Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Chemical and Biological Defense Program										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*							
COST ($ in Millions)	**FY 2010**	**FY 2011**	**FY 2012 Base**	**FY 2012 OCO**	**FY 2012 Total**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**	**Cost To Complete**	**Total Cost**
Total Program Element	237.631	407.162	400.608	-	400.608	405.991	540.890	519.249	478.114	Continuing	Continuing
CA5: *CONTAMINATION AVOIDANCE (SDD)*	67.384	124.936	52.114	-	52.114	63.524	82.148	104.170	95.822	Continuing	Continuing
CM5: *HOMELAND DEFENSE (SDD)*	2.861	1.166	9.109	-	9.109	13.829	4.961	1.979	1.954	Continuing	Continuing
CO5: *COLLECTIVE PROTECTION (SDD)*	11.847	18.459	11.307	-	11.307	14.511	7.749	-	-	0.000	63.873
DE5: *DECONTAMINATION SYSTEMS (SDD)*	17.195	28.499	4.370	-	4.370	9.189	27.426	22.381	12.410	Continuing	Continuing
IP5: *INDIVIDUAL PROTECTION (SDD)*	19.848	9.678	11.490	-	11.490	11.768	1.979	0.989	1.963	Continuing	Continuing
IS5: *INFORMATION SYSTEMS (SDD)*	17.435	13.844	2.423	-	2.423	9.523	31.465	25.381	13.010	Continuing	Continuing
MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*	57.563	141.680	272.345	-	272.345	259.039	354.900	331.308	310.104	Continuing	Continuing
MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*	4.126	51.856	26.407	-	26.407	18.860	18.396	20.824	27.289	Continuing	Continuing
MR5: *MEDICAL RADIOLOGICAL DEFENSE (SDD)*	-	1.143	-	-	-	-	-	-	-	0.000	1.143
TE5: *TEST & EVALUATION (SDD)*	39.372	15.901	11.043	-	11.043	5.748	11.866	12.217	15.562	Continuing	Continuing

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 agent threat environment across the continuum of global, contingency, special operations/low-intensity conflict, counter-narcotics, and other high risk missions. Operating forces have a critical need for defense against worldwide proliferation of Chemical and Biological (CB) warfare capabilities and for medical treatment of casualties in medical treatment facilities. Congress has directed centralized management of Department of Defense (DoD) CB Defense initiatives, both medical and non-medical. This program element supports the System Development and Demonstration (SDD) of CB defensive equipment, both medical and non-medical. These projects have been restructured to consolidate Joint- and Service-unique tasks within four commodity areas: contamination avoidance; force protection (individual and collective); decontamination; and medical countermeasures. The consolidation will provide for development and operational testing of equipment for Joint Service,as well as, Service-unique requirements.

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Chemical and Biological Defense Program	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*

Contamination avoidance efforts under this system development program will provide U.S. forces with real-time hazard assessment capabilities. They include advanced multi-agent point and remote chemical detection systems 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. They include improved aircrew respiratory protection, lightweight integrated suit technology, and shipboard collective protection equipment.

The medical chemical defense system development program funds improved medical equipment and drugs essential to counteracting lethal and performance-degrading effects of chemical threats and medical equipment essential to meeting medical requirements on the integrated battlefield with emphasis on decreased size/weight and high mobility, yet supporting large numbers of combat casualties. Additionally, foreign medical materiel may be procured for exploitation of advanced technology and development to meet medical defense goals. This program element supports the development of prophylactic and therapeutic drugs and rapid identification and diagnostic systems.

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. This program element also provides for the development of biological defense medical programs. DoD Biological Defense medical mission will address: (1) Protective vaccines - vaccination capability against the most probable biological threat agents; (2) Identification - clinical identification of biological threat agents through medical evaluation and laboratory analysis to augment early warning capabilities.

CBDP reprioritization does not continue program efforts into Fiscal Year 2012 for the following programs: Medical Radiological Countermeasures (MRADC), Inhalational Atropine (IA) and the Joint Service Sensitive Equipment Decontamination (JSSED) programs. Additionally, the BA5 reductions in support of the DoD Efficiency Initiatives for FY12 include: PD TESS efforts reduced in association with program changes (-$3.306M); Major Defense Acquisition Program support (-$2.259M); Program management support reduced (-$3.304M); Service Support Contracts reduced (-$4.025M).

The projects in this program element support efforts in the system development phases of the acquisition strategy and are therefore correctly placed in Budget Activity 5.

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Chemical and Biological Defense Program	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*

B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	300.317	407.162	413.610	-	413.610
Current President's Budget	237.631	407.162	400.608	-	400.608
Total Adjustments	-62.686	-	-13.002	-	-13.002
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-4.469	-			
• SBIR/STTR Transfer	-3.671	-			
• Other Adjustments	-54.546	-	-13.002	-	-13.002

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2010	FY 2011
Project: DE5: *DECONTAMINATION SYSTEMS (SDD)*		
Congressional Add: *1) Self Contained Automated Vehicle Washing Systems with microwave decontamination.*	1.593	-
Congressional Add Subtotals for Project: DE5	1.593	-
Project: IP5: *INDIVIDUAL PROTECTION (SDD)*		
Congressional Add: *1) JSAM*	2.390	-
Congressional Add Subtotals for Project: IP5	2.390	-
Congressional Add Totals for all Projects	3.983	-

Change Summary Explanation

Funding: FY10 - Realignment between BA4 and BA5 for approved threshold reprogramming to meet FAR guidelines (-$2,000K CA5; -$5,666K CM5; -$12,455K DE5; -$2,305K IP5; -$14,714K IS5; -$6,898K MC5); Other program realignments to support CBDP and DoD program initiatives (-$7,707K CA5; -$6,771K DE5; +$1,300 IP5; +$5,200K IS5; +$751K MB5; -$2,823K MC5; -$8,168K MR5; +$3,240K TE5); SBIR Transfer (-$952K CA5; -$111K CM5; -$155K CO5; -$365K DE5; -$241K IP5; -$3522K IS5; -$746K MB5; -$180K MC5; -$108K MR5; -$461K TE5).

FY12 - Adjustments less than 10% of total program.

Schedule: N/A

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Chemical and Biological Defense Program	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*

Technical: N/A

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
CA5: *CONTAMINATION AVOIDANCE (SDD)*	67.384	124.936	52.114	-	52.114	63.524	82.148	104.170	95.822	Continuing	Continuing
Quantity of RDT&E Articles	8	19	0		0	0	0	0	0		

A. Mission Description and Budget Item Justification

This funding supports Engineering and Manufacturing Development and Low Rate Initial Production (EMD/LRIP) of an array of reconnaissance, detection and identification equipment, and warning systems.

Efforts funded in this project are: (1) Chemical, Biological, Radiological, and Nuclear Dismounted Reconnaissance Systems (CBRN DRS, formerly JNBCRS Increment 2); (2) Joint Biological Point Detection System (JBPDS); (3) Joint Chemical Agent Detector (JCAD); (4) Major Defense Acquisition Program (MDAP) Support; (5) Next Generation Chemical Standoff Detection (NGCSD); (6) Non-Traditional Agent (NTA) Detection Support; and (7) 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 "JNBCRS Increment 2" was renamed to "CBRN DRS" starting in FY10.

The JBPDS is a Joint Service biological detector system. 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 Aegis class ships. The JBPDS is a fully automated system that increases the number of agents that can be identified by the current BIDS P3I and Interim Bio Agent Detector System (IBADS). JBPDS Tech Refresh consists of two separate efforts that, when combined, will reduce lifecycle costs and address obsolescence concerns. The existing computer hardware and operating system in the JBPDS will not be supportable beyond FY13 due to obsolescence. Under the existing production contract, an engineering effort is underway to address the computer and operating system obsolescence concerns. The second element is being developed under RDT&E funding for a new detector technology that will significantly reduce false alarms resulting in less consumable use and reduced operational and maintenance costs.

The JCAD program employs an incremental acquisition strategy to develop a miniaturized, rugged, and portable point chemical agent detector that automatically and simultaneously detects, identifies, quantifies, and alerts in the presence of nerve, blister, and blood chemical warfare agents. The M4 JCAD entered full rate production in September 2008 and will be produced through FY10. The attainable JCAD Increment 2 capabilities within the JCAD Increment 1 objectives were incorporated into an improvement of the M4 JCAD (M4E1). Production of the M4E1 is scheduled to begin in FY11. JCAD will be used for wheeled vehicles, stand alone, and individual soldier applications. The M4 JCAD will replace the M8A1 and the M22 Automatic Chemical Agent Alarms (ACAA/ACADA). The M4E1 may additionally replace the Chemical Agent Monitor (CAM) and Improved Chemical Agent Monitor (ICAM) and other legacy systems currently used by the individual Services.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** CA5: *CONTAMINATION AVOIDANCE (SDD)*

The Major Defense Acquisition Program (MDAP) Support program will integrate System of Systems (SoS) solutions across the Armed Services for (MDAP) having Chemical and Biological Radiological and Nuclear (CBRN) survivability requirements. The program will demonstrate modular, net-centric, "plug and play" capabilities for mounted and dismounted CBRN reconnaissance that will establish a common CBRN reconnaissance architecture across the services.

The NGCSD, a next generation chemical standoff effort initiated under the JSLSCAD program, will provide early warning for both traditional and non-traditional chemical agent attacks at fixed sites, forward operating bases and on Service designated vehicles and ships. This effort will develop and integrate new standoff sensor technologies for future standoff systems. The detection system will interface with the Services and Joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) architectures.

The Non-Traditional Agent (NTA) Detection projects will develop and procure detection system(s) through incremental acquisition that will afford Warfighter's the ability to attain situational awareness and respond to emerging hazards. The products will provide a near term capability to detect priority emerging threat materials with common core technologies for detection and identification for urgent need in early FY11. The common technologies can be further exploited in future increments to address lab deployable, fixed site and handheld applications. Conduct systems engineering analysis to prioritize capability gaps and outline issues that require investment. Continue with detection component development to address capability shortfalls and expanded threats and mission areas.

The SSI NBCRS will provide a biological capability to the Chemical Biological Mass Spectrometer (CBMS) and a non-contact, low volatile, surface contamination capability supporting the NTA Detection products and the Next Generation Chemical Point Detection evaluation efforts. The CBMS effort will add the biological warfare agent and Toxic Industrial Chemical (TIC) detection and identification capability to the existing chemical liquid detection and identification capability. The integration of liquid chemical and biological aerosol detection, within a single sensor; saves size, weight, and power on the platform. The non-contact low volatile surface contamination detection capability will provide an improved capability for on-the-move, non-contact, detection and identification of Chemical Warfare Agents (CWAs), TICs, and other Non-Traditional Agents (NTAs). The SSI NBCRS transitioned from JNBCRS Increment 3 in FY10.

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 sample 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 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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) CBRN DRS	3.618	1.407	4.000
FY 2010 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiated documentation, systems engineering, and design to support Milestone (MS) B. ***FY 2011 Plans:*** Complete documentation, systems engineering, and design to support Milestone (MS) B. Initiate documentation, systems engineering, and design to support Milestone (MS) C Low Rate Initial Production (LRIP). ***FY 2012 Plans:*** Complete documentation, systems engineering, and design to support MS C LRIP.			
Title: 2) CBRN DRS ***FY 2010 Accomplishments:*** Initiated developmental test planning and purchased component test items. ***FY 2011 Plans:*** Complete developmental test planning. Initiate and complete developmental testing at the component level. Initiate system level developmental testing. ***FY 2012 Plans:*** Complete system level developmental testing.	4.619	3.896	2.000
Title: 3) CBRN DRS ***FY 2010 Accomplishments:*** Initiated and completed Operational Assessment for trailer-mounted CBRN DRS system. ***FY 2011 Plans:*** Initiate technical manual and logistics products development for Operational Assessment for CBRN DRS Quadcon configuration (specifically designed shipping containers for systems). ***FY 2012 Plans:*** Initiate and complete Operational Assessment for CBRN DRS Quadcon system. Continue technical manual development and logistics products development.	3.800	2.800	9.148
Title: 4) CBRN DRS ***FY 2011 Plans:*** Fabricate Engineering and Manufacturing Development (EMD) systems for test (6 systems, $900K each). ***FY 2012 Plans:***	-	5.400	2.602

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Retrofit Engineering and Manufacturing Development (EMD) systems.			
Title: 5) CBRN DRS ***FY 2011 Plans:*** Initiate Developmental Testing (DT) and Operational Assessment (OA) to support initial emerging capability to meet urgent need. ***FY 2012 Plans:*** Continue testing and integration of emerging threats for enhancements.	-	4.535	2.821
Title: 6) CBRN DRS ***FY 2011 Plans:*** Initiate engineering solution for integrated emerging threats kit to address capability shortfalls.	-	3.152	-
Title: 7) CBRN DRS ***FY 2011 Plans:*** Support testing and integration development with technology development for cutting edge solutions to provide systems that address non-traditional emerging threats.	-	13.213	-
Title: 8) CBRN DRS ***FY 2011 Plans:*** Develop Commercial Off-the-Shelf (COTS)/Government Off-the-Shelf (GOTS) evaluation for Sensitive Site Assessment and Consequence Management mission areas. Begin analysis for Commercial Off-the-Shelf (COTS)/Government Off-the-Shelf (GOTS) evaluation in force protection mission area.	-	10.983	-
Title: 9) JBPDS ***FY 2010 Accomplishments:*** Provided strategic and tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, acquisition oversight and technical support. ***FY 2011 Plans:*** Continue strategic and tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, acquisition oversight and technical support. ***FY 2012 Plans:***	1.320	3.476	0.991

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continue strategic and tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, acquisition oversight and technical support.			
Title: 10) JBPDS ***FY 2010 Accomplishments:*** Continued development of a new detector Line Replaceable Unit (LRU) for the Tech Refresh program. ***FY 2011 Plans:*** Continue development of a new detector Line Replaceable Unit (LRU) for the Tech Refresh program. ***FY 2012 Plans:*** Complete development of a new detector Line Replaceable Unit (LRU) for the Tech Refresh program.	5.280	12.906	1.994
Title: 11) JBPDS ***FY 2011 Plans:*** Initiate component level testing of the new detector LRU. ***FY 2012 Plans:*** Complete component level testing of the new detector LRU.	-	1.000	2.000
Title: 12) JCAD ***FY 2010 Accomplishments:*** Conducted M4E1 JCAD Developmental Tests to include surety chamber, MIL-STD-810/EMI, and false alarm and other testing.	3.755	-	-
Title: 13) JCAD ***FY 2010 Accomplishments:*** Provided Systems Engineering, Program Management, and T&E Integrated Product Team (IPT) Support. ***FY 2011 Plans:*** Continue Program Management Support and T&E IPT Support.	2.987	2.233	-
Title: 14) JCAD ***FY 2010 Accomplishments:*** Conducted M4E1 JCAD Follow-On Operational Test and Evaluation (FOT&E). ***FY 2011 Plans:***	3.134	2.000	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Complete FOT&E.			
Title: 15) JCAD ***FY 2011 Plans:*** Evaluate software enhancements and test increased capability for incorporate into CBRN DRS to meet Navy specific requirements for Vessel Boarding Search & Seizure (VBSS) mission.	-	5.500	-
Title: 16) MDAP SPRT ***Description:*** Development of modular CBRN sensing capabilities for the Small Unmanned Ground Vehicle (SUGV) and Multifunction Utility/Logistics Equipment (MULE). ***FY 2010 Accomplishments:*** Began the design, development and test of the Chemical Point Sensor (CPS), Common CBRN Sensor Interface (CCSI) Compliant Radiological Detector (CCRD), and a CCSI Sensor Mounting Cradle to meet Brigade Combat Team Modernization (BCTM) CBR detection requirements for the Small Unmanned Ground Vehicle (SUGV) and the Multifunction Utility/Logistics Equipment (MULE), unmanned vehicle platforms. The CPS and CCRD are repackaged sensors based on fully qualified hand held sensors. ***FY 2011 Plans:*** Complete the design, development and test of the Chemical Point Sensor (CPS), Common CBRN Sensor Interface (CCSI) Compliant Radiological Detector (CCRD), and a CCSI Sensor Mounting Cradle to meet Brigade Combat Team Modernization (BCTM) CBR detection requirements for the Small Unmanned Ground Vehicle (SUGV) and the Multifunction Utility/Logistics Equipment (MULE), unmanned vehicle platforms.	1.404	0.700	-
Title: 17) MDAP SPRT ***Description:*** Decontamination capabilities to meet Joint Strike Fighter (JSF) survivability requirements. ***FY 2010 Accomplishments:*** Continued the design and development of a transportable shelter system to support decontamination operations. Initiated component level and sub-scale system level testing of the transportable shelter system. ***FY 2011 Plans:*** Complete the design and development of one transportable shelter system prototype at an estimated unit cost of $1.5 million. Complete component level testing of the transportable shelter system. Start system level testing of the portable shelter system.	1.800	2.150	-
Title: 18) MDAP SPRT - JSF	1.500	4.000	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: Development of an aircrew mask to meet Joint Strike Fighter (JSF) Survivability Requirements. ***FY 2010 Accomplishments:*** Began the design and development of a JSF specific aircrew mask. ***FY 2011 Plans:*** Continue the design and development of a JSF specific aircrew mask.			
Title: 19) MDAP SPRT ***Description:*** Provide strategic tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2010 Accomplishments:*** Conducted strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight, and technical support. ***FY 2011 Plans:*** Conduct strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight, and technical support.	3.207	2.410	-
Title: 20) NGCSD ***FY 2011 Plans:*** Integrate multi-sensor detection systems and algorithms into Technology Evaluation and field exercises.	-	8.113	-
Title: 21) NGCSD ***FY 2011 Plans:*** Conduct Joint Service support for capability document development, concept of operations (CONOPS), Tactic, Techniques and Procedures (TTPs), etc.	-	0.620	-
Title: 22) NGCSD ***FY 2011 Plans:*** Provide program management, systems engineering, and Integrated Product Team (IPT) support.	-	2.350	-
Title: 23) NGCSD ***FY 2011 Plans:***	-	0.900	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiate and finalize technical manuals and logistics products that support field exercises.			
Title: 24) NGCSD ***FY 2010 Accomplishments:*** Initiated program management support. ***FY 2011 Plans:*** Complete program management support.	1.500	0.630	-
Title: 25) NTA DETECT ***FY 2010 Accomplishments:*** Initiated Commercial Off-the-Shelf (COTS)/Government Off-the-Shelf (GOTS) technology evaluation for Installation Force Protection Mission Areas. Continued Development Testing (DT) of COTS/GOTS for application in the Sensitive Site Assessment (SSA) and Consequence Management (CM) mission areas. ***FY 2011 Plans:*** Complete DT for Commercial Off-the-Shelf (COTS)/Government Off-the-Shelf (GOTS) evaluation for SSA and CM mission areas. Begin analysis for Commercial Off-the-Shelf (COTS)/Government Off-the-Shelf (GOTS) evaluation in force protection mission area. ***FY 2012 Plans:*** Initiate DT and LOE to assess performance Commercial Off-the-Shelf (COTS)/Government Off-the-Shelf (GOTS) solution in force protection mission area.	3.012	3.299	3.470
Title: 26) NTA DETECT ***FY 2010 Accomplishments:*** Initiated integration of COTS components and library build for the Lab Deployable Mass Spectrometer. Continued integration and initiated DT for Lab Deployable Desorption Electrospray Ionization (DESI) Mass Spectrometer for CM and SSA. ***FY 2011 Plans:*** Initiate engineering to support reduced form factor for the Man Portable Mass Spectrometer. ***FY 2012 Plans:*** Continue engineering and integration for the Man Portable DESI Mass Spectrometer.	1.902	2.153	3.000
Title: 27) NTA DETECT ***FY 2010 Accomplishments:***	2.402	2.056	2.850

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiated integration of COTS components and support engineering to ruggedize and harden an environmental monitor. ***FY 2011 Plans:*** Continue engineering and integration and initiate DT to provide COTS environment monitoring capability. ***FY 2012 Plans:*** Continue DT and initiate operational assessment (OA) of environmental monitor to support force protection mission.			
Title: 28) NTA DETECT ***FY 2010 Accomplishments:*** Initiated Developmental Testing (DT) and Operational Assessment (OA) to support initial NTA capability to meet urgent need. ***FY 2011 Plans:*** Continue DT and OA to address NTA detection capability shortfall and critical data gaps. ***FY 2012 Plans:*** Update and integrate NTA detection capability with CBRN DRS to provide enhanced NTA detection solution for SSA and CM mission areas.	8.842	2.153	3.110
Title: 29) NTA DETECT ***FY 2010 Accomplishments:*** Initiated systems engineering effort to understand areas of capability shortfalls. ***FY 2011 Plans:*** Continue systems engineering analysis to prioritize technology investment strategies. ***FY 2012 Plans:*** Update systems engineering model to refine capability shortfalls with current technology advances and developmental test data inputs.	0.402	0.865	0.879
Title: 30) SSI NBCRS ***FY 2010 Accomplishments:*** Initiated engineering support, systems engineering, and Integrated Product Team (IPT) support. ***FY 2011 Plans:*** Continue program management, systems engineering, and Integrated Product Team (IPT) support. ***FY 2012 Plans:***	1.597	5.448	5.700

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continue program management, systems engineering, and Integrated Product Team (IPT) support.			
Title: 31) SSI NBCRS ***FY 2010 Accomplishments:*** Initiated sensor capability development using competitive prototyping (4 vendors, 2 systems each at $1,061K per system). ***FY 2011 Plans:*** Continue sensor development, development support and demonstration using competitive prototyping (3 vendors, 4 systems each at $800K per system). ***FY 2012 Plans:*** Complete sensor demonstration using competitive prototyping.	8.491	9.836	2.140
Title: 32) SSI NBCRS ***FY 2012 Plans:*** Initiate Chemical Biological sensor Engineering and Manufacturing Development (EMD) effort.	-	-	3.495
Title: 33) SSI NBCRS ***FY 2010 Accomplishments:*** Conducted sensor Developmental Test and Evaluation (DT&E) planning. ***FY 2011 Plans:*** Initiate prototype evaluation efforts. ***FY 2012 Plans:*** Complete prototype evaluation efforts.	0.320	2.250	1.246
Title: 34) SSI NBCRS ***FY 2011 Plans:*** Initiate and complete platform integration and system support of improved sensors for competitive prototype evaluation.	-	1.500	-
Title: 35) SSI NBCRS ***FY 2010 Accomplishments:*** Initiated program management support for Stryker NBCRV path forward. ***FY 2011 Plans:***	0.500	1.002	0.668

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APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continue program management support for Stryker NBCRV planned Full Rate Production decision and path forward. ***FY 2012 Plans:*** Continue program management support for Stryker NBCRV path forward.			
Title: 36) SSI NBCRS ***FY 2010 Accomplishments:*** Congressional add for development of Man Portable Sensors for Dismounted Reconnaissance.	1.992	-	-
Accomplishments/Planned Programs Subtotals	67.384	124.936	52.114

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• JC0100: *JOINT BIO POINT DETECTION SYSTEM (JBPDS)*	41.976	43.555	26.300		26.300	36.550	49.055	49.548	7.938	Continuing	Continuing
• JF0100: *JOINT CHEMICAL AGENT DETECTOR (JCAD)*	32.294	40.071	35.172		35.172	34.347	34.347	35.871	34.380	0.000	246.482
• JN0900: *NON TRADITIONAL AGENT DETECTION (NTAD)*	0.000	4.178	3.891		3.891	4.711	0.000	0.000	0.000	0.000	12.780
• MC0100: *JOINT NBC RECONNAISSANCE SYSTEM (JNBCRS)*	15.721	22.511	63.714		63.714	108.647	0.000	0.000	0.000	0.000	210.593
• MC0101: *CBRN DISMOUNTED RECONNAISSANCE SYSTEMS (CBRN DRS)*	6.815	15.414	6.991		6.991	19.962	30.940	39.670	24.999	0.000	144.791

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. Upon further review of the CBRN capabilities at the Materiel Development Decision (MDD), the program restructured in 4QFY10 to begin the acquisition process at Milestone (MS) B. Funding finalizes the Analysis of Materiel Solutions (AMS), materiel/prototype testing, and design to provide the Services with enhanced full spectrum CBRN detection capability to support strategic, operational, and tactical objectives at lower life cycle costs. CBRN DRS will enhance the Situational Awareness (SA) by providing a dismounted ability to detect chemical, biological

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

and radiological hazards across the Range of Military Operations (ROMO) and employ contamination avoidance activities to prevent disruption to operations and organizations.

