Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Chemical and Biological Defense Program											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*					R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*							
COST ($ in Millions)	**All Prior Years**	**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**
Total Program Element	-	308.791	311.071	451.306	-	451.306	408.758	385.696	302.252	352.926	Continuing	Continuing
CA5: *CONTAMINATION AVOIDANCE (EMD)*	-	52.854	33.018	36.766	-	36.766	58.170	68.535	45.458	67.888	Continuing	Continuing
CM5: *HOMELAND DEFENSE (EMD)*	-	8.984	9.952	18.533	-	18.533	1.600	0.000	0.000	0.000	0.000	39.069
CO5: *COLLECTIVE PROTECTION (EMD)*	-	12.451	10.642	13.300	-	13.300	2.600	0.000	0.000	0.000	0.000	38.993
DE5: *DECONTAMINATION SYSTEMS (EMD)*	-	0.000	9.324	2.412	-	2.412	8.506	17.961	17.417	31.827	Continuing	Continuing
IP5: *INDIVIDUAL PROTECTION (EMD)*	-	13.325	15.971	26.296	-	26.296	13.672	17.292	9.411	8.522	Continuing	Continuing
IS5: *INFORMATION SYSTEMS (EMD)*	-	4.699	2.045	9.267	-	9.267	17.636	20.643	15.471	17.508	Continuing	Continuing
MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*	-	197.907	212.056	263.443	-	263.443	228.199	183.390	151.455	184.222	Continuing	Continuing
MC5: *MEDICAL CHEMICAL DEFENSE (EMD)*	-	2.336	9.642	55.087	-	55.087	58.342	57.675	47.340	28.759	Continuing	Continuing
MR5: *MEDICAL RADIOLOGICAL DEFENSE (EMD)*	-	0.000	2.027	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.027
TE5: *TEST & EVALUATION (EMD)*	-	16.235	6.394	26.202	-	26.202	20.033	20.200	15.700	14.200	Continuing	Continuing

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 Chemical and Biological (CB) threat environment across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high-risk missions. Operating forces have a critical need for defense against worldwide proliferation of CB warfare capabilities and for medical treatment of CB casualties. Congress directed centralized management of

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Department of Defense (DoD) CB Defense initiatives, both medical and non-medical. This program element supports the System Development and Demonstration (SDD) of medical and non-medical CB defensive equipment and materiel. Projects within BA5 are structured to consolidate Joint and Service-unique tasks within four commodity areas: contamination avoidance, individual and collective force protection, decontamination, and medical countermeasures. This consolidation provides for development and operational testing of equipment for Joint Service use and for Service-unique requirements.

Contamination avoidance efforts under this system development program will provide U.S. forces with real-time hazard assessment capabilities. They include multi-agent point and remove chemical detection for ground, aircraft, and shipboard applications; automated warning and reporting systems; integrated radiation detection and monitoring equipment; and enhanced battlefield reconnaissance capabilities. Force protection efforts will increase protection levels while decreasing physical and psychological burdens imposed by protective equipment.

The DoD Biological Defense mission requires the detection of validated biological threat agents to provide early warning capabilities on mobile and fixed platforms. This program, element will provide theater protection through the development of point and stand-off detection systems. The detection system concept will provide detection, identification, warning, and sample collection for verification that a biological agent attack has occurred.

The Secretary of Defense is responsible for research, development, acquisition, and deployment of medical countermeasure equipment and materiel 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 emphasize prevention of injury and illness and protection of the force. Preventive measures in this SDD, such as vaccines and chemical 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 satisfy the need for greater flexibility in military planning and operations. When vaccines and other prophylactic medical countermeasures are not available, efforts on this SDD support pre-hospitalization treatment, en-route care, hospital care, and long-term clinical outcomes. Specific items in this category include CB diagnostics, and therapeutics to mitigate the consequences of biologic threats and exposure to ionizing radiation due to nuclear or radiological attacks. DoD is the only Federal activity conducting SDD on these prophylactic, therapeutic and rapid identification and diagnostic CB medical countermeasures.

The Department of Defense coordinates its efforts with the Departments of Health and Human Services to promote synergy and minimize redundancy. This 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.

Key efforts within this PE are in support of the FY14 policy priorities for Countering Biological Threats. Approximately $148.4M 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,

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accidental, or deliberate events." Approximately $61.8M 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 $288.3M 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 engineering and manufacturing phase of the acquisition strategy and are therefore correctly placed in Budget Activity 5.

B. Program Change Summary ($ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	316.608	311.071	416.915	-	416.915
Current President's Budget	308.791	311.071	451.306	-	451.306
Total Adjustments	-7.817	0.000	34.391	-	34.391
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-3.464	0.000			
• SBIR/STTR Transfer	-4.353	0.000			
• Other Adjustments	0.000	0.000	34.391	-	34.391

Change Summary Explanation

Funding: Adjustments less than 10% of total program.

Schedule: N/A

Technical: N/A

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COST ($ in Millions)	All Prior Years	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
Quantity of RDT&E Articles												

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The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

This project supports System Development and Demonstration and Low Rate Initial Production (SDD/LRIP) of an array of reconnaissance, detection and identification equipment, and warning systems.

Efforts included in this project are: (1) Chemical, Biological, Radiological, and Nuclear Dismounted Reconnaissance Systems (CBRN DRS); (2) Joint Biological Point Detection System (JBPDS); (3) Joint Biological Tactical Detection System (JBTDS); (4) Non-Traditional Agent (NTA) Defense Support; (5) Non-Traditional Agent (NTA) Detection Support; and (6) Sensor Suite Integration for NBC Reconnaissance Systems (SSI NBCRS).

The CBRN Dismounted Reconnaissance Systems (CBRN DRS) consists of portable, commercial and government off-the-shelf equipment to provide personnel protection from current and emerging CBRN hazards and detection, identification, sample collection, decontamination, marking, and hazard reporting of CBRN threats. The system supports dismounted Reconnaissance, Surveillance, and CBRN Site Assessment missions to enable more detailed CBRN information reports for commanders. The program will support emerging CBRN threat capability to provide an enhanced capability in the future.

The Joint Biological Point Detection System (JBPDS) is a fully automated system that detects, warns, and provides presumptive identification and samples for follow-on confirmatory analysis. It is an ACAT II program in Full Rate Production. The Army platforms include the JBPDS on the Biological Integrated Detection System (BIDS) and the Stryker Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV). The Navy installs the JBPDS on several classes of ships such as Cruisers and Amphibious Transports. Engineering Changes to refresh the technology of the JBPDS consists of two separate efforts (one funded by procurement and one RDT&E funded) that, when combined, will reduce lifecycle costs and address obsolescence concerns. The existing computer hardware and operating system in the JBPDS will not meet Information Assurance standards due to obsolescence. Under the existing production contract, an engineering effort is underway to address the computer and operating system obsolescence concerns. The element being developed under RDT&E funding is a new detector technology that will significantly reduce false positives resulting in improved reliability, reduced consumable use, and reduction in operational and sustainment costs.

The Joint Biological Tactical Detection System (JBTDS) 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. JBTDS will provide warning through the Joint Warning And Reporting Network (JWARN) and archive samples for follow-on analyses. JBTDS will provide near real-time local audio and visual alarm for use by any Military Occupational Specialty (MOS). JBTDS components will be man-portable, battery-operable and easy to employ. JBTDS will be used organically at battalion level and below and provide notification of a

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hazard and enhanced battle space awareness to protect and preserve the force. When networked, JBTDS will augment existing biological detection systems to provide a theater-wide seamless array capable of biological detection, identification and warning. Units equipped with JBTDS will conduct biological surveillance missions to detect BWA aerosol clouds, collect a sample, and identify the agent to support time sensitive force protection decisions. JBTDS will leverage potential common identification technology solutions to the three programs. JBTDS is part of the Biological Recapitalization strategy for biological point systems.

The Non-Traditional Agent (NTA) Defense program will support the chemical and biological (CB) challenges in which are dynamic and encompass the entire range of military operations. Dedicated initiatives and projects will explore these challenges outline and transition information, technologies, and capability into acquisition strategies that account for the breadth and depth of emerging threats that span the full range of military essential missions. By leveraging previous work done on NTAs within the DoD, the interagency, and international, these efforts will provide essential enablers of a comprehensive, integrated, and layered defense against current CB threats and develop a balanced portfolio targeted at capabilities that preclude technological surprise from emerging threats.

The Non-Traditional Agent (NTA) Detection projects will develop, procure and advance detection and identification system(s) through follow-on technology insertion that will enhance the Domestic Response Capability (DRC), Advanced Threat (AT) Box, CBRN DRS (Dismounted Reconnaissance Sets, Kits, and Outfits), and Next Generation Chemical Detector programs to attain situational awareness and respond to emerging and escalating threats. The projects will test, optimize and advance technology capabilities provided within the fielded NTA detection components and explore the passive defense mission space. The products provide a mid-term capability to detect priority emerging threat materials and afford the Warfighter the ability to support domestic response and force protection missions. These products leverage common core technologies to detect and identify threats that can be exploited for lab deployable, fixed site and handheld applications. Additional efforts include conducting systems engineering analysis to prioritize capability gaps and outline issues that require investment.

Sensor Suite Integration for NBC Reconnaissance Systems (SSI NBCRS) evaluated technologies' ability to provide biological warfare agents (BWA), liquid Chemical Warfare Agent (CWA), Toxic Industrial Chemical (TIC), and Non-Traditional Agent (NTA) identification using a single detection technology. This effort evaluated potential capability improvements with significant cost savings to the Warfighter by reducing consumables, reducing false alarms, and providing the ability to rapidly upgrade to detect emerging threats. The program demonstrated a modular, "plug and play" capability to support mounted and dismounted CBRN reconnaissance, fixed site, lab deployable, and handheld applications. Feasibility of a single sensor concept for CWA, TIC, and biological aerosols were demonstrated in technology evaluation. A low volatile chemical surface contamination detection capability will provide improved identification of CWAs, TICs, and NTAs. Continued prototype development will mitigate risk for future programs including NTA Detection products and Next Generation Chemical Detector.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: 1) CBRN DRS - Dismounted Reconnaissance Sets, Kits, and Outfits (DR SKO)	4.478	3.700	0.720
FY 2012 Accomplishments: Continued documentation, systems engineering, and design to support MS C. Continued IPT support.			
FY 2013 Plans: Continue documentation, systems engineering, and design to support MS C LRIP. Continue IPT support.			
FY 2014 Plans:			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Complete documentation, systems engineering, and design to support FRP. Continue IPT support.			
Title: 2) CBRN DRS - DR SKO ***FY 2012 Accomplishments:*** Completed component and system level developmental testing. ***FY 2013 Plans:*** Initiate and complete Multi-Service Operational Test and Evaluation (MOT&E). Initiate Failure Mode, Effects, and Criticality Analysis (FMECA). ***FY 2014 Plans:*** Complete verification and assessment of Failure, Mode, Effects, and Criticality Analysis (FMECA).	4.750	5.556	0.950
Title: 3) CBRN DRS - DR SKO ***FY 2012 Accomplishments:*** Initiated and completed Operational Assessment for DR SKO. Continued technical manual development and logistics products development. ***FY 2013 Plans:*** Complete technical manual development. Continue logistics products development. ***FY 2014 Plans:*** Complete logistics products development.	3.601	3.450	0.330
Title: 4) CBRN DRS - DR SKO ***FY 2012 Accomplishments:*** Initiated retrofit of System Development and Demonstration (SDD) systems. ***FY 2013 Plans:*** Complete retrofit of System Development and Demonstration (SDD) systems.	3.600	1.975	0.000
Title: 5) CBRN DRS - Emerging Threats ***FY 2012 Accomplishments:*** Assessed emerging technical solutions from Operational Needs Statement (ONS) investments.	3.861	0.000	0.000
Title: 6) JBPDS ***FY 2012 Accomplishments:***	1.043	0.148	0.000

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Continued strategic and tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, and technical support. ***FY 2013 Plans:*** Complete strategic and tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, and technical support.			
Title: 7) JBPDS ***FY 2012 Accomplishments:*** Continued development of a new detector for the JBPDS program. ***FY 2013 Plans:*** Complete development of a new detector for the JBPDS program.	6.199	1.197	0.000
Title: 8) JBPDS ***FY 2012 Accomplishments:*** Completed component level testing of the new detector.	0.844	0.000	0.000
Title: 9) JBPDS ***FY 2012 Accomplishments:*** Built eight (8) engineering development units ($175,000 each).	1.400	0.000	0.000
Title: 10) JBTDS ***FY 2014 Plans:*** Initiate System Development and Demonstration (SDD) Contract (60 components/systems @ $290,000 each).	0.000	0.000	17.401
Title: 11) JBTDS ***FY 2014 Plans:*** Initiate development testing phase 1 on SDD systems.	0.000	0.000	3.000
Title: 12) JBTDS ***FY 2013 Plans:*** Initiate and complete development of production process for ten aerosol agents and interferents for SDD (System Development and Demonstration) test phase.	0.000	3.000	0.000
Title: 13) JBTDS ***FY 2013 Plans:***	0.000	0.280	0.000

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Initiate and finalize characterization of ten aerosol interferents for developmental testing.			
Title: 14) JBTDS ***FY 2013 Plans:*** Initiate and finalize validation of Dynamic Concentration Aerosol Generator (DYCAG).	0.000	1.600	0.000
Title: 15) JBTDS ***FY 2013 Plans:*** Initiate and finalize modeling effort for characterization of indoor referee equipment for developmental test phase.	0.000	0.995	0.000
Title: 16) JBTDS ***FY 2013 Plans:*** Provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, and technical support. ***FY 2014 Plans:*** Provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, and technical support.	0.000	2.823	2.799
Title: 17) JBTDS ***FY 2013 Plans:*** Provide Operation Test Agency (OTA) and Service representation (i.e. integrated product teams and working groups). ***FY 2014 Plans:*** Continue Operation Test Agency (OTA) and Service representation (i.e. integrated product teams and working groups).	0.000	1.264	1.614
Title: 18) NTA DEFENSE - Threat Understanding/Military Utility and Supportability ***FY 2014 Plans:*** Initiate analysis of threat understanding and combat developer provided operational analysis to ascertain technology and training gaps in multiple missions. Leverage previous work done under NTA Detect to fully challenge outputs of threat and operational phenomenology. Centralize the analysis outputs and extend threat phenomenology methodology to all commodities.	0.000	0.000	2.759
Title: 19) NTA DEFENSE - Systems Engineering ***FY 2014 Plans:***	0.000	0.000	2.174

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Initiate detection focused systems engineering model tools and update to reflect and account for protection, medical, and decontamination. Begin to refine model in preparation for verification.			
Title: 20) NTA DEFENSE - Test and Evaluation ***FY 2014 Plans:*** Initiate emerging threat test bed and methodologies to evaluate component technologies (detectors, decontaminants, individual protection ensembles, etc.) for the enterprise to inform technology development strategies and support competitive prototypes and technology insertions in acquisition programs.	0.000	0.000	3.360
Title: 21) NTA DEFENSE - Technology Assessments ***FY 2014 Plans:*** Initiate synchronization of acquisition strategies across the CBDP, Interagency, and International Community for all NTA initiatives. Conduct assessments and coordinate science and technology transition through Enterprise Wide IPT for whole of government.	0.000	0.000	1.159
Title: 22) NTA DETECT - COTS/GOTS Mission Analysis ***FY 2012 Accomplishments:*** Completed analysis for Commercial Off-the-Shelf (COTS)/Government Off-the-Shelf (GOTS) evaluation for use in urgent need fieldings. Continued to explore the impact of emerging threats in asymmetric threat scenarios and developed models to increase understanding of threat impacts to a mission. Initiated gap analyses to identify future needs to adequately test technology solutions. Compiled all relevant emerging threat data into a single repository. ***FY 2013 Plans:*** Continue gap analyses to identify future needs to adequately test technology solutions. Continue to refine and update source books for additional classes of emerging threats. Gap analysis, source book development, and testing of COTS/GOTS will transition to the NTA Defense funding line in FY14. These efforts will support acquisition and integration of equipment for the DR SKO and CALS acquisition programs.	2.999	1.201	0.000
Title: 23) NTA DETECT - DESI Mass Spectrometer (MS) ***FY 2012 Accomplishments:*** Initiated engineering to support improved system health monitoring, sampling techniques, reliability and detection algorithm of the DESI-MS. Technology challenges forced a refocus on improving the original DESI-MS capability before continuing to a man-portable version. ***FY 2013 Plans:***	1.290	1.540	0.250

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Complete engineering and testing to support improved system health monitoring, sampling techniques, reliability and detection algorithm of the DESI-MS. Integrate and test improved sampling techniques. ***FY 2014 Plans:*** Develop capability to more easily add chemicals to the MS/MS algorithm.			
Title: 24) NTA DETECT - Environmental Monitor ***FY 2012 Accomplishments:*** Continued engineering and DT to optimize and ruggedize environmental monitoring COTS capability. Continued DT to assess performance of environmental monitoring capability including Chemical Hazard Indicating and Ranging Pack (CHIRP) and Instantaneous Biological Aerosol Collector (IBAC) for Chem. Refined and updated test capability for aerosol testing. ***FY 2013 Plans:*** Initiate and complete systems engineering design optimization of a vapor and aerosol environmental monitor for an identified Program of Record (POR). Complete whole system DT to include more representative environments to support force protection and domestic response mission. Transition as possible candidate technology to Next Generation Chemical Detector (NGCD) and/or future increments of the AT/DRC box. Continue optimizing inclusion of other threat chemistries into IBAC for Chem. ***FY 2014 Plans:*** Conduct a military utility assessment of the environmental monitor in representative mission applications.	1.990	2.175	0.250
Title: 25) NTA DETECT - Sensitive Site Assessment and Consequence Management Gaps ***FY 2012 Accomplishments:*** Completed integration of NTA detection capability with CBRN DRC to provide enhanced NTA detection solution for Sensitive Site Assessment (SSA) and Consequence Management (CM) mission areas. Completed threat phenomenology on NTAs to verify and finalize detection capability shortfalls and critical data gaps for SSA and CM mission areas.	3.392	0.000	0.000
Title: 26) NTA DETECT - Systems Engineering ***FY 2012 Accomplishments:*** Developed systems engineering analysis methodology to prioritize technology investment strategies for SSA and CM missions, updated database sourcebooks. ***FY 2013 Plans:*** Refine systems engineering methodology and incorporate into a model to verify detection technology investment strategies for SSA and CM missions, continue to update database sourcebooks and continue threat understanding.	3.353	2.114	0.000
Title: 27) SSI NBCRS	3.516	0.000	0.000

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Completed program management, systems engineering, and Integrated Product Team (IPT) support.			
Title: 28) SSI NBCRS ***FY 2012 Accomplishments:*** Completed CB sensor test and evaluation of 19 vendor systems to transition to the Next Generation Chemical Detection (NGCD).	2.452	0.000	0.000
Title: 29) SSI NBCRS ***FY 2012 Accomplishments:*** Completed low volatile sensor test support, development, and evaluation efforts.	4.086	0.000	0.000
Accomplishments/Planned Programs Subtotals	52.854	33.018	36.766

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
• CA4: *CONTAMINATION AVOIDANCE (ACD&P)*	13.432	3.038	26.853		26.853	46.788	40.163	34.595	2.873	Continuing	Continuing
• JC0100: *JOINT BIO POINT DETECTION SYSTEM (JBPDS)*	20.669	30.934	52.732		52.732	121.893	10.000	0.000	0.000	0.000	236.228
• 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
• MC0100: *JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)*	51.944	96.244	0.000		0.000	0.000	0.000	0.000	0.000	0.000	148.188
• 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

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D. Acquisition Strategy

CBRN DRS

The Chemical Biological Radiological Nuclear Dismounted Reconnaissance Systems (CBRN DRS) program uses a government-off-the-shelf (GOTS)/commercial-off-the-shelf (COTS) non-developmental item (NDI) single step to full capability acquisition approach. This strategy employs an NDI acquisition concept to establish a simplified management framework to translate mission needs and technology opportunities into a stable, affordable, and well-managed acquisition program.

JBPDS

The technology update for the detector focuses on the Rapid Agent Aerosol Detector (RAAD); being developed by MIT-LL with producibility and logistics support from Kansas City Plant (KCP). A competitive solicitation will be issued for RAAD full rate production. KCP will transition RAAD production to industry with the use of a technical data package. The RAAD contractor will provide the new biological warfare agent detector to the JBPDS prime contractor. Through an Engineering Change Order the prime contractor has initiated system integration efforts to accept the new detector technology.

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.

NTA DEFENSE

The Non-Traditional Agent Defense products will provide incremental acquisition information, technology, and evaluation testbeds to afford acquisition programs the ability to develop capabilities for the Warfighter. The ability to attain situational awareness and respond to any unknown and emerging threat hazard will be attained through these incremental transitions to acquisition programs. By leveraging previous work done on NTAs within the DoD, the interagency, and internationally, the NTA Defense will provide essential enablers of a comprehensive, integrated, and layered defense against current CB threats and develop a balanced portfolio targeted at capabilities that preclude technological surprise from emerging threats.

NTA DETECT

The Non-Traditional Agent (NTA) Detection products will provide a detection capability through incremental acquisition that will afford the Warfighter ability to attain situational awareness and respond to unknown and emerging hazards. Leveraging COTS/GOTS assessments will be used in order to lower program risks, reduce

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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costs, and ensure a higher confidence in selected technologies. The project will continue to address next priority mission areas and threats by continuing to qualify identified detection equipment. To accomplish these efforts, various competitive contracting strategies will be used, i.e., cost plus type contracts, task orders, and IDIQ.

