1	2013	4	2014