JBPDS

The Joint Biological Point Detection System (JBPDS) uses an open systems approach to insert maturing and validated technologies as part of the overall acquisition strategy to expedite fielding of a credible force protection. The JBPDS Tech Refresh program used results from a business case analysis to upgrade the system's line replaceable units (LRUs) to reduce life cycle costs and address system obsolescence concerns. Per Director, Operational Test and Evaluation (DOT&E) Memorandum dated July 9, 2002, the program will continue to support the development of a Whole System Live Agent Test (WSLAT) capability.

JBTDS

The Joint Biological Tactical Detection System (JBTDS) will be developed using an evolutionary acquisition strategy. The evolutionary approach is the preferred Department of Defense (DoD) strategy for rapid acquisition of mature technology for the warfighter. Under this approach, capability is developed in increments, recognizing up front the need for future capability improvements. Each increment is a militarily useful and supportable operational capability that can be developed, produced, deployed, and sustained. In addition, JBTDS will make maximum use of commercial off-the-shelf (COTS) and Government off-the-shelf (GOTS) technology and an evolutionary acquisition strategy is also consistent with the use of COTS and GOTS components. This is because as new and better technologies become available, they can be inserted faster into systems to meet the need for capability improvements.

This approach also provides capability to the warfighter in the shortest possible time. The JBTDS program will incrementally design, develop, integrate, test, procure and field systems that improve biological aerosol detection, sampling and identification capabilities and reduce size, weight, power consumption, and logistic footprint over current systems. Again, COTS and GOTS will be exploited to the fullest extent possible.

JCAD

The current strategy employs an improvement of the M4 JCAD to reduce Life Cycle costs, transition to a competitive procurement contract, and attain objective capability. Three competitive fixed-price contracts for the M4E1 were awarded in Sep 2007 for prototypes and options for full rate production. Competitive prototype testing was conducted and one system was selected for continued development. The production options will be exercised in FY11 following a successful production cut-in decision. The BA4 funding strategy will be to identify current technologies for addressing capability gaps for emerging threat not addressed by M4 and M4E1 JCAD.

MDAP SPRT

The Major Defense Acquisition Program (MDAP) Support effort will integrate Chemical, Biological, and Radiological (CBR) solution sets across the Department of Defense for platforms, including MDAPs, having CBR defense and survivability requirements. The approach used for each platform will encompass: (1) Engaging the

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

platform manager and establishing agreement upon the scope of effort, roles and responsibilities; (2) Performing requirements analysis and developing architectures to derive the system requirements from the capability document requirement, platform concept of operations, and appropriate threat documentation; (3) Identifying a solution set which leverages fielded items, programs of record and commercial items whenever feasible, minimizing developmental effort; (4) Verification and validation that the solution set meets the platform's requirements; (5) Providing subject matter expertise to support the integration and testing of the solution integrated onto the platform; and (6) Managing the integration of efforts across the CBR commodity areas to provide an integrated capability to the platform and identifying capability gaps through the applicable Joint Requirements Office led Integrated Concept Teams.

NGCSD

The Next Generation Chemical Standoff Detection (NGCSD) program, a next generation chemical standoff effort which was initiated under the Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD) program, will award Indefinite Delivery/Indefinite Quantity contract(s) to support system engineering, software development, test and evaluation, and system support efforts to increase standoff detection capabilities and identify new standoff technology. These critical contracts will allow the program office to complete current prototyping and test efforts to assess current technology and provide findings for use in the Sensor Suite Integration, the NTA Detect, Integrated Base Defense, and Bio-Surveillance programs.

NTA DETECT

The Non-Traditional Agent (NTA) 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. The products provide a near term capability to detect priority emerging threat materials with common core technologies to detect and identify threats that can further be explored for lab deployable, fixed site and handheld applications. Leveraging COTS/GOTS assessments will be used in order to lower program risks, reduce 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.

SSI NBCRS

The Sensor Suite and Integration for Nuclear Biological Chemical Reconnaissance System (SSI NBCRS) program, transitioned from Joint Nuclear Biological Chemical Reconnaissance System (JNBCRS) Increment 3 in FY10, will develop and test platform specific prototype Chemical Biological Mass Spectrometer (CBMS) capability. System development will be performed by separate full and open contract solicitation for CBMS to demonstrate a technology readiness level (TRL) 6 in laboratory and field testing. Subsequent contract efforts will mature the system to a TRL 7 and will include extensive laboratory and early user testing, test and evaluation. Upon successful completion, a In-Process Review (IPR) will be held to approve low-rate initial production of the CBMS. The non-contact, low volatile, surface contamination capability contract efforts will produce at least three prototypes of each system.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CBRN DRS - HW C - DR SKO Program Development	SS/CPFF	AGENTASE-ICX:Pittsburgh, PA	3.650	4.500	Feb 2011	4.500	Feb 2012	-		4.500	Continuing	Continuing	0.000
HW S - DR SKO Program development	SS/CPFF	AGENTASE ICX:Pittsburgh, PA	2.434	2.100	Feb 2011	2.500	Feb 2012	-		2.500	Continuing	Continuing	0.000
HW S - NTA enhancements	C/FP	Various:	-	15.023	Aug 2011	2.821	Feb 2012	-		2.821	Continuing	Continuing	0.000
** JBPDS - SW SB - New Detector Development, modification and development.	MIPR	MA Institute of Tech-Lincoln Labs MIT-LL):Boston, MA	6.271	5.640	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW S - New Detector Development, modification and integration.	C/CPIF	TBD:	-	6.296	Feb 2011	1.524	Feb 2012	-		1.524	Continuing	Continuing	0.000
** JCAD - SW SB - Enhanced Detector Development for VBSS	C/FFP	TBD:	-	1.500	Feb 2011	-		-		-	Continuing	Continuing	0.000
** MDAP SPRT - HW S - JSF Decon Shelter	MIPR	Various:	3.500	2.150	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW S - JSF Aircrew Mask	MIPR	Various:	1.500	4.000	Feb 2011	-		-		-	Continuing	Continuing	0.000
SW SB - SUGV/MULE CBRN Sensor	MIPR	Various:	2.504	0.700	Feb 2011	-		-		-	Continuing	Continuing	0.000
** NGCSD - SW SB - Prototype System Development & Integration	C/CPFF	TBD:	-	5.223	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW SB - Prototype System Development & Integration	C/FFP	TBD:	-	2.890	Feb 2011	-		-		-	Continuing	Continuing	0.000
** NTA DETECT - HW S - DESI Mass Spec	C/CPAF	ICX Griffin:West Lafayette, IN	0.784	0.589	Feb 2011	1.653	Feb 2012	-		1.653	Continuing	Continuing	0.000
HW S - GOTS/COTS Dual Use Assessment	C/CPAF	Battelle:Crystal City, VA	1.305	1.093	Feb 2011	1.600	Feb 2012	-		1.600	Continuing	Continuing	0.000
SW S - DESI Mass Spec Library Development	MIPR	RDECOM:Aberdeen Proving Ground, MD	0.416	0.403	Nov 2010	0.450	Feb 2012	-		0.450	Continuing	Continuing	0.000
HW S - COTS Enzyme based technologies	C/CPAF	AGENTASE - ICX:Pittsburgh, PA	1.005	1.153	Feb 2011	1.011	Feb 2012	-		1.011	Continuing	Continuing	0.000

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APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
HW S - Environmental Monitor	C/CPAF	AGENTASE - ICX:Pittsburgh, PA	1.500	1.003	Feb 2012	2.022	Aug 2012	-		2.022	Continuing	Continuing	0.000
** SSI NBCRS - HW S - Sensor Capability Development (3 vendors, 4 systems each)	C/CPIF	TBD:	-	9.836	Feb 2011	2.140	Feb 2012	-		2.140	Continuing	Continuing	0.000
SW SB - CB sensor EMD effort	C/CPIF	TBD:	-	-		3.496	Feb 2012	-		3.496	Continuing	Continuing	0.000
HW S - Sensor Platform Integration	C/CPIF	TBD:	-	1.500	Feb 2011	-		-		-	Continuing	Continuing	0.000
		Subtotal	24.869	65.599		23.717		-		23.717			0.000

Remarks

Contract Award: Jul 2010
Camber Corporation, Huntsville, AL
Northrop Grumman, Herndon, VA
Midwest Research Institute, Kansas City, MO
Battelle Memorial Institute, Columbus, OH

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CBRN DRS - ES S - NTA Enhancements	C/CPIF	Various:	-	3.860	Feb 2011	-		-		-	0.000	3.860	0.000
ES S - Logistics	MIPR	Edgewood Chemical Biological Center:Edgewood, MD	0.400	0.700	Nov 2010	0.700	Nov 2011	-		0.700	0.000	1.800	0.000
** JBPDS - ILS S New Detector logistics and support documentation	C/CPIF	TBD:	-	1.470	Feb 2011	0.470	Feb 2012	-		0.470	0.000	1.940	0.000
	MIPR	Various:	-	0.900	Feb 2011	-		-		-	0.000	0.900	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** NGCSD - TD/D SB - Logistics Planning and Development													
** NTA DETECT - ES SB - Mass Spectrometer Analysis and Evaluation	C/CPFF	JRAD:Stafford, VA	0.273	0.108	Feb 2011	0.137	Feb 2012	-		0.137	0.000	0.518	0.000
ES S - Systems engineering support	C/CPFF	Lockheed Martin:Philadelphia, PA	0.402	0.865	Feb 2011	0.923	Feb 2012	-		0.923	0.000	2.190	0.000
		Subtotal	1.075	7.903		2.230		-		2.230	0.000	11.208	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CBRN DRS - DTE S - DR SKO Developmental Testing and Operational Assessment	MIPR	ATEC:Alexandria, VA	-	4.100	Feb 2011	8.000	Feb 2012	-		8.000	0.000	12.100	0.000
DTE S - NTA Enhancements	MIPR	MULTIPLE:	-	11.800	Feb 2011	-		-		-	0.000	11.800	0.000
** JBPDS - DTE S - New Detector developmental testing.	MIPR	MIT-LL:Boston, MA	-	1.000	Feb 2011	-		-		-	0.000	1.000	0.000
DTE S - New Detector developmental testing.	C/CPIF	TBD:	-	-		2.000	Feb 2012	-		2.000	0.000	2.000	0.000
** JCAD - OTE S - M4E1 JCAD Follow-On Operational Test and Evaluation (FOT&E)	MIPR	Various:	8.114	2.000	Nov 2010	-		-		-	0.000	10.114	0.000
OTHT S - Conduct Enhanced Detector Developmental Testing	MIPR	Various:	-	4.000	May 2011	-		-		-	0.000	4.000	0.000
** NTA DETECT - DTE S - Developmental Test Mass Spectrometer	C/CPFF	Battelle Memorial Institute:Columbus, OH	0.585	0.502	Feb 2011	0.653	Feb 2012	-		0.653	0.000	1.740	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
OTE S - OA Test and Evaluation Support	MIPR	OTC:Ft. Hood, TX	0.301	0.598	Aug 2011	1.045	Aug 2012	-		1.045	0.000	1.944	0.000
** SSI NBCRS - OTHT S - Prototype Evaluation	MIPR	Various:	-	2.250	Feb 2011	1.249	Feb 2012	-		1.249	0.000	3.499	0.000
		Subtotal	9.000	26.250		12.947		-		12.947	0.000	48.197	0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CBRN DRS - PM/MS-S - Program Management and System Engineering Support	MIPR	JPM NBC CA:APG, MD	1.702	1.502	Nov 2010	1.450	Nov 2011	-		1.450	0.000	4.654	0.000
PM/MS S - NTA Enhancements Program Management and System Engineering Support	MIPR	JPM NBC CA:APG, MD	-	1.200	Nov 2010	-		-		-	0.000	1.200	0.000
PM/MS S - Integrated Product Team	MIPR	Various:	0.560	0.601	Nov 2010	0.600	Nov 2011	-		0.600	0.000	1.761	0.000
** JBPDS - PM/MS S - Project Management	MIPR	JPM BD:APG, MD	6.711	1.790	Nov 2010	0.693	Nov 2011	-		0.693	0.000	9.194	0.000
PM/MS S - New Detector prime contractor management support	MIPR	MIT-LL:Boston, MA	0.175	0.350	Feb 2011	-		-		-	0.000	0.525	0.000
PM/MS S - New Detector prime contractor management support #2	C/CPIF	TBD:	-	0.836	Feb 2011	0.298	Feb 2012	-		0.298	0.000	1.134	0.000
** JCAD - PM/MS S - Joint Service Support	MIPR	Various:	5.985	2.233	Feb 2011	-		-		-	0.000	8.218	0.000
** MDAP SPRT - PM/MS SB - MDAP SPRT Management & Oversight	MIPR	Various:	3.207	2.410	Feb 2011	-		-		-	0.000	5.617	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** NGCSD - PM/MS S - Program Management and Systems Engineering Support	MIPR	JPM NBC CA:APG, MD	-	2.350	Feb 2011	-		-		-	0.000	2.350	0.000
PM/MS SB - Joint Service Combat Developer Support	MIPR	Various:	-	0.620	Feb 2011	-		-		-	0.000	0.620	0.000
PM/MS S - Program Management and Systems Engineering Support	MIPR	JPEO-CBD:Falls Church, VA	1.500	0.630	Aug 2011	-		-		-	0.000	2.130	0.000
** NTA DETECT - PM/MS S - Program Management support	MIPR	JPM NBCCA:Edgewood, MD	2.808	3.633	Aug 2011	3.815	Aug 2012	-		3.815	0.000	10.256	0.000
PM/MS S - Program Management and Systems Engineering Support #2	MIPR	JPEO-CBD:Falls Church, VA	-	0.579	Aug 2011	-		-		-	0.000	0.579	0.000
** SSI NBCRS - PM/MS S - Program Management and Systems Engineering Support	MIPR	JPM NBC CA:APG, MD	1.597	5.448	Feb 2011	5.700	Feb 2012	-		5.700	0.000	12.745	0.000
PM/MS S - Program Management and Systems Engineering Support #3	MIPR	JPEO-CBD:Falls Church, VA	0.500	1.002	Aug 2011	0.664	Feb 2012	-		0.664	0.000	2.166	0.000
		Subtotal	24.745	25.184		13.220		-		13.220	0.000	63.149	0.000

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	59.689	124.936		52.114		-		52.114			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

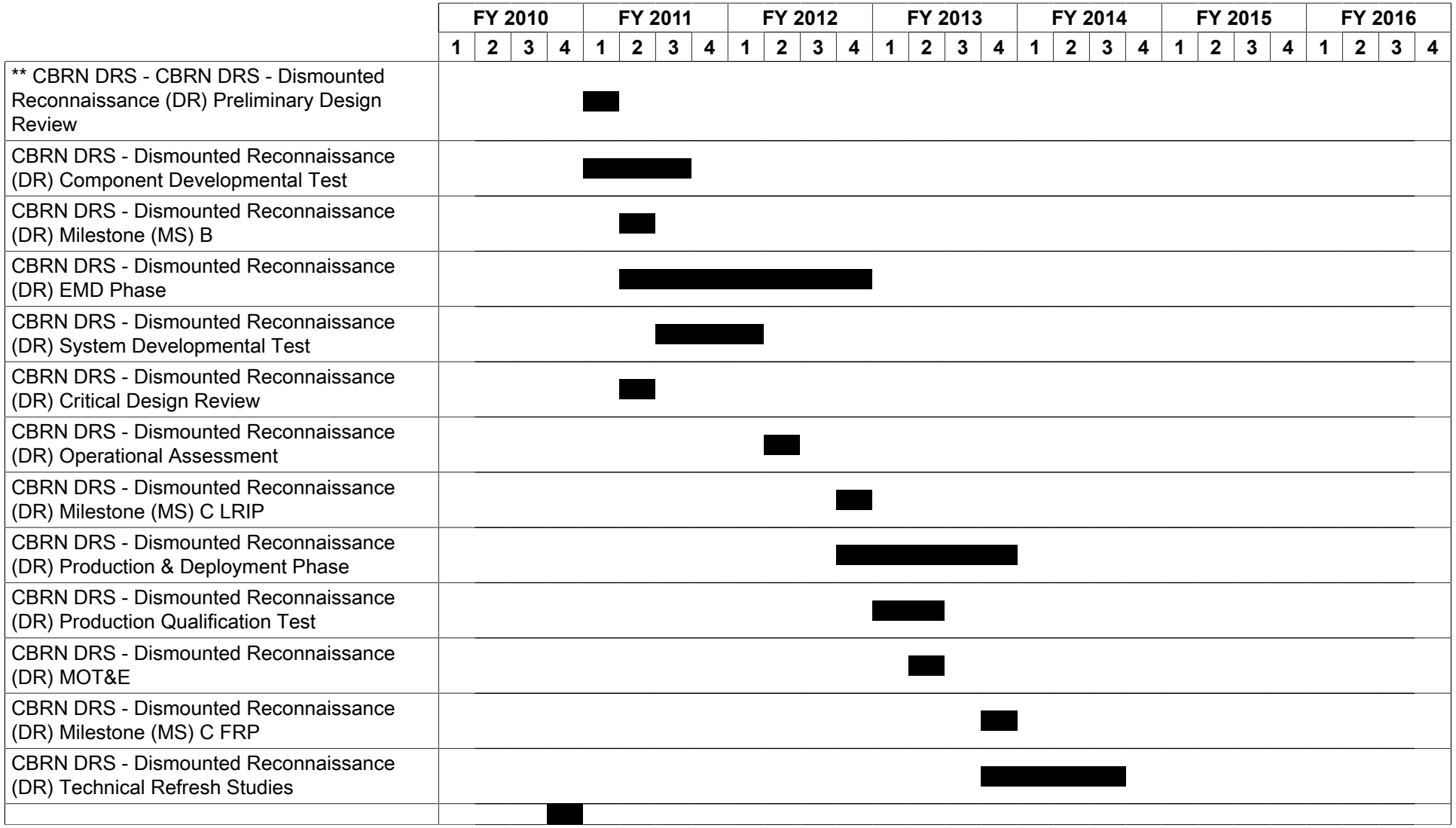

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** CA5: *CONTAMINATION AVOIDANCE (SDD)*