SSI NBCRS

A cost plus fixed fee contract was awarded to assist in program development and integration. The Sensor Suite and Integration for Nuclear Biological and Chemical Reconnaissance System (SSI NBCRS) evaluated the state of Chemical and Biological sensor manufacturing to support future acquisition programs. A technical evaluation was performed on four separate Cost plus Fixed Fee (CPFF) task orders using a competitive omnibus contract. The evaluation focused on using a common sensor technology to detect and identify both chemical and biological threats. Efforts are ongoing to evaluate modularizing, allowing for application on potential mounted and dismounted reconnaissance, lab deployable and fixed site systems.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program			DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CBRN DRS - HW S - DR SKO SDD systems	C/CPFF	FLIR Systems Inc.:Elkridge, MD	0.000	3.650	Mar 2012	1.975	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000
HW S - Emerging Threat Mobile Lab	C/CPFF	FLIR Systems Inc.:Elkridge, MD	0.000	0.472	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** JBPDS - HW C - New Detector development	MIPR	Marine Forces Pacific (MARFORPAC) Pacific Command (PACOM):Camp Smith, HI	0.991	6.199	Mar 2012	1.197	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW C - Built 8 units	MIPR	MA Institute of Tech - Lincoln Labs (MIT-LL):Lexington, MA	0.000	1.400	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** JBTDS - HW C - SDD Contract Award	C/CPIF	TBD:	0.000	0.000		0.000		17.401	Dec 2013	-		17.401	Continuing	Continuing	0.000
** NTA DEFENSE - SW C - Mass Spectroscopy, Infrared Spectroscopy, and Other	C/CPFF	Various:	0.000	0.000		0.000		0.600	Mar 2014	-		0.600	Continuing	Continuing	0.000
HW S - System Performance Baseline	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	0.000		0.000		1.000	Mar 2014	-		1.000	Continuing	Continuing	0.000
** NTA DETECT - HW S - DESI Mass Spec	C/CPFF	FLIR Systems Inc.:West Lafayette, IN	1.373	0.000		0.250	Mar 2013	0.210	Mar 2014	-		0.210	Continuing	Continuing	0.000
HW S - GOTS/COTS Dual Use Assessment	C/CPFF	Battelle Memorial Institute:Columbus, OH	2.597	2.200	Mar 2012	0.671	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
SW S - DESI Mass Spec Library Development	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.819	0.200	Mar 2012	0.700	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - Environmental Monitor	C/CPFF	FLIR Systems Inc.:Pittsburgh, PA	2.503	0.194	Sep 2012	1.300	Sep 2013	0.000		-		0.000	Continuing	Continuing	0.000

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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
HW S - Sampling	FFRDC	Naval Research Lab (NRL):Washington, DC	0.000	0.400	Sep 2012	0.300	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** SSI NBCRS - HW S - Chemical Biological Sensor Capability Development	C/CPFF	Various:	0.000	2.452	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
		Subtotal	8.283	17.167		6.393		19.211		0.000		19.211			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CBRN DRS - ES S - DR SKO Logistics Products	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.619	Mar 2012	0.400	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
ILS S - DR SKO Logistics Products	C/CPFF	FLIR Systems Inc.:Elkridge, MD	0.000	2.554	Mar 2012	3.050	Mar 2013	0.330	Mar 2014	-		0.330	Continuing	Continuing	0.000
** JBTDS - ES S - OTA & Service Representation	MIPR	Various:	0.000	0.000		1.264	Mar 2013	1.614	Mar 2014	-		1.614	Continuing	Continuing	0.000
ES S - Calibration Effort	MIPR	Naval Research Lab (NRL):Washington, DC	0.000	0.000		1.600	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
ES S - Characterize dissemination equipment	MIPR	Institute for Defense Analysis (IDA):Alexandria, VA	0.000	0.000		0.995	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** NTA DEFENSE - ES S - Systems Engineering	C/CPFF	MA Institute of Tech - Lincoln Labs (MIT-LL):Lexington, MA	0.000	0.000		0.000		1.015	Mar 2014	-		1.015	Continuing	Continuing	0.000
ES S - Analysis and Evaluation	MIPR	Various:	0.000	0.000		0.000		1.417	Jun 2014	-		1.417	Continuing	Continuing	0.000

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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
ES S - Integrated Product Team (IPT) Support	MIPR	Various:	0.000	0.000		0.000		0.920	Dec 2013	-		0.920	Continuing	Continuing	0.000
** NTA DETECT - ES SB - COTS/GOTS Analysis and Evaluation	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	0.078	Mar 2012	0.165	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
ES S - Systems engineering support	C/CPFF	Joint Research and Development Inc.:Stafford, VA	0.381	1.331	Mar 2012	0.894	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
ES S - Environmental Monitor	FFRDC	MA Institute of Tech - Lincoln Labs (MIT-LL):Lexington, MA	0.000	0.000		0.000		0.210	Mar 2014	-		0.210	Continuing	Continuing	0.000
ES S - Mass Spectrometer	FFRDC	MA Institute of Tech - Lincoln Labs (MIT-LL):Lexington, MA	0.000	0.600	Mar 2012	0.200	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
ES S - Integrated Product Team (IPT) Support #2	MIPR	Various:	0.000	0.776	Dec 2011	0.110	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
		Subtotal	0.381	5.958		8.678		5.506		0.000		5.506			0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CBRN DRS - DTE S - DR SKO Developmental Testing and Operational Assessment	MIPR	Various:	0.000	3.057	Mar 2012	5.556	Mar 2013	0.950	Mar 2014	-		0.950	Continuing	Continuing	0.000
DTE S - DR SKO Developmental Testing and Operational Assessment	C/CPFF	FLIR Systems Inc.:Elkridge, MD	0.000	2.760	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
DTE C - Emerging Threat Enhancements	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	2.700	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000

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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JBPDS - DTE C - New Detector developmental testing.	MIPR	MA Institute of Tech - Lincoln Labs (MIT-LL):Lexington, MA	0.000	0.844	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** JBTDS - DTE SB - Production process for ten agents	MIPR	Dugway Proving Ground (DPG):Dugway, UT	0.000	0.000		3.000	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
DTE S - DT 1 Testing	MIPR	Dugway Proving Ground (DPG):Dugway, UT	0.000	0.000		0.000		1.500	Mar 2014	-		1.500	Continuing	Continuing	0.000
DTE S - DT 1 Testing #2	MIPR	Johns Hopkins University - Applied Physics Lab:Laurel, MD	0.000	0.000		0.000		0.500	Mar 2014	-		0.500	Continuing	Continuing	0.000
DTE S - DT 1 Testing #3	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.000		1.000	Mar 2014	-		1.000	Continuing	Continuing	0.000
DTE S - Characterization of aerosol interferents	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.280	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** NTA DEFENSE - DTE C - Developmental Tests Component	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	0.000		0.000		1.101	Mar 2014	-		1.101	Continuing	Continuing	0.000
DTE S - DT Test and Evaluation Support	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.000		1.159	Mar 2014	-		1.159	Continuing	Continuing	0.000
OTE S - Operational Assessment	C/CPFF	MA Institute of Tech - Lincoln Labs (MIT-LL):Lexington, MA	0.000	0.000		0.000		1.100	Mar 2014	-		1.100	Continuing	Continuing	0.000
** NTA DETECT - DTE S - Developmental Test Component	C/CPFF	Battelle Memorial Institute:Columbus, OH	5.087	3.400	Mar 2012	0.800	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000

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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DTE C - DT Test and Evaluation Support	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	2.796	Jun 2012	0.585	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
** SSI NBCRS - OTHT S - Chemical Biological Prototype Evaluation	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.565	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
OTHT S - Low Volatile Sensor Evaluation	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	1.400	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
OTHT S - Low Volatile Sensor Support	MIPR	Battelle Memorial Institute:Aberdeen, MD	0.000	0.879	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
OTHT S - Low Volatile Sensor Support #2	MIPR	Various:	0.000	1.242	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
		Subtotal	5.087	19.643		10.221		7.310		0.000		7.310			0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CBRN DRS - PM/MS-S - Program Management and System Engineering Support	MIPR	Various:	0.000	2.049	Dec 2011	1.950	Dec 2012	0.720	Dec 2013	-		0.720	Continuing	Continuing	0.000
PM/MS S - Emerging Threat Enhancements Program Management and System Engineering Support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	0.000	0.600	Dec 2011	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS S - Integrated Product Team	MIPR	Various:	0.000	1.829	Dec 2011	1.750	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000

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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JBPDS - PM/MS SB - Project Management and System Engineering Support	MIPR	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	5.566	1.043	Mar 2012	0.148	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** JBTDS - PM/MS SB - Program Management and System Engineering Support	MIPR	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	0.000		2.823	Mar 2013	2.799	Dec 2013	-		2.799	Continuing	Continuing	0.000
** NTA DEFENSE - PM/MS S - Program Management Support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	0.000	0.000		0.000		1.140	Mar 2014	-		1.140	Continuing	Continuing	0.000
** NTA DETECT - PM/MS S - Program Management support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	6.441	1.049	Mar 2012	1.055	Mar 2013	0.080	Mar 2014	-		0.080	Continuing	Continuing	0.000
** SSI NBCRS - PM/MS S - Program Management and Systems Engineering Support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	0.000	3.516	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
		Subtotal	12.007	10.086		7.726		4.739		0.000		4.739			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	25.758	52.854		33.018		36.766		0.000		36.766			0.000

Remarks

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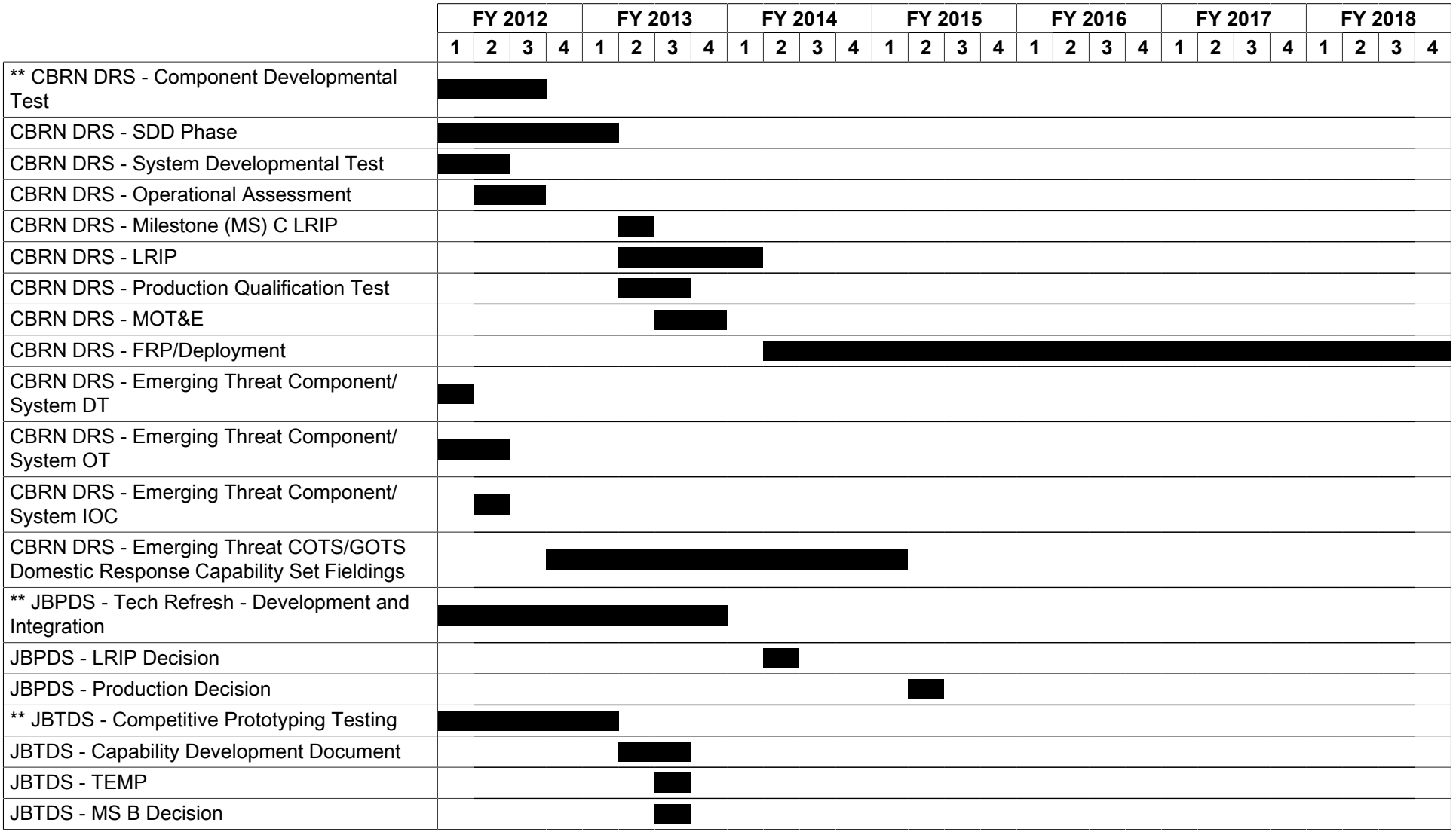

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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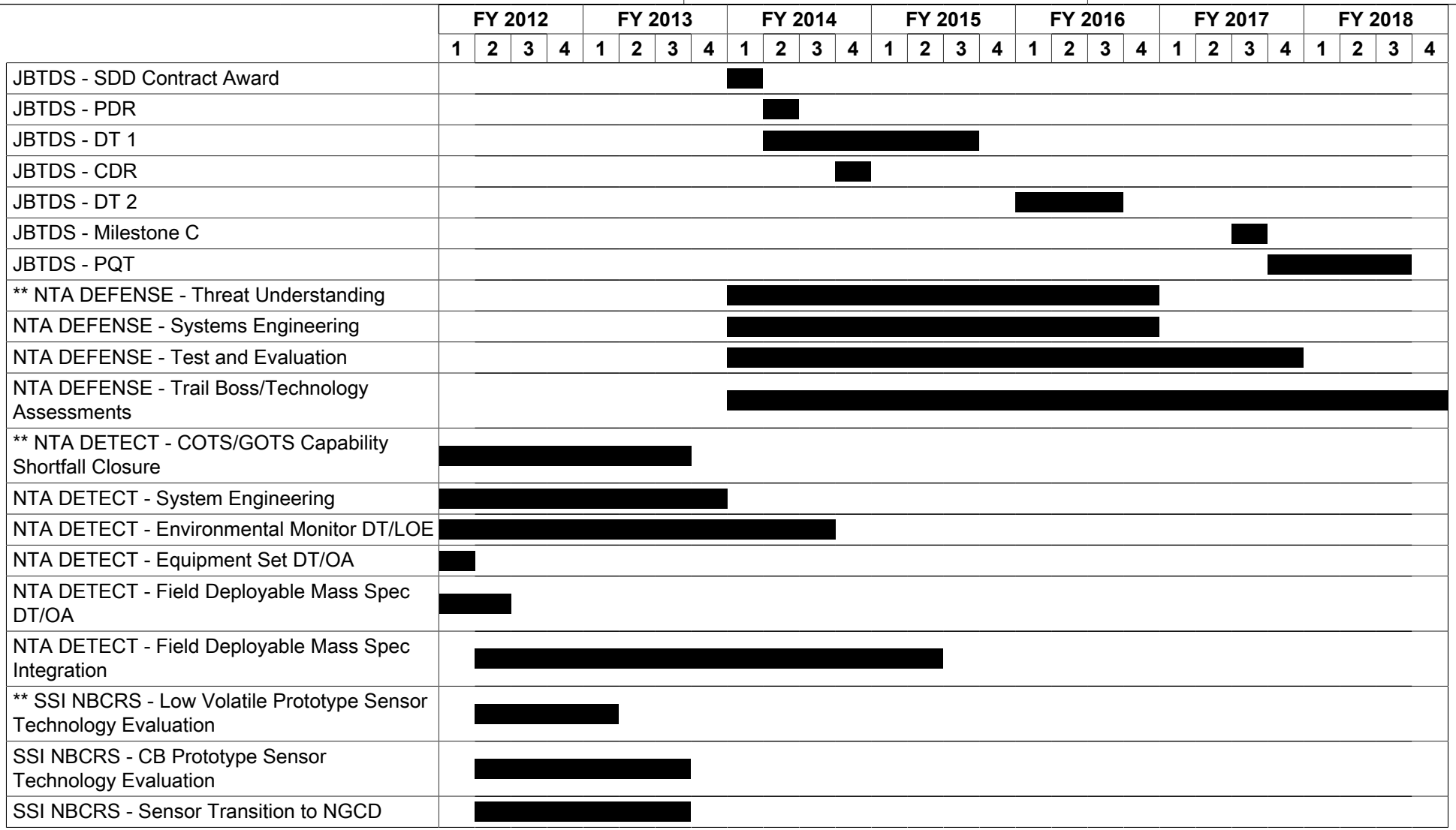

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** CBRN DRS - Component Developmental Test	1	2012	3	2012
CBRN DRS - SDD Phase	1	2012	1	2013
CBRN DRS - System Developmental Test	1	2012	2	2012
CBRN DRS - Operational Assessment	2	2012	3	2012
CBRN DRS - Milestone (MS) C LRIP	2	2013	2	2013
CBRN DRS - LRIP	2	2013	1	2014
CBRN DRS - Production Qualification Test	2	2013	3	2013
CBRN DRS - MOT&E	3	2013	4	2013
CBRN DRS - FRP/Deployment	2	2014	4	2018
CBRN DRS - Emerging Threat Component/System DT	1	2012	1	2012
CBRN DRS - Emerging Threat Component/System OT	1	2012	2	2012
CBRN DRS - Emerging Threat Component/System IOC	2	2012	2	2012
CBRN DRS - Emerging Threat COTS/GOTS Domestic Response Capability Set Fieldings	4	2012	1	2015
** JBPDS - Tech Refresh - Development and Integration	1	2012	4	2013
JBPDS - LRIP Decision	2	2014	2	2014
JBPDS - Production Decision	2	2015	2	2015
** 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

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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	Start		End	
Events	Quarter	Year	Quarter	Year
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
** NTA DEFENSE - Threat Understanding	1	2014	4	2016
NTA DEFENSE - Systems Engineering	1	2014	4	2016
NTA DEFENSE - Test and Evaluation	1	2014	4	2017
NTA DEFENSE - Trail Boss/Technology Assessments	1	2014	4	2018
** NTA DETECT - COTS/GOTS Capability Shortfall Closure	1	2012	3	2013
NTA DETECT - System Engineering	1	2012	4	2013
NTA DETECT - Environmental Monitor DT/LOE	1	2012	3	2014
NTA DETECT - Equipment Set DT/OA	1	2012	1	2012
NTA DETECT - Field Deployable Mass Spec DT/OA	1	2012	2	2012
NTA DETECT - Field Deployable Mass Spec Integration	2	2012	2	2015
** SSI NBCRS - Low Volatile Prototype Sensor Technology Evaluation	2	2012	1	2013
SSI NBCRS - CB Prototype Sensor Technology Evaluation	2	2012	3	2013
SSI NBCRS - Sensor Transition to NGCD	2	2012	3	2013

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COST ($ in Millions)	All Prior Years	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
CM5: *HOMELAND DEFENSE (EMD)*	-	8.984	9.952	18.533	-	18.533	1.600	0.000	0.000	0.000	0.000	39.069
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 System Development and Demonstration and Low Rate Initial Production (SDD/LRIP) for programs that provide a comprehensive, integrated and layered Chemical Biological Radiological Nuclear (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 COTS solutions to consequence management units.

Included in this project are the following developmental efforts:

The Common Analytical Laboratory System capability (CALS) will be modular, scalable and adaptable to a variety of concept of operations (CONOPS) and environmental conditions. Currently, fielded systems have been designed independently by various agencies with the intent of meeting a specific units requirements. As a result, multiple mobile lab configurations exist with differing sustainment tails and lacking in commonality. The system under development will incorporate an open architecture that provides enhanced scalability and tailorability to emerging mission requirements. It also provides the ability to rapidly develop a common operating picture allowing first responders and DoD officials to determine the appropriate course of action. The analytical detection package fielded will be fitted to the specific mission and CONOPS of the gaining unit and be able to detect and identify Chemical Warfare Agents (CWAs), Toxic Industrial Chemicals (TICs), Toxic Industrial Materials (TIMs), Biological Warfare Agents (BWAs), Lower Explosive Limits (LEL), and radioactive particles in all samples. Users of the system will include the National Guard Bureau Civil Support Teams, the Army 20th Support Command, the Army Medical Laboratory, the Air Force and the Marines.

The Special Purpose Units Chemical Biological Equipment program provides for the acquisition and ongoing assessment of Chemical, Biological, Radiological and Nuclear (CBRN) detection, protection and decontamination equipment for these units.

The Weapons of Mass Destruction Civil Support Team Program supports the ongoing assessment and acquisition of COTS and GOTS hand held analytical detection, protection, decontamination and sampling equipment for survey in order to expand/enhance the operational capabilities of the (57) WMD CST Teams. This includes modernization of detection capabilities inside the Analytical Laboratory System to maintain system viability until the CALS is fielded.

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CM5: *HOMELAND DEFENSE (EMD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: 1) CALS - System Engineering and Program Management ***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 2013 Plans:*** Continue System and Program Management Support at the initiation of the Engineering Manufacturing and Development Phase, provide management and engineering support, System Integration Laboratory Efforts in preparation of Critical Design Review, Manufacture of Prototypes, and testing. ***FY 2014 Plans:*** Continue System and Program Management Support to provide management and engineering support, System Integration Laboratory Efforts in preparation of Critical Design Review, Manufacture of Prototypes, and testing.	0.000	2.550	3.960
Title: 2) CALS - Production Engineering and Planning ***Description:*** Efforts to ensure the producibility of the developmental material system, item, or component. Involves engineering task necessary to ensure timely, efficient, and economic production of essential materiel and is primarily of a planning nature. Includes efforts related to development of quality assurance (QA) plans, and special production processes to assess producibility. ***FY 2013 Plans:*** Prepare Quality Assurance plans for system level development and conduct logistics analysis.	0.000	0.573	0.000
Title: 3) CALS - Development Tooling ***Description:*** Planning, design, assembly, installation, and rework of all tools, inspection equipment, and test equipment supporting the development of each system level prototype. ***FY 2013 Plans:*** Conduct and complete planning and preparation of tools, equipment, platforms, materials required to fabricate, and integrate a complete set of CALS modules for test and evaluation.	0.000	1.557	0.000
Title: 4) CALS - System Integration Laboratory ***Description:*** Establishment of a System Integration laboratory to assist in the mitigation of programmatic risk and to facilitate the evaluation and integration of subsystem CBRN modules into System level prototypes.	0.000	0.245	0.375

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CM5: *HOMELAND DEFENSE (EMD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
FY 2013 Plans: Mitigate program risk through the use of a system integration laboratory tool set designed to facilitate system and subsystem level integration. ***FY 2014 Plans:*** Continue to mitigate program risk through the use of a system integration laboratory tool set designed to facilitate system and subsystem level integration.			
Title: 5) CALS - Subsystem (Module) Prototype Manufacturing ***Description:*** Development of Subsystem (Module) prototypes ensuring integration and connectivity between modules as a general system layout. This includes raw and semi-fabricated material plus purchased parts materials, fabrication, processing, subassembly, final assembly, reworking modification, and installation of parts and equipment, power plants, electronic equipment, and other items (including government-Furnished equipment [GFE]), and the proving of such equipment and instruments for the specified subsystem prototype (Module). ***FY 2014 Plans:*** Initiate and complete manufacture of subsystem module.	0.000	0.000	0.966
Title: 6) CALS - Subsystem Module Test and Evaluation ***Description:*** Subsystem related activities to include detailed planning, conduct, support, data reduction, and reports from such testing. ***FY 2014 Plans:*** Conduct subsystem module level testing.	0.000	0.000	2.179
Title: 7) CALS - System Level Prototype Variants ***Description:*** Development of System Level variant prototypes ensuring integration and connectivity between modules as a general system layout. This includes raw and semi-fabricated material plus purchased parts materials, fabrication, processing, subassembly, final assembly, reworking modification, and installation of parts and equipment, power plants, electronic equipment, and other items (including government-Furnished equipment [GFE]), and the proving of such equipment and instruments for the specified system prototype (Module). ***FY 2014 Plans:*** Initiate development and manufacture of CALS system variant prototypes (Five prototypes - $1.714 million per system).	0.000	0.000	8.568
Title: 8) SPU CBE	0.000	0.000	2.485

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CM5: *HOMELAND DEFENSE (EMD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Description: Acquisition and ongoing assessment of Chemical, Biological, Radiological and Nuclear (CBRN) detection, protection and decontamination equipment in support of the Special Purpose Units Chemical Biological Equipment (SPU CBE). ***FY 2014 Plans:*** Provides for CBRN Counter-Terrorism Commercial Off-The-Shelf (COTS) product/technology integration in support of the Special Operations (SOF) Community.			
Title: 9) WMD CST - System Engineering and Program Management ***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, 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:*** Provided for system engineering, technical control, and business management support of the next generation biological detection system. ***FY 2013 Plans:*** Continues to provide for system engineering, technical control, and business management support of the next generation biological detection system.	1.653	1.466	0.000
Title: 10) WMD CST - Development Engineering ***Description:*** Includes the costs of study, analysis, design development, evaluation testing, and redesign for the system components(s) during system development efforts. Includes the design efforts of preparing specifications, establishment of reliability, maintainability, and quality assurance control requirements. Also includes the engineering efforts in support of preplanned product improvements and development costs for any neutralization process designed to change the physical, chemical, biological character or composition of hazardous waste produced by the system. ***FY 2012 Accomplishments:*** Initiated development of method protocols for sampling with the next generation biological detection system for integration into the Analytical Laboratory System. ***FY 2013 Plans:***	1.260	0.958	0.000

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CM5: *HOMELAND DEFENSE (EMD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Complete development of method protocols for sampling with the next generation biological detection system for integration into the Analytical Laboratory System.			
Title: 11) WMD CST - Component Test and Evaluation (ALS) ***Description:*** General system-related test activities, including costs of specially fabricated hardware to obtain or validate engineering data on the performance of the system. This element also includes costs of the detailed planning, conduct, support, data reduction, and reports from such testing, as well as hardware items that are consumed or planned to be consumed in the conduct of such operations. ***FY 2012 Accomplishments:*** Conducted Component Test and evaluation as a part of the modernization strategy for CBRN COTS technologies. ***FY 2013 Plans:*** Continue Component Test and evaluation as a part of the modernization strategy for CBRN COTS technologies.	5.785	1.265	0.000
Title: 12) WMD CST - Component Integration and Test (ALS) ***Description:*** Integration of component and test to ensure viable integration and connectivity of the component as a part of the general system layout. This includes raw and semi-fabricated material plus purchased parts materials, fabrication, processing, subassembly, final assembly, reworking modification, and installation of parts and equipment, power plants, electronic equipment and instrumentation for the specified component as well as evaluation. ***FY 2012 Accomplishments:*** Initiated integration of component detection system into the Analytical Laboratory System and validate connectivity of the component as a part of the general system. ***FY 2013 Plans:*** Complete integration of component detection system into the Analytical Laboratory System and validate connectivity of the component as a part of the general system.	0.286	1.338	0.000
Accomplishments/Planned Programs Subtotals	8.984	9.952	18.533

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
• JS0004: *WMD - CIVIL SUPPORT TEAMS (WMD CST)*	15.065	24.025	13.314		13.314	11.657	13.282	13.306	6.027	Continuing	Continuing

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CM5: *HOMELAND DEFENSE (EMD)*

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
• JS0005: *COMMON ANALYTICAL LABORATORY SYSTEM (CALS)*	0.000	0.000	0.957		0.957	34.991	54.411	64.946	33.008	Continuing	Continuing

Remarks

D. Acquisition Strategy

CALS

The Common Analytical Laboratory System (CALS) will follow an incremental approach designed to address known joint force capability requirements for Chemical, Biological, Radiological and Nuclear (CBRN) detection which includes Toxic Industrial Chemicals (TICs), Toxic Industrial Materials (TIMs), Chemical Warfare Agents (CWAs), Biological Warfare Agents (BWAs). CALS will address situational awareness by leveraging efforts underway with 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.

SPU CBE

Address legacy requirements gaps/deficiencies for SPU-CBE's where they exist through the streamlined acquisition of COTS/government-off-the-shelf (GOTS) capability upgrades that incorporate proven advancements in technology to satisfy mission performance standards.

WMD CST

The Weapons of Mass Destruction Civil Support Team Program (WMD-CST) is a COTS based program that supports the ongoing system engineering assessment, validation, and modernization of both CBRN COTS and GOTS analytical detection, protection, decontamination and sampling capabilities fielded to the (57) WMD CST Teams in order to optimize/enhance their operational capabilities.

E. Performance Metrics

N/A

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CM5: *HOMELAND DEFENSE (EMD)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CALS - HW SB - CALS Developmental Tooling	C/FPIF	TBD:	0.000	0.000		1.557	Jun 2013	0.000		-		0.000	0.000	1.557	0.000
HW S - CALS Production Engineering and Planning	C/FPIF	TBD:	0.000	0.000		0.573	Jun 2013	0.000		-		0.000	0.000	0.573	0.000
HW SB - CALS Subsystem Prototype Manufacturing	C/FPIF	TBD:	0.000	0.000		0.000		0.966	Dec 2013	-		0.966	0.000	0.966	0.000
HW S - CALS Prototype System Manufacturing	C/FPIF	TBD:	0.000	0.000		0.000		8.568	Mar 2014	-		8.568	0.000	8.568	0.000
** SPU CBE - HW S - CBRN Counter-Terrorism COTS	C/FP	TBD:	0.000	0.000		0.000		2.485	Jan 2014	-		2.485	0.000	2.485	0.000
** WMD CST - SW SB - Next Generation Bio Detection - Integration (ALS)	C/CPIF	Battelle Memorial Institute:Aberdeen, MD	0.000	0.862	Sep 2012	0.958	Mar 2013	0.000		-		0.000	0.000	1.820	0.000
SW SB - Method Protocol Development (ALS)	C/CPIF	Battelle Memorial Institute:Aberdeen, MD	0.000	0.398	Sep 2012	0.000		0.000		-		0.000	0.000	0.398	0.000
		Subtotal	0.000	1.260		3.088		12.019		0.000		12.019	0.000	16.367	0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CALS - ES S - CALS - Engineering Support System	C/FFP	Various:	0.000	0.000		1.657	Mar 2013	2.574	Mar 2014	-		2.574	0.000	4.231	0.000
ES S - CALS - System Integration Laboratory Support	MIPR	Various:	0.000	0.000		0.245	Mar 2013	0.375	Mar 2014	-		0.375	0.000	0.620	0.000
** WMD CST - ES S - Next Generation Bio Detection - Support	MIPR	Edgewood Chemical Biological Center	0.000	0.478	Mar 2012	0.438	Mar 2013	0.000		-		0.000	0.000	0.916	0.000

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CM5: *HOMELAND DEFENSE (EMD)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		(ECBC):Aberdeen Proving Ground, MD													
ES C - CBRN COTS Equipment	C/FP	Camber Corp.:Huntsville, AL	0.000	0.608	Jun 2012	0.539	Mar 2013	0.000		-		0.000	0.000	1.147	0.000
		Subtotal	0.000	1.086		2.879		2.949		0.000		2.949	0.000	6.914	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CALS - DTE SB - CALS Subsystem Prototype	C/CPIF	TBD:	0.000	0.000		0.000		2.179	Mar 2014	-		2.179	0.000	2.179	0.000
** WMD CST - OTHT SB - Next Generation Bio Detection Component Testing (ALS)	C/CPIF	Battelle Memorial Institute:Aberdeen, MD	0.000	3.819	Sep 2012	0.000		0.000		-		0.000	0.000	3.819	0.000
OTHT SB - Component Integration Testing (ALS)	C/CPIF	Battelle Memorial Institute:Aberdeen, MD	0.000	0.286	Sep 2012	1.338	Mar 2013	0.000		-		0.000	0.000	1.624	0.000
OTHT C - CBRN Component Testing	C/CPIF	Battelle Memorial Institute:Aberdeen, MD	0.000	1.965	Jun 2012	1.265	Jun 2013	0.000		-		0.000	0.000	3.230	0.000
		Subtotal	0.000	6.070		2.603		2.179		0.000		2.179	0.000	10.852	0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CALS - PM/MS HW - CALS Program Office - Planning and Programming	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.893	Mar 2013	1.386	Mar 2014	-		1.386	0.000	2.279	0.000

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CM5: *HOMELAND DEFENSE (EMD)*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** WMD CST - PM/MS SB - CBRN COTS	MIPR	Various:	0.000	0.568	Mar 2012	0.489	Mar 2013	0.000		-		0.000	0.000	1.057	0.000
		Subtotal	0.000	0.568		1.382		1.386		0.000		1.386	0.000	3.336	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	8.984		9.952		18.533		0.000		18.533	0.000	37.469	0.000

Remarks

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CM5: *HOMELAND DEFENSE (EMD)*

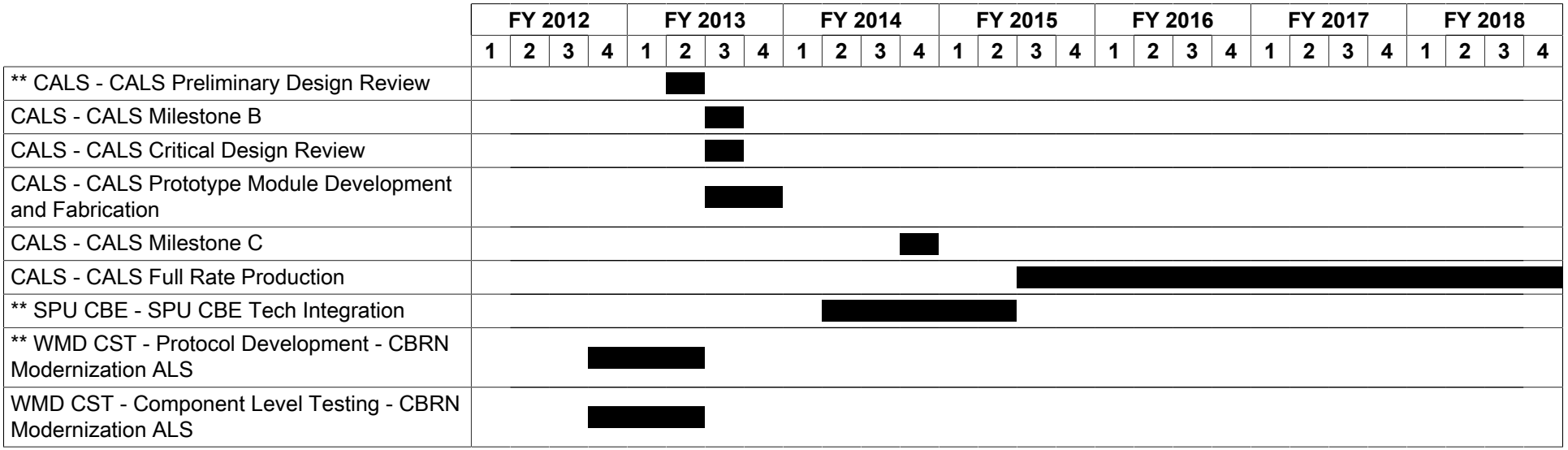

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	**PROJECT** CM5: *HOMELAND DEFENSE (EMD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** CALS - CALS Preliminary Design Review	2	2013	2	2013
CALS - CALS Milestone B	3	2013	3	2013
CALS - CALS Critical Design Review	3	2013	3	2013
CALS - CALS Prototype Module Development and Fabrication	3	2013	4	2013
CALS - CALS Milestone C	4	2014	4	2014
CALS - CALS Full Rate Production	3	2015	4	2018
** SPU CBE - SPU CBE Tech Integration	2	2014	2	2015
** WMD CST - Protocol Development - CBRN Modernization ALS	4	2012	2	2013
WMD CST - Component Level Testing - CBRN Modernization ALS	4	2012	2	2013

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CO5: *COLLECTIVE PROTECTION (EMD)*	

COST ($ in Millions)	All Prior Years	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
CO5: *COLLECTIVE PROTECTION (EMD)*	-	12.451	10.642	13.300	-	13.300	2.600	0.000	0.000	0.000	0.000	38.993
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

Funding supports System Development and Demonstration and Low Rate Initial Production (SDD/LRIP) of Joint Service Chemical, Biological, and Radiological (CBR) Collective Protection (CP) systems that are smaller, lighter, less costly to produce and maintain, and more logistically supportable enabling mission accomplishment in CBR environments. CP systems can be installed on any type of platform, such as, hard and soft shelters, vehicles, ships, aircraft, and buildings. CP systems provide spaces safe from the effects of CBR contamination.

The system included in this project is the Joint Expeditionary Collective Protection (JECP).

JECP provides the Joint Expeditionary Forces a CP capability which is lightweight, compact, modular, and affordable. A family of systems is planned that will allow the application of CP to transportable soft-side shelters, enclosed spaces of opportunity, and in remote austere locations as a standalone resource. JECP will be capable of protecting personnel groups of varying size, unencumbered by Individual Protective Equipment (IPE), from the effects of CB agents, Toxic Industrial Materials (TIMs), radiological particles, heat, dust, and sand. The employment of JECP is a strategic deterrence against enemy use of CBR agents or TIMs, and will reduce the need for personnel and equipment decontamination.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: 1) JECP - System Development and Demonstration (SDD) Contract	1.659	4.234	2.216
Description: System Development and Demonstration (SDD) Contract to design, develop, integrate and test the prototype Joint Expeditionary Collective Protection (JECP) Family of Systems (FoS) that meet the requirements of the Capability Development Document (CDD) and System Performance Specification (SPS).			
FY 2012 Accomplishments: Continued providing support for Government system level Development Testing (DT) with combined Operational and DT field events, logistics/manpower and personnel integration (MANPRINT) demonstration, and operational assessment (OA). Conducted			

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CO5: *COLLECTIVE PROTECTION (EMD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
System Verification Review, Functional Configuration Audit and Production Readiness Review. Continued development of logistic products for the Family of Systems (FoS). Conducted Technical Manual Validation. ***FY 2013 Plans:*** Continue development of logistic products. Support Milestone C decision review. Incorporate changes into the FoS design to address any failures from DT or observations from the OA. Begin the manufacture of Low Rate Initial Production (LRIP) systems for Government operational test and evaluation and manufacturing readiness evaluation. LRIP consists of 5 tent kits at approximately $35,000 each, 9 structure kit improved at approximately $26,000 each, 6 SA large at approximately $150,000 each, 9 single person airlocks at approximately $9,000 each, and 9 multi-person airlocks at approximately $25,000 each. Estimated total FY13 cost of LRIP systems is $1.724 million. ***FY 2014 Plans:*** Continue manufacture of additional LRIP systems, 5 tent kits at approximately $35,000 each, 7 structure kit unimproved at approximately $38,000 each, 5 SA large at approximately $150,000 each, 5 single person airlocks at approximately $9,000 each, and 7 multi-person airlocks at approximately $25,000 each. Estimated total FY14 cost of LRIP systems is $1.331 million. Participate in a Logistics Maintenance Demonstration (LMD). Finalize logistic products for the Family of Systems and support the final Joint Integrated Logistics Assessment. Support FoS Technical Manual Verification and Provisioning Conference. Provide support to Government led production verification test and multi-service operational test and evaluation.			
Title: 2) JECP - Government System Level Developmental Testing ***Description:*** Conduct Government system level Developmental Testing (DT) of the Family of Systems (FoS) to be conducted both in the chamber and in the field (littoral and desert environments). Conduct Operational Assessment (OA). Develop system level empirical models to provide to the JECP System Performance Model (SPM). ***FY 2012 Accomplishments:*** Completed Non-CB mode DT of the Family of Systems (FoS). Began Reliability, Availability, and Maintainability (RAM) Analysis from data collected throughout DT. Completed static and dynamic Collective Protection system verification testing on the FoS. Conducted DT system field challenge, 30 day continuous operations verification testing, OA, and post field static system verification testing. Began post field Government component level DT consisting of barrier materials swatch testing, and air-purification component testing. ***FY 2013 Plans:***	5.003	1.640	4.991

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CO5: *COLLECTIVE PROTECTION (EMD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Complete post field Government component level DT to include barrier material swatch testing and passive air-purification component testing. Begin regression testing on any design changes resulting from failures during DT or observations from the OA. Conduct detailed planning for production verification testing on low rate initial production FoS. ***FY 2014 Plans:*** Complete regression testing on any design changes resulting from failures during DT or observations from the OA. Conduct production verification testing, including a RAM event, on low rate initial production FoS.			
Title: 3) JECP - Multi-Service Operational Test & Evaluation ***Description:*** Conduct Government system level Operational Testing (OT) of the Family of Systems (FoS) to be conducted in the field (littoral and desert environments). ***FY 2013 Plans:*** Begin high level planning for Multi-service Operational Test & Evaluation (MOT&E) of Low Rate Initial Production units. ***FY 2014 Plans:*** Complete detailed planning for MOT&E of Low Rate Initial Production units.	0.000	0.100	0.250
Title: 4) JECP - Systems Engineering IPT ***Description:*** Provide technical direction to the Contractor team. Establish and maintain a robust and disciplined Systems Engineering process IAW Department of Defense (DoD) and Joint Program Executive Office for Chemical Biological Defense (JPEO-CBD) policy and guidance. ***FY 2012 Accomplishments:*** Developed, updated and/or reviewed program documentation in preparation for MS C. Provided support for Government system level DT. Ensured FoS ready for and participated in System Verification Review, Functional Configuration Audit and Production Readiness Review. Updated and maintained the Requirements Traceability Matrix (RTM) to track when requirements have been verified as test results become available. Coordinated with JRO to assist in development of the Capability Production Document based on system level testing and trades analysis. Worked with the contractor to identify corrective action for any test failures. ***FY 2013 Plans:*** Update and maintain the RTM to track when requirements have been verified as test results become available. Conduct a System Verification Review, Functional Configuration Audit and a Production Readiness Review. Establish the LRIP product baseline. Participate in Configuration Control Board. ***FY 2014 Plans:***	1.062	1.048	0.750

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CO5: *COLLECTIVE PROTECTION (EMD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Provide support for Government led production verification test and MOT&E. Update and maintain the RTM to track when requirements have been verified as test results become available. Participate in Configuration Control Board.			
Title: 5) JECP - Test and Evaluation IPT ***Description:*** Lead and oversee all aspects of the JECP Integrated Test (IT) program. ***FY 2012 Accomplishments:*** Participated in Government system level DT and Technical Manual validation. Reviewed and assessed results from component and system level DT and provided to users for incorporation into the Capability Production Document. Ensured FoS ready for and participate in System Verification Review, Functional Configuration Audit and Production Readiness Review. Developed, updated and/or reviewed program documentation in preparation for MS C. ***FY 2013 Plans:*** Complete participation in Government lead system level DT and operational assessment. Conduct test failure scoring conferences as necessary. Authenticate data collected during DT. Perform analysis to support test report generation and determination of requirements compliance. ***FY 2014 Plans:*** Conduct Government led system level DT using LRIP systems and participate in MOT&E. Conduct test failure scoring conferences as necessary.	0.871	1.250	0.750
Title: 6) JECP - Integrated Logistics Support IPT ***Description:*** Oversee and provide supportability planning guidance to the SDD contractor in addressing logistic support elements including maintenance philosophy, manpower and personnel, supply support, Tech Data, support and test equipment, training and training support. ***FY 2012 Accomplishments:*** Developed, updated and/or reviewed program documentation in preparation for MS C. Provide support for Government system level DT. Reviewed Technical Manuals and witnessed validation. Ensured FoS ready for and participated in System Verification Review, Functional Configuration Audit and Production Readiness Review. Provided information to support the Joint Independent Logistics Assessment (JILA). Continued the Business Case Analysis to determine the best approach for logistic support and sustainment. Participated in Configuration Control Board as necessary. Provided information to support the JILA. ***FY 2013 Plans:***	0.808	1.219	0.750

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT CO5: *COLLECTIVE PROTECTION (EMD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Report out at MS C the results of the BCA and surge requirements analysis. Review updated Technical Manuals and Training material. Participate in Configuration Control Board as necessary. Provide information to support the JILA. ***FY 2014 Plans:*** Conduct a logistics maintenance demonstration on the FoS using Warfighters from the services. Conduct a Provisioning Conference and Technical Manual Verification. Provide information to support the final JILA.			
Title: 7) JECP - Program Management and Contract Administration ***Description:*** Oversee the day-to-day program execution including guidance and direction to the JECP Integrated Product Teams (IPTs), financial management and tracking, budget preparation, schedule planning and monitoring, and reporting requirements including but not limited to weekly highlight reports, monthly acquisition status reports and quarterly program review briefs. Perform SDD contract management and administration. ***FY 2012 Accomplishments:*** Focused on technical manual development and validation, Government system level DT and OA. Begin planning and preparation for MS C. ***FY 2013 Plans:*** Complete an LRIP MS C decision. Exercise option in contract for low rate initial production (LRIP). Focus on system verification review, functional configuration audit and production readiness reviews, manufacture of LRIP systems and preparation for Production Verification Test (PVT) and MOT&E. ***FY 2014 Plans:*** Focus on conduct of PVT and detailed planning for MOT&E. Begin preparation for FRP decision.	0.673	0.917	0.900
Title: 8) JECP - Program Management ***FY 2012 Accomplishments:*** Provided strategic planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2013 Plans:*** Provide strategic planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2014 Plans:***	2.375	0.234	2.693

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Provide strategic planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.			
Accomplishments/Planned Programs Subtotals	12.451	10.642	13.300

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
• JP1111: *JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)*	0.000	0.000	4.055		4.055	10.160	7.200	11.700	11.700	Continuing	Continuing

Remarks

D. Acquisition Strategy

JECP

Strategy based on evolutionary development, based on a family of systems approach. Following MS B, a Statement of Work (SOW) and System Performance Specification (SPS) were used to award competitive cost plus incentive fee contract to build prototypes that are being subjected to robust engineering developmental testing and Operational Assessment during the System Development and Demonstration (SDD) phase. Following MS C, award a Fixed Price Incentive Successive Target (FPIS) option for Low Rate Initial Production (LRIP) to support formal Developmental Testing (DT) and Multi-Service Operational Test & Evaluation (MOT&E) with the intent to field Low Rate Initial Production (LRIP) systems developed using procurement funds. Following a successful Full Rate Production (FRP) decision, award a Fixed Price Incentive-Successive targets (FPIS) option with five one-year ordering periods. Full and open competition will be used with an updated SPS to award follow-on production contracts.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JECP - HW S - Prototype Development	C/CPIF	Science Applications International Corporation (SAIC):Abingdon, MD	4.542	1.659	Mar 2012	0.000		0.000		-		0.000	0.000	6.201	0.000
HW S - Production Representative System	C/CPIF	Science Applications International Corporation (SAIC):Abingdon, MD	0.000	0.000		4.234	Mar 2013	0.404	Mar 2014	-		0.404	0.000	4.638	0.000
		Subtotal	4.542	1.659		4.234		0.404		0.000		0.404	0.000	10.839	0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JECP - ES S - Systems Engineering IPT	MIPR	Various:	3.011	1.062	Dec 2011	1.048	Dec 2012	0.750	Dec 2013	-		0.750	0.000	5.871	0.000
ILS S - Integrated Logistics IPT	MIPR	Various:	1.346	0.808	Dec 2011	1.219	Dec 2012	0.750	Dec 2013	-		0.750	0.000	4.123	0.000
		Subtotal	4.357	1.870		2.267		1.500		0.000		1.500	0.000	9.994	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JECP - OTHT SB - Test & Evaluation IPT	MIPR	Various:	3.171	0.871	Dec 2011	1.250	Dec 2012	0.750	Dec 2013	-		0.750	0.000	6.042	0.000
DTE S - Prototype Production Qualification Testing	MIPR	Various:	0.000	1.052	Mar 2012	0.000		0.000		-		0.000	0.000	1.052	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DTE S - Prototype Production Qualification Testing #2	MIPR	Dugway Proving Ground (DPG):Dugway, UT	0.000	2.901	Dec 2011	0.000		0.000		-		0.000	0.000	2.901	0.000
DTE S - Prototype Production Qualification Testing #3	MIPR	Test Management Group:Elgin AFB, FL	0.000	1.050	Dec 2011	0.000		0.000		-		0.000	0.000	1.050	0.000
DTE S - Low Rate Initial Production Units Production Verification Testing	MIPR	Various:	0.000	0.000		1.640	Mar 2013	4.991	Mar 2014	-		4.991	0.000	6.631	0.000
OTE S - Low Rate Initial Production Multi-Service Operational Testing	MIPR	Various:	0.000	0.000		0.100	Dec 2012	2.062	Dec 2013	-		2.062	0.000	2.162	0.000
		Subtotal	3.171	5.874		2.990		7.803		0.000		7.803	0.000	19.838	0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JECP - PM/MS S - APMO Support	MIPR	Naval Surface Warfare Center (NSWC) - Dahlgren Center:Dahlgren, VA	3.130	0.532	Dec 2011	0.667	Dec 2012	0.600	Dec 2013	-		0.600	0.000	4.929	0.000
PM/MS S - APMO Contractor Support	C/FP	Solutions Development Corp.:Dahlgren, VA	4.945	0.141	Mar 2012	0.250	Mar 2013	0.300	Mar 2014	-		0.300	0.000	5.636	0.000
PM/MS S - Program Management Support	MIPR	Various:	1.259	2.375	Dec 2011	0.234	Dec 2012	2.693	Dec 2013	-		2.693	0.000	6.561	0.000
		Subtotal	9.334	3.048		1.151		3.593		0.000		3.593	0.000	17.126	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program			DATE: April 2013
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	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	21.404	12.451		10.642		13.300		0.000		13.300	0.000	57.797	0.000

Remarks

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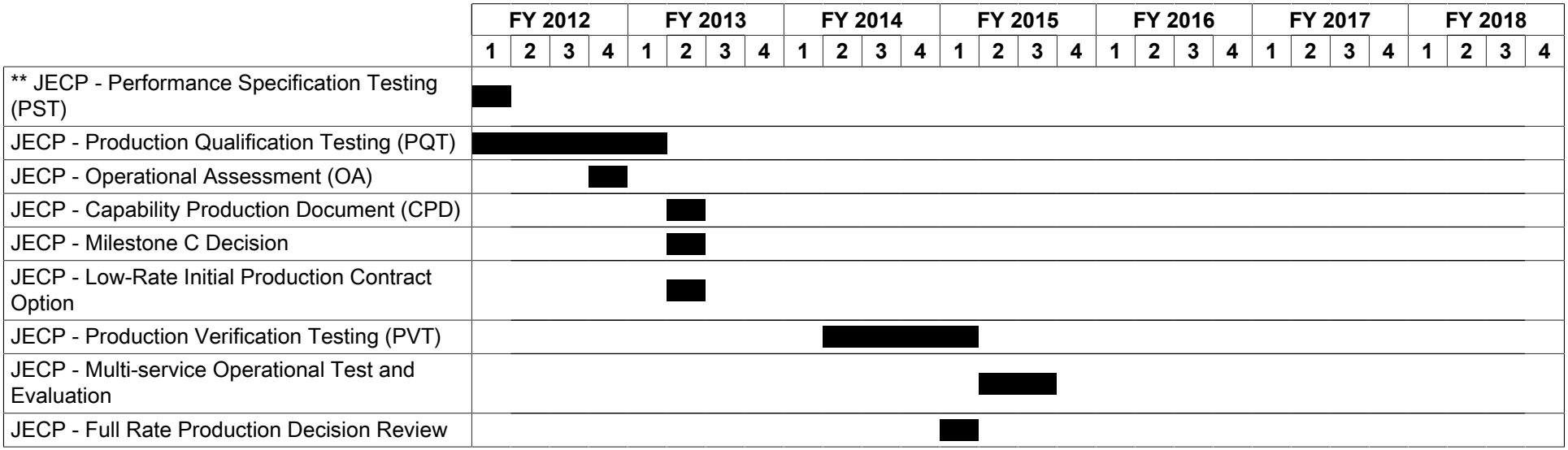

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	**PROJECT** CO5: *COLLECTIVE PROTECTION (EMD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** JECP - Performance Specification Testing (PST)	1	2012	1	2012
JECP - Production Qualification Testing (PQT)	1	2012	1	2013
JECP - Operational Assessment (OA)	4	2012	4	2012
JECP - Capability Production Document (CPD)	2	2013	2	2013
JECP - Milestone C Decision	2	2013	2	2013
JECP - Low-Rate Initial Production Contract Option	2	2013	2	2013
JECP - Production Verification Testing (PVT)	2	2014	1	2015
JECP - Multi-service Operational Test and Evaluation	2	2015	3	2015
JECP - Full Rate Production Decision Review	1	2015	1	2015

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program			DATE: April 2013
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COST ($ in Millions)	All Prior Years	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
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 provides System Development and Demonstration (SDD) for: (1) the Contaminated Human Remains Pouch (CHRP); (2) the Decontamination Family of Systems (DFoS); and (3) Joint Sensitive Equipment Wipe (JSEW).