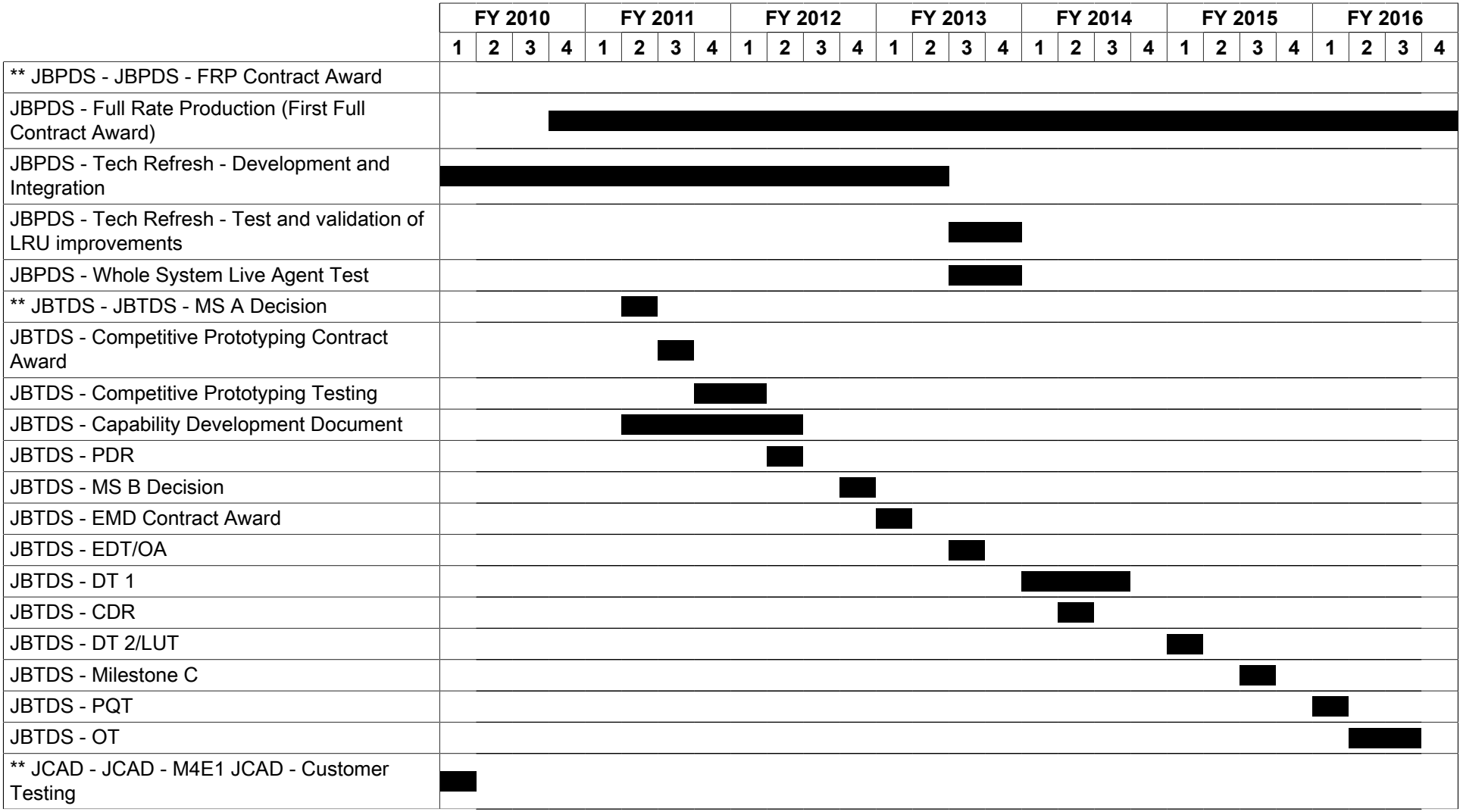

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

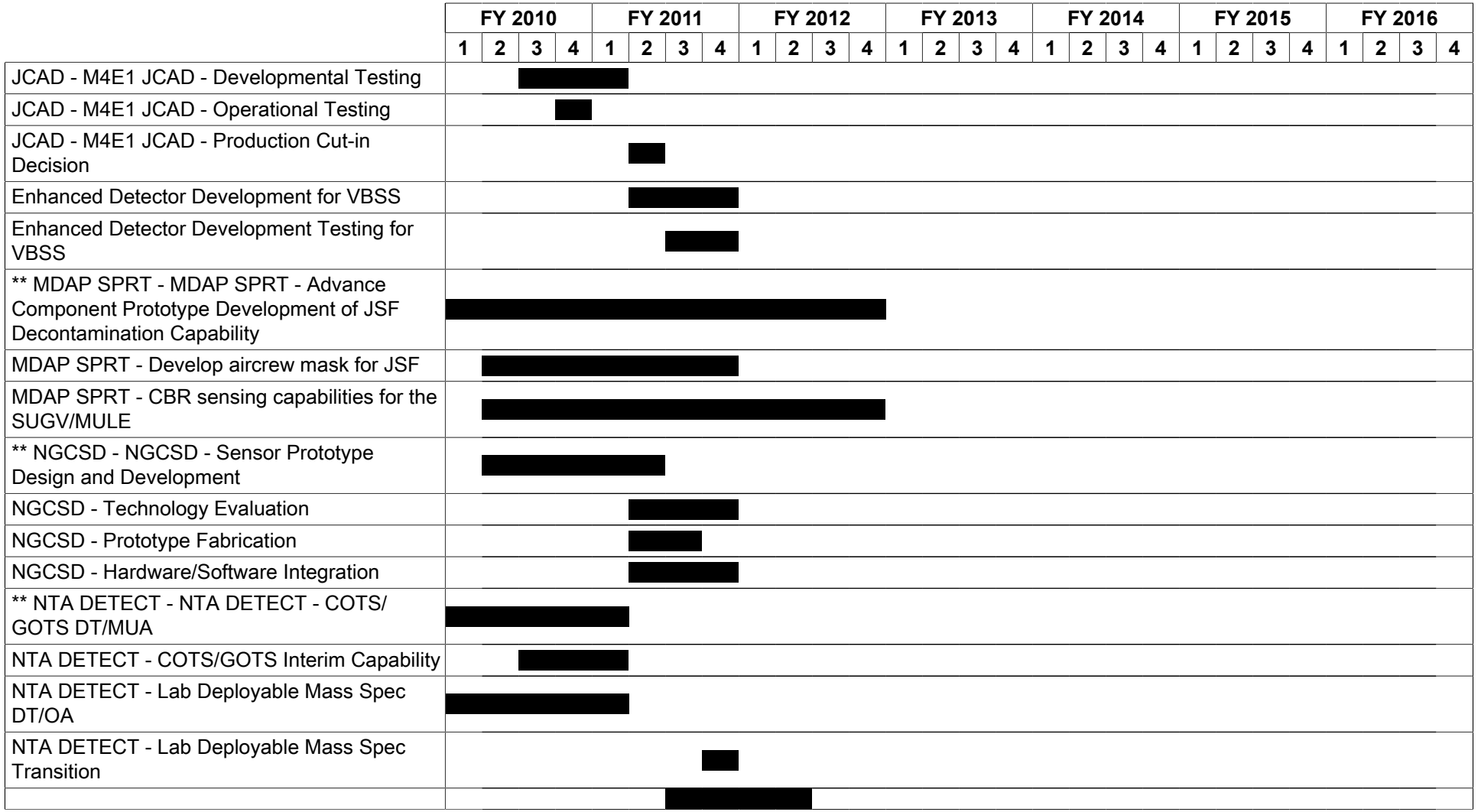

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

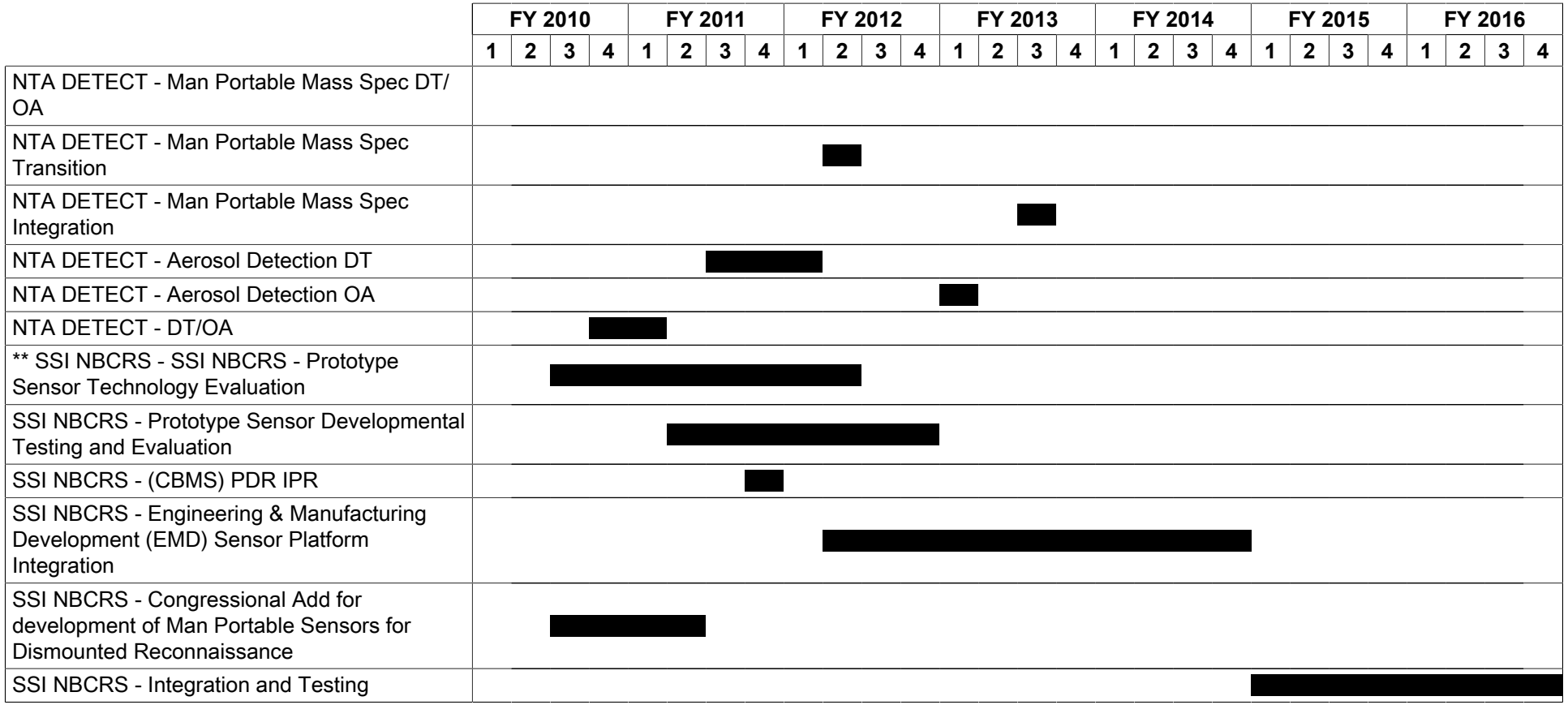

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CA5: *CONTAMINATION AVOIDANCE (SDD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** CBRN DRS - CBRN DRS - Dismounted Reconnaissance (DR) Preliminary Design Review	1	2011	1	2011
CBRN DRS - Dismounted Reconnaissance (DR) Component Developmental Test	1	2011	3	2011
CBRN DRS - Dismounted Reconnaissance (DR) Milestone (MS) B	2	2011	2	2011
CBRN DRS - Dismounted Reconnaissance (DR) EMD Phase	2	2011	4	2012
CBRN DRS - Dismounted Reconnaissance (DR) System Developmental Test	3	2011	1	2012
CBRN DRS - Dismounted Reconnaissance (DR) Critical Design Review	2	2011	2	2011
CBRN DRS - Dismounted Reconnaissance (DR) Operational Assessment	2	2012	2	2012
CBRN DRS - Dismounted Reconnaissance (DR) Milestone (MS) C LRIP	4	2012	4	2012
CBRN DRS - Dismounted Reconnaissance (DR) Production & Deployment Phase	4	2012	4	2013
CBRN DRS - Dismounted Reconnaissance (DR) Production Qualification Test	1	2013	2	2013
CBRN DRS - Dismounted Reconnaissance (DR) MOT&E	2	2013	2	2013
CBRN DRS - Dismounted Reconnaissance (DR) Milestone (MS) C FRP	4	2013	4	2013
CBRN DRS - Dismounted Reconnaissance (DR) Technical Refresh Studies	4	2013	3	2014
** JBPDS - JBPDS - FRP Contract Award	4	2010	4	2010
JBPDS - Full Rate Production (First Full Contract Award)	4	2010	4	2016
JBPDS - Tech Refresh - Development and Integration	1	2010	2	2013
JBPDS - Tech Refresh - Test and validation of LRU improvements	3	2013	4	2013
JBPDS - Whole System Live Agent Test	3	2013	4	2013
** JBTDS - JBTDS - MS A Decision	2	2011	2	2011
JBTDS - Competitive Prototyping Contract Award	3	2011	3	2011
JBTDS - Competitive Prototyping Testing	4	2011	1	2012
JBTDS - Capability Development Document	2	2011	2	2012

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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	Start		End	
Events	Quarter	Year	Quarter	Year
JBTDS - PDR	2	2012	2	2012
JBTDS - MS B Decision	4	2012	4	2012
JBTDS - EMD Contract Award	1	2013	1	2013
JBTDS - EDT/OA	3	2013	3	2013
JBTDS - DT 1	1	2014	3	2014
JBTDS - CDR	2	2014	2	2014
JBTDS - DT 2/LUT	1	2015	1	2015
JBTDS - Milestone C	3	2015	3	2015
JBTDS - PQT	1	2016	1	2016
JBTDS - OT	2	2016	3	2016
** JCAD - JCAD - M4E1 JCAD - Customer Testing	1	2010	1	2010
JCAD - M4E1 JCAD - Developmental Testing	3	2010	1	2011
JCAD - M4E1 JCAD - Operational Testing	4	2010	4	2010
JCAD - M4E1 JCAD - Production Cut-in Decision	2	2011	2	2011
Enhanced Detector Development for VBSS	2	2011	4	2011
Enhanced Detector Development Testing for VBSS	3	2011	4	2011
** MDAP SPRT - MDAP SPRT - Advance Component Prototype Development of JSF Decontamination Capability	1	2010	4	2012
MDAP SPRT - Develop aircrew mask for JSF	2	2010	4	2011
MDAP SPRT - CBR sensing capabilities for the SUGV/MULE	2	2010	4	2012
** NGCSD - NGCSD - Sensor Prototype Design and Development	2	2010	2	2011
NGCSD - Technology Evaluation	2	2011	4	2011
NGCSD - Prototype Fabrication	2	2011	3	2011
NGCSD - Hardware/Software Integration	2	2011	4	2011

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** NTA DETECT - NTA DETECT - COTS/GOTS DT/MUA	1	2010	1	2011
NTA DETECT - COTS/GOTS Interim Capability	3	2010	1	2011
NTA DETECT - Lab Deployable Mass Spec DT/OA	1	2010	1	2011
NTA DETECT - Lab Deployable Mass Spec Transition	4	2011	4	2011
NTA DETECT - Man Portable Mass Spec DT/OA	3	2011	2	2012
NTA DETECT - Man Portable Mass Spec Transition	2	2012	2	2012
NTA DETECT - Man Portable Mass Spec Integration	3	2013	3	2013
NTA DETECT - Aerosol Detection DT	3	2011	1	2012
NTA DETECT - Aerosol Detection OA	1	2013	1	2013
NTA DETECT - DT/OA	4	2010	1	2011
** SSI NBCRS - SSI NBCRS - Prototype Sensor Technology Evaluation	3	2010	2	2012
SSI NBCRS - Prototype Sensor Developmental Testing and Evaluation	2	2011	4	2012
SSI NBCRS - (CBMS) PDR IPR	4	2011	4	2011
SSI NBCRS - Engineering & Manufacturing Development (EMD) Sensor Platform Integration	2	2012	4	2014
SSI NBCRS - Congressional Add for development of Man Portable Sensors for Dismounted Reconnaissance	3	2010	2	2011
SSI NBCRS - Integration and Testing	1	2015	4	2016

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
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COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
CM5: *HOMELAND DEFENSE (SDD)*	2.861	1.166	9.109	-	9.109	13.829	4.961	1.979	1.954	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project supports Engineering and Manufacturing Development and Low Rate Initial Production (EMD/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.

Efforts funded in this project are:

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 can accommodate quick installation or removal of equipment as mission requirements dictate. As well, it will provide 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 sample types.

The CB Installation Protection Program (CBIPP) supports the development of analytical methodologies to expand/enhance the operational capabilities of currently fielded CBRN detection, identification and protection technologies against emerging threats to include Toxic Industrial Chemicals (TICs), Chemical Warfare Agents (CWAs), and Biological Warfare Agents (BWAs). Detection and identification of these substances is currently difficult and time-consuming. Current systems lack extensive libraries to support rapid identification. Identification may also involve multiple, expensive technologies. The ability to rapidly detect and identify a TIC is essential to effectively control and mitigate its effects, thus protecting personnel. This program also supports the evaluation of emerging CBRN detection, identification, information management and decision support technologies to DoD response units to maintain required state of the art capabilities.

The Weapons of Mass Destruction Civil Support Team Program supports the ongoing assessment and acquisition of COTS and GOTS analytical detection, protection, decontamination and sampling equipment for survey in order to expand/enhance the operational capabilities of the (57) WMD CST Teams.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) CALS - System Engineering and Program Management	-	1.166	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: System engineering and technical control, as well as the business management of the system/program. 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 2011 Plans:*** Completed System Engineering and Program Management Support related to contract development and procurement actions.			
Title: 2) FORCE PROT - Large Filter Study ***Description:*** Large Filter, M48A1 Gas Particulate Filter (GPF), Testing. ***FY 2010 Accomplishments:*** Completed surety testing of M48A1 GPF.	0.924	-	-
Title: 3) FORCE PROT - CatOx Integration ***Description:*** Catalytic Oxidation (CatOx) air purification system integration into the Analytical Laboratory System's (ALS) Class III Glovebox. ***FY 2010 Accomplishments:*** Monitored contractor engineering studies. Conducted non-surety testing on contractor prototype.	0.234	-	-
Title: 4) FORCE PROT - Filter Life Surveillance ***Description:*** Filter Life Surveillance Testing to determine performance of M98 Gas Particle Filter Sets used in fixed collective protection systems when used for extended periods with an objective to reduce life cycle costs. ***FY 2010 Accomplishments:*** Completed Filter Life Surveillance Testing.	0.100	-	-
Title: 5) FORCE PROT - Alternative Systems Analysis ***Description:*** Alternative Systems Analysis to develop and apply an analytical capability to evaluate alternate concepts and technologies for collective protection of fixed sites (buildings) to optimize mission preservation and reduce the life cycle cost. ***FY 2010 Accomplishments:*** Completed Alternative Systems Analysis for Fixed Collective Protection Systems.	0.900	-	-
Title: 6) FORCE PROT - Fixed ColPro System Test Bed	0.250	-	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: Modify Fixed Collective Protection System Test Bed and conduct trials to compare the protection level provided by various Fixed Collective Protection systems and operating conditions. ***FY 2010 Accomplishments:*** Completed Fixed ColPro System Test Bed trials.			
Title: 7) FORCE PROT - Management Oversight ***Description:*** Provide strategic tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2010 Accomplishments:*** Provided strategic tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.	0.353	-	-
Title: 8) WMD CST - TIC TIM Task Force ***Description:*** The Toxic Industrial Chemical/Toxic Industrial Material (TIC/TIM) Task Force (TTTF) was established to provide TIC prioritization and baseline TIC acquisition capability recommendations to the Joint Program Executive Office for Chemical & Biological Defense (JPEO-CBD). The focus has been primarily on intentional/collateral large scale release scenarios of acutely hazardous TICs in a military operational setting that could cause notable operational risk. The TTTF products have included the following products: #1 TIC prioritization process and results. #2 Operational hazard and risk assessment results. #3 Results of the portfolio analysis. #4 Results of TIC test procedure standardization efforts, which include the development of a test procedure framework, two draft priority test procedures, a test procedure repository, and a test procedure status report. ***FY 2010 Accomplishments:*** Provided for collaboration with the NATO Joint Coordination Group and partner countries to develop and present a Data Document collecting and synthesizing the results of several international studies related to TIC/TIM threat analysis, detection capabilities, and testing regiments to provide heightened awareness and institutionalization of the findings/results on the international stage.	0.100	-	-
Title: 9) WMD CST - System Engineering and Program Management	-	-	2.620

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: System engineering and technical control, as well as the business management of the system/program. It encompasses the overall planning, direction, and control of the definition, development, and production of the system/program, including functions of logistics engineering and integrated logistics support (ILS) management (e.g., maintenance support, facilities, personnel, training, testing, and activation of the system). ***FY 2012 Plans:*** Provide for system engineering, technical control, and business management support of the Meso Scale Defense System.			
Title: 10) WMD CST - Development Engineering ***Description:*** Studies, analysis, design development, evaluation, testing, and redesign for the system component(s) during system development. Includes the design efforts of preparing specifications, engineering drawings, parts lists, wiring diagrams, test planning and scheduling, analysis of test results, data reduction, report preparations and establishment of reliability, maintainability, and quality assurance control requirements. ***FY 2012 Plans:*** Initiate Development of reagents for the Meso Scale Defense (MSD) biological detection system to be integrated into the Analytical Laboratory System.	-	-	3.494
Title: 11) WMD CST - Development Engineering ***Description:*** This element includes the costs of study, analysis, design development, evaluation, testing, and redesign for the system component(s) during the system development efforts. It includes the design efforts of preparing specifications, establishment of reliability, maintainability, and quality assurance control requirements. This element 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 Plans:*** Initiate development of method protocols for sampling with the Meso Scale Defense biological detection system for integration into the Analytical Laboratory System.	-	-	1.498
Title: 12) WMD CST - System Test and Evaluation ***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.	-	-	1.497

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2012 Plans: Conduct Meso Scale Defense Biological detection system Component Test and evaluation.			
Accomplishments/Planned Programs Subtotals	2.861	1.166	9.109

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• JS0004: *WMD - CIVIL SUPPORT TEAMS (WMD CST)*	12.565	39.862	15.900		15.900	28.797	20.044	30.519	32.304	Continuing	Continuing
• JS0005: *COMMON ANALYTICAL LABORATORY SYSTEM (CALS)*	0.000	0.000	0.000		0.000	0.000	14.765	19.962	29.608	Continuing	Continuing
• JS0500: *CB INSTALLATION/ FORCE PROTECTION PROGRAM (FORCE PROT)*	54.123	50.773	0.000		0.000	0.000	0.000	0.000	0.000	0.000	104.896

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.

FORCE PROT

The Special Study for System Methodology Development will support the development of analytical methodologies to expand/enhance the operational capabilities of currently fielded CBRN detection, identification and protection technologies against emerging threats to include TIC, CWA, and BWA threats.

The Special Study for CBRN Defense Technology Evaluation will support the evaluation of emerging CBRN detection, identification, information management and decision support technologies to DoD response units to maintain required state-of-the-art capabilities.

WMD CST

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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This program utilizes multiple acquisition vehicles to deliver a CBRN capability to the WMD response units. The CALS program will upgrade the analytical capability with the objective of improving chemical and biological detection sensitivity and selectivity of the WMD CST Analytical Laboratory System Increment 1 and the 20th SUPCOM heavy and light tactical lab variants. Additionally, the CALS will integrate the communications and reachback capability for mobile CBRN homeland defense capability as required by the Joint Requirements Oversight Council (JROC).

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** WMD CST - HW S - Meso Scale Defense - Reagent Development	MIPR	TBD:	-	-		3.495	Feb 2012	-		3.495	Continuing	Continuing	0.000
HW S - Method Protocol Development	MIPR	TBD:	-	-		1.500	May 2012	-		1.500	Continuing	Continuing	0.000
		Subtotal	-	-		4.995		-		4.995			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** WMD CST - ES S - Meso Scale Defense - Support	MIPR	Edgewood Chemical Biological Center:Edgewood, MD	-	-		1.207	Feb 2012	-		1.207	0.000	1.207	0.000
		Subtotal	-	-		1.207		-		1.207	0.000	1.207	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** WMD CST - OTHT C - Meso Scale Defense Component Testing	MIPR	TBD:	-	-		1.497	May 2012	-		1.497	0.000	1.497	0.000
		Subtotal	-	-		1.497		-		1.497	0.000	1.497	0.000

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Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CALS - PM/MS HW - Program Office - Planning and Programming	MIPR	Edgewood Chemical Biological Center:Edgewood, MD	-	1.166	Feb 2011	-		-		-	0.000	1.166	0.000
** WMD CST - PM/MS S - Meso Scale Defense System	MIPR	TBD:	-	-		1.410	Feb 2012	-		1.410	0.000	1.410	0.000
		Subtotal	-	1.166		1.410		-		1.410	0.000	2.576	0.000

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	1.166		9.109		-		9.109			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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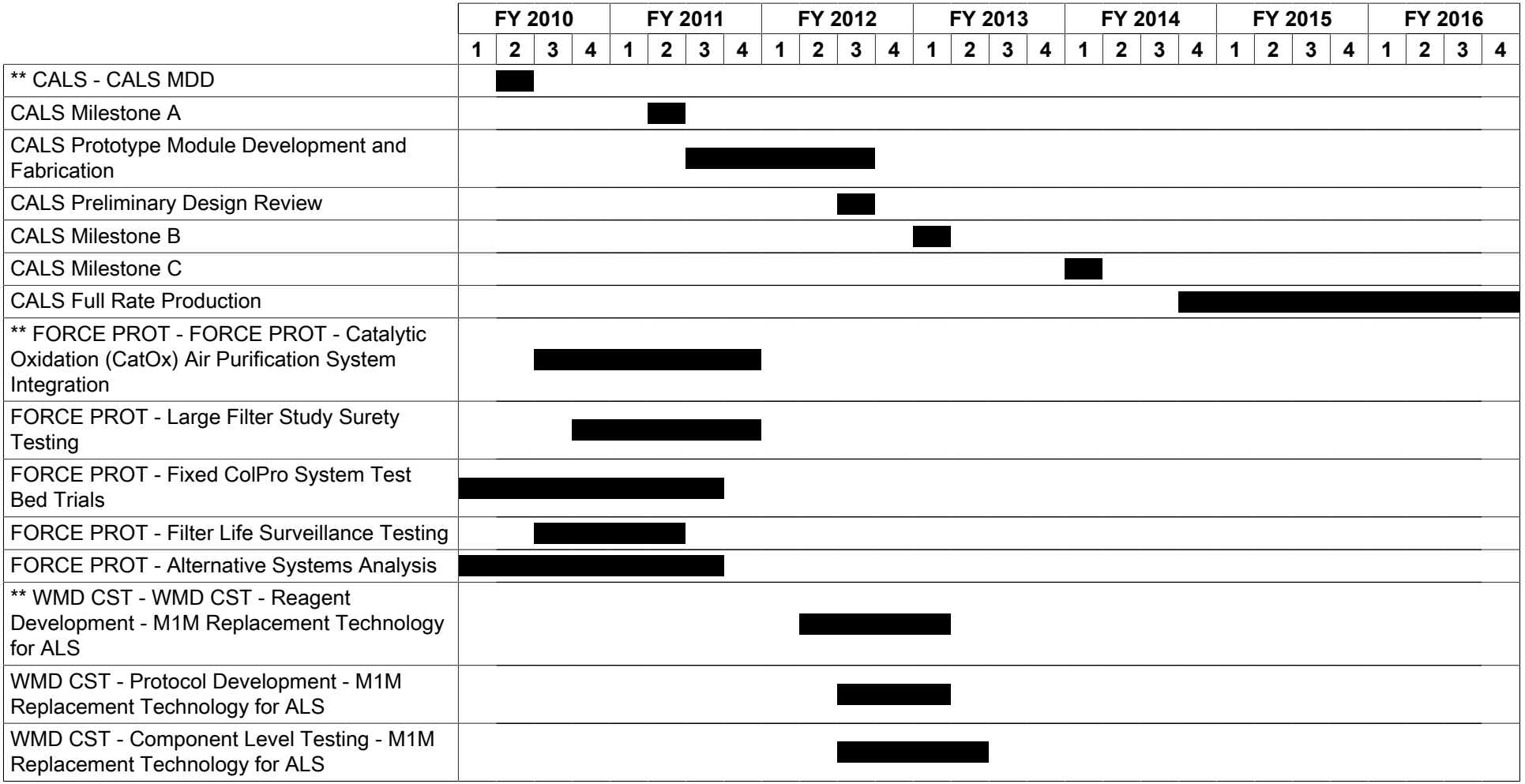

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** CALS - CALS MDD	2	2010	2	2010
CALS Milestone A	2	2011	2	2011
CALS Prototype Module Development and Fabrication	3	2011	3	2012
CALS Preliminary Design Review	3	2012	3	2012
CALS Milestone B	1	2013	1	2013
CALS Milestone C	1	2014	1	2014
CALS Full Rate Production	4	2014	4	2016
** FORCE PROT - FORCE PROT - Catalytic Oxidation (CatOx) Air Purification System Integration	3	2010	4	2011
FORCE PROT - Large Filter Study Surety Testing	4	2010	4	2011
FORCE PROT - Fixed ColPro System Test Bed Trials	1	2010	3	2011
FORCE PROT - Filter Life Surveillance Testing	3	2010	2	2011
FORCE PROT - Alternative Systems Analysis	1	2010	3	2011
** WMD CST - WMD CST - Reagent Development - M1M Replacement Technology for ALS	2	2012	1	2013
WMD CST - Protocol Development - M1M Replacement Technology for ALS	3	2012	1	2013
WMD CST - Component Level Testing - M1M Replacement Technology for ALS	3	2012	2	2013

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
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COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
CO5: *COLLECTIVE PROTECTION (SDD)*	11.847	18.459	11.307	-	11.307	14.511	7.749	-	-	0.000	63.873
Quantity of RDT&E Articles	72	0	0		0	72	0	0	0		

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.

Systems funded under this project are: 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 2010	FY 2011	FY 2012
Title: 1) JECP - Engineering and Manufacturing Development (EMD) Contract	4.030	2.492	1.039
Description: Engineering and Manufacturing Development 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 2010 Accomplishments:*** Completed detailed design activities with design review; held User demonstration of early prototypes with Design and Trade Studies Review. Conducted an Integrated Baseline Review and In-Process Reviews. Provided support for Government agent and simulant component level Developmental Test (DT). Manufactured prototype systems for Contractor system level DT. Began Contractor system level DT (including environmental and electromagnetic interference testing). Began manufacture of prototypes for Government system level DT. Prototypes consist of 18 tent kits (3 configurations, 6 units each) at approximately $75 thousand each, 12 structure kits at approximately $56 thousand each, 6 stand alone (SA) man-portable at approximately $7 thousand each, 6 SA small at approximately $22 thousand each, 6 SA medium at approximately $67 thousand each, 6 SA large at approximately			

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CO5: *COLLECTIVE PROTECTION (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
$167 thousand each, 9 single person airlocks at approximately $5 thousand each and 9 multi-person airlocks at approximately $30 thousand each. Estimated total multi-year cost of all prototypes: $3.915 million. ***FY 2011 Plans:*** Complete Contractor system level DT. Complete manufacture of prototypes for Government system level DT. Conduct Critical Design Review (CDR). Provide support for Government system level DT of all 9 configurations of the FoS including training, maintenance, troubleshooting and repair. ***FY 2012 Plans:*** Continue providing support for Government system level DT with combined Operational and DT field events, logistics/manpower and personnel integration (MANPRINT) demonstration, and operational assessment (OA). Conduct System Verification Review, Functional Configuration Audit and Production Readiness Review.			
Title: 2) JECP - Government Component Level Developmental Testing ***Description:*** Conduct Government component level developmental testing (DT) using agent and simulant to determine compliance with SPS protection requirements. Used test data from agent and simulant testing to establish a defendable agent to simulant relationship (ASR). Develop component level empirical models to provide to the JECP System Performance Model (SPM). ***FY 2010 Accomplishments:*** Completed Barrier Materials Swatch Testing and Air-Purification Component Testing. Established ASR and provide component level empirical models to provide to the JECP SPM team.	2.096	-	-
Title: 3) JECP - Government System Level 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 SPM. ***FY 2010 Accomplishments:*** Developed Design of Experiment (DoE) to ensure optimum results are achieved from the Government system level Developmental Testing (DT) that is conducted. ***FY 2011 Plans:***	0.322	8.587	5.014

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Begin Non-CB mode OT of the Family of Systems (FoS) in littoral and desert environments. Begin Reliability and Maintainability Analysis, static and dynamic system verification testing on the FoS. Conduct accelerated materials aging study. ***FY 2012 Plans:*** Complete Non-CB mode OT of the Family of Systems (FoS) in littoral and desert environments. Complete Reliability and Maintainability Analysis, static and dynamic system verification testing on the FoS. Conduct DT system field challenge, 30 day continuous operations verification testing, OA and post field static system verification testing. Begin post field Government component level DT consisting of Barrier Materials Swatch Testing, and Air-Purification Component Testing.			
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 2010 Accomplishments:*** Updated the System Performance Specification (SPS) and participated in contract re-negotiations. Updated and maintained the Requirements Traceability Matrix (RTM) to be consistent with the updated SPS. Monitored detailed design activities including design review; participated in User demonstration of early prototypes and Design and Trade Studies Review. Participated in an Integrated Baseline Review and In-Process Reviews. Monitored manufacture of EMD prototypes. Provided support for Contractor system level DT and Government agent and simulant component level DT. Assisted planning of Government system level DT. ***FY 2011 Plans:*** Update and maintain the RTM to track when requirements have been verified as test results become available. Ensure FoS ready for and participate in CDR. Prepare Post-CDR Assessment. Participate in Configuration Control Board. Monitor manufacture of Government system level DT prototypes. Provide support for Contractor system level DT and Government agent and simulant component level DT. Assist planning and conduct of Government system level DT. ***FY 2012 Plans:*** Develop, update and/or review program documentation in preparation for MS C. Provide support for Government system level DT. Ensure FoS ready for and participate in System Verification Review, Functional Configuration Audit and Production Readiness Review.	1.074	1.153	0.840
Title: 5) JECP - Test and Evaluation IPT ***Description:*** Lead and oversee all aspects of the JECP Integrated Test (IT) program.	0.812	1.127	0.750

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2010 Accomplishments: Conducted integrated test planning, coordination, and test readiness reviews associated with Government component level DT and Contractor system level DT. Reviewed test plans, procedures and reports and witnessed contractor system level test events as needed. Assisted in the development of the Design of Experiment and associated Test Matrices in support of Government system level DT. Reviewed component level test data and reports (including reliability test results and key performance parameters (KPP) failures). ***FY 2011 Plans:*** Develop and/or review test plans, procedures and reports. Ensure FoS ready for and participate in CDR. Participate in Configuration Control Board as necessary. ***FY 2012 Plans:*** Continue to review test procedures and reports and participate in Government system level DT and operational assessment. Provide results from component and system level DT to User for incorporation into the Capability Production Document. Ensure FoS ready for and participate in System Verification Review, Functional Configuration Audit and Production Readiness Review. Develop, update and/or review program documentation in preparation for MS C.			
Title: 6) JECP - Integrated Logistics Support IPT ***Description:*** Oversee and provide supportability planning guidance to the EMD contractor in addressing logistic support elements including maintenance philosophy, manpower & personnel, supply support, Tech Data, support & test equipment, training and training support. ***FY 2010 Accomplishments:*** Continued the Business Case Analysis (BCA) to determine the scope of implementing Performance Based Logistics. Continued evaluation as to whether organic or Contractor Logistics Support is the most effective approach. Began an analysis to identify surge requirements and industries ability to support. Initiated researching Depot Source of Repair. Drafted a Maintenance Concept, Item Unique Identification Plan and System Manpower and Personnel Integration Management Plan. Monitored Contractor logistics efforts and delivered documents. Provided information to support the Joint Independent Logistics Assessment (JILA). ***FY 2011 Plans:*** Complete the analysis to identify surge requirements and industries ability to support. Report out at MS C the results of the BCA and surge requirements analysis. Draft Materiel Fielding Plan. Ensure FoS ready for and participate in CDR. Participate in	0.641	0.775	0.500

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Configuration Control Board as necessary. Provide information to support the JILA. Begin development of Navy Training System Plan. ***FY 2012 Plans:*** Develop, update and/or review program documentation in preparation for MS C. Draft material fielding plan. Provide support for Government system level DT, including coordination of first increment of Logistics/Manpower Personnel Integration Demonstration. Ensure FoS ready for and participate in System Verification Review, Functional Configuration Audit and Production Readiness Review. Provide information to support the JILA. Complete Navy Training System Plan.			
Title: 7) JECP - Program Management and Contract Administration ***Description:*** Oversee the day-to-day program execution including guidance and direction to the JECP IPTs, financial management and tracking, budget preparation, schedule planning and monitoring, and JPEO-CBD/JPM-ColPro reporting requirements including but not limited to weekly highlight reports, monthly Acquisition Status Reports and quarterly program review briefs. Perform EMD contract management and administration. ***FY 2010 Accomplishments:*** Focused on monitoring detailed design activities including Configuration Management, User demonstration day and trade studies review, Integrated Baseline Review, In-process Review, Critical Design Review preparation, Government component level DT and Contractor system level DT prototype manufacturing and testing. ***FY 2011 Plans:*** Focus on Contractor system level DT, CDR and CDR Assessment, and Government system level DT prototypes and testing. ***FY 2012 Plans:*** Focus on System Verification Review, Functional Configuration Audit and Production Readiness Review and MS C planning and preparation.	1.227	1.250	1.228
Title: 8) JECP - Program Management ***Description:*** Provide strategic tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2010 Accomplishments:*** Provided strategic tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2011 Plans:***	1.645	3.075	1.936

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Provide strategic tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2012 Plans:*** Provide strategic tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.			
Accomplishments/Planned Programs Subtotals	11.847	18.459	11.307

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• JN0014: *COLLECTIVE PROT SYS AMPHIB BACKFIT (CPS BKFT)*	11.963	5.869	0.000		0.000	0.000	0.000	0.000	0.000	0.000	17.832
• JP0911: *CP FIELD HOSPITALS (CPFH)*	10.265	1.929	3.423		3.423	1.505	0.000	0.000	0.000	0.000	17.122
• JP1111: *JOINT EXPEDITIONARY COLLECTIVE PROTECTION (JECP)*	0.000	0.000	0.000		0.000	0.000	4.003	36.523	35.560	Continuing	Continuing
• R12301: *CB PROTECTIVE SHELTER (CBPS)*	10.608	19.744	5.991		5.991	5.990	19.716	22.573	23.811	Continuing	Continuing

D. Acquisition Strategy

JECP

Strategy based on evolutionary development in consonance with the Joint Requirements Office (JRO)/User developed capability documents. During the Pre-MS A Concept Refinement Phase, conducted a tailored Analysis of Alternatives (AoA) leveraging the market survey, test results and lessons learned from the FY05 ColPro Technology Readiness Evaluation (TRE). During the Technology Development Phase following MS A, technology demonstrations were conducted to mitigate risk and identify affordable mature technologies that individually or together meet the Warfighters needs. 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 Engineering and Manufacturing Development 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). Following a successful Full Rate Production (FRP) decision, award a FPIS option with five one-year ordering periods. Full and open competition will be

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CO5: *COLLECTIVE PROTECTION (SDD)*

used with an updated SPS to award follow-on production contracts. Following JECP achieving Full Operational Capability, the Expeditionary Collective Protection-Enhanced Program will provide solutions to meet emerging and evolving User needs.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CO5: *COLLECTIVE PROTECTION (SDD)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JECP - HW S - Prototype Development	C/CPIF	Science Applications International Corporation:San Diego, CA	8.572	2.492	Feb 2011	1.041	Feb 2012	-		1.041	0.000	12.105	0.000
		Subtotal	8.572	2.492		1.041		-		1.041	0.000	12.105	0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JECP - ES S - Systems Engineering IPT	MIPR	Various:	4.085	1.153	Nov 2010	0.839	Nov 2011	-		0.839	0.000	6.077	0.000
ILS S - Integrated Logistics IPT	MIPR	Various:	1.987	0.775	Nov 2010	0.499	Nov 2011	-		0.499	0.000	3.261	0.000
		Subtotal	6.072	1.928		1.338		-		1.338	0.000	9.338	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JECP - OTHT SB - Test & Evaluation IPT	MIPR	Various:	3.983	1.127	Nov 2010	0.749	Nov 2011	-		0.749	0.000	5.859	0.000
DTE S - Prototype Performance Specification Testing	MIPR	Various:	0.322	8.587	Nov 2010	5.014	Feb 2012	-		5.014	0.000	13.923	0.000
		Subtotal	4.305	9.714		5.763		-		5.763	0.000	19.782	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CO5: *COLLECTIVE PROTECTION (SDD)*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JECP - PM/MS S - APMO Support	MIPR	NSWC Dahlgren:Dahlgren, VA	4.089	0.975	Nov 2010	0.948	Nov 2011	-		0.948	0.000	6.012	0.000
PM/MS S - APMO Contractor Support	C/FP	Solutions Development Corporation:Dahlgren, VA	0.546	0.275	Feb 2011	0.280	Feb 2012	-		0.280	0.000	1.101	0.000
PM/MS S - JPM-ColPro Support	MIPR	NSWC Dahlgren:Dahlgren, VA	3.043	1.387	Nov 2010	1.258	Nov 2011	-		1.258	0.000	5.688	0.000
PM/MS S - JPEO-CBD Support	MIPR	JPEO CBD:Falls Church, VA	1.932	1.688	Nov 2010	0.679	Nov 2011	-		0.679	0.000	4.299	0.000
		Subtotal	9.610	4.325		3.165		-		3.165	0.000	17.100	0.000

	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	28.559	18.459		11.307		-		11.307	0.000	58.325	0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT CO5: *COLLECTIVE PROTECTION (SDD)*

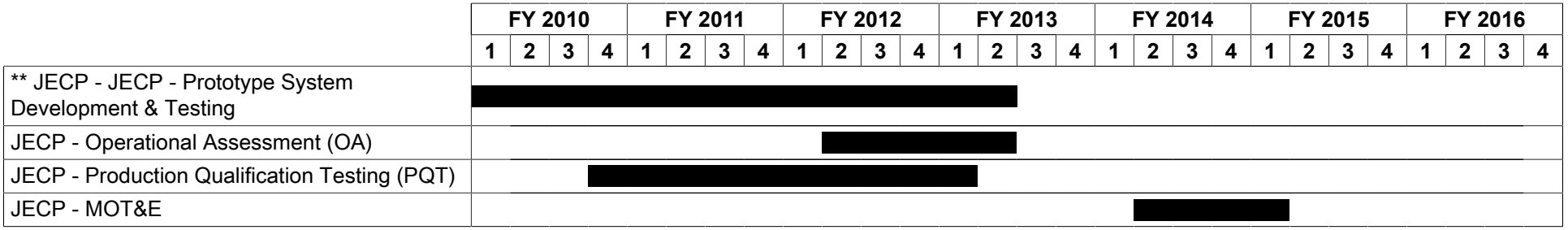

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** CO5: *COLLECTIVE PROTECTION (SDD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** JECP - JECP - Prototype System Development & Testing	1	2010	2	2013
JECP - Operational Assessment (OA)	2	2012	2	2013
JECP - Production Qualification Testing (PQT)	4	2010	1	2013
JECP - MOT&E	2	2014	1	2015

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (SDD)*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
DE5: *DECONTAMINATION SYSTEMS (SDD)*	17.195	28.499	4.370	-	4.370	9.189	27.426	22.381	12.410	Continuing	Continuing
Quantity of RDT&E Articles	11	0	0		0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project funds Engineering, and Manufacturing Development (EMD) for: (1) Decontamination Competitive Prototype; (2) the Decontamination Family of Systems (DFoS); (3) Joint Platform Interior Decon (JPID); and (4) the Joint Service Sensitive Equipment Decontamination (JSSED).

The Decontamination Competitive Prototype (DC PROTO) effort will support the JPID program of record in evaluating prototype systems that will demonstrate the best decontamination technology to increase sensitive equipment and platform interior decontamination capabilities and the Joint Strike Fighter (JSF) interior/exterior decontamination requirement. DC PROTO will support the development of the JPID MS A activities and the release of the Request for Proposal (RFP) to support the JPID source selection and competitive prototyping efforts.

The Decontamination Family of Systems (DFoS) program facilitates the rapid transition of mature Science and Technology (S&T) research developments to existing Decontamination and Major Acquisition Defense Program (MDAP) Programs of Record and guides S&T community efforts toward meeting the needs of the Warfighter. Leveraging the outcomes of the Materiel Development Decision (MDD) (2QFY11) directed Analysis of Alternatives, DFoS will develop a Family of Systems, including end items/consumables which will 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.