The Contaminated Human Remains Pouch (CHRP) effort will provide the capability to protect personnel handling and processing human remains contaminated with Chemical, Biological, Radiological, or Nuclear (CBRN) contamination. The CHRP will fulfill gaps as described in the Mortuary Affairs (MA) Initial Capabilities Document (ICD) for safe intra-theater handling and transport of contaminated human remains (CHR). The CHRP will provide protection by containing contaminated human remains (CHR) during recovery and transport from the point of fatality to the Mortuary Affairs (MA) Activity. The CHRP will contain fluid and vapor CBRN hazards associated with the CHR to reduce the spread of contamination and reduce the hazard to personnel handling the CHR and the environment. Successful development and procurement of the CHRP will provide Warfighters with the capability to safely handle, transport, and temporarily store or inter CHR in a theater of operations.

The Decontamination Family of Systems (DFoS) program facilitates the rapid transition of mature Science and Technology (S&T) research developments to existing Decontamination or Contamination Mitigation ICD Programs of Record and guides S&T community efforts toward meeting the needs of the Warfighter. DFoS will develop a Family of Systems, to include equipment, to improve decontamination processes, and decontaminant solutions to meet the capability gaps for decontaminating NTA and chemical and biological warfare agents from personnel, equipment, vehicle interiors/exteriors, terrain, and fixed facilities.

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/m2 to less than or equal to 1 g/m2 in support of thorough decontamination on sensitive equipment. In addition, the JSEW program will investigate the potential for non-traditional agent (NTA) compatibility of JSEW prototypes.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: 1) CHRP	0.000	1.773	1.412
FY 2013 Plans:			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Initiate engineering, testing, and logistics planning and documentation to support Contaminated Human Remains Pouch (CHRP) test and evaluation to include liquid and vapor live agent swatch, system permeation, durability, material compatibility, environmental effects, and Operational Testing (OT). ***FY 2014 Plans:*** Complete OT and reporting to support Capabilities Production Document (CPD). Finalize documentation and complete final technical reviews to support a MS C FRP decision.			
Title: 2) CHRP ***FY 2013 Plans:*** Award contract(s) to procure 80 CHRP systems (at $2,000 each) for Developmental Testing (DT) and Multi-Service Operational Test and Evaluation (MOT&E).	0.000	0.160	0.000
Title: 3) DFoS ***FY 2013 Plans:*** Validate the decontamination wipes, the selected chemical decontaminant(s) with a decontaminant delivery system, the decontamination assurance spray with the selected decontaminant(s), and Reactive Skin Decontamination Lotion (RSDL) through evaluations such as full scale use of the systems, interference and compatibility testing.	0.000	7.391	0.000
Title: 4) DFoS - JSEW ***FY 2014 Plans:*** Purchase 3,000 JSEW test assets (at $17 each) for advanced DT and development of programmatic documentation.	0.000	0.000	0.350
Title: 5) DFoS - JSEW ***FY 2014 Plans:*** Complete Developmental Testing (DT) to include Packaging/MIL-STD 810G, real-time shelf-life, Product Verification Testing (PVT), and Multi-Service Operational Test and Evaluation (MOT&E).	0.000	0.000	0.650
Accomplishments/Planned Programs Subtotals	0.000	9.324	2.412

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
• JD0050: *DECONTAMINATION FAMILY OF SYSTEMS (DFoS)*	0.000	0.506	0.000		0.000	4.450	9.754	16.337	28.356	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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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
• JD0055: *JOINT SERVICE PERSONNEL/SKIN DECON SYSTEM (JSPDS)*	7.466	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	7.466
• 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

D. Acquisition Strategy

CHRP

The CHRP commercial items/Non-Developmental Items (NDI) acquisition strategy will leverage current Mortuary Affairs equipment, such as the Human Remains Pouch (HRP), to identify metrics and performance specifications necessary for the handling of non-contaminated human remains, and expand the performance to fill the identified capability gap for safe handling of contaminated human remains (CHR). CHRP will verify that existing commercial items/NDIs meet performance specifications to provide a fielded capability for safe intra-theater handling and transport of CHR. Follow-on phases of CHRP development may include efforts to incorporate the CHRP into a system designed to provide a transport capability to return CHR to Continental United States (CONUS).

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.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program			DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CHRP - CHRP Contract	C/FFP	Various:	0.000	0.000		0.160	Mar 2013	0.032	Dec 2013	-		0.032	Continuing	Continuing	0.000
** DFoS JSEW - HW S - Joint Sensitive Equipment Wipe (JSEW)	C/FFP	TBD:	0.000	0.000		0.000		0.350	Jan 2014	-		0.350	Continuing	Continuing	0.000
		Subtotal	0.000	0.000		0.160		0.382		0.000		0.382			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CHRP - IPT Technical Support	MIPR	Various:	0.000	0.000		0.150	Mar 2013	0.200	Mar 2014	-		0.200	Continuing	Continuing	0.000
		Subtotal	0.000	0.000		0.150		0.200		0.000		0.200			0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CHRP - Document Development and Test Planning	MIPR	Various:	0.000	0.000		0.150	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
Developmental Testing and Reporting	MIPR	Various:	0.000	0.000		0.624	May 2013	0.000		-		0.000	Continuing	Continuing	0.000
Operational Testing and Reporting	MIPR	Various:	0.000	0.000		0.400	Jun 2013	0.494	Dec 2013	-		0.494	Continuing	Continuing	0.000
** DFoS - DTE C - UNS NTA Decon Assurance Spray	MIPR	TBD:	0.000	0.000		1.746	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
DTE C - UNS NTA Reactive Skin Decontamination Lotion (RSDL)	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.000	0.000		1.200	Jan 2013	0.000		-		0.000	Continuing	Continuing	0.000

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (EMD)*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DTE C - UNS NTA Chemical Decon/Decon Wipes	MIPR	TBD:	0.000	0.000		2.745	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** DFoS JSEW - OTE S - Joint Sensitive Equipment Wipe (JSEW)	MIPR	TBD:	0.000	0.000		0.000		0.450	Mar 2014	-		0.450	Continuing	Continuing	0.000
		Subtotal	0.000	0.000		6.865		0.944		0.000		0.944			0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CHRP - PM/MS S - Program Management Support, Integrated Product Team and Technical Support	MIPR	Various:	0.000	0.000		0.449	Mar 2013	0.686	Jan 2014	-		0.686	Continuing	Continuing	0.000
** DFoS - PM/MS SB - Program Management Support, Integrated Product Team and Technical Support	MIPR	Various:	0.265	0.000		1.700	Jan 2013	0.000		-		0.000	Continuing	Continuing	0.000
** DFoS JSEW - PM/MS S - Program Management, Integrated Product Team, and Technical Support	MIPR	TBD:	0.000	0.000		0.000		0.200	Oct 2013	-		0.200	Continuing	Continuing	0.000
		Subtotal	0.265	0.000		2.149		0.886		0.000		0.886			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	0.265	0.000		9.324		2.412		0.000		2.412			0.000

Remarks

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (EMD)*

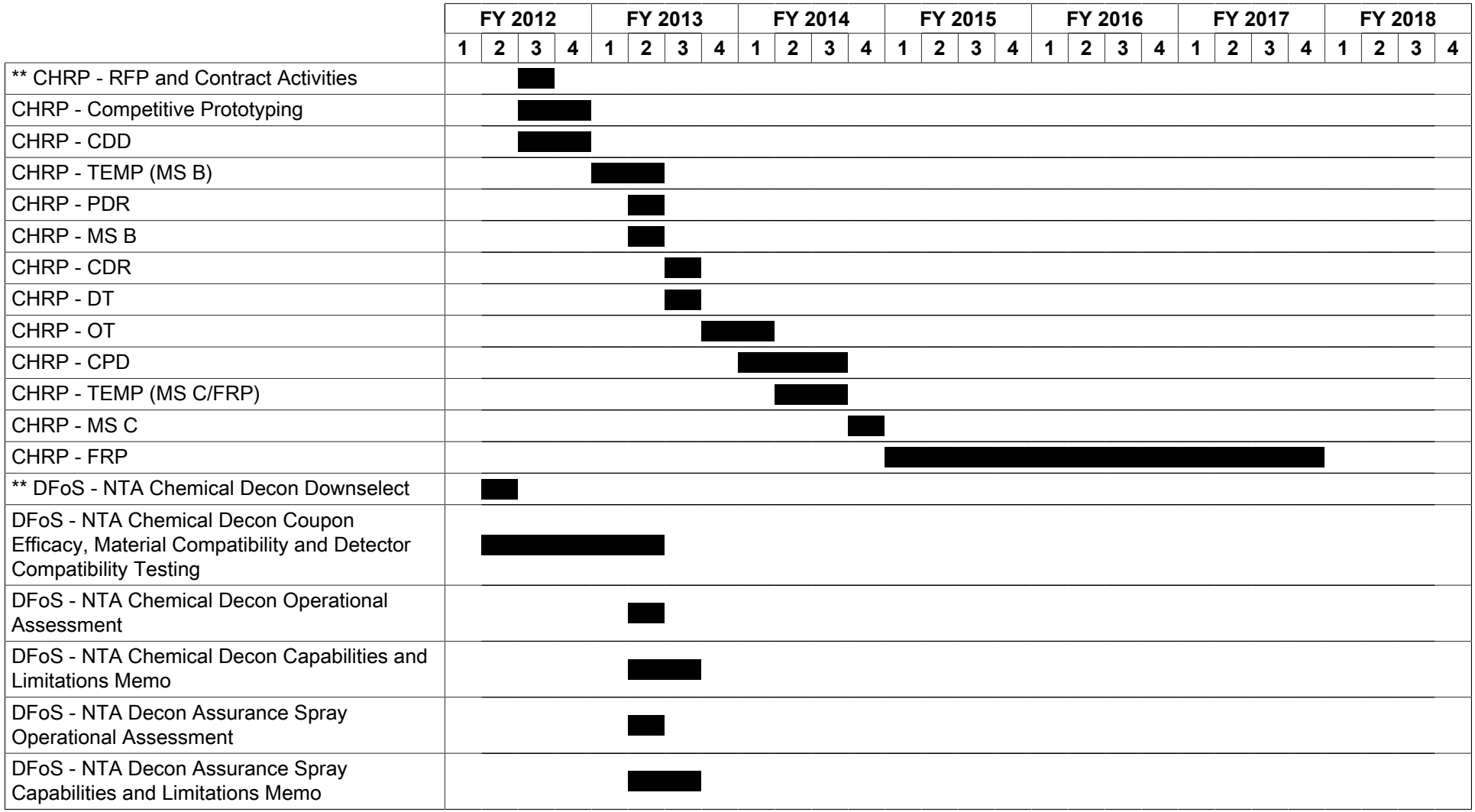

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (EMD)*

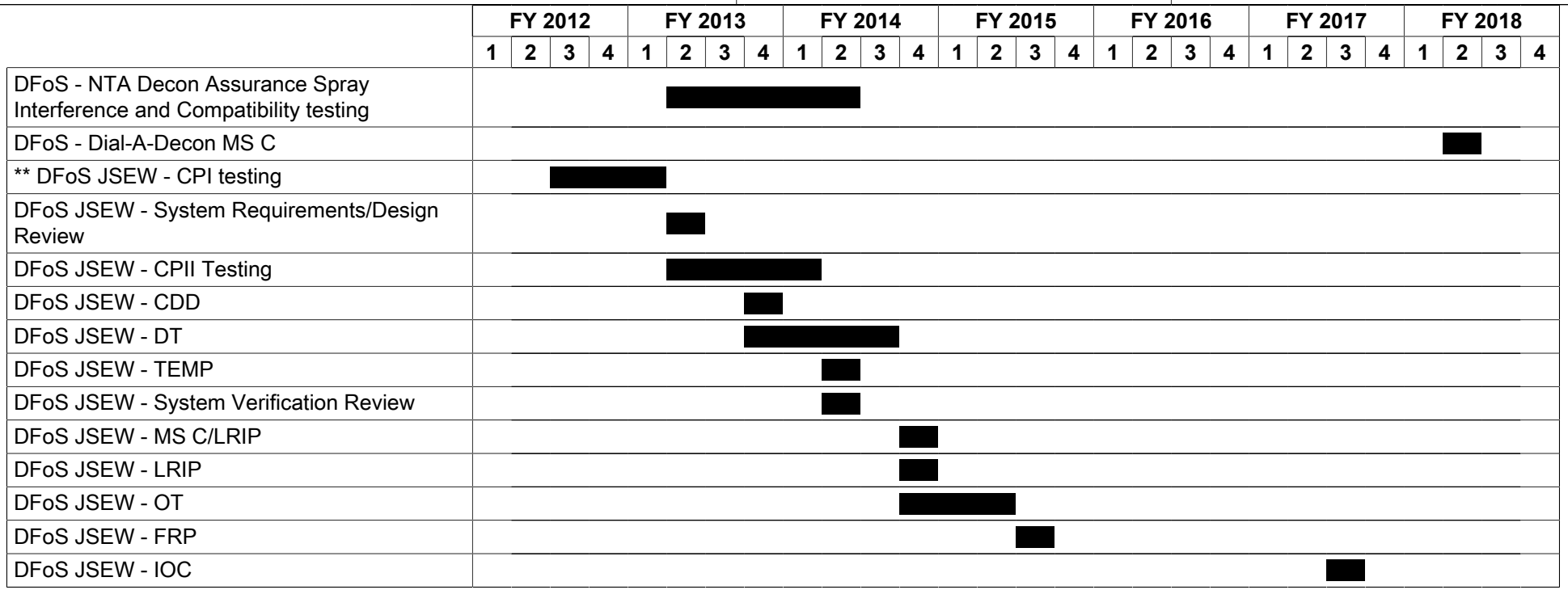

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	**PROJECT** DE5: *DECONTAMINATION SYSTEMS (EMD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** CHRP - RFP and Contract Activities	3	2012	3	2012
CHRP - Competitive Prototyping	3	2012	4	2012
CHRP - CDD	3	2012	4	2012
CHRP - TEMP (MS B)	1	2013	2	2013
CHRP - PDR	2	2013	2	2013
CHRP - MS B	2	2013	2	2013
CHRP - CDR	3	2013	3	2013
CHRP - DT	3	2013	3	2013
CHRP - OT	4	2013	1	2014
CHRP - CPD	1	2014	3	2014
CHRP - TEMP (MS C/FRP)	2	2014	3	2014
CHRP - MS C	4	2014	4	2014
CHRP - FRP	1	2015	4	2017
** 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 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 - Dial-A-Decon MS C	2	2018	2	2018

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (EMD)*

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** 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

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 5: *System Development & Demonstration (SDD)*					R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*				PROJECT IP5: *INDIVIDUAL PROTECTION (EMD)*			
COST ($ in Millions)	**All Prior Years**	**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
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 provides System Development and Demonstration (SDD) and Low Rate Initial Production (SDD/LRIP) for individual protection equipment, with the goal of providing equipment that allows the individual soldier, sailor, airman, or Marine to operate in a contaminated Nuclear, Biological and Chemical (NBC) environment with little or no degradation of his/her performance.

Included in this program are:

(1) The Joint Service Aircrew Mask (JSAM) is an Acquisition Category (ACAT) III, incrementally developed Family of Systems (FoS) for respiratory protection. The JSAM MBU-25 (V)/P and Modified M53 (MM53) Fixed Wing (FW) respirators are being developed for use in the majority of Department of Defense fixed wing aircraft, and the JSAM MPU-5 Rotary Wing (RW) mask is being developed for use in the majority of Department of Defense RW aircraft, and the JSAM-JSF is a CB respirator that supports the Joint Strike Fighter (JSF) when integrated with aircraft and pilot mounted equipment, will provide combined CB, hypoxia and anti-Gravity (anti-G) protection to all F-35 users, including the United States Air Force (USAF), Navy (USN), Marine Corps (USMC), and International Partners. The goal of the overall JSAM project is to develop, manufacture, field and sustain an aircrew respirator system that, in conjunction with a below-the-neck (BTN) clothing ensemble, will provide the capability for all aircrew to fly throughout their full operating envelope in an actual or perceived Chemical and Biological (CB) warfare environment. The JSAM will be a lightweight CB protective mask that will be worn as CB protection for most Army, Air Force, Navy and Marine RW and FW aircrew members. The JSAM-FW MBU-25(V)/P will be the first and only CB protective mask in the DoD inventory that can provide anti-G protection, up to nine times the vertical force (Gz), for aircrew in high-performance aircraft. The JSAM-FW MM53 will be used in aircrew positions that do not require anti-G protection. The MM53 provides CB protection for positions that only need pressure breathing for altitude and has a much lower cost per unit than the MBU-25(V)/P. All JSAM variants will be compatible with most BTN CB ensembles and existing aircrew life support equipment. They will include a protective hood assembly, CB filter, blower assembly, and an intercom for ground communication. They will also provide flame and thermal protection, demist/emergency demist, and anti-drowning features. JSAM Phase II will provide CB respiratory and ocular protection to aircrew members for 75% of aircrew positions.

(2) The Joint Service General Purpose Mask (JSGPM) Advanced Respiratory Protection Initiative (ARPI): This project funds the advanced component development and prototypes of an improved filtration and protection capability against highest priority Toxic Industrial Chemical (TIC) threats, addressing a current and significant capability gap to the operating force. The effort is supported by the Capabilities Production Document for the JSGPM, which outlines the need for a robust TIC/TIM

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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protection capability. It is expected that new capabilities demonstrated through the activities in this project will be leveraged and integrated into future increments of UIPE.

(3) The Uniform Integrated Protection Ensemble (UIPE). The objective of UIPE is to fully integrate chemical, biological, radiological, nuclear (CBRN) and toxic industrial material (TIM) protection into an ensemble, identical in fit and form to the combat uniform (including mask-helmet integration and protective boots and gloves), thus negating the need for separate protective ensemble components. This integrated protection approach will result in increased Warfighter operational performance in a CBRN environment. The UIPE program will develop, integrate, test, procure and field incremental capability solutions that are modular in function and offer improvements in form and fit over current systems; the program will explore trade-space in areas such as protection level, heat stress, durability, antimicrobial properties, flame resistance, launderability, self-detoxification, and protection time in order to provide capabilities that afford maximum utility to the Warfighter. Where appropriate modeling and simulation tools will be used to lower UIPE program risks, reduce costs, and ensure a high confidence in selected technologies. UIPE Increment 1 is aimed specifically at providing enhanced individual protection capabilities to the Warfighter through reduction of physiological and psychological effects associated with CBRN protective garment thermal burden, weight, and bulk. UIPE Increment 1 achieved MS B approval in November 2011 and is now in the Engineering and Manufacturing Development (EMD) phase. The first increment of UIPE will ultimately provide CB protective equipment with improved operational capability to the U.S. Special Operations Command.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: 1) JSAM	9.402	0.000	0.000
FY 2012 Accomplishments: JSAM MBU-25 (V)/P (FW) - Completed DT for F-22, MC-12W, F-18 and MV-22 aircraft platforms. Started operation testing (OT) for top four priority aircraft. Conducted logistics demonstration. JSAM MPU-5 (RW) - Completed Manufacturing Readiness Assessment. Finalized configuration for Multi-Service Operational Test and Evaluation (MOT&E). Completed definition of performance envelope. Completed logistics and training planning. Conducted developmental tests (DT)(e.g., chemical agent, simulant, environmental, and logistics tests) and developed reports. JSAM JSF - Design Verification Testing, Manufacturing Readiness Assessment, Critical Design Review Preparation and Program Management.			
Title: 2) JSAM FW	0.000	2.683	17.172
FY 2013 Plans: Complete Critical Design Reviews and begin Developmental Testing (DT) for MBU-25 and Modified M53 (MM53). ***FY 2014 Plans:*** Complete DT for MBU-25 and MM53 and begin Operational Testing (OT) for the MM53.			
Title: 3) JSAM FW	0.000	0.803	1.082
FY 2013 Plans: Award contracts to procure 75 MBU-25 test assets (at $9,900 each) and 50 MM53 test assets (at $1,200 each). ***FY 2014 Plans:***			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Award contracts to procure 85 MBU-25 Low Rate Initial Production (LRIP) assets (at $9,900 each) and 200 MM53 LRIP assets (at $1,200 each).			
Title: 4) JSAM FW - JSF ***FY 2013 Plans:*** Continue Design Verification Testing, Manufacturing Readiness Assessment, Critical Design Review preparation and program management.	0.000	2.000	0.000
Title: 5) JSAM RW ***FY 2013 Plans:*** Conduct airworthiness testing. Prepare assets for operational testing. Develop test plans. Conduct developmental tests (e.g., chemical agent, simulant, environmental, and logistics tests) and develop reports. Prepare milestone documentation. Conduct formal system reviews (i.e., System Verification Review and Production Readiness Review). Conduct training. ***FY 2014 Plans:*** Complete airworthiness testing and obtain airworthiness certifications. Initiate Multi-Service Operational Test and Evaluation (MOT&E). Conduct Performance Verification Testing (PVT) upon receipt of Low Rate Initial Production (LRIP) systems. Conduct technical reviews in preparation for/in advance of the Full Rate Production (FRP) Decision Milestone.	0.000	6.612	6.037
Title: 6) JSGPM ***FY 2013 Plans:*** JSGPM (ARPI) - Begin the SDD phase of ZZ-AT media (zirconium hydroxide) based filter transitioning from Tech Base that is applicable to replace or improve fielded protection. Prepare for SDD contract. ***FY 2014 Plans:*** JSGPM (M61 Filters) - Award task on M61 Filter contract for delivery of 700 pairs of filters with more robust TIC/CWA protection. Filters will be $100 per pair for a total cost of $70,000.	0.000	2.004	2.005
Title: 7) UIPE ***FY 2012 Accomplishments:*** UIPE Incr 1 - Prepared for, and conducted MS B decision. Entered Engineering & Manufacturing Development (EMD) phase. Awarded prototype contracts for 614 test articles at approx $477 each. Conduct Critical Design Review (CDR) and EMD phase competitive prototyping. Initiate integrated developmental testing and operational testing (DT/OT). Assess down-selected UIPE	3.923	1.869	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
candidates in field and laboratory test events to evaluate performance with respect to reduction of thermal burden, protection against CB agents, and mission suitability. ***FY 2013 Plans:*** UIPE Incr 1 - Conduct Production Readiness Review (PRR), System Verification Review (SVR), Manufacturing Readiness Assessment (MRA) and Technology Readiness Assessment (TRA). Complete Logistics Demonstration. Perform Physical Configuration Audit (PCA). Prepare for, and conduct MS C Low Rate Initial Production (LRIP) decision. Exercise LRIP contract option(s). Conduct Operational Test Readiness Review (OTRR) and First Article Test (FAT). Initiate Operational Test and Evaluation (OT&E). Prepare for and conduct Full Rate Production (FRP) decision.			
Accomplishments/Planned Programs Subtotals	13.325	15.971	26.296

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
• JI0002: *JS AIRCREW MASK (JSAM)*	7.341	14.878	10.552		10.552	11.526	31.500	54.050	68.924	Continuing	Continuing
• MA0401: *CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)*	0.000	10.376	13.772		13.772	12.948	17.101	17.101	17.101	0.000	88.399

Remarks

D. Acquisition Strategy

JSAM

The overall JSAM acquisition approach is incremental and phased due to the complexity of interfacing with almost 200 aircraft types and models with different mission sets, ALSE, cockpit layouts, priorities, etc. The JSAM MBU-25 FW effort will test and field the Pressure Breathing for Gravity (PBG) Mask to aircraft platforms through an SDD contract. An Request For Proposal will be released to solicit industry for JSAM FW procurement using a full and open competition. The Modified M53 (MM53) effort will test and field a mask for aircrew positions not requiring PBG capabilities. This contract will be awarded via sole source to Avon Protection Systems, Cadillac, Michigan to modify a commercially available mask (M53). JSAM RW MPU-5 Low Rate Production (LRIP) and Full Rate Production (FRP) assets will be procured using contract options. JSAM RW MPU-5 Low Rate Production (LRIP) and Full Rate Production (FRP) assets will be procured using contract options. JSAM RW MPU-5 Engineering and Manufacturing Development activities are performed via a contract awarded using a full and open competition, best value contracting strategy. The existing contract includes options for LRIP and FRP. A full and open competition, best value contracting strategy will be utilized to support additional Full Rate Production upon completion of the existing contract requirements and execution of options.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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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.