The Joint Platform Interior Decontamination (JPID) program will provide immediate, operational and thorough decontamination capabilities for interiors of vehicles, ships, fixed site facilities, mobile maintenance facilities, aircraft and sensitive equipment during ground/shipboard operations in hostile and non-hostile environments that have been exposed to chemical, biological, radiological and nuclear (CBRN) agents/contamination. To accommodate the array of Service mission sets, the potential for varying system and/or technology configurations may be required. The JPID Preferred System Concept (PSC) may consist of multiple solution sets that provide increments of capability or one solution to address the various platforms and threats identified under the program.

The Joint Service Sensitive Equipment Decontamination System (JSSED) program provides a thorough decontamination capability against chemical and biological warfare agents for high value or critical sensitive equipment that cannot be decontaminated using existing methods without damage. JSSED efforts will be addressed under the JPID program of record from FY11 forward.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) DC PROTO	-	5.484	-
FY 2011 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiate DC Proto/JPID engineering, testing and logistics planning and develop program documents to support JPID program of record.			
Title: 2) DFoS ***FY 2010 Accomplishments:*** Initiated engineering, testing and logistics planning and documentation to support the evaluation of a general purpose decontaminant(s), Decon Wipes, Contamination Indicator/Decon Assurance Spray (CI/DA); conduct efficacy and material compatibility to evaluate general purpose decontaminant(s).	2.950	-	-
Title: 3) DFoS ***FY 2011 Plans:*** Conduct efficacy and deliver production representative articles/material compatibility testing/demonstrate manufacturing processes for Decon Wipes and Man Portable Decontamination System. Continue efficacy and material compatibility to evaluate general purpose decontaminants and coatings Electro-chemically generated Chlorine Dioxide (eClO2).	-	9.770	-
Title: 4) DFoS ***FY 2011 Plans:*** Conduct technology and manufacturing readiness assessments/initiate efficacy and material compatibility testing/transition Contamination Indicator/DAS technologies to DFoS.	-	1.500	-
Title: 5) DFoS ***FY 2012 Plans:*** Initiate engineering and manufacturing development phase for Reactive Skin Decontamination Lotion (RSDL) for use against NTAs	-	-	1.398
Title: 6) DFoS ***FY 2012 Plans:*** Initiate analyses, system and user testing to support Contaminated Human Remains Pouch (CHRP) Technology Readiness Assessment (TRA)	-	-	2.972
Title: 7) JPID ***FY 2011 Plans:*** Develop, validate and verify large item test capability to support JPID post chemical/biological efficacy at various temperatures.	-	5.200	-
Title: 8) JPID	-	3.291	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2011 Plans: Validate and verify large frame aircraft test capability to support JPID post test activities.			
Title: 9) JSSED ***FY 2010 Accomplishments:*** Conducted Developmental Testing (ambient chemical efficacy).	1.500	-	-
Title: 10) JSSED ***FY 2010 Accomplishments:*** Conducted engineering, testing and logistics planning and documentation to support program restructure.	4.682	-	-
Title: 11) JSSED ***FY 2010 Accomplishments:*** Fabricated 10 JSSED Prototypes (at $300 thousand each) and conducted MIL-STD810, chemical efficacy and biological efficacy testing on Engineering Test Units.	6.470	-	-
Title: 12) JSSED ***FY 2011 Plans:*** Conducted engineering, testing and logistics planning and documentation to support transition of program efforts into JPID.	-	3.254	-
Accomplishments/Planned Programs Subtotals	15.602	28.499	4.370

	FY 2010	FY 2011
Congressional Add: 1) Self Contained Automated Vehicle Washing Systems with microwave decontamination. ***FY 2010 Accomplishments:*** Congressional Interest Item - Design and develop a prototype (quantity of 1 at $1M per system each)for a Self Contained Automated Vehicle Washing System with microwave decontamination capability.	1.593	-
Congressional Adds Subtotals	1.593	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• JD0050: *DECONTAMINANT SYSTEM OF SYSTEMS*	0.000	0.000	0.000		0.000	0.000	2.096	10.680	22.466	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (SDD)*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• JD0055: *JOINT SERVICE PERSONNEL/SKIN DECON SYSTEM (JSPDS)*	4.466	0.000	6.466		6.466	0.000	2.994	2.994	0.000	0.000	16.920
• JD0056: *JS TRANS DECON SYSTEM - SMALL SCALE (JSTDS-SS)*	24.040	18.160	0.000		0.000	0.000	0.000	0.000	0.000	0.000	42.200
• JD0060: *JOINT PLATFORM INTERIOR DECON (JPID)*	0.000	0.000	0.000		0.000	0.000	0.000	0.000	6.437	Continuing	Continuing
• JD0062: *HUMAN REMAINS DECON SYSTEM (HRDS)*	0.000	3.410	0.000		0.000	0.000	0.000	0.000	0.000	0.000	3.410

D. Acquisition Strategy

DC PROTO

DC PROTO will conduct a Sources Sought in support of JPID for prototypes suitable for sensitive equipment and platform interior decontamination. The DC PROTO will integrate into the JPID program.

DFoS

The Decontamination Family of Systems (DFoS) will utilize an incremental acquisition strategy to transition various developmental technology efforts (COTS, Joint Science Technology Office (JSTO), Defense Threat Reduction Agency (DTRA) efforts, etc.) 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. The DFoS acquisition will be managed as a Family of Systems (FoS), leveraging differing technologies in each subsystem to fulfill Warfighter capability gaps. A multi-phased Analysis of Alternatives (AoA) will be conducted to identify and evaluate the operational effectiveness of potential material solutions to satisfy Service requirements. As each AoA phase is completed, individual systems and their respective phases of entry will be identified. Industry and government labs will be solicited and through competitive prototyping, materiel solutions will be down-selected for continued development and fielding as a new or enhanced joint force capability.

JPID

JPID will utilize an incremental evolutionary acquisition strategy to provide immediate, operational and thorough decontamination capabilities for interiors of vehicles, ships, fixed site facilities, mobile maintenance facilities, aircraft and sensitive equipment during ground/shipboard operations in hostile and non-hostile environments

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (SDD)*

that have been exposed to chemical, biological, radiological and nuclear (CBRN) agents/contamination. To accommodate the array of Service mission sets, the potential for varying system and/or technology configurations may be required. The JPID Preferred System Concept (PSC) may consist of multiple solution sets that provide increments of capability or one solution to address the various platforms and threats identified under the program. JPID will employ a competitive prototyping effort to facilitate the identification and evaluation of NDI and/or commercially available capabilities that can meet the JPID requirements. An RFP will be released to solicit industry for NDI/commercial technologies capable of meeting some or all of the JPID requirements using a full and open competition, best value contract strategy that may result in multiple contract awards.

JSSED

The Joint Service Sensitive Equipment Decontamination (JSSED) program awarded a single Engineering and Manufacturing Development (EMD) contract (Cost Plus Incentive Fee) with Low Rate Initial Production and Full Rate Production options (Fixed Price Successive Target) following a full and open competition RFP to meet the individual sensitive equipment requirement through incremental development. The JSSED requirement will be addressed under the JPID program of record from FY11 forward.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (SDD)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** DC PROTO - HW C - Transition Program Efforts to JPID	C/CPIF	Teledyne Brown Engineering - Huntsville:AL	-	2.000	Feb 2011	-		-		-	Continuing	Continuing	0.000
** DFoS - SW C - Decon wipes	MIPR	RDECOM:Natick, MA	-	0.800	May 2011	-		-		-	Continuing	Continuing	0.000
HW C - Man Portable Decon System	MIPR	RDECOM:Natick, MA	-	0.835	May 2011	-		-		-	Continuing	Continuing	0.000
HW C - Contaminant Indicator/ Decon Assurance Spray	MIPR	Defense Threat Reduction Agency (DTRA):Ft. Belvoir, VA	-	0.355	May 2011	-		-		-	Continuing	Continuing	0.000
HW S - General Purpose Decontamination	C/FFP	TBD:	-	1.584	May 2011	-		-		-	Continuing	Continuing	0.000
HW C - Contaminated Human Remains Pouch (CHRP)	MIPR	TBD:	-	-		1.986	Feb 2012	-		1.986	Continuing	Continuing	0.000
HW C - Reactive Skin Decontamination Lotion (RSDL) NTA	MIPR	Defense Technical Information Center:Fort Belvoir, VA	-	-		1.398	Feb 2012	-		1.398	Continuing	Continuing	0.000
HW S - Coatings	C/FFP	TBD:	-	0.350	May 2011	-		-		-	Continuing	Continuing	0.000
** JSSED - HW C - EMD Contract/Program Transition	C/CPIF	Teledyne Brown Engineering - Huntsville:AL	-	2.603	Nov 2010	-		-		-	Continuing	Continuing	0.000
		Subtotal	-	8.527		3.384		-		3.384			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** DC PROTO - ES C - Engineering, Testing and Logistics Support	MIPR	Various:	-	3.484	May 2011	-		-		-	0.000	3.484	0.000
** DFoS - ES C - Technical Support	MIPR	Various:	0.392	0.409	Feb 2011	-		-		-	0.000	0.801	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (SDD)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	0.392	3.893		-		-		-	0.000	4.285	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** DFoS - DTE C - Man Portable Decon System	MIPR	TBD:	-	1.330	May 2011	-		-		-	0.000	1.330	0.000
DTE C - Decon Wipes	MIPR	TBD:	-	1.000	May 2011	-		-		-	0.000	1.000	0.000
DTE C - Contaminant Indicator/Decon Assurance Spray	MIPR	TBD:	-	1.050	May 2011	-		-		-	0.000	1.050	0.000
DTE C - Contaminated Human Remains Pouch (CHRP)	MIPR	TBD:	-	-		0.986	Feb 2012	-		0.986	0.000	0.986	0.000
DTE C - General Purpose Decon	MIPR	TBD:	-	2.420	May 2011	-		-		-	0.000	2.420	0.000
DTE C - Coatings	MIPR	TBD:	-	0.500	May 2011	-		-		-	0.000	0.500	0.000
** JPID - DTE C - Develop, validate and verify large item test capability	MIPR	Various:	-	4.000	Feb 2011	-		-		-	0.000	4.000	0.000
DTE C - Validate and verify large frame aircraft	MIPR	Various:	-	2.369	Feb 2011	-		-		-	0.000	2.369	0.000
		Subtotal	-	12.669		0.986		-		0.986	0.000	13.655	0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** DFoS - PM/MS C - Integrated Product Team and Technical Support	MIPR	RDECOM:Natick, MA	1.805	0.637	Feb 2011	-		-		-	0.000	2.442	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (SDD)*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JPID - PM/MS C - Program Management Support, Integrated Product Team and Technical Support	MIPR	Various:	-	2.122	Feb 2011	-		-		-	0.000	2.122	0.000
** JSSED - PM/MS C - Program Management Support, Integrated Product Team and Technical Support	MIPR	Various:	10.756	0.651	Feb 2011	-		-		-	0.000	11.407	0.000
		Subtotal	12.561	3.410		-		-		-	0.000	15.971	0.000

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	12.953	28.499		4.370		-		4.370			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT DE5: *DECONTAMINATION SYSTEMS (SDD)*

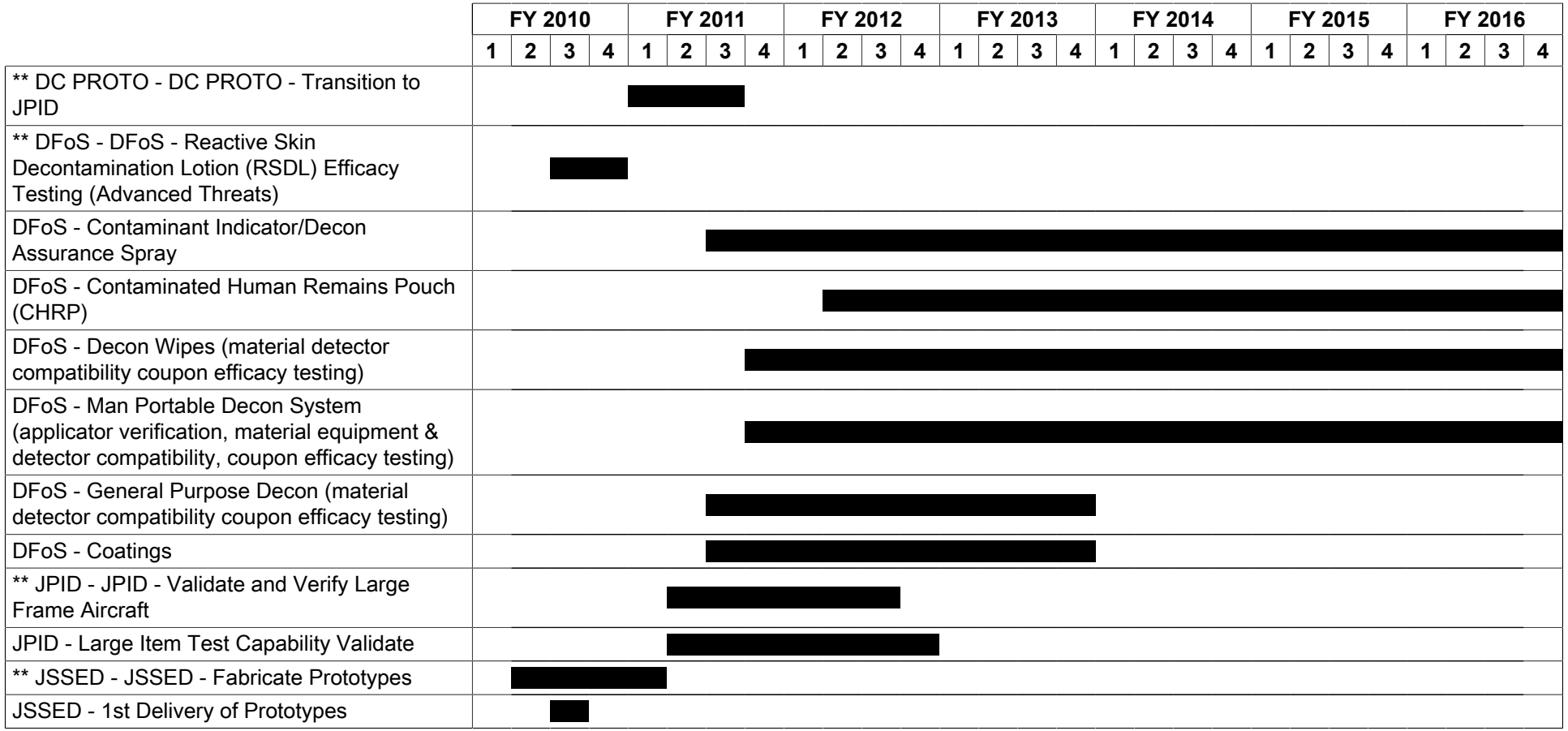

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** DE5: *DECONTAMINATION SYSTEMS (SDD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** DC PROTO - DC PROTO - Transition to JPID	1	2011	3	2011
** DFoS - DFoS - Reactive Skin Decontamination Lotion (RSDL) Efficacy Testing (Advanced Threats)	3	2010	4	2010
DFoS - Contaminant Indicator/Decon Assurance Spray	3	2011	4	2016
DFoS - Contaminated Human Remains Pouch (CHRP)	2	2012	4	2016
DFoS - Decon Wipes (material detector compatibility coupon efficacy testing)	4	2011	4	2016
DFoS - Man Portable Decon System (applicator verification, material equipment & detector compatibility, coupon efficacy testing)	4	2011	4	2016
DFoS - General Purpose Decon (material detector compatibility coupon efficacy testing)	3	2011	4	2013
DFoS - Coatings	3	2011	4	2013
** JPID - JPID - Validate and Verify Large Frame Aircraft	2	2011	3	2012
JPID - Large Item Test Capability Validate	2	2011	4	2012
** JSSED - JSSED - Fabricate Prototypes	2	2010	1	2011
JSSED - 1st Delivery of Prototypes	3	2010	3	2010

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (SDD)*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
IP5: *INDIVIDUAL PROTECTION (SDD)*	19.848	9.678	11.490	-	11.490	11.768	1.979	0.989	1.963	Continuing	Continuing
Quantity of RDT&E Articles	256	0	0		0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project funds System Development and Demonstration (SDD) of individual protection equipment, the goal is to provide 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.

The three efforts listed below are funded in this program:

(1) The Joint Service Aircrew Mask (JSAM) is an Acquisition Category (ACAT) III Family of Systems (FoS) respiration system being incrementally developed. JSAM MPU-6 Apache Rotary Wing (RW) masks is for use with the Apache Integrated Helmet And Display Sighting System, JSAM MBU-25/26 (V)/P Fixed Wing (FW) respirator are being developed for use on limited number of U.S. Air Force Fixed Wing aircraft and the JSAM MPU-5 Rotary Wing (RW) for use in the majority of Department of Defense (DoD's) RW aircraft. 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. JSAM will be a lightweight CB protective mask that will be worn as CB protection for most Army, Air Force, Navy and Marine rotary and fixed-wing aircrew members. The JSAM (FW) will be the first and only CB protective mask in the DoD inventory that can provide anti-G protection, up to 9 times the vertical force (Gz), for aircrew in high performance aircraft. All JSAM variants will be compatible with most below-the-neck 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 provide flame and thermal protection, provide hypoxia protection to 60,000 feet, demist/emergency demist and anti-drown features. The MBU-26 (V)/P (FW) variants are being designed to be capable of being donned/doffed in flight.

(2) The Joint Service General Purpose Mask (JSGPM) funds SDD of respiratory and ocular protection technologies aimed at providing incremental upgrades for the JSGPM. Additionally, this project funds the Technology Development (TD) phase of the Advanced Respiratory Protection Initiative (ARPI) program for developing revolutionary materials, design and concepts that may be transitioned into future CB ensembles. Performance enhancements for all respiratory and ocular protection programs will be focused on increasing the protection levels of the systems from Chemical Warfare Agents (CWAs) and Toxic Industrial Chemicals (TICs) while reducing the physiological and logistical burdens.

(3) The Uniform Integrated Protection Ensemble (UIPE) program (formerly LCBE) will pursue an evolutionary incremental approach to provide capability to the Warfighter. Each increment of UIPE will provide technologies with military utility that are modular in function, and offer improvement in form and fit over current systems. The UIPE program will develop, integrate, test, procure and field systems that increase Warfighter operational performance in a CBRN environment via the use of emerging technologies and by leveraging tradespace in areas such as protection level, heat stress, durability, antimicrobial properties, launderability, self-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (SDD)*

detoxification, protection time, etc. Where appropriate, modeling and simulation tools will be used to lower UIPE program risks, reduce costs and ensure a high confidence in selected technologies.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) JSAM	16.014	7.269	7.919
FY 2010 Accomplishments: JSAM MPU-5 (RW) - Prepared specific mask tooling for prototypes. Completed development testing (DT). Produced MPU-5 prototypes (256 units at a cost of $4,400 each) for operational testing (OT). JSAM MBU-25/26 (V)/P (FW) - Finalized new generation design. Conducted JHMS tests. Start DT.			
FY 2011 Plans: JSAM MPU-5 (RW) - Start OT. JSAM FW - Continue DT for top four priority aircraft platforms (F-22,MC-12W,F-18 and MV-22).			
FY 2012 Plans: JSAM MPU-5 (RW) - Complete OT. Prepare documentation for full rate production (FRP). JSAM MBU-25/26 (V)/P (FW) - Complete DT for F-22,MC-12W,F-18 and MV-22 aircraft platforms. Start OT.			
Title: 2) JSGPM	1.444	2.409	-
FY 2010 Accomplishments: JSGPM (ARPI) - Conducted government testing screening. Initiated filter qualification testing on potential End of Service Life Indicator (ESLI) candidates.			
FY 2011 Plans: JSGPM (ARPI) - Conduct government testing to ensure carbons transitioned to JSGPM filters to improve TIC protection meeting the user requirements. Conduct government testing on novel filtration candidates considered for UIPE. JSGPM - Complete testing of ESLI.			
Title: 3) UIPE Increment 1	-	-	3.571
FY 2012 Plans: UIPE Incr. 1 - Conduct developmental testing (DT) efforts for UIPE Incr. 1. Assess down-selected items for UIPE Incr. 1 candidates for field and laboratory test events to evaluate performance with respect to reduction of physiological burden, protection against chemical warfare agents, and mission suitability. Complete DT. Start OT. Complete OT. Prepare milestone (MS) C documentation. Prepare for multiservice operational test and evaluation (MOT&E).			
Accomplishments/Planned Programs Subtotals	17.458	9.678	11.490

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** IP5: *INDIVIDUAL PROTECTION (SDD)*

	FY 2010	FY 2011
Congressional Add: 1) JSAM	2.390	-
FY 2010 Accomplishments: Congressional Interest Item - JSAM Donn\Doff. Complete development of Donn \Doff capability for JSAM MBU-26(V)/P requirement.		
Congressional Adds Subtotals	2.390	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• IP7: *INDIVIDUAL PROTECTION (OP SYS DEV)*	0.000	0.000	0.000		0.000	0.000	0.494	2.467	1.470	Continuing	Continuing
• JI0002: *JS AIRCREW MASK (JSAM)*	23.045	6.964	11.853		11.853	21.223	43.717	47.598	48.368	Continuing	Continuing
• JI0003: *JOINT SERVICE GENERAL PURPOSE MASK (JSGPM/JSCESM)*	53.182	49.835	58.523		58.523	72.346	70.893	91.948	88.049	Continuing	Continuing
• JI0300: *JOINT CHEMICAL ENSEMBLE (JCE)*	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000
• MA0400: *PROTECTIVE CLOTHING (JSLIST)*	21.493	17.887	0.000		0.000	0.000	0.000	0.000	0.000	0.000	39.380

D. Acquisition Strategy

JSAM

The JSAM Acquisition Program Baseline Agreement (APBA) identifies JSAM MPU-6 Apache as the Rotary Wing (RW) Integrated Helmet and Display Sighting System (IHADSS) variant. The JSAM MPU-5 RW that is being developed for the majority of RW aircrew. JSAM MPU-6 Apache will be fielded first. Appropriate production options will be exercised.

JSGPM

JSGPM: All possible candidates will be identified through the Request For Information (RFI). The candidates will be screened against CWAs and TICs at the sorbent level. Candidates that show an indication that it may provide a performance enhancement may be transitioned into filter qualification testing. The qualification of a new filtration media for JSGPM will be based on the current JSGPM filter specification.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (SDD)*

JSGPM (ARPI): The Advanced Respiratory Protection Initiative (ARPI) will address improved masks protection, filter protection against TICs/TIMs and improved profile and breathing resistance; and wearability compatibility/integration. This will be accomplished by: 1) Class-Based Analysis, 2) Filtration Advanced Screening Test (FAST), Desorption Study; and Advanced CBRN Filtration efforts. Accomplishments to date include development of the prioritization approach and class based analysis; development of challenge levels for performance curve through modeling; FAST of ASZM-TDA, BSC, and EUMC against the priority TIC LIST; test of representative chemicals demonstrating the applicability of the class based analysis, and Scientific literature review of filter desorption.

UIPE

UIPE INCREMENT 1

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

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

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (SDD)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSAM - SW SB - Contractor Development MBU- 25/26	C/FPIF	Gentex:Rancho Cucamonga, CA	12.443	0.425	Feb 2011	2.251	Feb 2012	-		2.251	Continuing	Continuing	0.000
** UIPE - HW S - UIPE 1	MIPR	Natick:Natick, MA	-	-		1.019	Nov 2011	-		1.019	Continuing	Continuing	0.000
		Subtotal	12.443	0.425		3.270		-		3.270			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSGPM - ES C - JSGPM Filter	MIPR	ECBC:APG, MD	0.451	0.215	Nov 2010	-		-		-	0.000	0.666	0.000
ES C - JSGPM Filter	MIPR	NRL:Washington, DC	0.350	0.150	Nov 2010	-		-		-	0.000	0.500	0.000
		Subtotal	0.801	0.365		-		-		-	0.000	1.166	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSAM - OTHT SB - Govt Dev Test	MIPR	Various:	15.663	-		1.728	Nov 2011	-		1.728	0.000	17.391	0.092
OTE S - Govt Operational Test MBU-25/26	MIPR	Various:	19.230	4.049	Feb 2011	2.610	May 2012	-		2.610	0.000	25.889	0.404
OTHT SB - Govt Operational Test MPU-5	C/FFP	AVOX:Lancaster, NY	6.354	1.980	Nov 2010	0.632	Nov 2011	-		0.632	0.000	8.966	0.185
** JSGPM - DTE SB - JSGPM Filter Testing	MIPR	Various:	3.146	1.594	Nov 2010	-		-		-	0.000	4.740	0.000
DTE SB - JSGPM Filter Testing	MIPR	NRL:Washington, DC	0.750	0.250	Nov 2010	-		-		-	0.000	1.000	0.000
** UIPE - DTE S - UIPE 1 DT	MIPR	Various:	-	-		0.653	Feb 2012	-		0.653	0.000	0.653	0.000
OTE S - UIPE 1 OT	MIPR	Various:	-	-		1.256	Feb 2012	-		1.256	0.000	1.256	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (SDD)*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	45.143	7.873		6.879		-		6.879	0.000	59.895	0.681

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JSAM - PM/MS SB - Program Management	MIPR	Various:	18.763	0.815	Nov 2010	0.698	Nov 2011	-		0.698	0.000	20.276	5.421
** JSGPM - PM/MS C - Program Management Conduct Market Survey Analysis	MIPR	JPMO IP:Stafford, VA	0.600	0.200	Nov 2010	-		-		-	0.000	0.800	0.000
** UIPE - PM/MS C - Program Management	MIPR	JPMO IP Stafford:VA	-	-		0.643	Nov 2011	-		0.643	0.000	0.643	0.000
		Subtotal	19.363	1.015		1.341		-		1.341	0.000	21.719	5.421

	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	77.750	9.678		11.490		-		11.490			6.102

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (SDD)*

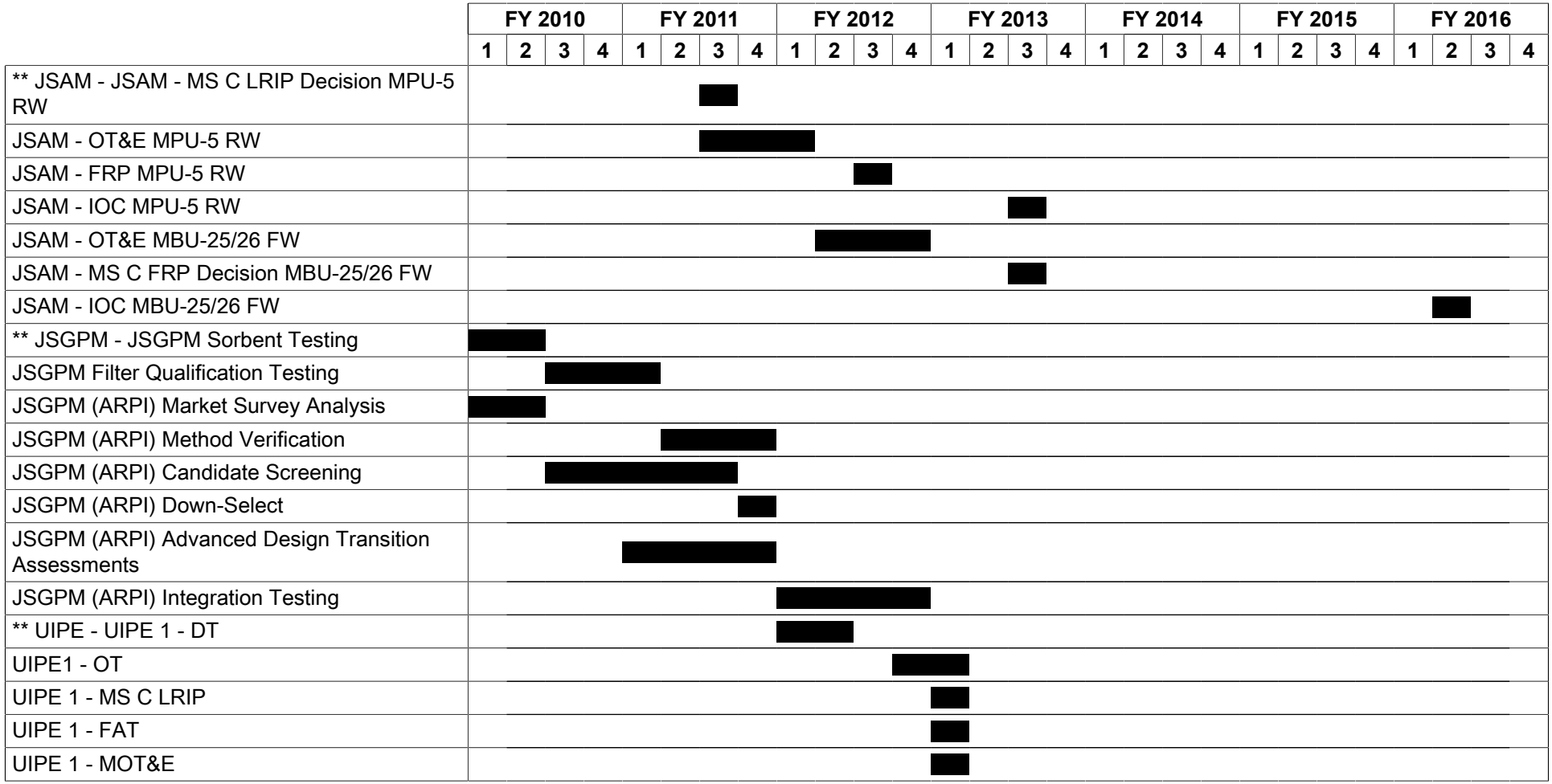

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IP5: *INDIVIDUAL PROTECTION (SDD)*

Schedule Details

	Start		End	
Events	Quarter	Year	Quarter	Year
** JSAM - JSAM - MS C LRIP Decision MPU-5 RW	3	2011	3	2011
JSAM - OT&E MPU-5 RW	3	2011	1	2012
JSAM - FRP MPU-5 RW	3	2012	3	2012
JSAM - IOC MPU-5 RW	3	2013	3	2013
JSAM - OT&E MBU-25/26 FW	2	2012	4	2012
JSAM - MS C FRP Decision MBU-25/26 FW	3	2013	3	2013
JSAM - IOC MBU-25/26 FW	2	2016	2	2016
** JSGPM - JSGPM Sorbent Testing	1	2010	2	2010
JSGPM Filter Qualification Testing	3	2010	1	2011
JSGPM (ARPI) Market Survey Analysis	1	2010	2	2010
JSGPM (ARPI) Method Verification	2	2011	4	2011
JSGPM (ARPI) Candidate Screening	3	2010	3	2011
JSGPM (ARPI) Down-Select	4	2011	4	2011
JSGPM (ARPI) Advanced Design Transition Assessments	1	2011	4	2011
JSGPM (ARPI) Integration Testing	1	2012	4	2012
** UIPE - UIPE 1 - DT	1	2012	2	2012
UIPE1 - OT	4	2012	1	2013
UIPE 1 - MS C LRIP	1	2013	1	2013
UIPE 1 - FAT	1	2013	1	2013
UIPE 1 - MOT&E	1	2013	1	2013

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
IS5: *INFORMATION SYSTEMS (SDD)*	17.435	13.844	2.423	-	2.423	9.523	31.465	25.381	13.010	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This funding supports System Development and Demonstration and Low Rate Initial Production (SDD/LRIP).

Efforts funded in this project are: (1) Joint Effects Model (JEM); (2) the Joint Warning and Reporting Network (JWARN); and (3) the Joint Program Executive Office for Chemical Biological Defense (JPEO-CBD) Software Support Activity (SSA).

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

The Joint Warning and Reporting Network (JWARN) will provide the Joint Forces with a comprehensive Integrated Early Warning, Analysis and Response capability to minimize the effects of hostile CBRN attacks, as well as accidents and incidents. It will provide the operational capability to employ CBRN warning technology which will collect, analyze, identify, locate, report, and disseminate warnings. JWARN will be compatible and integrated with Joint Service C4ISR Systems. JWARN will transition from platform specific Common Operating Environment (COE) standards to a Web-based Service Oriented Architecture (SOA). JWARN will also provide an expansion of sensors that will connect to JWARN, increased automation of message handling, improved false alarm filtering, integration of route-planning calculator, and interoperability with additional command and control (C2) systems. JWARN will be located in Command and Control Centers at the appropriate level and will be employed by CBRN defense specialists and other designated personnel. This employment will transfer data automatically from existing and future sensors to provide commanders with the capability to support operational decision making in a CBRN environment. JWARN will provide additional data processing to support the production of plans and reports, and access to specific CBRN information to improve the efficiency of limited CBRN personnel assets. JWARN will integrate existing sensors into a sensor network or host C2 system, but does not provide the sensors that will be employed in the operating environment. The JWARN capability described above will be developed utilizing an incremental approach based on Service requirements and host system architecture.

The JPEO-CBD SSA is a JPEO-CBD enterprise-wide, 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; interoperable and integrated net-centric, Service-oriented, composable solutions for CBD; and infusion of

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

latest technologies into programs of record. CBRN user community and related communities of interest have need for CBRN "plug and play" capability to allow interoperability and re-configurability across the enterprise. The requirement for net-centric, composable solutions provides the near term foundation for the Warfighter's ability to communicate his CBRN solutions and interoperate with other Service operational systems. It also supports a longer term ability to interoperate with related agencies and to reduce the Warfighter's CBRN footprint as technologies improve.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) JEM Operational Demonstrations and Exercises ***FY 2010 Accomplishments:*** Continued support of operational demonstrations and exercises.	0.389	-	-
Title: 2) JEM Operational Test and Evaluation/Follow-On Test and Evaluation ***FY 2010 Accomplishments:*** Continued to conduct multi-service Operational Test and Evaluation (MOT&E) and Follow-On Test and Evaluation (FOT&E).	0.574	-	-
Title: 3) JEM Systems Engineering ***FY 2010 Accomplishments:*** Continued to sustain JEM Increment 1 Systems Engineering Tasks to include software updates, configuration management, human-system integration, security analysis and DoD architecture artifact development.	0.479	-	-
Title: 4) JEM Independent Verification, Validation, and Accreditation ***FY 2010 Accomplishments:*** Conducted independent verification, validation, and accreditation of JEM software and related models. ***FY 2011 Plans:*** Continue independent verification, validation, and accreditation of JEM software and related models.	0.100	0.278	-
Title: 5) JEM Program Management ***FY 2010 Accomplishments:*** Provided program planning, financial management, contracting, schedule, and acquisition oversight support. Revised integrated master schedule, and other statutory and regulatory acquisition documents required for JEM Increment 1 Full Deployment Decision (FDD). ***FY 2011 Plans:*** Provide strategic, tactical planning, program/financial management, costing, contracting, scheduling and acquisition oversight support of fielded product all Services. Prepare and execute a follow-on Full Deployment Decision (FDD) for selected Command and Control systems.	0.828	0.233	-
Title: 6) JEM Accession of Technology Improvements	0.580	0.567	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2010 Accomplishments: Continued Science and Technology transition and improvement of existing JEM software. Analyzed existing and future software architectures. Continued migrating JEM software to evolving host platforms (Service C2 systems). Reviewed existing JEM internal architecture for improved performance and potential operational cost savings. ***FY 2011 Plans:*** Integrate FY10 transitioned Science and Technology technology and capabilities into JEM software. Analyze existing and future software architectures. Continue migrating JEM software to evolving host platforms (Service C2 systems). Incorporate Urban Dispersion Modeling enhancements, Missile Intercept, Backtracking to Source, enhanced STRATCOM Support, and Human Effects. Continue to review and evaluate existing JEM internal architecture for improved performance and potential operational cost savings.			
Title: 7) JEM Developmental Test and Evaluation ***FY 2010 Accomplishments:*** Performed Government Development Test (DT) on updates to the JEM and evolving baselines in support of fielding. Conducted interoperability, network and system security certifications of multiple service C4I/host systems and three computer operating systems (Windows XP, Windows 7 and UNIX). Conducted verification and validation to ensure updates to evolving baseline don't affect JEM accreditation. ***FY 2011 Plans:*** Continue to perform Governmental DT on updates to the JEM and evolving baselines in support of future User and Operational Assessments in preparation for milestone events. Verify and validate transitioned S&T code and developed models. Conduct test in support of follow-on accreditation and operational test. Initiate interoperability, network and system security certifications of multiple service C4I/host systems and three computer operating systems (Windows XP, Vista and UNIX).	0.829	0.439	-
Title: 8) JEM ***Description:*** JEM Program Development ***FY 2010 Accomplishments:*** Performed software upgrades on JEM baseline to support evolving C4I host system updates. Supported requests for special configurations of JEM (e.g. US Forces Korea (USFK), US Air Force Europe (USAFE), US National Guard Civil Support Teams (CST), Global Command and Control System (GCCS) - Joint/Army/Air Force/Maritime (J/A/AF/M). ***FY 2011 Plans:***	0.901	0.478	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continue software upgrades on JEM baseline to support the evolving C4I host system updates.			
Title: 9) JWARN ***Description:*** JWARN Program Development ***FY 2010 Accomplishments:*** Performed software upgrades and updates on JWARN baseline in parallel with evolving C4I host system upgrades. Continued development of enhancements within JWARN system. Provided special configurations and training of JWARN prototype for US Forces Korea (USFK). Maintained interoperability with Global Command and Control Systems GCCS (J/A/M) for Joint Commands, Army and Marines and the Army Maneuver Control System (MCS). ***FY 2011 Plans:*** Perform software upgrades and updates on JWARN baseline in parallel with evolving Command, Control, Communications, Computers, and Intelligence (C4I) host system upgrades. Complete development and transition to modernization efforts.	2.332	7.494	-
Title: 10) JWARN ***Description:*** JWARN Operational demonstrations and tests. ***FY 2010 Accomplishments:*** Planned, conducted and supported operational demonstrations and tests for service specific Follow-on Test and Evaluation (FOT&E) events. Generated test results and reports. ***FY 2011 Plans:*** Prepare, conduct and support operational demonstrations and tests for service specific FOT&E events. Generate test results and reports.	0.647	0.284	-
Title: 11) JWARN ***Description:*** JWARN Program Management ***FY 2010 Accomplishments:*** Continued JWARN program financial management, scheduling, planning and reporting. ***FY 2011 Plans:*** Continue JWARN program financial management, scheduling, planning and reporting.	2.083	2.727	-
Title: 12) SSA Policies, Standards and Guidelines	1.649	0.216	0.244

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2010 Accomplishments: Provided Policies, Standards & Guidelines to IT development programs to meet emerging architecture requirements for the Service Command, Control, Communications, Computers, and Intelligence (C4I) and CBRN (CBRN) Enterprise Systems. Monitored compliance with the Federal Information Security Management Act (FISMA) and DoD Acquisition policies necessary to obtain Interoperability Certification for use on services IT platforms. Continued maintenance of Enterprise Verification, Validation, and Accreditation (VV&A) guidelines and processes, including modeling and simulation (M&S) strategic support and accreditation support. ***FY 2011 Plans:*** Continue monitoring compliance with Federal Information Security Management Act (FISMA) and DoD Acquisition policies required to sustain certification on Service specific IT platforms. Update acquisition documentation for CBRN IT systems. Review and update Enterprise Verification, Validation, and Accreditation (VV&A) guidelines and processes, including M&S strategic support and accreditation support. ***FY 2012 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: 13) SSA Integrated Architecture ***FY 2010 Accomplishments:*** Used a federated approach to create a comprehensive framework of information security controls that affect the JPEO-CBD's IT Enterprise. Identified host system requirements and derived formal delivery dates for host systems. Conducted Net-Centric Assessment for programs. Maintained Common CBRN Interface standards including a Common CBRN Sensor Interface (CCSI). ***FY 2011 Plans:*** Continue documentation of CB Information Systems data flows, data requirements, services and applications as well as IT infrastructure and technical standards for host systems. Update and maintain the Integrated Architecture for JPEO-CBD Enterprise in accordance with DoDAF and industry standards. Provide Net-Centric Assessment for programs. Update Common CBRN Interface standards, including a CCSI and develop new interfaces as required. ***FY 2012 Plans:*** Continue required modifications to the Integrated Architecture for JPEO-CBD Enterprise on host platforms. Continue efforts to document CB Information Systems infrastructure and technical standards. Continue to provide Net-Centric Assessment for	1.648	0.332	0.308

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
programs. Review and update the Common CBRN Interface standards on operational systems, including a CCSI. Develop new interfaces as required.			
Title: 14) SSA Enterprise Support and Services ***FY 2010 Accomplishments:*** Facilitated the development of CBRN services that easily plug into service platforms and the Common CBRN Sensor Interface (CCSI). Provided support processes and services for Architectures, Data, Information Assurance, Help Desk, Modeling and Simulation, Science and Technology, and Standards and Policy. ***FY 2011 Plans:*** Provide support processes and services for Architectures, Data, Information Assurance, Help Desk, Modeling and Simulation, Science and Technology, and Standards and Policy. Compile performance metrics for services rendered. ***FY 2012 Plans:*** 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.	0.614	0.134	0.163
Title: 15) SSA Chemical, Biological, Radiological, Nuclear (CBRN) Data Model ***FY 2010 Accomplishments:*** Hosted collaborative forums to improve CBRN Data Model requirements. Developed and demonstrated CBRN data and information push to the Intel COI utilizing UCORE technology and concepts. ***FY 2011 Plans:*** Collaborate and exchange information for use in CBRN Data models. Develop CBRN data dissemination across multiple users utilizing Universal Core (UCore) concepts and technologies previously demonstrated in the UCORE Pilot. Refine CBRN data model to be used as an enterprise wide model for the CBRN Center of Excellence (COE). ***FY 2012 Plans:*** Continue to provide CBRN Data Model development for Community of Interest.	0.647	0.134	0.153
Title: 16) SSA Information Assurance ***FY 2010 Accomplishments:*** Provided System Security Management Procedures to obtain Information Assurance (IA) certification and acceptance services for developed JPEO-CBD IT programs. Ensured compliance with Information System Security (INFOSEC) Certification and Accreditation (C&A) practices related to Security Awareness and Training, Risk Management Plans and Incident Response	1.651	0.318	0.601

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Plans for JEM and JWARN. Obtained authorization to operate (ATO) annually to confirm that the IA posture of the IS remains acceptable. Validated IA controls and documented findings to maintain certification on host systems. ***FY 2011 Plans:*** Conduct reviews and maintain Authorization to Operate on host systems. Maintain situational awareness and initiate actions to improve or restore IA posture. Complete documentation required to provide Information Assurance certification and acceptance services for developing JPEO-CBD programs. ***FY 2012 Plans:*** Continue 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.			
Title: 17) SSA Policy and Standards Repository ***FY 2010 Accomplishments:*** Updated and maintained a repository for applicable Enterprise policies, standards, and guidelines. ***FY 2011 Plans:*** Review data for relevancy and update the repository for applicable Enterprise policies, standards, and guidelines. ***FY 2012 Plans:*** Update the repository for applicable Enterprise policies, standards, and guidelines.	0.697	0.140	0.359
Title: 18) SSA Technology Transition Support ***FY 2010 Accomplishments:*** Continued to provide Technology Transition support services (common components and services). ***FY 2011 Plans:*** Provide Technology Transition support services (common components and services). ***FY 2012 Plans:*** Continue to provide Technology Transition support services (common components and services).	0.787	0.070	0.595
Accomplishments/Planned Programs Subtotals	17.435	13.844	2.423

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• G47101: *JOINT WARNING & REPORTING NETWORK (JWARN)*	6.551	6.903	3.880		3.880	2.613	1.548	4.682	2.086	Continuing	Continuing
• IS7: *INFORMATION SYSTEMS (OP SYS DEV)*	1.284	1.821	6.911		6.911	6.032	4.565	4.264	6.261	Continuing	Continuing
• JC0208: *JOINT EFFECTS MODEL (JEM)*	3.482	3.482	0.000		0.000	0.000	0.000	0.225	1.532	0.000	8.721

D. Acquisition Strategy

JEM

The Joint Effects Model (JEM) is following an evolutionary acquisition approach that will allow rapid fielding of existing technologies while further research and development (R&D) continues in order to mature the technologies required for subsequent versions of JEM. JEM is now being fielded in increments of capabilities. Each increment will retain the functionality of the preceding increment. The JEM development effort will be aligned with the evolving Joint Program Executive Office for Chemical Biological Defense (JPEO-CBD) architectures and technologies, as well as, with Service Command and Control (C2) systems. JEM will develop three distinct increments of software. JEM is a web-services based application and has been granted an Interoperability Certificate by the Joint Interoperability Test Command (JITC). The program plans to award competitive contracts using fixed price or cost-plus as appropriate.