UIPE

UIPE will use an incremental development approach. UIPE Increment 1 will pursue a Modified Commercial-Off-The-Shelf/Non-Developmental Item (COTS/NDI) Acquisition Strategy; full and open competition will be used. Following Milestone (MS) B approval, contracts will be awarded and integrated Developmental Test/ Operational Test (DT/OT) will be initiated on selected candidate system(s) during the Engineering and Manufacturing Development (EMD) phase. At the end of EMD, those candidates meeting UIPE Increment 1 requirements and that offer best value to the Government will move forward into Low Rate Initial Production (LRIP) and Operational Test and Evaluation (OT&E). Following OT&E, effective and suitable systems will be considered for Full-Rate Production (FRP). Increment 1 of UIPE will ultimately provide CB protective equipment with improved operational capability to the U.S. Special Operations Command.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSAM - HW S - JSAM MPU-5 (RW) Contractor Development	C/CPAF	AVOX Systems Inc.:Lancaster, NY	22.190	1.062	Jan 2012	0.000		0.000		-		0.000	Continuing	Continuing	7.209
HW S - JSAM JSF	C/CPFF	GENTEX Corp.:Rancho Cucamonga, CA	0.000	0.352	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW S - JSAM FW	C/CPFF	GENTEX Corp.:Rancho Cucamonga, CA	0.000	0.300	Dec 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** JSAM FW - JSAM MBU-25/26 (FW) Test/ LRIP Assets	C/CPFF	GENTEX Corp.:Rancho Cucamonga, CA	0.000	0.000		0.743	Mar 2013	0.842	Mar 2014	-		0.842	Continuing	Continuing	0.000
JSAM Modified M53 (FW) Test/LRIP Assets	C/FFP	TBD:	0.000	0.000		0.060	Mar 2013	0.240	Mar 2014	-		0.240	Continuing	Continuing	0.000
JSAM JSF	C/CPFF	GENTEX Corp.:Rancho Cucamonga, CA	0.000	0.000		1.393	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** JSAM RW - HW S - JSAM MBU-5 (RW) Test Components	C/FFP	AVOX Systems Inc.:Lancaster, NY	0.000	0.000		0.530	Jan 2013	0.215	Jan 2014	-		0.215	Continuing	Continuing	0.000
** JSGPM - HW C - ZZAT Filter/M61	C/CPIF	Various:	0.000	0.000		0.600	Feb 2013	1.200	Feb 2014	-		1.200	Continuing	Continuing	0.000
** UIPE - HW S - Prototype Garment Development	C/FFP	Various:	0.000	0.294	Mar 2012	0.018	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
		Subtotal	22.190	2.008		3.344		2.497		0.000		2.497			7.209

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSAM - ES S - JSAM MBU-25/26 (FW)	MIPR	Various:	0.000	0.981	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Product Team and Technical Support															
ES S - JSAM MPU-5 (RW) Integrated Product Team and Technical Support	MIPR	Various:	0.000	0.631	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** JSAM FW - ES S - JSAM MBU-25/26 (FW) Integrated Product Team and Technical Support	MIPR	Various:	0.000	0.000		0.760	Jan 2013	3.763	Jan 2014	-		3.763	Continuing	Continuing	0.000
ES S - JSAM-JSF	MIPR	Various:	0.000	0.000		0.088	Jan 2013	0.000		-		0.000	Continuing	Continuing	0.000
** JSAM RW - ES S - JSAM MBU-5 (RW) Integrated Product Team and Technical Support	MIPR	Various:	0.000	0.000		1.790	Jan 2013	0.566	Jan 2014	-		0.566	Continuing	Continuing	0.000
** JSGPM - TD/D SB - JSGPM Filter	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.333	0.000		0.179	Feb 2013	0.000		-		0.000	Continuing	Continuing	0.000
ES C - JSGPM Filter	MIPR	Naval Research Lab (NRL):Washington, DC	0.250	0.000		0.100	Feb 2013	0.000		-		0.000	Continuing	Continuing	0.000
ES C - ZZAT Filter/M61	MIPR	TBD:	0.000	0.000		0.000		0.400	Feb 2014	-		0.400	Continuing	Continuing	0.000
** UIPE - ES S - Prototype Garment - Manufacturing Readiness Assessment	C/FFP	Joint Research and Development Inc.:Stafford, VA	0.000	0.114	Jun 2012	0.055	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000
		Subtotal	0.583	1.726		2.972		4.729		0.000		4.729			0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSAM - OTE S - MBU-25/26 (FW)	MIPR	Various:	14.166	0.889	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.404

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (EMD)*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental and Operational Test															
OTHT SB - JSAM MPU-5 (RW) Developmental Test	MIPR	Various:	5.054	0.707	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.185
** JSAM FW - DTE S - JSAM FW Developmental Test	MIPR	TBD:	0.000	0.000		1.182	Mar 2013	5.438	Mar 2014	-		5.438	Continuing	Continuing	0.000
OTE S - JSAM FW Operational Test	MIPR	Various:	0.000	0.000		0.000		4.371	Mar 2014	-		4.371	Continuing	Continuing	0.000
DTE S - JSAM JSF Developmental Testing	MIPR	Various:	0.000	0.000		0.220	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** JSAM RW - OTE S - JSAM MBU-5 (RW) Operational Testing	MIPR	Various:	0.000	0.000		3.313	Jan 2013	3.685	Jan 2014	-		3.685	Continuing	Continuing	0.000
** JSGPM - DTE SB - JSGPM Filter Testing	MIPR	Various:	2.370	0.000		0.625	Feb 2013	0.000		-		0.000	Continuing	Continuing	0.000
** UIPE - DTE S - Prototype Garment - Integrated DT/OT	MIPR	Various:	0.000	1.703	Mar 2012	0.653	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
OTHT S - Test and Evaluation IPT Support	MIPR	Various:	0.000	0.460	Dec 2011	0.370	Dec 2012	0.000		-		0.000	Continuing	Continuing	0.000
		Subtotal	21.590	3.759		6.363		13.494		0.000		13.494			0.589

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSAM - PM/MS SB - Program Management Support	MIPR	Various:	16.063	4.480	Dec 2011	0.000		0.000		-		0.000	Continuing	Continuing	5.421
** JSAM FW - PM/MS C - JSAM FW Program Management Support	MIPR	Various:	0.000	0.000		0.741	Mar 2013	3.600	Dec 2014	-		3.600	Continuing	Continuing	0.000

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (EMD)*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PM/MS C - JSAM-JSF Program Management Support	SS/FFP	Various:	0.000	0.000		0.299	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** JSAM RW - PM/MS SB - JSAM MBU-5 (RW) Program Management Support	MIPR	Various:	0.000	0.000		0.979	Jan 2013	1.571	Dec 2013	-		1.571	Continuing	Continuing	0.000
** JSGPM - PM/MS C - Program Management	MIPR	Various:	0.400	0.000		0.400	Feb 2013	0.405	May 2014	-		0.405	Continuing	Continuing	0.000
PM/MS C - ARPI	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.100	Feb 2013	0.000		-		0.000	Continuing	Continuing	0.000
** UIPE - PM/MS C - Program Management, Technical and IPT Support.	C/FFP	Various:	0.000	1.352	Mar 2012	0.773	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
		Subtotal	16.463	5.832		3.292		5.576		0.000		5.576			5.421

	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	60.826	13.325		15.971		26.296		0.000		26.296			13.219

Remarks

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (EMD)*

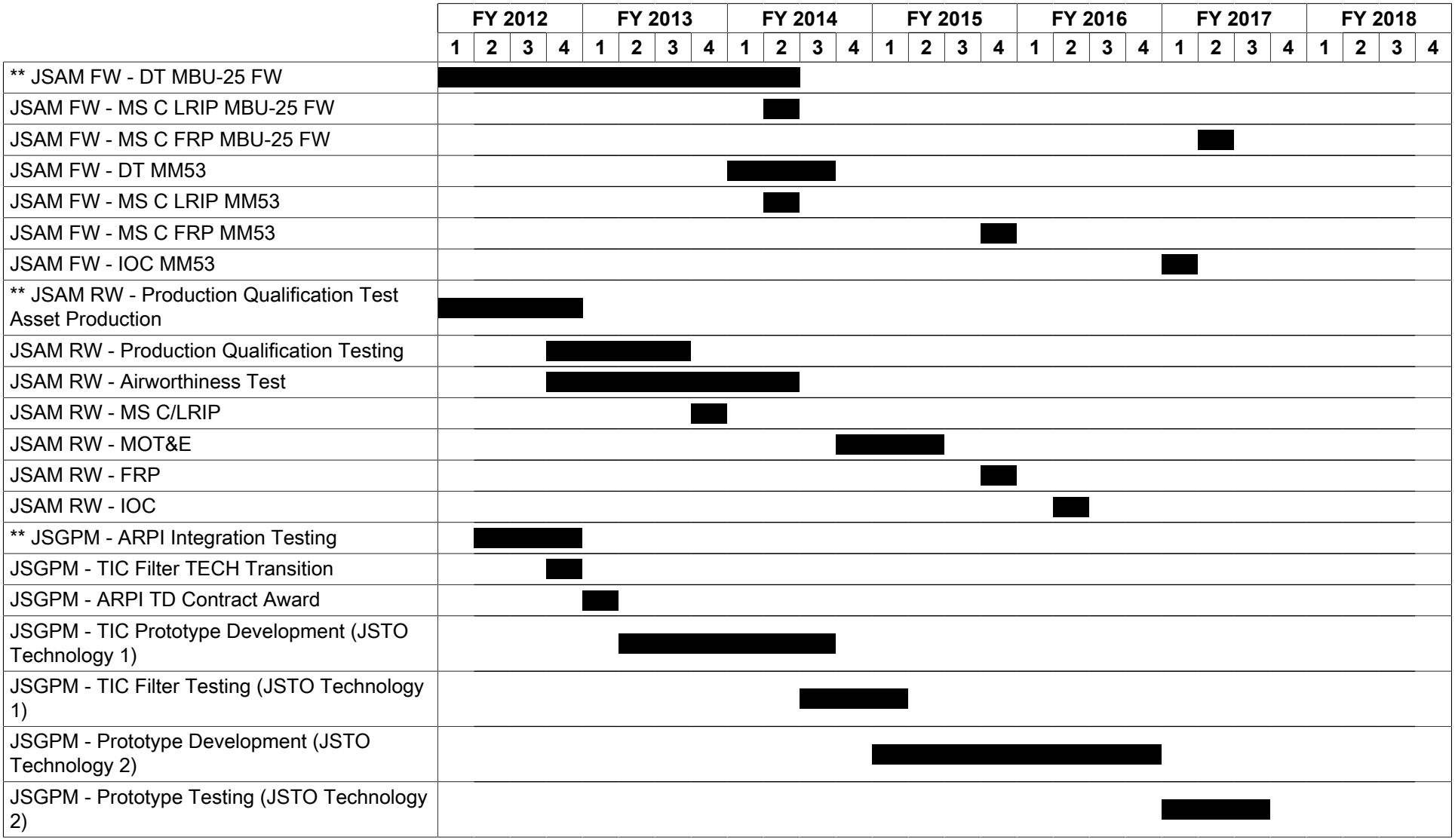

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (EMD)*

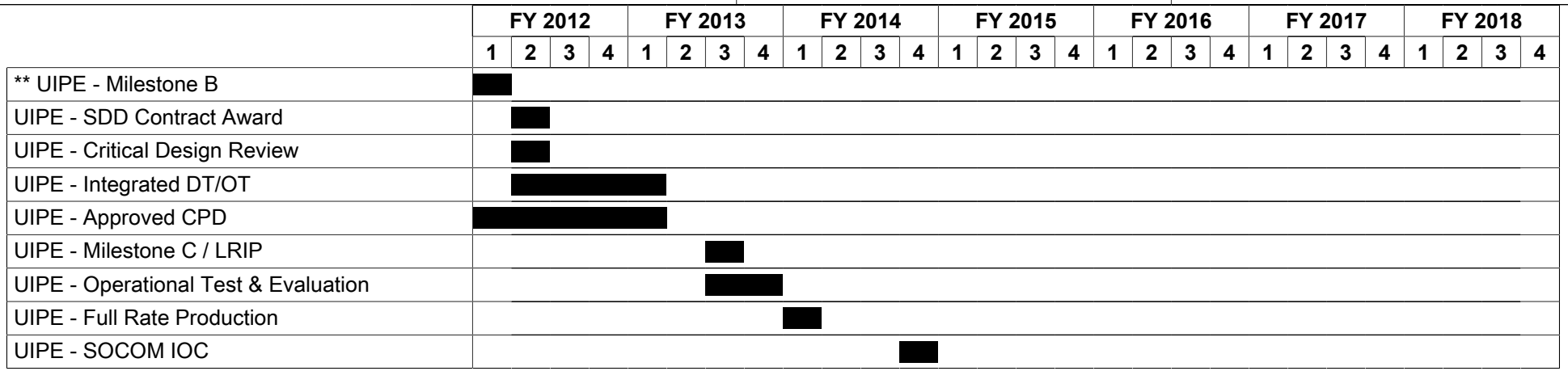

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	**PROJECT** IP5: *INDIVIDUAL PROTECTION (EMD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** JSAM FW - DT MBU-25 FW	1	2012	2	2014
JSAM FW - MS C LRIP MBU-25 FW	2	2014	2	2014
JSAM FW - MS C FRP MBU-25 FW	2	2017	2	2017
JSAM FW - DT MM53	1	2014	3	2014
JSAM FW - MS C LRIP MM53	2	2014	2	2014
JSAM FW - MS C FRP MM53	4	2015	4	2015
JSAM FW - IOC MM53	1	2017	1	2017
** JSAM RW - Production Qualification Test Asset Production	1	2012	4	2012
JSAM RW - Production Qualification Testing	4	2012	3	2013
JSAM RW - Airworthiness Test	4	2012	2	2014
JSAM RW - MS C/LRIP	4	2013	4	2013
JSAM RW - MOT&E	4	2014	2	2015
JSAM RW - FRP	4	2015	4	2015
JSAM RW - IOC	2	2016	2	2016
** 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
** UIPE - Milestone B	1	2012	1	2012

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (EMD)*

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
UIPE - SDD Contract Award	2	2012	2	2012
UIPE - Critical Design Review	2	2012	2	2012
UIPE - Integrated DT/OT	2	2012	1	2013
UIPE - Approved CPD	1	2012	1	2013
UIPE - Milestone C / LRIP	3	2013	3	2013
UIPE - Operational Test & Evaluation	3	2013	4	2013
UIPE - Full Rate Production	1	2014	1	2014
UIPE - SOCOM IOC	4	2014	4	2014

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT IS5: *INFORMATION SYSTEMS (EMD)*	

COST ($ in Millions)	All Prior Years	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
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 System Development and Demonstration and Low Rate Initial Production (SDD/LRIP).

Efforts included in this project are: (1) Joint Effects Model (JEM) Increment 2 and (2) 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.

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&S) average annual per unit costs are not applicable.

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&A) and Data Management;

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interoperable and integrated net-centric, Service-oriented, composable solutions for CBD; and infusion of latest technologies into programs of record. The CBRN user community and related communities of interest have the need for a 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.

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: 1) JEM Increment 2 Developmental Test and Evaluation ***FY 2014 Plans:*** Perform Government assessment of competitive prototypes to assist in contracting technical assessment and downselect decision. Perform Government Development Test of JEM Increment 2 capabilities to support Operational Test and Milestone C (MS C) decision.	0.000	0.000	0.547
Title: 2) JEM Increment 2 Program Development ***FY 2014 Plans:*** Award competitive prototyping down-select option and develop JEM Increment 2 software baseline.	0.000	0.000	6.012
Title: 3) JEM Increment 2 Program Management ***FY 2013 Plans:*** Perform program/financial management, costing, contracting, scheduling and acquisition oversight support for JEM Increment 2. Perform competitive prototyping contract down-select decision and award. ***FY 2014 Plans:*** Perform program/financial management, costing, contracting, scheduling and acquisition oversight support for JEM Increment 2. Complete execution of Milestone B (MS B) for JEM Increment 2.	0.000	0.152	0.721
Title: 4) SSA Policies, Standards and Guidelines ***FY 2012 Accomplishments:*** Continued updates to acquisition documentation for CBRN IT systems based on changes in policy, procedures, and guidelines. Continued surveillance of Federal Information Security Management Act (FISMA) and DoD Acquisition policies necessary to maintain certification on deployed service platforms. Provided M&S strategic and accreditation support. ***FY 2013 Plans:***	0.244	0.198	0.208

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Update acquisition documentation for CBRN IT systems based on changes in policy, procedures, and guidelines. Continue surveillance of Federal Information Security Management Act (FISMA) and DoD Acquisition policies necessary to maintain certification on deployed service platforms. Provide M&S strategic and accreditation support. ***FY 2014 Plans:*** Continue updates to acquisition documentation for CBRN IT systems based on changes in policy, procedures, and guidelines. Continue surveillance of Federal Information Security Management Act (FISMA) and DoD Acquisition policies necessary to maintain certification on deployed service platforms. Provide M&S strategic and accreditation support.			
Title: 5) SSA Integrated Architecture ***FY 2012 Accomplishments:*** Continued required modifications to the Integrated Architecture for JPEO-CBD Enterprise on host platforms. Continued efforts to document CB Information Systems infrastructure and technical standards. Continued to provide Net-Centric Assessment for programs. Reviewed and updated the Common CBRN Interface standards on operational systems, including a CCSI. Developed new interfaces as required. ***FY 2013 Plans:*** Continue required modifications to the Integrated Architecture for JPEO-CBD Enterprise on host platforms and document the infrastructure and technical standards. Conduct Net-Centric Assessments for programs. Review and update the Common CBRN Interface standards on operational systems, including a Common CBRN Sensor Interface (CCSI). ***FY 2014 Plans:*** Continue required modifications to the Integrated Architecture for JPEO-CBD Enterprise on host platforms and document the infrastructure and technical standards. Conduct Net-Centric Assessments for programs. Review and update the Common CBRN Interface standards on operational systems, including a CCSI.	0.808	0.239	0.251
Title: 6) SSA Enterprise Support and Services ***FY 2012 Accomplishments:*** Continued to provide support processes and services for Architectures, Data, Information Assurance, Modeling and Simulation, Science and Technology, and Standards and Policy. Modified support processes and services necessary to maintain relevancy in accordance with DoD standards, policies, and guidelines. ***FY 2013 Plans:*** Support processes and services for Architectures, Data, Information Assurance, Modeling and Simulation, Science and Technology, and Standards and Policy. ***FY 2014 Plans:***	1.371	0.156	0.163

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Continue to provide support processes and services for Architectures, Data, Information Assurance, Modeling and Simulation, Science and Technology, and Standards and Policy. Modify support processes and services necessary to maintain relevancy in accordance with DoD standards, policies, and guidelines.			
Title: 7) SSA Chemical, Biological, Radiological, Nuclear (CBRN) Data Model ***FY 2012 Accomplishments:*** Continued to provide CBRN Data Model development for Community of Interest. ***FY 2013 Plans:*** Refine CBRN Data Model to maintain relevancy for Community of Interest. ***FY 2014 Plans:*** Refine CBRN Data Model to maintain relevancy for Community of Interest.	0.753	0.174	0.183
Title: 8) SSA Information Assurance ***FY 2012 Accomplishments:*** Continued situational awareness and initiated actions to improve or restore IA posture to keep systems certified in accordance with DoD standards for JPEO-CBD information system programs. ***FY 2013 Plans:*** Maintain situational awareness and initiate actions to improve or restore IA posture to keep systems certified in accordance with DoD standards for JPEO-CBD information system programs. ***FY 2014 Plans:*** Maintain situational awareness and initiate actions to improve or restore IA posture to keep systems certified in accordance with DoD standards for JPEO-CBD information system programs.	0.601	0.449	0.471
Title: 9) SSA Policy and Standards Repository ***FY 2012 Accomplishments:*** Updated the repository for applicable Enterprise policies, standards, and guidelines. ***FY 2013 Plans:*** Maintain the repository for applicable Enterprise policies, standards, and guidelines. ***FY 2014 Plans:*** Maintain the repository for applicable Enterprise policies, standards, and guidelines.	0.359	0.349	0.366
Title: 10) SSA Technology Transition Support	0.563	0.328	0.345

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Continued to provide Technology Transition support services (common components and services) for CBD programs. ***FY 2013 Plans:*** Provide Technology Transition support services (common components and services) for CBD programs. ***FY 2014 Plans:*** Provide Technology Transition support services (common components and services) for CBD programs.			
Accomplishments/Planned Programs Subtotals	4.699	2.045	9.267

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
• JS5230: *SOFTWARE SUPPORT ACTIVITY (SSA)*	0.000	0.000	0.100		0.100	0.100	0.100	0.100	0.100	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.

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,

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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).

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JEM - SW SB - JEM Increment 2 - Hazard Prediction Model Development and Integration	C/CPAF	TBD:	0.000	0.000		0.000		6.012	Mar 2014	-		6.012	Continuing	Continuing	0.000
** SSA - HW S - Product Development	C/FFP	Various:	2.719	1.349	Mar 2012	0.799	Mar 2013	0.839	Mar 2014	-		0.839	Continuing	Continuing	0.000
		Subtotal	2.719	1.349		0.799		6.851		0.000		6.851			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** SSA - ES S - Support Costs	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	3.678	2.560	Mar 2012	0.486	Mar 2013	0.497	Mar 2014	-		0.497	Continuing	Continuing	0.000
		Subtotal	3.678	2.560		0.486		0.497		0.000		0.497			0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JEM - DTE SB - JEM Increment 2 - Hazard Prediction Model Development Test	MIPR	Various:	6.813	0.000		0.000		0.547	Mar 2014	-		0.547	Continuing	Continuing	0.000
** SSA - DTE S - Test and Evaluation	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	1.528	0.321	Mar 2012	0.423	Mar 2013	0.446	Mar 2014	-		0.446	Continuing	Continuing	0.000
		Subtotal	8.341	0.321		0.423		0.993		0.000		0.993			0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JEM - PM/MS S - Program Office - Planning and Programming	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	4.922	0.000		0.152	Mar 2013	0.721	Mar 2014	-		0.721	Continuing	Continuing	0.000
** SSA - PM/MS S - Management Services	MIPR	Space and Naval Warfare (SPAWAR) Systems Center:San Diego, CA	1.591	0.469	Mar 2012	0.185	Mar 2013	0.205	Mar 2014	-		0.205	Continuing	Continuing	0.000
		Subtotal	6.513	0.469		0.337		0.926		0.000		0.926			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	21.251	4.699		2.045		9.267		0.000		9.267			0.000

Remarks

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT IS5: *INFORMATION SYSTEMS (EMD)*

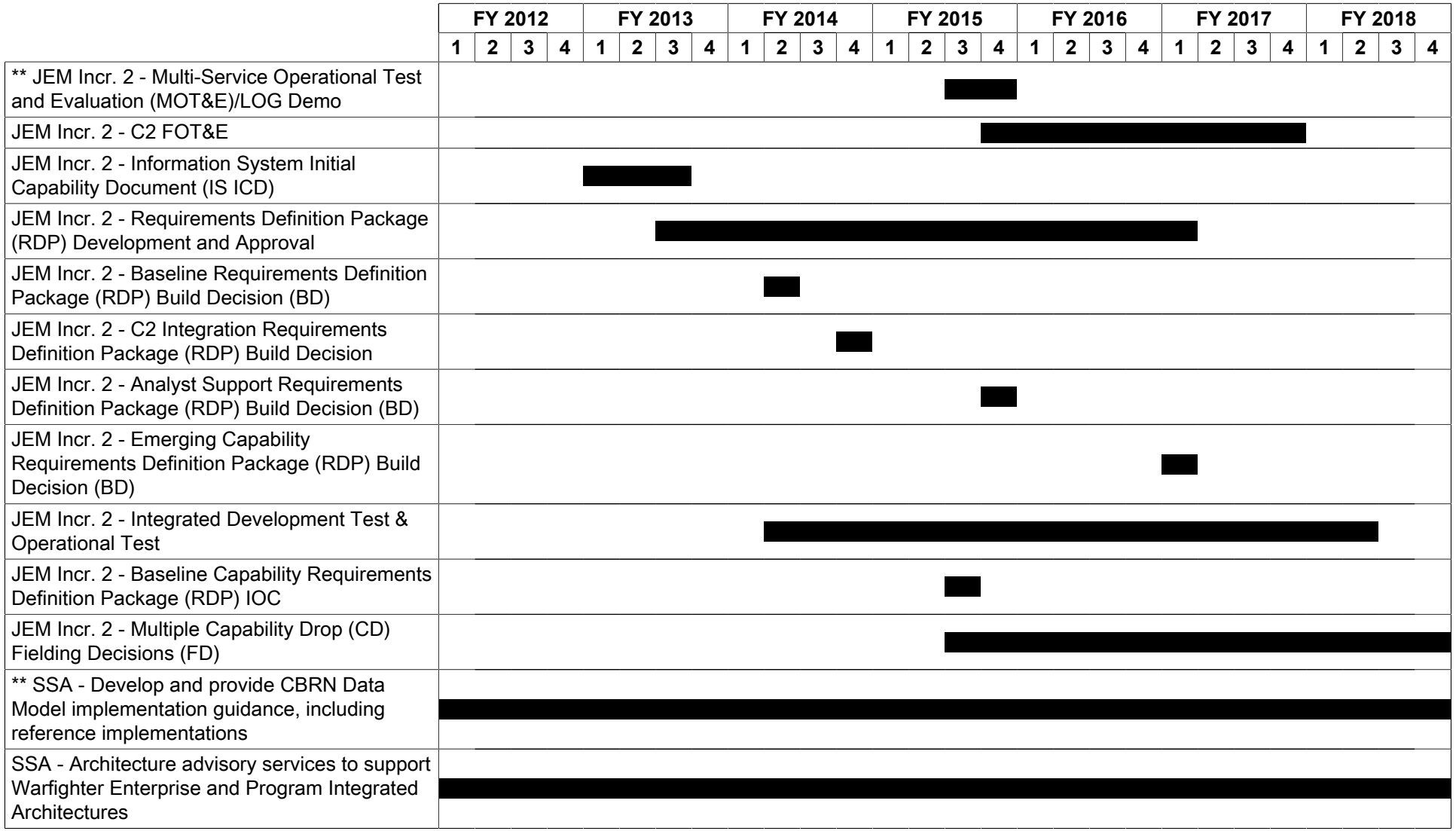

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT IS5: *INFORMATION SYSTEMS (EMD)*

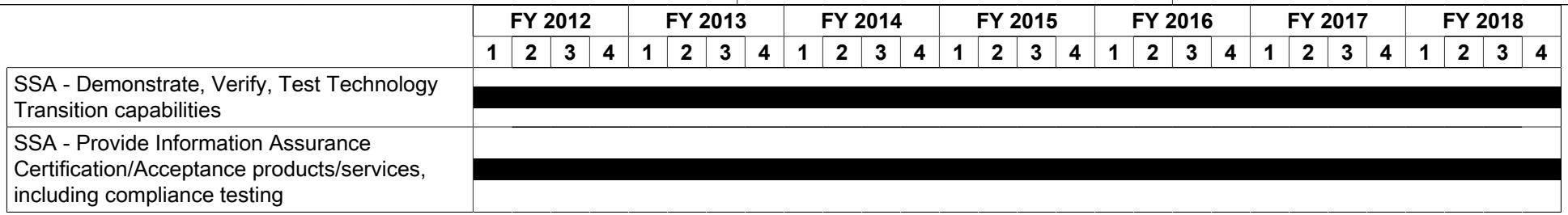

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT IS5: *INFORMATION SYSTEMS (EMD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** JEM Incr. 2 - Multi-Service Operational Test and Evaluation (MOT&E)/LOG Demo	3	2015	4	2015
JEM Incr. 2 - C2 FOT&E	4	2015	4	2017
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 - 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 - Emerging Capability Requirements Definition Package (RDP) Build Decision (BD)	1	2017	1	2017
JEM Incr. 2 - Integrated Development Test & Operational Test	2	2014	2	2018
JEM Incr. 2 - Baseline Capability Requirements Definition Package (RDP) IOC	3	2015	3	2015
JEM Incr. 2 - Multiple Capability Drop (CD) Fielding Decisions (FD)	3	2015	4	2018
** SSA - Develop and provide CBRN Data Model implementation guidance, including reference implementations	1	2012	4	2018
SSA - Architecture advisory services to support Warfighter Enterprise and Program Integrated Architectures	1	2012	4	2018
SSA - Demonstrate, Verify, Test Technology Transition capabilities	1	2012	4	2018
SSA - Provide Information Assurance Certification/Acceptance products/services, including compliance testing	1	2012	4	2018

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program				DATE: April 2013
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COST ($ in Millions)	All Prior Years	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
MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*	-	197.907	212.056	263.443	-	263.443	228.199	183.390	151.455	184.222	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

This project funds the development of reagents, assays, and diagnostic equipment for biological warfare agents (BWA) defense and expands chemical and biological detection capabilities. Its primary mission is enhancing CBRN information sharing across the Department of Defense's (DoD) medical surveillance, public health, and chemical/biological defense communities to enhance chemical and biological medical health situational awareness and coordinate integrated CBRN system solutions.

The Medical Countermeasure (MCM) Advanced Development and Manufacturing (ADM) capability (formerly the MCMI program) provides core and drug development services to include the establishment, commissioning, validation, and attainment of Current Good Manufacturing Practice (cGMP)/Current Good Laboratory Practice (cGLP) for a MCM ADM capability for the Department of Defense (DoD). Future funding will be used to maintain the facility in a state of readiness to support MCM product development, FDA licensure and manufacture of MCMs.

The ADM effort is being executed in two phases. Phase I is for the establishment, commissioning, and validation of the MCM capability. This project funds the establishment of a facility(ies) to be located in the United States and its territories. Two ADM suites, at Bio Surety Level (BSL) 3 will be established during the base contract period, with options to incrementally increase capacity. In Phase II, the contractor team will support and maintain that capability in a state of readiness to support MCM development (under the 'Animal Rule' as applicable) and manufacturing and assist in training personnel in its use. This includes transition and integration of new technologies, from pre-Investigational New Drug Application phase with readiness to support simultaneous operations, through FDA licensure.

Two major medical programs critical to accomplishing the Biosurveillance mission are supported under this project in order to streamline collaboration and integration efforts, maintain continuity and efficiency, and to minimize duplication of efforts. Specifically, these efforts include but are not limited to the Critical Reagents Program (CRP), and Next Generation Diagnostic System (NGDS), These efforts address the President's priority of developing a robust portfolio of cross-cutting resources and materiel solutions that support the National Security Strategy, National Military Strategy to Combat Weapons of Mass Destruction, the National Strategy for Countering Biological Threats, and the needs of the Warfighter.

The Critical Reagents Program's (CRP) strategy establishes a core research and development capability by developing biological threat agent reference materials (strains, antigens, antibodies and nucleic acids) and detection/diagnostic assays for biothreat agent detection. These reagents/assays are leveraged across multiple programs to meet the requirements of the Warfighter and Joint biological defense systems and support the biological defense community. After FY14, CRP funding is combined with NGDS to form a medical diagnostic portfolio.

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BSV will support the Joint USFK Portal and Integrated Threat Recognition (JUPITR) 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 laboratory to operational use. Depending on the maturity, outputs will focus on providing component, CONOPS, and subsystem transition into programs of record (PORs) and/or integration into existing PORs. Technologies identified from the JUPITR ATD will be fielded in FY14 to Pacific Command (PACOM). Future ATD developments will continue to bridge communication gaps between US Forces across other Combatant Command (COCOMs).

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.

The Emerging Infectious Disease - Influenza (EID-Flu) Medical Countermeasure Acquisition program will develop and deliver a U.S. Food and Drug Administration (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 viruses as well. Completion of activities required for FDA approval for an influenza treatment, expected in fiscal year 2016, is the focus of the SDD Phase.

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 via the FDA 'Animal Rule', which allows for the demonstration of efficacy in relevant animal model(s) when human testing is not ethically feasible. The HFV program 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 activities required for FDA approval for Filovirus therapeutics, expected in fiscal year 2018, is the focus of the SDD Phase.

The DoD funds the development of vaccines that are directed against validated biological warfare (BW) weapons to include bacteria, viruses, and toxins of biological origin. Effective medical countermeasures to negate the threat of these BW agents are urgently needed. Vaccines have been identified as the most efficient countermeasure against the validated threat of BW weapons. Products under development in this budget item include Recombinant Botulinum A/B and Plague vaccines. Efforts to be conducted during the system Development and Demonstration (SDD) Phase include the development of large scale manufacturing process

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and validation of that process, nonclinical studies, demonstration of manufacturing consistency, and expanded clinical human safety studies. The results of these efforts, and those conducted during the EMD phase, will be used to submit a Biologic License Application (BLA) to the Food and Drug Administration (FDA) for product licensure. To evaluate vaccine effectiveness, pivotal animal studies will be conducted concurrently with the Phase 3 clinical trial to satisfy the requirements of the FDA's "Animal Rule". 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). Upon FDA licensure, the product will transition to full-scale licensed production.

The DoD also has the mission to maintain IND vaccines in Good Manufacturing Practice (GMP) storage and to conduct the periodic potency and sterility testing of these materials to support submissions to the FDA. These IND vaccines will be used to provide additional levels of protection to laboratory workers in the Special Immunizations Program (SIP) conducting research on these diseases.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: 1) ADM - Integrated Master Plan	13.801	0.000	0.000
FY 2012 Accomplishments: The engineering contractor (engineering and architectural design and studies) completed and delivered for Government review and acceptance an integrated master plan (IMP) and a detailed manufacturing capability plan.			
Title: 2) ADM - Manufacturing Suites	34.797	0.000	10.077
FY 2012 Accomplishments: Began the establishment of two modular manufacturing suites to biosurety level three (3) standards.			
FY 2014 Plans: Finalize the establishment of two modular manufacturing suites to biosurety level three (3) standards. Conduct verification and validation of the manufacturing suites to include facility equipment.			
Title: 3) ADM - Equipment and Installation.	34.786	23.702	6.000
FY 2012 Accomplishments: Procured, installed, and tested ADM equipment to include single use bioreactors.			
FY 2013 Plans: Continue the procurement, installation and test of equipment.			
FY 2014 Plans: Continue the procurement, installation and test of equipment.			
Title: 4) ADM - Staffing	2.048	2.478	2.500
FY 2012 Accomplishments:			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Provided initial staffing of the ADM facility by contractor personnel. ***FY 2013 Plans:*** Continue ramp of ADM staffing with Contractor personnel. ***FY 2014 Plans:*** Continue ADM staffing with Contractor personnel. Contractor personnel will have core competencies to manage the ADM capability in a state of readiness.			
Title: 5) ADM - Facility Utilities ***FY 2012 Accomplishments:*** Provided ADM facility utilities to include electricity, steam, water, water for injection (WFI) and heating, ventilation and air conditioning. ***FY 2013 Plans:*** Provide for facilities support (utilities, waste disposal). ***FY 2014 Plans:*** Provide for facilities support (utilities, waste disposal).	4.463	5.048	1.413
Title: 6) ADM - Equipment Test and Commissioning ***FY 2013 Plans:*** Conduct equipment test and commissioning. Prepare for independent validation and attainment of Food and Drug (FDA) Current Good Manufacturing Practice (cGMP) and Current Good Laboratory Practice (cGLP) certification. Validation processes include Design Qualification, Installation Qualification, Operational Qualification, Performance Qualification. Contractor complete and deliver for Government Review and Acceptance a Facility Operation Feasibility Plan.	0.000	10.210	0.000
Title: 7) ADM - Program Management ***FY 2012 Accomplishments:*** Provided strategic planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2014 Plans:*** Provided strategic planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.	9.411	0.000	6.618
Title: 8) ADM - BSL4 GLP T&E ***FY 2012 Accomplishments:***	0.962	0.000	0.000

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Initiated a Bio-Safety Level BSL4 Good Laboratory Practice (GLP) Test and Evaluation (T&E) capability to develop medical countermeasures in a safe environment. The BSL4 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 BSL4 containment.			
Title: 9) BSV ***FY 2014 Plans:*** Initiate test efforts and logistics support for the Advanced Technology Demonstration (ATD).	0.000	0.000	5.000
Title: 10) CRP ***FY 2012 Accomplishments:*** Continued development/expansion of biological select agents reference materials to known and emerging threats. ***FY 2013 Plans:*** Continue development/expansion of biological select agents reference materials to known and emerging threats.	1.960	2.117	0.000
Title: 11) CRP ***FY 2012 Accomplishments:*** Continued development of immunoassays and nucleic acid based genomic assays to support fielded and developmental systems. ***FY 2013 Plans:*** Continue development of immunoassays and nucleic acid based genomic assays to support fielded and developmental systems.	1.170	1.200	0.000
Title: 12) CRP ***FY 2012 Accomplishments:*** Continued QA/QC testing to encompass the transition and fielding of biological detection assays. ***FY 2013 Plans:*** Continue QA/QC testing to encompass the transition and fielding of biological detection assays.	0.670	0.680	0.000
Title: 13) CRP ***FY 2012 Accomplishments:*** Continued to maintain International Standards Organization (ISO) 9001; 17025 and Guide 34 certifications. ***FY 2013 Plans:*** Continue to maintain ISO 9001; 17025 and Guide 34 certifications.	0.870	0.900	0.000
Title: 14) CRP	1.311	0.000	0.000

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Continued development and integration of medical surveillance enhancement tools that facilitate surveillance and sensor/detector/ diagnostic information exchange.			
Title: 15) CRP ***FY 2012 Accomplishments:*** Continued surveillance assessments that identify public health threats and capabilities in countries where US forces are present and deploy threat assessment tools.	2.987	0.000	0.000
Title: 16) CRP ***FY 2013 Plans:*** Development of strain dossier and comprehensive microbial resource application for strains contained in Unified Culture Collection.	0.000	0.500	0.000
Title: 17) EID-Flu ***FY 2013 Plans:*** Initiate Phase 3 clinical trials as required by the FDA. Each Phase 3 clinical trial requires the enrollment of at least 1500 patients and is conducted globally to capture both Northern and Southern Hemisphere flu seasons. ***FY 2014 Plans:*** Continue the global Phase 3 clinical trials.	0.000	32.912	69.847
Title: 18) HFV ***FY 2013 Plans:*** Continue the development of platform-based MCMs against HFV threats Ebola Zaire or Marburg Viruses. Initiate scale up of manufacturing to meet commercial scale. Prepare for pivotal animal efficacy studies to support licensure of the MCM under the FDA 'Animal Rule'. Complete FDA qualification of the non-human primate model for aerosolized Ebola Zaire required to support the pivotal animal efficacy studies. Initiate the submission of a pre-Emergency Use Authorization (EUA) package to the FDA to enable the Government to expedite the review and approval process of granting a EUA in the event of a naturally occurring emergency or a Bio-terrorist event. ***FY 2014 Plans:*** Continue activities to scale up manufacturing of the HFV platform-based MCMs to meet commercial scale and initiate the production of pilot manufacturing lots to support FDA licensure. This will also serve as a capability to respond under a EUA, if needed. Initiate pivotal animal efficacy studies via the parenteral route of challenge under Good Laboratory Practices (GLP)	0.000	16.402	42.478

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
conditions in a Bio Safety Level (BSL) 4. Initiate preparatory activities to support pilot aerosol efficacy studies in a BSL 4, under GLP conditions. Complete FDA qualification of the non-human primate model for aerosolized Marburg required to support the pivotal animal efficacy studies.			
Title: 19) NGDS Increment 1 ***FY 2013 Plans:*** Complete other test agency support activities for Increment 1.	0.000	3.296	0.000
Title: 20) NGDS Increment 1 ***FY 2013 Plans:*** Initiate clinical trials for 510(k) submission to FDA for cleared assays on Increment 1 platform. Initiate connectivity assessment on selected platform.	0.000	6.531	0.000
Title: 21) NGDS - CRP ***FY 2014 Plans:*** Continue development/expansion/scale-up of biological select agents reference materials to known and emerging threats.	0.000	0.000	2.960
Title: 22) NGDS - CRP ***FY 2014 Plans:*** Continue development of immunoassays and nucleic acid based genomic assays to support fielded and developmental systems.	0.000	0.000	2.170
Title: 23) NGDS - CRP ***FY 2014 Plans:*** Continue development of prototypes/information for strains contained in Unified Culture Collection.	0.000	0.000	1.525
Title: 24) NGDS - CRP ***FY 2014 Plans:*** Continue QA/QC testing to encompass the transition and fielding of biological detection assays.	0.000	0.000	1.111
Title: 25) NGDS - CRP ***FY 2014 Plans:*** Continue to maintain ISO certification.	0.000	0.000	0.870
Title: 26) VAC BOT - Recombinant Botulinum Vaccine ***FY 2012 Accomplishments:***	24.864	9.305	0.917

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Completed manufacturing large scale process validation for serotypes A and B. Initiated manufacturing of consistency lots for serotypes A and B. ***FY 2013 Plans:*** Complete manufacturing of consistency lots for serotypes A and B. ***FY 2014 Plans:*** Conduct storage and stability testing of consistency lot material.			
Title: 27) VAC BOT - Recombinant Botulinum Vaccine ***FY 2012 Accomplishments:*** Continued non-clinical testing. Initiated reproductive toxicity testing and pivotal efficacy testing. Continued requirement for safeguarding biological select agents and toxins. ***FY 2013 Plans:*** Continue non-clinical reproductive toxicity testing and pivotal efficacy testing. Continue requirements for safeguarding biological select agents and toxins, and Milestone C. ***FY 2014 Plans:*** Continue non-clinical reproductive toxicity testing and pivotal efficacy testing. Continue requirements for safeguarding biological select agents and toxins.	7.638	17.904	21.900
Title: 28) VAC BOT - Recombinant Botulinum Vaccine ***FY 2012 Accomplishments:*** Completed Phase 2 clinical trial. ***FY 2013 Plans:*** Initiate Phase 3 clinical trial including planning to evaluate expanded safety in thousands of volunteers. ***FY 2014 Plans:*** Continue Phase 3 clinical trial.	1.573	30.500	32.100
Title: 29) VAC PLG ***FY 2012 Accomplishments:*** Continued non-clinical studies, to include additional FDA required passive transfer studies. Continued requirement for safeguarding biological select agents and toxins. Initiated reproductive toxicity testing. ***FY 2013 Plans:***	9.414	9.196	10.125

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Continue non clinical studies, to include additional FDA required passive transfer studies. Continue requirement for safeguarding biological select agents and toxins. Initiate pivotal animal efficacy studies. Continue reproductive toxicity testing. ***FY 2014 Plans:*** Complete non clinical studies, to include additional FDA required passive transfer studies. Continue requirement for safeguarding biological select agents and toxins. Continue pivotal animal efficacy studies. Complete reproductive toxicity testing.			
Title: 30) VAC PLG ***FY 2012 Accomplishments:*** Continued Phase 2b clinical trial. ***FY 2013 Plans:*** Complete Phase 2b clinical trial. Initiate additional FDA required passive transfer studies. ***FY 2014 Plans:*** Initiate Phase 3 clinical trial to evaluate expanded safety and efficacy in thousands of volunteers. Initiate pivotal animal efficacy studies. Complete additional FDA required passive transfer studies.	17.548	29.969	35.901
Title: 31) VAC PLG ***FY 2012 Accomplishments:*** Completed large scale manufacturing process validation, assay validation, and cleaning validation. Initiated consistency lot production and testing. ***FY 2013 Plans:*** Continue consistency lot production and testing. ***FY 2014 Plans:*** Complete consistency lot production and testing. Conduct Milestone C decision review.	18.630	1.362	1.450
Title: 32) VAC PLG ***FY 2012 Accomplishments:*** Provided strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight, and technical support. ***FY 2013 Plans:***	6.730	5.449	6.012

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Continue to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight, and technical support. ***FY 2014 Plans:*** Continue to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight, and technical support.			
Title: 33) VAC SIP ***FY 2012 Accomplishments:*** Conducted storage, distribution, potency testing, and biosurety compliance activities in support of the Special Immunization Program. ***FY 2013 Plans:*** Continue conducting storage, distribution, potency testing, and biosurety compliance activities in support of the Special Immunization Program. ***FY 2014 Plans:*** Continue conducting storage, distribution, potency testing, and biosurety compliance activities in support of the Special Immunization Program.	2.274	2.395	2.469
Accomplishments/Planned Programs Subtotals	197.907	212.056	263.443

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
• MB7: *MEDICAL BIOLOGICAL DEFENSE (OP SYS DEV)*	5.371	0.498	0.499		0.499	13.414	14.551	9.816	3.277	Continuing	Continuing
• JM8788: *NEXT GENERATION DIAGNOSTICS SYSTEM (NGDS)*	2.380	26.934	3.311		3.311	10.682	10.391	5.154	4.080	0.000	62.932
• JX0005: *DOD BIOLOGICAL VACCINE PROCUREMENT*	0.180	0.185	0.185		0.185	6.991	25.058	41.716	39.410	Continuing	Continuing
• JX0210: *CRITICAL REAGENTS PROGRAM (CRP)*	0.998	1.012	0.000		0.000	0.000	0.000	0.000	0.000	0.000	2.010

Remarks

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D. Acquisition Strategy

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 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&E, F&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 .

BSV

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.

CRP

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

EID FLU

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.

HFV

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&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.

NGDS

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.

VAC BOT

A prime system contractor will function as the FDA regulatory sponsor and will perform all ancillary, regulatory, quality assurance, and data management as required by the FDA. The current budget supports development through FDA licensure of a recombinant bivalent (A and B) botulinum vaccine. Other serotypes will be developed through an evolutionary approach, as funding becomes available. The Advanced Component Development and Prototypes (ACD&P) phase included the manufacture of candidate current Good Manufacturing Practices (cGMP) lots, animal safety testing, and initial clinical trials. During this phase, the vaccine was evaluated for safety and immunogenicity in a small human clinical trial (Phase 1). During the System Development and Demonstration (SDD) phase, the prime contractor stabilized the vaccine formulation, validated the manufacturing process and testing protocols, optimized the delivery systems and manufactured consistency lots. Phase 2 clinical trials were performed and provided additional safety data. The remaining efforts to be conducted during the SDD phase include the Phase 3 clinical trial to demonstrate safety in an expanded volunteer population and evaluation of efficacy in pivotal animal studies to satisfy FDA requirements for the Animal Rule . The Low rate Initial Production (LRIP) decision will be conducted after the manufacturing process has been validated and consistency lots have been produced. A Biologics License Application is submitted to the FDA will all clinical, nonclinical, and manufacturing data. The FDA grants licensure to products that are determined to be safe and efficacious.

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*

VAC PLG

The Advanced Component Development and Prototypes (ACD&P) phase included the manufacture of candidate current Good Manufacturing Practices (cGMP) lots, animal safety testing, and initial clinical trials. During this phase, the vaccine was evaluated for safety and immunogenicity in a small human clinical trial (Phase 1). In order to reduce technical program risk in the Plague vaccine program, the program office conducted competitive prototyping, US vaccine candidate and a United Kingdom vaccine candidate. During the 2008 Resource Allocation Decision, the US Plague Vaccine candidate was selected for development through licensure under a Prime System Contract. The Prime System Contractor will function as the FDA regulatory sponsor and will perform all ancillary, regulatory, quality assurance, and data management as required by the FDA. A Project Arrangement is in place with the United Kingdom and Canada. During the System Development and Demonstration (SDD) phase, the prime contractor stabilized the vaccine formulation, validated the manufacturing process and testing protocols, optimized the delivery systems and manufactured consistency lots. Phase 2 clinical trials were performed and provided additional safety data. The remaining efforts to be conducted during the SDD phase include the Phase 3 clinical trial to demonstrate safety in an expanded volunteer population and evaluation of efficacy in pivotal animal studies to satisfy FDA requirements for the Animal Rule . The Low rate Initial Production (LRIP) decision will be conducted after the manufacturing process has been validated and consistency lots have been produced. A Biologics License Application is submitted to the FDA will all clinical, nonclinical, and manufacturing data. The FDA grants licensure to products that are determined to be safe and efficacious.

VAC SIP

The SIP effort is to store IND vaccines used to potentially provide additional protection to laboratory workers performing research on the infectious agents for Tularemia, Eastern Equine Encephalitis (EEE), Western Equine Encephalitis (WEE), Venezuelan Equine Encephalitis (VEE), and Q-Fever. Efforts include Good Manufacturing Practices (GMP) storage and periodic potency testing to support the FDA regulated Investigational New Drug (IND) reporting requirements. This Department of Defense program supports the Federal interagency with this effort, as well as academic and industry partners.