JWARN

JWARN will develop and provide Integrated Early Warning capabilities to specified (Common Operating Environment (COE-based)) operational-level Service Command and Control (C2) systems at the Global Command and Control System (GCCS) level, extend the integration effort into the Service tactical (non COE-based) C2 systems, provide connectivity to legacy and newly developed sensors, and complete the development of JWARN.

JWARN will extend these baseline capabilities to emerging, net-centric, Service C2 systems and Service CBRN sensors and detectors as they are developed and fielded. JWARN will also ensure CBRN warning and reporting capabilities remain synchronized with the changing demands of the Warfighter while keeping pace with evolving C2 systems and their architectures, and will further evolve by integrating next generation sensors, detectors and emerging Medical and Biological Surveillance requirements into the CBRN Enterprise.

SSA

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** IS5: *INFORMATION SYSTEMS (SDD)*

The JPEO-CBD Software Support Activity (SSA) is a JPEO-CBD user support organization spanning and supporting all Joint Project Managers (JPMs) and JPEO-CBD Directorates. The SSA provides enterprise-wide services and coordination across all JPEO-CBD Programs of Record (PORs) 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) across the JPEO and all JPMs.

Phase 1a identifies JPEO-CBD JPMs and programs that deal with data or software, and have an IT component. This will be followed by coordination with the JPMs and programs to facilitate the concepts of interoperability, integration and supportability of enterprise-wide services. Next follows work with user communities to develop and demonstrate enterprise-wide common architectures, products and services. (BA5 - System Development and Demonstration).

Phase 1b established management and control measures for tracking and reporting progress of the various elements described in Phases 1 and 2. This includes establishing, tracking, and performing configuration management of inventories and databases of IT systems and their states of interoperability and information assurance compliance. (BA6 - RDT&E Management Support).

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 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JWARN - SW S - JWARN System Development and Demonstration	C/CPAF	Northrop Grumman:Winterpark, FL	9.203	7.494	Feb 2011	-		-		-	Continuing	Continuing	0.000
** SSA - HW S - Product Development	MIPR	SPAWAR Systems Center:San Diego, CA	4.950	0.468	Nov 2010	1.350	Nov 2011	-		1.350	Continuing	Continuing	0.000
		Subtotal	14.153	7.962		1.350		-		1.350			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JEM - ES S - IPT - System Engineering, Logistics and Program Support	MIPR	Various:	15.809	0.432	Feb 2011	-		-		-	0.000	16.241	0.000
** SSA - ES S - Support Costs	MIPR	SPAWAR Systems Center:San Diego, CA	6.121	0.682	Nov 2010	0.549	Nov 2011	-		0.549	0.000	7.352	0.000
		Subtotal	21.930	1.114		0.549		-		0.549	0.000	23.593	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JEM - DTE SB - Hazard Prediction Model Development Test	MIPR	Various:	7.410	0.346	Feb 2011	-		-		-	0.000	7.756	0.000
OTE S - Hazard Prediction Model Developmental Test	MIPR	Various:	5.257	0.984	Feb 2011	-		-		-	0.000	6.241	0.000
** JWARN - OTHT SB - JWARN	MIPR	Various:	16.196	0.284	Feb 2011	-		-		-	1.249	17.729	0.000
** SSA - DTE S - Test and Evaluation	MIPR	SPAWAR Systems Center:San Diego, CA	2.857	0.148	Nov 2010	0.321	Nov 2011	-		0.321	0.000	3.326	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	31.720	1.762		0.321		-		0.321	1.249	35.052	0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** JEM - PM/MS S - Program Office - Planning and Programming	MIPR	SPAWAR Systems Command:San Diego, CA	5.750	0.233	Nov 2010	-		-		-	0.826	6.809	0.000
** JWARN - PM/MS S - JWARN Management Support	C/CPAF	Various:	19.732	2.727	Feb 2011	-		-		-	2.657	25.116	0.000
** SSA - PM/MS S - Management Services	MIPR	SPAWAR Systems Center:San Diego, CA	3.281	0.046	Nov 2010	0.203	Nov 2011	-		0.203	0.000	3.530	0.000
		Subtotal	28.763	3.006		0.203		-		0.203	3.483	35.455	0.000

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	96.566	13.844		2.423		-		2.423			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

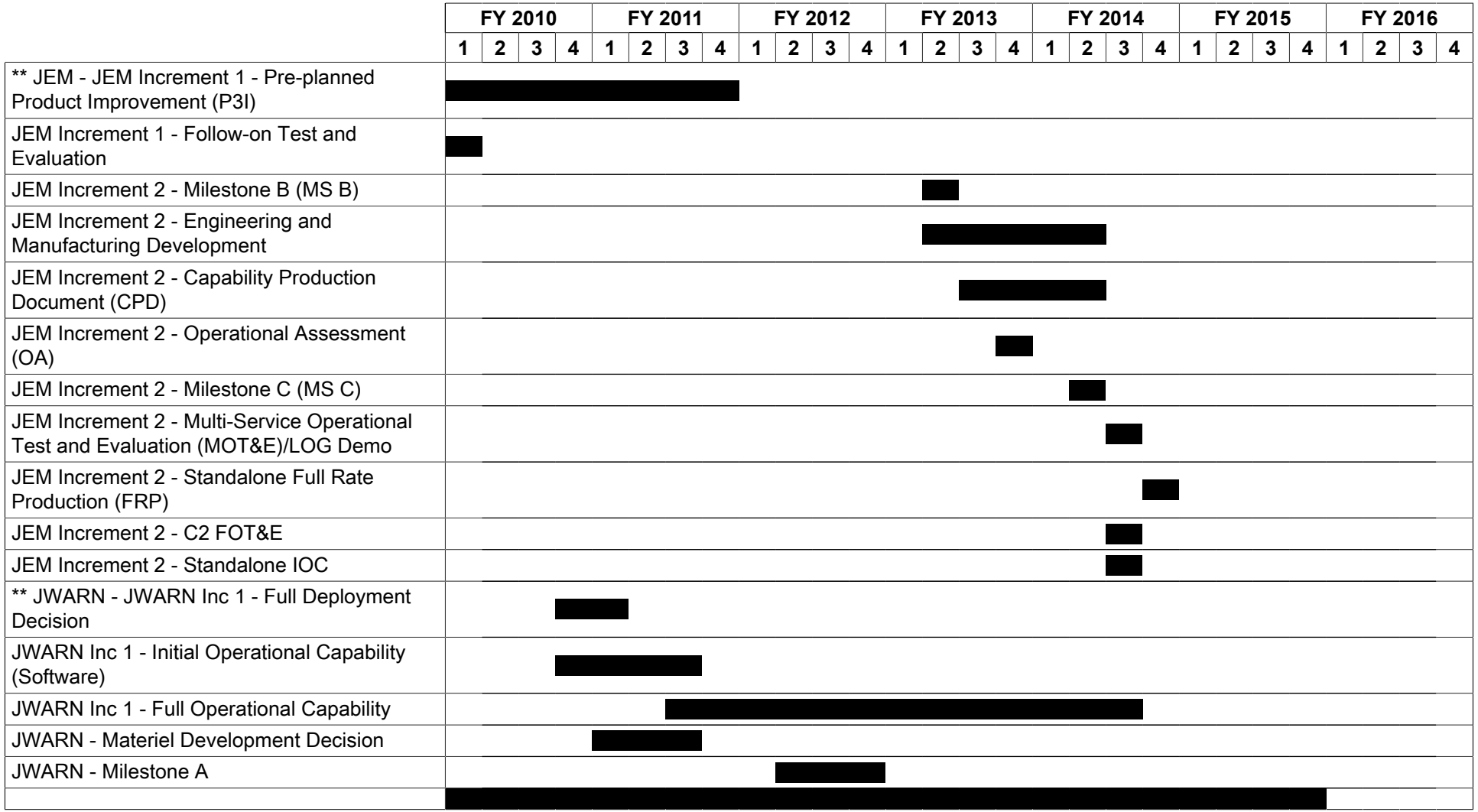

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT IS5: *INFORMATION SYSTEMS (SDD)*

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
** SSA - SSA - Sustain Common Components products, process and services																												

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** IS5: *INFORMATION SYSTEMS (SDD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** JEM - JEM Increment 1 - Pre-planned Product Improvement (P3I)	1	2010	4	2011
JEM Increment 1 - Follow-on Test and Evaluation	1	2010	1	2010
JEM Increment 2 - Milestone B (MS B)	2	2013	2	2013
JEM Increment 2 - Engineering and Manufacturing Development	2	2013	2	2014
JEM Increment 2 - Capability Production Document (CPD)	3	2013	2	2014
JEM Increment 2 - Operational Assessment (OA)	4	2013	4	2013
JEM Increment 2 - Milestone C (MS C)	2	2014	2	2014
JEM Increment 2 - Multi-Service Operational Test and Evaluation (MOT&E)/LOG Demo	3	2014	3	2014
JEM Increment 2 - Standalone Full Rate Production (FRP)	4	2014	4	2014
JEM Increment 2 - C2 FOT&E	3	2014	3	2014
JEM Increment 2 - Standalone IOC	3	2014	3	2014
** JWARN - JWARN Inc 1 - Full Deployment Decision	4	2010	1	2011
JWARN Inc 1 - Initial Operational Capability (Software)	4	2010	3	2011
JWARN Inc 1 - Full Operational Capability	3	2011	3	2014
JWARN - Materiel Development Decision	1	2011	3	2011
JWARN - Milestone A	2	2012	4	2012
** SSA - SSA - Sustain Common Components products, process and services	1	2010	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*	57.563	141.680	272.345	-	272.345	259.039	354.900	331.308	310.104	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project (MB5) provides Engineering and Manufacturing Development (EMD) for efforts (post Milestone B), which provide a rapid response capability from identification of pathogens to the delivery of medical countermeasures. Specifically, this project includes: the Medical Countermeasures Initiative (MCMI), efforts in support of biosurveillance, the Transformational Medical Technology (TMT) program, the Joint Vaccine Acquisition Program (JVAP), which includes vaccines for Recombinant Botulinum A/B and Plague, and the efforts to store and conduct required testing on Investigational New Drug (IND) vaccines used to investigate protection of lab workers in the Special Immunization Program (SIP).

This project funds the development of reagents, assays, and diagnostic equipment for biological warfare agents (BWA) and expands chemical and biological detection capabilities. It's primary mission is enhancing information sharing across the Joint Program Executive Office for Chemical Biological Defense (JPEO-CBD) enterprise and amongst 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 Countermeasures Initiative (MCMI) was established to coordinate inter-related advanced development and flexible manufacturing capabilities, based on public-private parternship agreements between the government and industry, providing a dedicated, cost-effective, reliable, and sustainable MCM process that meets the warfighter and national security needs. Specifically, the MCMI will provide the capability for the advanced development and flexible manufacturing of biological MCM (to include TMT developed MCMs) to address CBRN threats, including novel and previously unrecognized, naturally-occurring emerging infectious diseases. MCMI efforts in the advanced development component would be in two areas: 1) further maturation of novel platform/expression systems and integration into a production process, and 2) establishment of a Technical Center of Excellence (TCE) comprised of an advanced development and flexible manufacturing capability. MCMI MB5 efforts will focus on establishing and maintaining an advanced development and flexible manufacturing capability including, but not limited to, fermentation manufacturing processes, cell culture manufacturing processes, and plant based manufacturing processes.

In addition, three major 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 the Critical Reagents Program (CRP), Joint Biological Agent Identification and Diagnostic System (JBAIDS), and the 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 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.

The Next Generation Diagnostic System (NGDS) will develop and field a common medical test equipment and diagnostic platform among all Military Services. NGDS Increment 1 Commercial Off The Shelf (COTS) will identify traditional, enhanced, emerging and advanced threats (i.e., biowarfare, infectious disease, engineered threats). A multi-incremental configuration, evolutionary development and fielding approach is proposed which will provide expanded capability for an early warning tool of health threats, early detection of health events, and overall situational awareness. NGDS Increment 1 (COTS) is composed of platform test equipment hardware, assay test kits, point of care assays, and protocols for sample preparation. System operation will be for use in laboratories and potentially point of care environments. A COTS system will be procured to meet this requirement for Increment 1. The COTS system will be configured to support forward medical operations for force health protection. The NGDS program will support quality assurance efforts, Food and Drug Administration (FDA) current Good Manufacturing Practices (cGMP), engineering, integration, and FDA clearance.

The Transformational Medical Technologies Program (TMT) was launched to respond to the threat of emerging or intentionally bioengineered biological threats. TMT's mission is to protect the Warfighter from genetically engineered biological threats by providing a rapid response capability from identification of pathogens to the delivery of medical countermeasures. This mission is accomplished by developing broad spectrum (multi-agent) therapeutics against biological warfare (BW) agents (e.g. one drug that treats multiple agents). The development of broad spectrum therapeutics involves developing a capability to treat exposure to biological weapons. Beginning in FY12, TMT has been separated into four product lines. These lines are Hemorrhagic Fever Virus (HFV) Medical Countermeasures (MCMs) (e.g., Ebola virus), Intracellular Bacterial Pathogen (IBP) MCMs (e.g., Tularemia), Emerging Infectious Disease (EID) MCMs and Platform Technologies. HFV, IBP and EID MCM efforts are further classified as host-directed therapeutics (e.g, drugs that target common pathways within a human to prevent or treat a variety of diseases) or pathogen-directed therapeutics (e.g. drugs that attack a common pathway found in multiple threat agents). Attrition is high throughout the drug development process, less than 10% of all preclinical compounds become an approved drug. Causes for attrition include scientific failures, Food and Drug Administration (FDA) rejection at major milestone reviews, and loss through down-selection at DoD Milestone Decision points. The development of medical countermeasures is an arduous process that requires extensive interaction with the FDA, from pre-clinical research to safety tests in human subjects (Phase 1 clinical studies), efficacy tests in humans/animals (Phase 2 clinical studies or pivotal animal efficacy studies), and expanded safety or efficacy studies (Phase 3 clinical studies), which culminate with a request to the FDA to approve, market, and produce a drug. This interaction between the Department of Defense (DoD) and the FDA results in a coordinated, unified, and safe effort. Platform Technologies are standalone enabling technologies that support MCM development and when strategically aligned, provide a system of systems response capability to an adverse biological event - from the identification of an unknown pathogen to the development of an approved countermeasure ready for delivery to the Warfighter and the nation. The enabling technologies are divided into five platform areas: Pathogen Characterization, Target Identification, Countermeasure Discovery, Countermeasure Evaluation, and Bioinfomatics.

The Joint Vaccine Acquisition Program (JVAP) provides for the EMD phase 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. Efforts for medical biological defense product development involve production scale-up studies and validation, non-clinical studies, consistency manufacturing, 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

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

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". Upon FDA licensure, the product will transition to full-scale licensed production. Products under development in this budget item include Recombinant Botulinum A/B and Plague vaccines.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) CRP ***FY 2010 Accomplishments:*** Continued development/expansion of biological select agents reference materials to known and emerging threats. ***FY 2011 Plans:*** Continue development/expansion of biological select agents reference materials to known and emerging threats. ***FY 2012 Plans:*** Continue development/expansion of biological select agents reference materials to known and emerging threats.	1.158	2.177	1.980
Title: 2) CRP ***FY 2010 Accomplishments:*** Continued development of immunoassays and nucleic acid based genomic assays to support fielded and developmental systems. ***FY 2011 Plans:*** Continue development of immunoassays and nucleic acid based genomic assays to support fielded and developmental systems. ***FY 2012 Plans:*** Continue development of immunoassays and nucleic acid based genomic assays to support fielded and developmental systems.	0.679	1.000	1.190
Title: 3) CRP ***FY 2010 Accomplishments:*** Continued quality assurance (QA)/quality control (QC) testing to encompass the transition and fielding of biological detection assays. ***FY 2011 Plans:*** Continue QA/QC testing to encompass the transition and fielding of biological detection assays. ***FY 2012 Plans:*** Continue QA/QC testing to encompass the transition and fielding of biological detection assays.	2.206	0.640	0.690
Title: 4) CRP ***FY 2010 Accomplishments:***	0.312	0.889	0.890

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Completed implementation plan and achieved ISO certification. ***FY 2011 Plans:*** Continue to maintain ISO certification. ***FY 2012 Plans:*** Continue to maintain ISO certification.			
Title: 5) CRP ***FY 2010 Accomplishments:*** Biosurveillance - Initiated development and integration of medical surveillance enhancement tools that facilitate surveillance and sensor/detector/diagnostic information exchange. ***FY 2012 Plans:*** Biosurveillance - Continue development and integration of medical surveillance enhancement tools that facilitate surveillance and sensor/detector/diagnostic information exchange.	1.375	-	1.335
Title: 6) CRP ***FY 2010 Accomplishments:*** Biosurveillance - Initiated host nation surveillance assessments that identify public health threats and capabilities in countries where US forces are present. ***FY 2012 Plans:*** Biosurveillance - Continue host nation surveillance assessments that identify public health threats and capabilities in countries where US forces are present and deploy threat assessment tools.	3.025	-	3.007
Title: 7) MCMI ***FY 2012 Plans:*** Initiate and maintain an advanced development and manufacturing capability efforts to include qualifying and validating the manufacturing equipment, utilities and environmental controls, waste management, quality control laboratory, computer systems/ programs, quality systems and procedures, and personnel training.	-	-	60.272
Title: 8) MCMI ***FY 2012 Plans:***	-	-	29.271

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiate and maintain a fermentation component designed for production of vaccines and other biologics from recombinant microorganisms that will be staffed for the manufacture, test, and release of these products.			
Title: 9) MCMI ***FY 2012 Plans:*** Initiate and maintain a cell culture component with a bioreactor capacity designed to make cell culture products, including proteins, replication-incompetent virus, and viral-like-particles for use as vaccines. This facility will be staffed to manufacture, test, and release bulk product.	-	-	28.767
Title: 10) MCMI ***FY 2012 Plans:*** Initiate and maintain a plant based component designed for production of vaccines and other biologics from recombinant plant based systems that will be staffed for the manufacture, test, and release of these products.	-	-	28.860
Title: 11) MCMI ***FY 2012 Plans:*** Provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.	-	-	4.500
Title: 12) NGDS Increment 1 ***FY 2012 Plans:*** Initiate and complete fly-off of candidate prototypes.	-	-	2.995
Title: 13) NGDS Increment 1 ***FY 2012 Plans:*** Initiate Other Test Agencies (OTS) and Director, Office of Test and Evaluation (DOT&E) oversight support.	-	-	0.450
Title: 14) NGDS Increment 1 ***FY 2012 Plans:*** Initiate analysis of alternatives of Increment 1 Commercial Off The Shelf (COTS) candidates.	-	-	0.310
Title: 15) NGDS Increment 1 ***FY 2012 Plans:***	-	-	1.238

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiate additional Food and Drug Administration (FDA) clearance for assays on Increment 1 COTS, and connectivity of select candidate(s).			
Title: 16) TMT/HFV ***Description:*** Activities during this phase will include Phase 2 Pivotal Animal Efficacy Studies, which will test the efficacy of therapeutics. Because the therapeutics sought are for biological warfare (BW) indications, efficacy testing on humans cannot be performed and will be tested in animals only. Because of the lack of human efficacy data, trials in animals are considered to be "Pivotal Animal Efficacy Studies" and are most commonly performed on at least two species of animals, to include non-human primates. Activities will also include expanded human and animal safety and/or animal efficacy studies as directed by the Food and Drug Administration (FDA) to support a New Drug Application (NDA) submission. ***FY 2012 Plans:*** TMT/ HFV - Initiate Phase 2 pivotal animal efficacy studies and any expanded safety or efficacy studies as directed by the FDA for up to three candidate drugs following a Milestone B decision. Critical activities will include dose/schedule and administration, assay validation, and efficacy studies in animals to demonstrate a favorable impact on clinical endpoints. Final formulation and dose will be determined by these studies. Conduct additional studies as required by the FDA to ensure safety and/or efficacy requirements for NDA submission and approval.	-	-	20.062
Title: 17) TMTI ***Description:*** Broad Spectrum Medical Countermeasures: Activities during this phase will include Phase 2 clinical trials, which will test the efficacy of therapeutics. Because the therapeutics sought are for biological warfare (BW) indications, efficacy testing on humans cannot be performed and will be tested in animals only. Because of the lack of human efficacy data, trials in animals are considered to be "Pivotal Animal Efficacy Studies" and are most commonly performed on at least two species of animals, to include non-human primates. Activities will also include expanded human and animal safety and/or animal efficacy studies as directed by the Food and Drug Administration (FDA) to support a New Drug Application (NDA) submission. ***FY 2011 Plans:*** TMT - Initiate Phase 2 pivotal animal efficacy studies and any expanded safety or efficacy studies as directed by the FDA for up to three candidate drugs following review and approval of new drug candidates at Milestone B. Critical activities will include dose/schedule and administration, assay validation, and efficacy studies in animals to demonstrate a favorable impact on clinical endpoints. Final formulation and dose will be determined by these studies. Pending discussions with the FDA, additional data	-	48.419	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
may be required beyond that collected in initial Phase I clinical studies and pivotal animal efficacy studies to satisfy safety and/or efficacy requirements for NDA submission and licensure.			
Title: 18) TMTI ***Description:*** Platform Technologies: Pathogen Characterization - Identifies and/or characterizes genetically modified or emerging pathogens. Target Identification - identifies genes or pathways within the host or pathogen that are vulnerable to countermeasure intervention. Countermeasure Discovery - provides programmable technologies to develop candidate countermeasures. Countermeasure Evaluation - evaluates the candidate countermeasures for safety, efficacy, and manufacturability. Bioinformatics - provides databases, tools, processing power, and connectivity to enable response system interoperability. Exercises will commence on the platform technologies as an integrated system to evaluate and determine their capacity to support TMT's capability goals. ***FY 2011 Plans:*** TMT - Plan and execute up to two exercises and evaluations. Data will be collected into lessons learned and analyzed with the goal of improving the integration of the platforms. Analysis will be performed to develop a timeline for the response capability. Evaluate the bioinformatics system for overall architecture, connectivity, processing capability, and user friendliness. Analyze lessons learned from each exercise and incorporate them into future exercises in order to improve countermeasure efficacy and shorten the time required to produce an approved countermeasure for an unknown or genetically modified pathogen.	-	17.229	-
Title: 19) JVAP - Recombinant Botulinum Vaccine ***FY 2010 Accomplishments:*** Continued manufacturing process validation, assay validation, cleaning validation and validation of formulation, fill and finish process for serotypes A and B. ***FY 2011 Plans:*** Continue manufacturing process validation and validation of formulation, fill and finish process for serotypes A and B. ***FY 2012 Plans:*** Complete manufacturing process validation and validation of formulation, fill and finish process for serotypes A and B. Complete manufacturing of consistency lots for serotypes A and B.	22.965	28.668	24.881
Title: 20) JVAP - Recombinant Botulinum Vaccine ***FY 2010 Accomplishments:***	2.788	5.323	4.714