E. Performance Metrics

N/A

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** ADM - HW S - Initiate ADM capability	C/CPFF	TBD:	0.000	34.797	Mar 2013	0.000		10.077	Mar 2014	-		10.077	Continuing	Continuing	0.000
HW SB - Procure, Install and Test Equipment	C/CPFF	TBD:	0.000	34.786	Mar 2013	0.000		6.000	Mar 2014	-		6.000	Continuing	Continuing	0.000
HW S - Establish and Commission, Procure Equipment, Engineering, Establish BSL-3	C/CPFF	TBD:	0.000	0.000		23.702	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** BSV - SW SB - BSV Portal SW Testing and Integration	PO	Various:	0.000	0.000		0.000		0.650	Mar 2014	-		0.650	Continuing	Continuing	0.000
HW SB - BICS HW Component Testing and Integration	PO	Various:	0.000	0.000		0.000		0.500	Mar 2014	-		0.500	Continuing	Continuing	0.000
** CRP - HW C - Scale-up of Select Biological Threat Agent Reference Materials	MIPR	Various:	6.652	1.996	Mar 2012	1.815	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW C - Development of Select Biological Threat Agent Reference Materials and Assays	MIPR	Various:	1.063	0.760	Mar 2012	1.047	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW C - Surveillance concept assessments Support	SS/FFP	Various:	0.000	2.963	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW C - Tool enhancement/sensor information exchange	MIPR	Various:	0.000	0.258	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** EID FLU - SW SB - TMT EID FLU	C/CPFF	TBD:	0.000	0.000		25.514	Mar 2013	59.190	Mar 2014	-		59.190	Continuing	Continuing	0.000
** HFV - HW S - Pivotal Animal Efficacy Studies	C/CPIF	TBD:	0.000	0.000		14.012	Jun 2013	36.106	Mar 2014	-		36.106	Continuing	Continuing	0.000
** NGDS - HW C - CRP Scale up of Biological	MIPR	US Army Medical Research Institute of Infectious Disease	0.000	0.000		0.000		0.750	Jun 2014	-		0.750	Continuing	Continuing	0.000

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Threat Agent Reference Materials		(USAMRIID):Fort Detrick, MD													
HW C - CRP Scale up of Biological Threat Agent Reference Materials	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.000		0.550	Jun 2014	-		0.550	Continuing	Continuing	0.000
HW C - CRP Development of Biological Threat Agent Reference Materials and Assays	MIPR	USA Research Dev & Engr Cmd (RDECOM):Aberdeen Proving Ground, MD	0.000	0.000		0.000		0.578	Jun 2014	-		0.578	Continuing	Continuing	0.000
** VAC BOT - HW S - Manufacturing, Validation and Consistency Lot Production	C/CPAF	DynPort Vaccine Company (DVC) LLC.:Frederick, MD	27.024	9.874	Mar 2012	26.558	Mar 2013	0.817	Mar 2014	-		0.817	Continuing	Continuing	0.000
** VAC PLG - HW S - Manufacturing, Validation, and Consistency Lot Production	C/CPAF	DynPort Vaccine Company (DVC) LLC.:Frederick, MD	48.134	27.120	Mar 2012	12.459	Mar 2013	14.442	Mar 2014	-		14.442	Continuing	Continuing	0.000
		Subtotal	82.873	112.554		105.107		129.660		0.000		129.660			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** ADM - ES C - Medical Utilities	C/CPFF	TBD:	0.000	4.463	Mar 2013	5.048	Mar 2013	1.413	Mar 2014	-		1.413	Continuing	Continuing	0.000
ES SB - Integrated Master Plan / Detailed Manufacturing Capability Plan	C/CPFF	TBD:	0.000	13.801	Mar 2013	0.000		0.000		-		0.000	Continuing	Continuing	0.000
ES C - Medical Personnel (Contractor Staffing)	C/CPFF	TBD:	0.000	2.048	Mar 2013	2.478	Mar 2013	2.500	Mar 2014	-		2.500	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program			DATE: April 2013
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
ES C - Medical Commissioning	C/CPFF	TBD:	0.000	0.000		10.210	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
** BSV - ILS S - BSV Portal ILS & System Engr	PO	Various:	0.000	0.000		0.000		0.750	Mar 2014	-		0.750	Continuing	Continuing	0.000
ILS SB - BICS ILS & System Engr	PO	Various:	0.000	0.000		0.000		0.750	Mar 2014	-		0.750	Continuing	Continuing	0.000
** CRP - ES C - Select Biological Threat Agent Reference Material Support	MIPR	Various:	1.755	0.633	Mar 2012	0.520	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
ES C - Select Biological Threat Agent Reference Material Regulatory/Quality Assurance (QA) Support	MIPR	Dugway Proving Ground (DPG):Dugway, UT	0.932	0.135	Mar 2012	0.130	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
** NGDS - ES C - CRP - Select Biological Threat Agent Reference Material Support	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.000		0.000		2.683	Jun 2014	-		2.683	Continuing	Continuing	0.000
ES C - CRP - NGDS - Select Biological Threat Agent Reference Material Support	MIPR	USA Research Dev & Engr Cmd (RDECOM):Aberdeen Proving Ground, MD	0.000	0.000		0.000		0.750	Jun 2014	-		0.750	Continuing	Continuing	0.000
TD/D C - CRP - Select Biological Threat Agent Reference Material Regulatory/Quality Assurance (QA) Support	MIPR	Dugway Proving Ground (DPG):Dugway, UT	0.000	0.000		0.000		0.275	Jun 2014	-		0.275	Continuing	Continuing	0.000
ES S - NGDS - Conduct Early Operational Assessment	MIPR	AMEDD Center and School:Ft. Sam Houston, TX	0.000	0.000		0.500	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
** VAC BOT - TD/D C - Regulatory Integration (Environmental and FDA	C/CPAF	DynPort Vaccine Company (DVC) LLC.:Frederick, MD	3.378	1.676	Mar 2012	3.686	Mar 2013	3.690	Mar 2014	-		3.690	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Documentation) and Delivery System															
** VAC PLG - TD/D C - Regulatory Integration (Environmental and FDA Documentation) and Delivery System	C/CPAF	DynPort Vaccine Company (DVC) LLC.:Frederick, MD	9.246	1.215	Mar 2012	1.517	Mar 2013	1.725	Mar 2014	-		1.725	Continuing	Continuing	0.000
** VAC SIP - VAC SIP - Storage, and Distribution of Vaccines	MIPR	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	2.070	Mar 2012	2.130	Mar 2013	2.194	Mar 2014	-		2.194	Continuing	Continuing	0.000
		Subtotal	15.311	26.041		26.219		16.730		0.000		16.730			0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** ADM - DTE SB - BSL - 4 T&E	Allot	US Army Medical Research Institute of Infectious Disease (USAMRIID):Fort Detrick, MD	0.000	0.962	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** BSV - OTHT C - BSV Portal Development Testing	PO	Various:	0.000	0.000		0.000		0.100	Mar 2014	-		0.100	Continuing	Continuing	0.000
DTE SB - BICS Developmental Testing	PO	Various:	0.000	0.000		0.000		0.250	Mar 2014	-		0.250	Continuing	Continuing	0.000
OTE SB - BICS User Assessment	PO	Various:	0.000	0.000		0.000		0.500	Mar 2014	-		0.500	Continuing	Continuing	0.000
** NGDS - OTHT C - NGDS - Conduct Increment 1 Competitive Prototyping DT Testing	MIPR	Various:	0.000	0.000		6.377	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** VAC BOT - DTE C - Testing, Evaluation, and Clinical Trials	C/CPAF	DynPort Vaccine Company (DVC) LLC.:Frederick, MD	22.857	11.934	Mar 2012	21.377	Mar 2013	44.310	Mar 2014	-		44.310	Continuing	Continuing	0.000
** VAC PLG - DTE C - PLG - Clinical Trials	C/CPAF	DynPort Vaccine Company (DVC) LLC.:Frederick, MD	46.685	18.080	Mar 2012	24.621	Mar 2013	33.749	Mar 2014	-		33.749	Continuing	Continuing	0.000
		Subtotal	69.542	30.976		52.375		78.909		0.000		78.909			0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** ADM - PM/MS S - Program Management	Various	Various:	0.000	9.411	Mar 2012	0.000		6.618	Dec 2013	-		6.618	Continuing	Continuing	0.000
** BSV - PM/MS S - Product Management Support	PO	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	0.000		0.000		1.000	Mar 2014	-		1.000	Continuing	Continuing	0.000
PM/MS S - Chem Bio Medical systems Office	PO	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.000		0.500	Dec 2013	-		0.500	Continuing	Continuing	0.000
** CRP - PM/MS C - Product Management Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.966	0.433	Mar 2012	0.460	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
PM/MS C - Product Management Support	SS/FFP	Goldbelt Raven LLC.:Frederick, MD	3.806	1.540	Jun 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS C - Chem Bio Medical Systems Office	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	1.133	0.250	Sep 2012	0.160	Sep 2013	0.000		-		0.000	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program			DATE: April 2013
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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PM/MS S - PM/MS C - Product Management Support	SS/FFP	TBD:	0.000	0.000		1.265	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
** EID FLU - PM/MS SB - Management Support	Allot	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	0.000		7.398	Mar 2013	10.657	Feb 2014	-		10.657	Continuing	Continuing	0.000
** HFV - PM/MS SB - Management Support	Allot	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	0.000		2.390	Jun 2013	6.372	Mar 2014	-		6.372	Continuing	Continuing	0.000
** NGDS - PM/MS C - CRP Product Management Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.000		1.250	Mar 2014	-		1.250	Continuing	Continuing	0.000
PM/MS C - CRP - Product Management Support	SS/FFP	TBD:	0.000	0.000		2.950	Mar 2013	1.800	Jun 2014	-		1.800	Continuing	Continuing	0.000
** VAC BOT - PM/MS C - JPM Chem/Bio Medical Systems (JPM CBMS), Fort Detrick, MD	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.822	6.182	Mar 2012	2.388	Mar 2013	2.386	Mar 2014	-		2.386	Continuing	Continuing	0.000
PM/MS S - Joint Vaccine Acquisition Program Management	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	4.281	2.871	Mar 2012	2.500	Mar 2013	2.512	Mar 2014	-		2.512	Continuing	Continuing	0.000
PM/MS S - Contractor Systems Engineering/ Program Management Support	SS/FFP	Goldbelt Raven LLC.:Frederick, MD	2.968	1.538	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
PM/MS S - Contractor Support Engineering	SS/FFP	TBD:	0.000	0.000		1.200	Mar 2013	1.202	Mar 2014	-		1.202	Continuing	Continuing	0.000
** VAC PLG - PM/MS S - Joint Vaccine Acquisition	Allot	JPM Chem/Bio Medical Systems	4.794	1.692	Mar 2012	1.362	Mar 2013	1.551	Mar 2014	-		1.551	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Office		(JPM CBMS):Fort Detrick, MD													
PM/MS S - Program Management Support	Allot	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	8.163	4.215	Mar 2012	6.017	Mar 2013	2.021	Feb 2014	-		2.021	Continuing	Continuing	0.000
** VAC SIP - PM/MS SB - Management Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.204	Mar 2012	0.265	Mar 2013	0.275	Mar 2014	-		0.275	Continuing	Continuing	0.000
		Subtotal	26.933	28.336		28.355		38.144		0.000		38.144			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	194.659	197.907		212.056		263.443		0.000		263.443			0.000

Remarks

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*

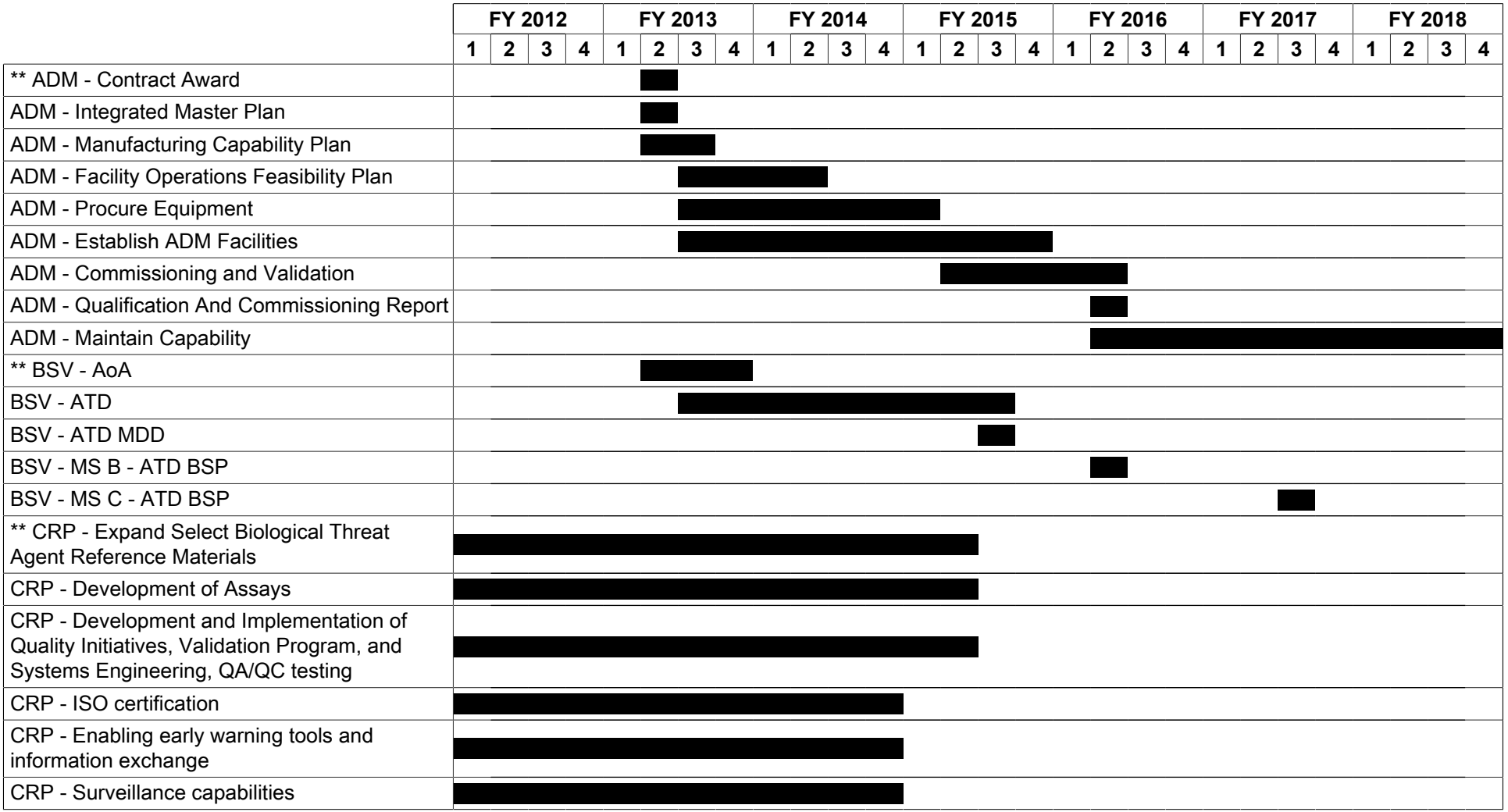

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*

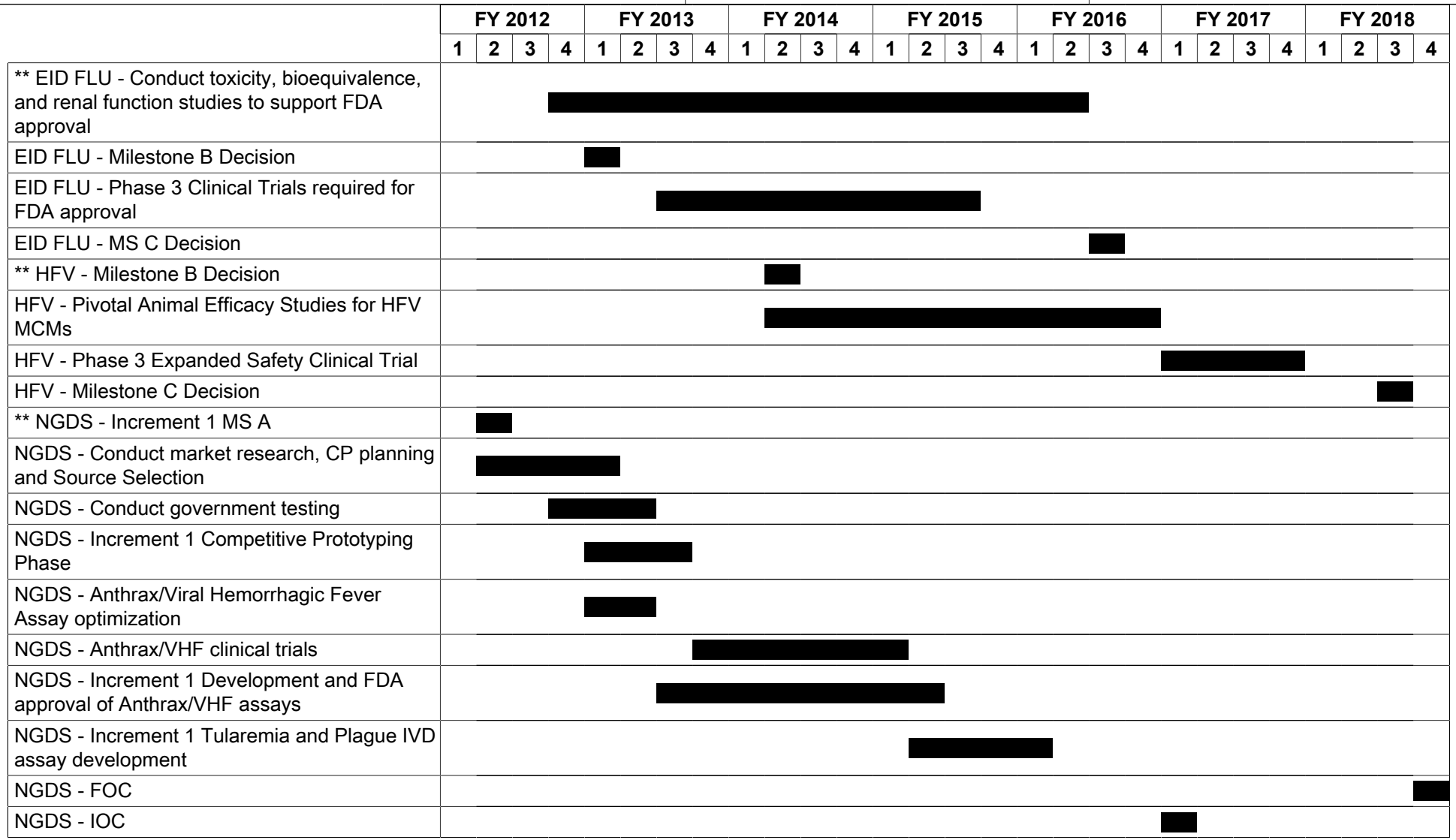

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*

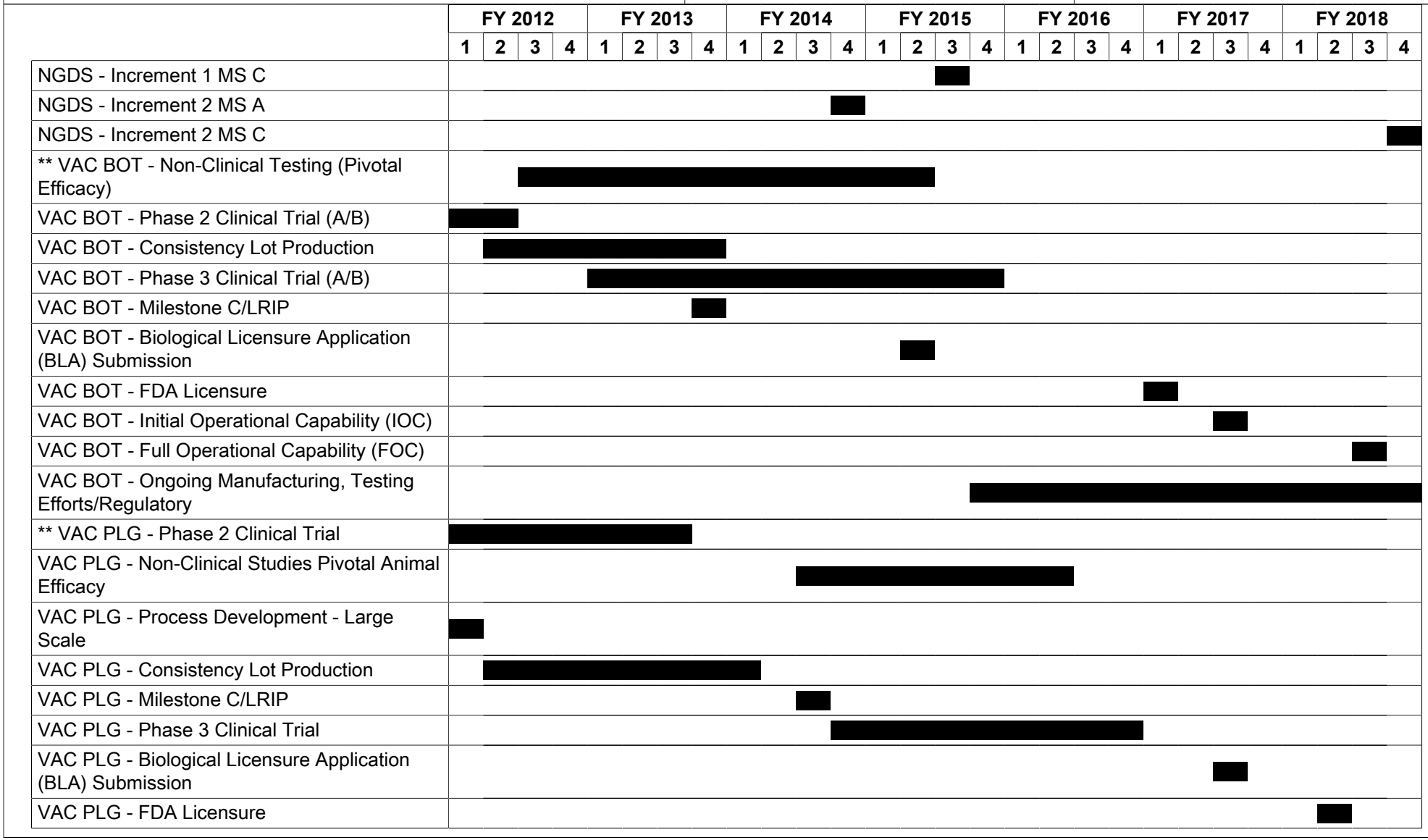

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*

	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 SIP - Storage, distribution, potency testing, biosurety compliance activities																												

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 5: *System Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	**PROJECT** MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** ADM - Contract Award	2	2013	2	2013
ADM - Integrated Master Plan	2	2013	2	2013
ADM - Manufacturing Capability Plan	2	2013	3	2013
ADM - Facility Operations Feasibility Plan	3	2013	2	2014
ADM - Procure Equipment	3	2013	1	2015
ADM - Establish ADM Facilities	3	2013	4	2015
ADM - Commissioning and Validation	2	2015	2	2016
ADM - Qualification And Commissioning Report	2	2016	2	2016
ADM - Maintain Capability	2	2016	4	2018
** 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
** CRP - Expand Select Biological Threat Agent Reference Materials	1	2012	2	2015
CRP - Development of Assays	1	2012	2	2015
CRP - Development and Implementation of Quality Initiatives, Validation Program, and Systems Engineering, QA/QC testing	1	2012	2	2015
CRP - ISO certification	1	2012	4	2014
CRP - Enabling early warning tools and information exchange	1	2012	4	2014
CRP - Surveillance capabilities	1	2012	4	2014
** EID FLU - Conduct toxicity, bioequivalence, and renal function studies to support FDA approval	4	2012	2	2016

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (EMD)*

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
EID FLU - Milestone B Decision	1	2013	1	2013
EID FLU - Phase 3 Clinical Trials required for FDA approval	3	2013	3	2015
EID FLU - MS C Decision	3	2016	3	2016
** HFV - Milestone B Decision	2	2014	2	2014
HFV - Pivotal Animal Efficacy Studies for HFV MCMs	2	2014	4	2016
HFV - Phase 3 Expanded Safety Clinical Trial	1	2017	4	2017
HFV - Milestone C Decision	3	2018	3	2018
** 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
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
NGDS - Increment 2 MS A	4	2014	4	2014
NGDS - Increment 2 MS C	4	2018	4	2018
** VAC BOT - Non-Clinical Testing (Pivotal Efficacy)	3	2012	2	2015
VAC BOT - Phase 2 Clinical Trial (A/B)	1	2012	2	2012
VAC BOT - Consistency Lot Production	2	2012	4	2013
VAC BOT - Phase 3 Clinical Trial (A/B)	1	2013	4	2015
VAC BOT - Milestone C/LRIP	4	2013	4	2013

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
VAC BOT - Biological Licensure Application (BLA) Submission	2	2015	2	2015
VAC BOT - FDA Licensure	1	2017	1	2017
VAC BOT - Initial Operational Capability (IOC)	3	2017	3	2017
VAC BOT - Full Operational Capability (FOC)	3	2018	3	2018
VAC BOT - Ongoing Manufacturing, Testing Efforts/Regulatory	4	2015	4	2018
** VAC PLG - Phase 2 Clinical Trial	1	2012	3	2013
VAC PLG - Non-Clinical Studies Pivotal Animal Efficacy	3	2014	2	2016
VAC PLG - Process Development - Large Scale	1	2012	1	2012
VAC PLG - Consistency Lot Production	2	2012	1	2014
VAC PLG - Milestone C/LRIP	3	2014	3	2014
VAC PLG - Phase 3 Clinical Trial	4	2014	4	2016
VAC PLG - Biological Licensure Application (BLA) Submission	3	2017	3	2017
VAC PLG - FDA Licensure	2	2018	2	2018
** VAC SIP - Storage, distribution, potency testing, biosurety compliance activities	1	2012	4	2018

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MC5: *MEDICAL CHEMICAL DEFENSE (EMD)*	

COST ($ in Millions)	All Prior Years	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	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

This project provides for the development of medical materiel and other medical equipment items necessary to provide an effective capability for medical defense against chemical warfare agent threats facing U.S. forces in the field. This project supports efforts in the System Development and Demonstration (SDD) phase of the acquisition strategy for prophylactic, pre-treatment, and therapeutic drugs and diagnostic medical devices for the protection, treatment, detection, and medical management of chemical warfare agent exposures. Project funds research and development of safety studies, manufacturing scale-up, process validation, drug interaction, performance test, and submission of the Food and Drug Administration (FDA) drug licensure application(s). This program currently funds: (1) Advanced Anticonvulsant System (AAS), which consists of the drug midazolam in an autoinjector, to be used as a treatment for nerve agent-induced seizures and will replace the currently-fielded Convulsant Antidote for Nerve Agent (CANA) autoinjector, which uses diazepam; (2) Bioscavenger, a new capability, to be used as a prophylaxis against nerve agents; and (3) 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)	FY 2012	FY 2013	FY 2014
Title: 1) AAS ***FY 2012 Accomplishments:*** Completed process development and current Good Manufacturing Practices (cGMP) requirements.	2.026	0.000	0.000
Title: 2) AAS ***FY 2012 Accomplishments:*** Completed preparation of New Drug Application (NDA) for FDA submission; conduct Milestone C.	0.310	0.000	0.000
Title: 3) BSCAV ***FY 2013 Plans:*** Complete studies for alternative manufacturing technologies (NTA).	0.000	1.545	0.000
Title: 4) BSCAV	0.000	1.923	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
FY 2013 Plans: Complete studies for a Post Exposure Prophylaxis (PEP) indication (NTA).			
Title: 5) BSCAV ***FY 2013 Plans:*** Continue source selection activities for SDD contract award and re-establish a manufacturing line. ***FY 2014 Plans:*** Complete re-establishment of a manufacturing line and initiate small scale process qualification.	0.000	4.674	11.972
Title: 6) BSCAV ***FY 2013 Plans:*** Initiate source material storage and stability testing. ***FY 2014 Plans:*** Continue source material storage and stability testing.	0.000	1.500	5.980
Title: 7) BSCAV ***FY 2014 Plans:*** Initiate Pharmacokinetic (PK) and efficacy bioequivalence bridging studies, pivotal animal efficacy studies, and the Phase 2 clinical trial (NTA).	0.000	0.000	11.018
Title: 8) BSCAV ***FY 2014 Plans:*** Initiate Current Good Manufacturing Practice (cGMP) manufacturing and large scale process validation.	0.000	0.000	22.368
Title: 9) INATS ***FY 2014 Plans:*** Initiate oxime candidate Current Good manufacturing Practice (cGMP) manufacturing and large scale process validation and qualification.	0.000	0.000	3.749
Accomplishments/Planned Programs Subtotals	2.336	9.642	55.087

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MC5: *MEDICAL CHEMICAL DEFENSE (EMD)*	

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
• 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

AAS

A prime contractor shall be responsible for conducting activities associated with drug development in a manner consistent with eventual approval by the Food and Drug Administration (FDA). The contractor shall sponsor the drug to the FDA and hold all approvals and/or licenses. During the System Development and Demonstration (SDD) Phase the program will conduct large scale manufacturing, Phase 2 human clinical safety studies and definitive animal efficacy studies. During the Production and Deployment Phase the program will purchase sufficient quantities of product to meet Initial Operational Capability (IOC) and Full Operational Capability (FOC). The Defense Logistics Agency will make subsequent purchases. The DoD is collaborating closely with the Department of Health and Human Services (HHS) with the development of midazolam for both civilian and DoD applications.

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 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.

INATS

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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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.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program			DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** AAS - HW S - cGMP Manufacturing Requirements	C/CPIF	Meridian Medical Technologies Inc.:Columbia, MD	3.931	1.545	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** BSCAV - HW C - Alternate Manufacturing	C/CPIF	PharmAthene Inc.:Annapolis, MD	0.000	0.000		1.051	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW C - Re-establish manufacturing line	C/CPFF	TBD:	0.000	0.000		3.281	Mar 2013	10.310	Dec 2013	-		10.310	Continuing	Continuing	0.000
HW S - cGMP Manufacturing and Process Validation	C/CPFF	TBD:	0.000	0.000		0.000		19.565	Mar 2014	-		19.565	Continuing	Continuing	0.000
		Subtotal	3.931	1.545		4.332		29.875		0.000		29.875			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** AAS - ES S - Regulatory Integration and NDA Support Efforts	C/CPIF	Meridian Medical Technologies Inc.:Columbia, MD	1.293	0.310	Sep 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** BSCAV - ES S - Regulatory Support	MIPR	TBD:	0.000	0.000		0.300	Mar 2013	0.551	Mar 2014	-		0.551	Continuing	Continuing	0.000
** INATS - ILS S - Regulatory Support	PO	Battelle Memorial Institute:Columbus, OH	0.000	0.000		0.000		0.224	Jun 2014	-		0.224	Continuing	Continuing	0.000
		Subtotal	1.293	0.310		0.300		0.775		0.000		0.775			0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** BSCAV - OTHT S - PEP Studies	MIPR	Various:	0.000	0.000		1.685	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program			DATE: April 2013
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
OTHT S - Stability Testing	C/CPIF	TBD:	0.000	0.000		1.586	Jun 2013	5.250	Jun 2014	-		5.250	Continuing	Continuing	0.000
OTHT S - Bioequivalence Bridging Studies	C/CPFF	TBD:	0.000	0.000		0.000		9.615	Mar 2014	-		9.615	Continuing	Continuing	0.000
** INATS - DTE S - cGMP Process Validation and Qualification	PO	Battelle Memorial Institute:Columbus, OH	0.000	0.000		0.000		2.565	Mar 2014	-		2.565	Continuing	Continuing	0.000
DTE S - GLP Animal Efficacy Studies	PO	Battelle Memorial Institute:Columbus, OH	0.000	0.000		0.000		0.815	Mar 2014	-		0.815	Continuing	Continuing	0.000
		Subtotal	0.000	0.000		3.271		18.245		0.000		18.245			0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** AAS - PM/MS S - Chem Bio Medical Systems	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.896	0.481	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
** BSCAV - PM/MS S - CBMS Management Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.745	Mar 2013	1.945	Mar 2014	-		1.945	Continuing	Continuing	0.000
PM/MS S - Product Management Support	SS/FFP	TBD:	0.000	0.000		0.629	Jun 2013	0.629	Jun 2014	-		0.629	Continuing	Continuing	0.000
PM/MS S - Product Management Support #2	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.000		0.215	Jun 2013	0.215	Jun 2014	-		0.215	Continuing	Continuing	0.000
PM/MS C - JPE Program Management Support	Allot	JPEO Chem/Bio Defense (JPEO-CBD):Aberdeen Proving Ground, MD	0.000	0.000		0.150	Sep 2013	3.258	Sep 2014	-		3.258	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** INATS - PM/MS S - Product Management Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.000		0.145	Dec 2013	-		0.145	Continuing	Continuing	0.000
		Subtotal	0.896	0.481		1.739		6.192		0.000		6.192			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	6.120	2.336		9.642		55.087		0.000		55.087			0.000

Remarks

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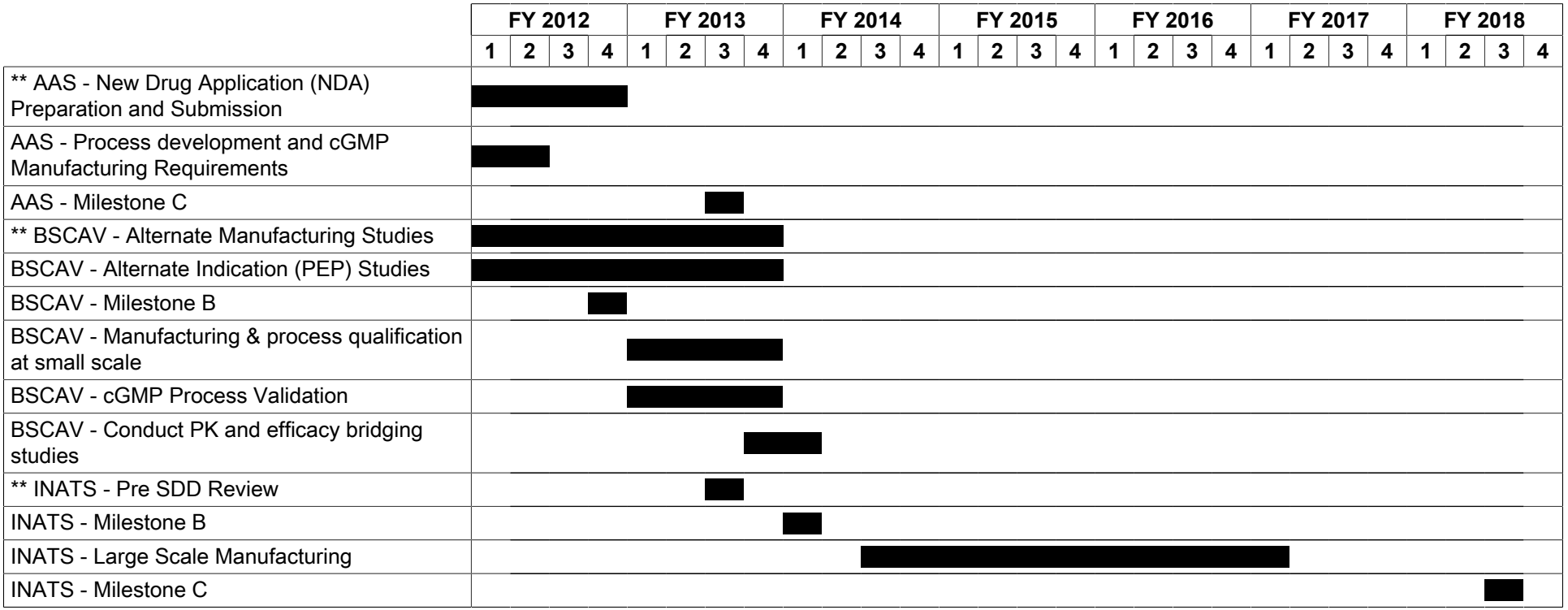

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** AAS - New Drug Application (NDA) Preparation and Submission	1	2012	4	2012
AAS - Process development and cGMP Manufacturing Requirements	1	2012	2	2012
AAS - Milestone C	3	2013	3	2013
** BSCAV - Alternate Manufacturing Studies	1	2012	4	2013
BSCAV - Alternate Indication (PEP) Studies	1	2012	4	2013
BSCAV - Milestone B	4	2012	4	2012
BSCAV - Manufacturing & process qualification at small scale	1	2013	4	2013
BSCAV - cGMP Process Validation	1	2013	4	2013
BSCAV - Conduct PK and efficacy bridging studies	4	2013	1	2014
** INATS - Pre SDD Review	3	2013	3	2013
INATS - Milestone B	1	2014	1	2014
INATS - Large Scale Manufacturing	3	2014	1	2017
INATS - Milestone C	3	2018	3	2018

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MR5: *MEDICAL RADIOLOGICAL DEFENSE (EMD)*	

COST ($ in Millions)	All Prior Years	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
MR5: *MEDICAL RADIOLOGICAL DEFENSE (EMD)*	-	0.000	2.027	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.027
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	2.027	0.000
FY 2013 Plans: Conduct animal efficacy studies to leverage Department of Health and Human Services (HHS) prototypes for DoD requirements.			
Accomplishments/Planned Programs Subtotals	0.000	2.027	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MR5: *MEDICAL RADIOLOGICAL DEFENSE (EMD)*

D. Acquisition Strategy

MRADC

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.

E. Performance Metrics

N/A

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MR5: *MEDICAL RADIOLOGICAL DEFENSE (EMD)*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** MRADC - DTE C - Animal Efficacy Studies	C/CPIF	TBD:	0.000	0.000		1.620	Jun 2013	0.000		-		0.000	0.000	1.620	0.000
		Subtotal	0.000	0.000		1.620		0.000		0.000		0.000	0.000	1.620	0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** MRADC - PM/MS C - Management Support	Allot	JPM Chem/Bio Medical Systems (JPM CBMS):Fort Detrick, MD	0.000	0.000		0.407	Jun 2013	0.000		-		0.000	0.000	0.407	0.000
		Subtotal	0.000	0.000		0.407		0.000		0.000		0.000	0.000	0.407	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		2.027		0.000		0.000		0.000	0.000	2.027	0.000

Remarks

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT MR5: *MEDICAL RADIOLOGICAL DEFENSE (EMD)*

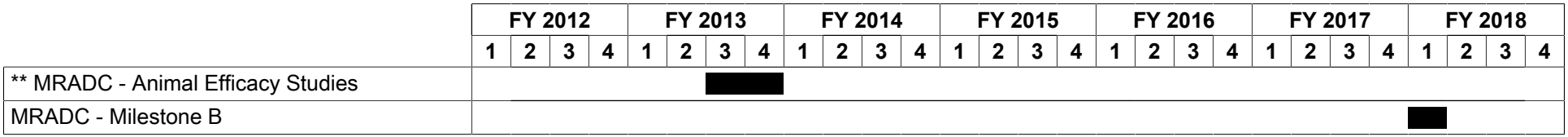

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	**PROJECT** MR5: *MEDICAL RADIOLOGICAL DEFENSE (EMD)*

Schedule Details

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

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT TE5: *TEST & EVALUATION (EMD)*	

COST ($ in Millions)	All Prior Years	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
TE5: *TEST & EVALUATION (EMD)*	-	16.235	6.394	26.202	-	26.202	20.033	20.200	15.700	14.200	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

This funding supports the 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. PD TESS test infrastructure products are aligned in four groups to include: (1) Chemical Laboratory (Sense); (2) Biological Laboratory (Sense); (3) Field Simulant Test (Sense); and (4) Individual Protection, Collective Protection and Decontamination (Shield and Sustain).

(1) Chemical Laboratory (Sense): The product for this area is the Dynamic Test Chamber (DTC) for chemical point sensors, and Non-Traditional Agent Defense Test System (NTADTS). The Dynamic Test Chamber provides a new capability for testing chemical point detection systems against chemical warfare agents in various environmental conditions. The NTADTS provides a new capability at Edgewood Chemical Biological Center to conduct highly toxic material testing using new emerging threats. The NTADTS supports testing of Decontamination, Collective Protection, Individual Protection, and Contamination Avoidance products. The CBD acquisition programs 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 Whole System Live Agent Test (WSLAT) "Full System" Chamber and the Standoff Detection Test System (SDTS). The WSLAT "Full System" Chamber supports testing of all biological point detection systems in production configuration in biological live agent environments. The SDTS, as a new start, will provide test and evaluation capability for the Joint Standoff Detection System (JSDS) acquisition program. The CBD acquisition programs supported are the Joint Biological Point Detection System (JBPDS) and the Joint Biological Tactical Detection System (JBTDS).

(3) Field Simulant (Sense): The product for this area is a fully instrumented simulant Test Grid. The Test Grid effort provides a fully instrumented 20 km by 40 km field chemical and biological simulant test capability that integrates cloud tracking equipment; meteorological equipment; and test data network. The CBD acquisition programs supported are the Joint Expeditionary Collective Protection (JECP), Next Generation Chemical Detector (NGCD), Joint Biological Point Detection System (JBPDS) and the Joint Biological Tactical Detection System (JBTDS).

(4) Individual Protection, Collective Protection and Decontamination (Shield and Sustain): IPEMS provides an articulated robotic mannequin that simulates Warfighters activities and includes under ensemble agent sensing capability for evaluating IPE against chemical warfare agents. IPEMS consists of an articulated robotic

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT TE5: *TEST & EVALUATION (EMD)*

mannequin, exposure chamber, control room, and real time under-ensemble sensor system. The individual protective equipment CBD programs supported include: Uniform Integrated Protection Ensemble Increment 1 (UIPE 1), Joint Service Aircrew Mask Fixed Wing (JSAM FW) and Rotary Wing (JSAM RW), Joint Service Lightweight Integrated Suit Technology (JSLIST), and the Joint Service General Purpose Mask (JSGPM).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: 1) PD TESS - Dynamic Test Chamber (DTC) ***FY 2012 Accomplishments:*** Upgraded and initiated pre-validation. ***FY 2013 Plans:*** Support upgrade and initiate validation of the DTC. ***FY 2014 Plans:*** Support validation activities.	0.134	0.170	0.100
Title: 2) PD TESS - Non-Traditional Agent Defense Test System (NTADTS) ***FY 2012 Accomplishments:*** Initiated fabrication and installation. ***FY 2013 Plans:*** Continue fabrication and installation. Initiate validation. ***FY 2014 Plans:*** Complete validation, and test system commissioning.	1.371	4.358	14.814
Title: 3) PD TESS - WSLAT ***FY 2012 Accomplishments:*** Completed installation and completed verification and validation plan.	2.020	0.000	0.000
Title: 4) PD TESS - Test Grid ***FY 2012 Accomplishments:*** Conducted and studied dissemination, point and standoff referee systems. Performed characterization test and inserted bio referee equipment in the Test Grid network. ***FY 2013 Plans:*** Initiate pre-verification activities. ***FY 2014 Plans:***	8.853	0.959	3.759

Exhibit R-2A, RDT&E Project Justification: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Conduct verification, validation, and transition.			
Title: 5) PD TESS - Individual Protection Ensemble Mannequin System (IPEMS) ***FY 2012 Accomplishments:*** Continued IPEMS chamber fabrication and installation. Continued mannequin fabrication. ***FY 2013 Plans:*** Complete chamber installation and verification. Accept mannequin.	3.857	0.907	0.000
Title: 6) PD TESS - Standoff Detection Test System (SDTS) ***FY 2014 Plans:*** Conduct analyses and initiate design.	0.000	0.000	7.529
Accomplishments/Planned Programs Subtotals	16.235	6.394	26.202

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
• TE7: *TEST & EVALUATION (OP SYS DEV)*	3.549	4.156	3.690		3.690	3.642	2.846	2.846	2.846	Continuing	Continuing

Remarks

D. Acquisition Strategy

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.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** PD TESS - HW S - DTC Fabrication/Installation	MIPR	Johns Hopkins University - Applied Physics Lab:Laurel, MD	3.974	0.000		0.100	Jun 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - WSLAT Chamber Fabrication/Installation	C/CPFF	Teledyne Brown Engineering Inc.:Huntsville, AL	11.433	1.080	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW S - WSLAT Design/ Fabrication/Installation	MIPR	Navy Operational Test and Eval Force (OPTEVFOR):Norfolk, VA	0.000	0.520	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW S - Test Grid Instrumentation/Data Network	MIPR	Dugway Proving Ground (DPG):Dugway, UT	1.010	1.175	Jun 2012	0.000		0.876	Mar 2014	-		0.876	Continuing	Continuing	0.000
HW S - Test Grid Instrumentation Data Network	C/CPFF	ITT Information Systems:Alexandria, VA	13.244	5.398	Jun 2012	0.000		2.040	Mar 2014	-		2.040	Continuing	Continuing	0.000
HWS - NTA Defense Test System Design/ Fabrication/Installation	MIPR	Edgewood Chemical Biological Center (ECBC):Aberdeen Proving Ground, MD	0.000	0.100	Mar 2012	1.355	Mar 2013	2.805	Mar 2014	-		2.805	Continuing	Continuing	0.000
SW SB - IPEMS Mannequin System Fabricate/Install/Validate/ Verify	C/CPFF	MRIGlobal:Kansas City, MO	42.569	2.685	Mar 2012	0.532	Mar 2013	0.000		-		0.000	Continuing	Continuing	0.000
HW S - IPEMS Design/ Fabrication/Installation	MIPR	Various:	0.000	0.180	Mar 2012	0.000		0.000		-		0.000	Continuing	Continuing	0.000
HW S - NTA Defense Test System Design, Fabrication, Install	C/CPFF	MRIGlobal:Kansas City, MO	0.000	0.918	Jun 2012	1.202	Mar 2013	9.000	Mar 2014	-		9.000	Continuing	Continuing	0.000
HW S - Standoff Detection Test System (SDTS) - Analyses and Design	Various	TBD:	0.000	0.000		0.000		6.000	Mar 2014	-		6.000	Continuing	Continuing	0.000
		Subtotal	72.230	12.056		3.189		20.721		0.000		20.721			0.000

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT TE5: *TEST & EVALUATION (EMD)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** PD TESS - ES S - Integrated Product Team (IPT) Support	MIPR	Various:	7.864	3.600	Dec 2011	2.245	Mar 2013	2.451	Dec 2013	-		2.451	Continuing	Continuing	0.000
		Subtotal	7.864	3.600		2.245		2.451		0.000		2.451			0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** PD TESS - PM/MS S - Program Management/ Systems Engineering Support	MIPR	JPM NBC Contamination Avoidance (JPM NBC CA):Aberdeen Proving Ground, MD	3.184	0.579	Dec 2011	0.960	Dec 2012	3.030	Dec 2013	-		3.030	Continuing	Continuing	0.000
		Subtotal	3.184	0.579		0.960		3.030		0.000		3.030			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	83.278	16.235		6.394		26.202		0.000		26.202			0.000

Remarks

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 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT TE5: *TEST & EVALUATION (EMD)*

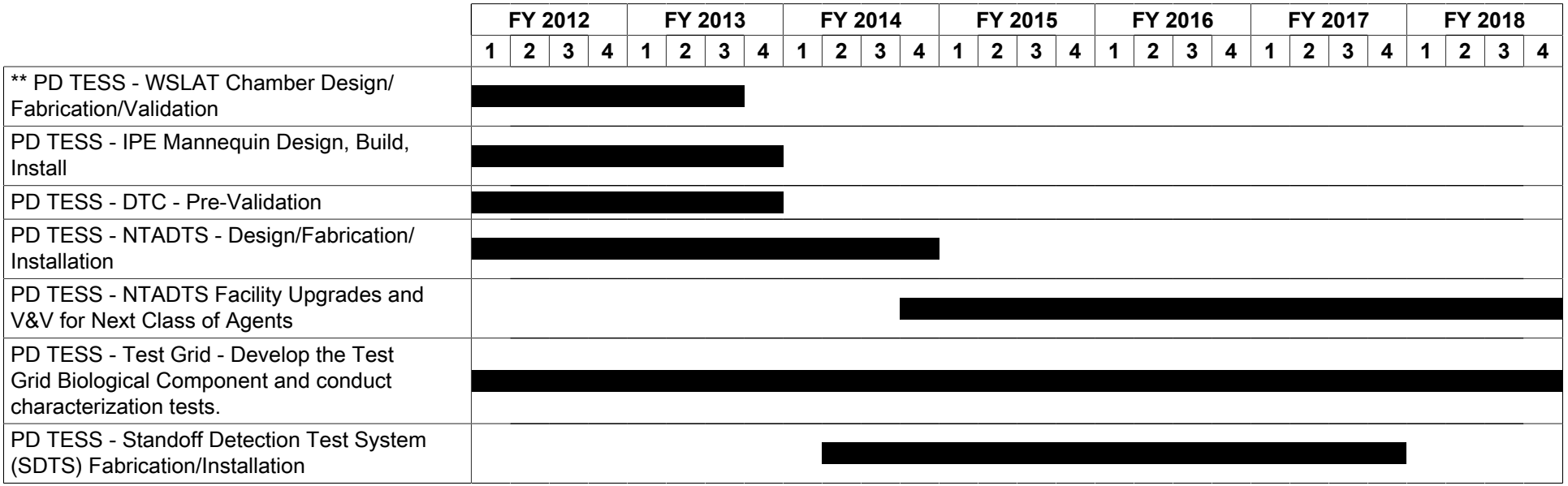

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Chemical and Biological Defense Program		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *System Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (EMD)*	PROJECT TE5: *TEST & EVALUATION (EMD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** PD TESS - WSLAT Chamber Design/Fabrication/Validation	1	2012	3	2013
PD TESS - IPE Mannequin Design, Build, Install	1	2012	4	2013
PD TESS - DTC - Pre-Validation	1	2012	4	2013
PD TESS - NTADTS - Design/Fabrication/Installation	1	2012	4	2014
PD TESS - NTADTS Facility Upgrades and V&V for Next Class of Agents	4	2014	4	2018
PD TESS - Test Grid - Develop the Test Grid Biological Component and conduct characterization tests.	1	2012	4	2018
PD TESS - Standoff Detection Test System (SDTS) Fabrication/Installation	2	2014	4	2017