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continued non-clinical testing. Initiated Phase 2 passive transfer studies. Continued requirement for safeguarding biological select agents and toxins. ***FY 2011 Plans:*** Continue non-clinical testing. Complete Phase 2 passive transfer studies. Continue requirement for safeguarding biological select agents and toxins. ***FY 2012 Plans:*** Continue non-clinical testing. Initiate reproductive toxicity testing and pivotal efficacy testing. Continue requirement for safeguarding biological select agents and toxins.			
Title: 21) JVAP - Recombinant Botulinum Vaccine ***FY 2010 Accomplishments:*** Continued Phase 2 clinical trial and selected final vaccination schedule. ***FY 2011 Plans:*** Continue Phase 2 clinical trial to evaluate safety and duration of immune response. ***FY 2012 Plans:*** Complete Phase 2 clinical trial and initiate Phase 3 clinical trial planning to evaluate expanded safety in thousands of volunteers.	4.979	2.139	1.573
Title: 22) JVAP - Plague Vaccine ***FY 2010 Accomplishments:*** Continued and completed large scale manufacturing process development.	1.453	-	-
Title: 23) JVAP - Plague Vaccine ***FY 2010 Accomplishments:*** Continued non-clinical studies, to include non-human primate dose response titration study and additional FDA required passive transfer studies. Continued requirement for safeguarding biological select agents and toxins. ***FY 2011 Plans:*** Continue non-clinical studies, to include additional FDA required passive transfer studies. Initiate non-human primate break through efficacy study. Continue requirement for safeguarding biological select agents and toxins. ***FY 2012 Plans:***	6.208	9.913	10.117

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continue non-clinical studies, to include additional FDA required passive transfer studies. Continue requirement for safeguarding biological select agents and toxins. Initiate reproductive toxicity testing.			
Title: 24) JVAP - Plague Vaccine ***FY 2010 Accomplishments:*** Initiated Phase 2b clinical trial to select final vaccination schedule. ***FY 2011 Plans:*** Continue Phase 2b clinical trial to select final vaccination schedule. ***FY 2012 Plans:*** Continue Phase 2b clinical trial and initiate Phase 3 clinical trial to evaluate expanded safety in thousands of volunteers.	4.056	5.725	17.578
Title: 25) JVAP - Plague Vaccine ***FY 2010 Accomplishments:*** Continued large scale manufacturing process validation and assay validation. ***FY 2011 Plans:*** Continue large scale manufacturing process validation and assay validation. Initiate cleaning validation. ***FY 2012 Plans:*** Complete large scale manufacturing process validation, assay validation, and cleaning validation. Initiate consistency lot production.	3.471	15.260	18.630
Title: 26) JVAP - Plague Vaccine ***FY 2010 Accomplishments:*** Provided strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contacting, scheduling, acquisition oversight and technical support. ***FY 2011 Plans:*** Provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contacting, scheduling, acquisition oversight and technical support. ***FY 2012 Plans:*** Provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contacting, scheduling, acquisition oversight and technical support.	2.888	4.298	6.730
Title: 27) VAC SIP	-	-	2.305

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APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2012 Plans: Conduct storage, distribution, potency testing, and biosurety compliance activities in support of the Special Immunization Program.			
Accomplishments/Planned Programs Subtotals	57.563	141.680	272.345

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• JM0001: *JOINT BIO AGENT IDENT AND DIAG SYSTEM (JBAIDS)*	0.000	5.571	0.000		0.000	0.000	0.000	0.000	0.000	0.000	5.571
• JX0005: *DOD BIOLOGICAL VACCINE PROCUREMENT*	12.701	12.824	0.180		0.180	4.425	4.425	28.539	25.744	Continuing	Continuing
• JX0210: *CRITICAL REAGENTS PROGRAM (CRP)*	0.000	0.994	0.998		0.998	0.999	0.998	0.997	0.991	Continuing	Continuing
• MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*	95.483	136.975	137.653		137.653	150.128	167.604	133.589	119.626	Continuing	Continuing

D. Acquisition Strategy

CRP

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

MCMI

MCM products will be developed by the private sector, academia and the government and transitioned to the Technical Center of Excellence (TCE) for manufacture as product maturity aligns with readiness of the facility and its operating structure. Rights to Intellectual Property will be required for subsequent advanced development and manufacturing (Government Purpose Rights). The Government intends to partner with multiple private companies and educational institutions. The TCE establishment will be formalized by competitively entering into an agreement under Other Transaction Authority (OTA) that is expected to allow the sharing of costs to meet objectives, and provide the availability of excess capacity. Innovative incentive provisions and cost sharing arrangements will be explored via interaction with industry through a Request For Information (RFI), industry day(s) and a Draft Request For Proposal (RFP) prior to release of the final solicitation.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

NGDS

The Next Generation Diagnostic System (NGDS) is an incremental, evolutionary development program. Increment 1 will be a rapid fielding effort to deliver the best Commercial Off-the-Shelf (COTS) capability to identify traditional, enhanced, emerging and advanced threats. NGDS Increment 1 development will focus on planning, performance, process, and innovative solutions (P3I) improvements to the fielded COTS device, to include new assays hosted on the NGDS fielded COTS platform. The strategy also includes NGDS Increment I connectivity to aspects of the DoD's Global Information Grid, and DoD's medical health care data base systems (e.g., Joint Warning and Reporting Network, Medical Situational Awareness in Theater, Armed Forces Health Longitudinal Technology Application, etc.) From a revolutionary standpoint, NGDS will annually evaluate new technologies in the diagnostic device area (e.g. Portable Sequencers, Pre-Symptomatic Markers, Metagenomics, etc.) starting in late FY12 through FY16. Increment 2 is planned to be a new diagnostics device that compliments the technology in Increment 1. NGDS Increment 2 will enter into separate Milestones from Increment 1 and will integrate into Increment 1 based on the assessed maturity. The NGDS Increment 2 Milestone A will start in 2QFY12 and run for 24-36 months.

TMT/EID FLU

The Transformational Medical Technology (TMT) Program's ultimate goal is the delivery of Food and Drug Administration (FDA)-licensed/approved prophylaxis or therapeutics to the Warfighter. TMT will reach this goal through full and open competition, soliciting drug candidates that meet or exceed the Technical Readiness Level and maturity entry criteria. The development contracts will be Cost Plus, with options aligned to drug development milestones. The final deliverable will be drug candidate licensure/approval. In order to execute the overall acquisition strategy, TMT will partner with elements within the DoD Chemical and Biological Defense Program, DoD agencies, DoD laboratories and other government agencies for the development of TMT products.

TMT/HFV

The Transformational Medical Technology (TMT) Program's ultimate goal is the delivery of Food and Drug Administration (FDA)-licensed/approved prophylaxis or therapeutics to the Warfighter. TMT will reach this goal through full and open competition, soliciting drug candidates that meet or exceed the Technical Readiness Level and maturity entry criteria. The development contracts will be Cost Plus, with options aligned to drug development milestones. The final deliverable will be drug candidate licensure/approval. In order to execute the overall acquisition strategy, TMT will partner with elements within the DoD Chemical and Biological Defense Program, DoD agencies, DoD laboratories and other government agencies for the development of TMT products.

TMT/IBP

The Transformational Medical Technology (TMT) Program's ultimate goal is the delivery of Food and Drug Administration (FDA)-licensed/approved prophylaxis or therapeutics to the Warfighter. TMT will reach this goal through full and open competition, soliciting drug candidates that meet or exceed the Technical Readiness Level and maturity entry criteria. The development contracts will be Cost Plus, with options aligned to drug development milestones. The final deliverable will be drug

candidate licensure/approval. In order to execute the overall acquisition strategy, TMT will partner with elements within the DoD Chemical and Biological Defense Program, DoD agencies, DoD laboratories and other government agencies for the development of TMT products.

TMTI

The Transformational Medical Technologies Initiative (TMTI) will advance Multiagent Broad Spectrum Medical Countermeasures (MCM), or MCM candidates based on an adaptable discovery platform, at a Technology Readiness Level (TRL) 4 through the Technology Development phase. TMTI will also conduct exercises on the platform technologies and the bioinformatics system developed with science and technology funding to evaluate and determine the ability of these systems to support the TMT capability goal. Beginning in FY12 TMT will separate into four product lines. This separation will provide greater program control and granularity. Separate program lines are: Hemorrhagic Fever Virus (HFV) Medical Countermeasures (MCMs) (e.g. Ebola virus), Intracellular Bacterial Pathogen (IBP) MCMs (e.g. Tularemia), Emerging Infectious Disease (EID) MCMs (e.g. H1N1 Influenza), and Platform Technologies.

Note - In FY10 TMTI was officially redesignated the Transformational Medical Technologies (TMT) Program.

VAC BOT

A prime systems contractor will function as the "responsible head" and license holder 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 management lead for the program shifted to Joint Vaccine Acquisition Program (JVAP) at Milestone A. 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 trial (Phase 1).

During the Engineering and Manufacturing Development (EMD) phase, the JVAP prime systems contract (PSC) will stabilize the vaccine formulation, validate the manufacturing processes and testing protocols, optimize the delivery systems and manufacture consistency lots. Phase 2 clinical trials are performed during this phase to provide additional safety data and determine dose and schedule. The Phase 3 clinical trial also is conducted during this phase to demonstrate safety in an expanded volunteer population. To evaluate efficacy, pivotal animal studies will be conducted concurrently with the Phase 3 clinical trial to satisfy FDA requirements for the "Animal Rule." The Milestone C, also the Low Rate Initial Production (LRIP) decision, will be conducted after the manufacturing process has been validated and consistency lots have been produced. At the Milestone C, approval is granted to produce the Initial Operational Capability (IOC) of vaccine material. A Biologics Licensure Application is submitted to the FDA with all clinical, nonclinical, and manufacturing data. The FDA grants licensure to products that are determined to be safe and efficacious.

VAC PLG

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

Chemical Biological Medical Systems (CBMS) was mitigating technical program risk in the Plague Vaccine program by temporarily supporting development of both a 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 JVAP's Prime Systems Contract. A Project Arrangement is in place with the United Kingdom and Canada.

The management lead for the program shifted to JVAP at Milestone A. 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 trial (Phase 1).

During the Engineering and Manufacturing Development phase (EMD), the vaccine developer will stabilize the vaccine formulation, validate the manufacturing processes and testing protocols, optimize the delivery systems, and manufacture consistency lots. Phase 2 clinical trials are performed during this phase to provide additional safety data and determine dose and schedule. The Phase 3 clinical trial is also conducted during this phase to demonstrate safety in an expanded volunteer population. To evaluate efficacy, pivotal animal studies will be conducted concurrently with the Phase 3 clinical trial to satisfy the requirements of the FDA's "Animal Rule." The Milestone C, also the Low Rate Initial Production (LRIP) decision, will be conducted after the manufacturing process has been validated and consistency lots have been produced. At the Milestone C, approval is granted...

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CRP - HW C - CRP - Scale-up of Select Biological Threat Agent Reference Materials	MIPR	USAMRIID:Fort Detrick, MD & Dugway Proving Ground	8.344	1.918	Feb 2011	2.010	Feb 2012	-		2.010	Continuing	Continuing	0.000
HW C - CRP - Development of Select Biological Threat Agent Reference Materials and Assays	MIPR	RDECOM:Edgewood, MD	1.711	0.750	Feb 2011	0.770	Feb 2012	-		0.770	Continuing	Continuing	0.000
HW C - BSV - Host Nation Support	SS/FFP	NAVSEA Contract:	3.000	-		2.993	Feb 2012	-		2.993	Continuing	Continuing	0.000
HW C - BSV - Tool enhancement/sensor information exchange	MIPR	Tri-Care Management Activity (TMA):	0.785	-		0.288	Feb 2012	-		0.288	Continuing	Continuing	0.000
** MCMI - HW S - Initiate ADM capability	C/CPFF	TBD:	-	-		60.272	May 2012	-		60.272	Continuing	Continuing	0.000
HW SB - Fermentation component	C/CPFF	TBD:	-	-		29.271	May 2012	-		29.271	Continuing	Continuing	0.000
HW SB - Cell culture component	C/CPFF	TBD:	-	-		28.767	May 2012	-		28.767	Continuing	Continuing	0.000
HW SB - Plant based component	C/CPFF	TBD:	-	-		28.860	May 2012	-		28.860	Continuing	Continuing	0.000
** TMT/HFV - SW S - MCM Contract #1	C/CPIF	TBD:	-	-		9.479	May 2012	-		9.479	Continuing	Continuing	0.000
SW S - MCM Contract #2	C/CPIF	TBD:	-	-		9.479	May 2012	-		9.479	Continuing	Continuing	0.000
** TMTI - HW C - Therapeutic Development Contract#1	C/CPIF	TBD:	-	8.493	May 2011	-		-		-	Continuing	Continuing	0.000
HW C - Therapeutic Development Contract#2	C/CPIF	TBD:	-	8.493	May 2011	-		-		-	Continuing	Continuing	0.000
SW S - Technologies Contract#1	C/CPIF	TBD:	-	6.044	May 2011	-		-		-	Continuing	Continuing	0.000
** VAC BOT - HW S - Manufacturing, Validation and Consistency Lot Production	C/CPAF	DynPort Vaccine Company:Frederick, MD	39.494	11.554	Feb 2011	11.069	Feb 2012	-		11.069	Continuing	Continuing	0.000
	C/CPAF		49.655	16.555	Feb 2011	23.469	Feb 2012	-		23.469	Continuing	Continuing	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** VAC PLG - HW S - Manufacturing, Validation, and Consistency Lot Production		DynPort Vaccine Company:Frederick, MD											
		Subtotal	102.989	53.807		206.727		-		206.727			0.000

Remarks

RDECOM - Research, Development & Engineering Command
NMRC - Naval Medical Research Center
USAMRIID - US Army Medical Research Institute of Infectious Diseases
DPG - Dugway Proving Ground

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CRP - ES C - CRP - Select Biological Threat Agent Reference Material Support	MIPR	USAMRIID:Fort Detrick, MD; RDECOM	2.049	0.309	Feb 2011	0.643	Feb 2012	-		0.643	0.000	3.001	0.000
ES C - CRP - Select Biological Threat Agent Reference Material Regulatory/Quality Assurance (QA) Support	MIPR	Dugway Proving Ground:Dugway, UT	1.063	0.138	Feb 2011	0.145	Feb 2012	-		0.145	0.000	1.346	0.000
** NGDS - TD/D SB - Market Research/Road Map	SS/FFP	Johns Hopkins University:Applied Physics Lab, Laurel	-	-		0.310	Feb 2012	-		0.310	0.000	0.310	0.000
** TMTI - ES C - Regulatory Integration Contract#1	C/CPIF	TBD:	-	6.066	May 2011	-		-		-	0.000	6.066	0.000
ES C - Regulatory Integration Contract#2	C/CPIF	TBD:	-	6.071	May 2011	-		-		-	0.000	6.071	0.000
TD/D C - Technologies Contract #2	C/CPIF	TBD:	-	4.317	May 2011	-		-		-	0.000	4.317	0.000
** VAC BOT - TD/D C - Regulatory Integration	C/CPAF		4.937	1.819	Feb 2011	2.088	Feb 2012	-		2.088	0.000	8.844	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
(Environmental and FDA Documentation) and Delivery System		DynPort Vaccine Company:Frederick, MD											
** VAC PLG - TD/D C - Regulatory Integration (Environmental and FDA Documentation) and Delivery System	C/CPAF	DynPort Vaccine Company:Frederick, MD	10.401	1.418	Feb 2011	1.918	Feb 2012	-		1.918	0.000	13.737	0.000
** VAC SIP - VAC SIP - Storage, and Distribution of Vaccines	SS/FP	TBD:	-	-		2.305	Feb 2012	-		2.305	0.000	2.305	0.000
		Subtotal	18.450	20.138		7.409		-		7.409	0.000	45.997	0.000

Remarks

DTIC - Defense Technical Information Center
NMRC - Naval Medical Research Center
RDECOM - Research, Development & Engineering Command
USAMRIID - US Army Medical Research Institute of Infectious Diseases
DPG - Dugway Proving Ground

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** NGDS - DTE C - Test and evaluation oversight	MIPR	ATEC:OPTEVFOR, AFOTEC	-	-		0.450	Feb 2012	-		0.450	0.000	0.450	0.000
DTE C - Prototype fly-off	MIPR	Dugway Proving Ground:UT	-	-		1.498	Feb 2012	-		1.498	0.000	1.498	0.000
OTHT C - Prototype fly-off support	PO	TBD:	-	-		1.468	Feb 2012	-		1.468	0.000	1.468	0.000
** TMTI - DTE C - Phase II and III Testing Contract#1	C/CPIF	TBD:	-	9.706	May 2011	-		-		-	0.000	9.706	0.000
	C/CPIF	TBD:	-	9.706	May 2011	-		-		-	0.000	9.706	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DTE C - Phase II and III Testing Contract #2													
DTE C - Technologies Contract#3	C/CPIF	TBD:	-	6.752	May 2011	-		-		-	0.000	6.752	0.000
** VAC BOT - DTE C - Testing, Evaluation, and Clinical Trials	C/CPAF	DynPort Vaccine Company:Frederick, MD	33.326	12.479	Feb 2011	11.934	Feb 2012	-		11.934	0.000	57.739	0.000
** VAC PLG - DTE C - PLG - Clinical Trials	C/CPAF	DynPort Vaccine Company:Frederick, MD	54.106	12.500	Feb 2011	18.080	Feb 2012	-		18.080	0.000	84.686	0.000
		Subtotal	87.432	51.143		33.430		-		33.430	0.000	172.005	0.000

Remarks

DTIC - Defense Technical Information Center
NMRC - Naval Medical Research Center
RDECOM - Research, Development & Engineering Command
USAMRIID - US Army Medical Research Institute of Infectious Diseases

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** CRP - PM/MS C - Product Management Support	Allot	CBMS:Frederick, MD	1.331	0.541	Feb 2011	0.453	Feb 2012	-		0.453	0.000	2.325	0.000
PM/MS C - Product Management Support	SS/FFP	Goldbelt Raven:LLC, Frederick	4.576	0.770	May 2011	1.540	May 2012	-		1.540	0.000	6.886	0.000
PM/MS C - Chem Bio Medical Systems Office	Allot	CBMS:Frederick, MD	1.382	0.250	Aug 2011	0.250	Aug 2012	-		0.250	0.000	1.882	0.000
PM/MS C - IT, Facility and Security Support	MIPR	RDECOM:Edgewood, MD	0.246	0.030	Aug 2011	-		-		-	0.000	0.276	0.000
** MCMI - PM/MS S - Program Management Costs	MIPR	JPEO:Falls Church, VA	-	-		4.500	Feb 2012	-		4.500	0.000	4.500	0.000
	C/FFP		-	-		0.767	May 2012	-		0.767	0.000	0.767	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** NGDS - PM/MS C - NGDS - Product Management Support		Goldbelt Raven:LLC, Frederick											
PM/MS C - NGDS - Product Management Support	Allot	CBMS:Frederick, MD	-	-		0.250	Feb 2012	-		0.250	0.000	0.250	0.000
PM/MS C - NGDS - Joint Program Executive Office	Allot	CBMS:Frederick, MD	-	-		0.250	Feb 2012	-		0.250	0.000	0.250	0.000
** TMT/HFV - PM/MS S - JPEO Program Management	MIPR	JPEO:Falls Church, VA	-	-		1.104	Aug 2012	-		1.104	0.000	1.104	0.000
** VAC BOT - PM/MS S - Program Management/ Program Manager Support	Allot	JPEO:Falls Church, VA	1.000	3.000	Feb 2011	1.668	Feb 2012	-		1.668	0.000	5.668	0.000
PM/MS S - Joint Vaccine Acquisition Program Management	Allot	CBMS:Frederick, MD	5.824	2.738	Aug 2011	2.871	Feb 2012	-		2.871	0.000	11.433	0.000
PM/MS S - Contractor Systems Engineering/Program Management Support	SS/FFP	Goldbelt Raven:LLC, Frederick	4.773	1.163	May 2011	1.538	Feb 2012	-		1.538	0.000	7.474	0.000
PM/MS S - Award Fee (Maximum 10.5%)	C/CPAF	DynPort Vaccine Company:Frederick, MD	9.149	3.377	Feb 2011	-		-		-	0.000	12.526	0.000
** VAC PLG - PM/MS S - Joint Vaccine Acquisition Program Management Office	Allot	CBMS:Frederick, MD	5.754	1.577	Feb 2011	1.692	Feb 2012	-		1.692	0.000	9.023	0.000
PM/MS S - Program Management Support	Allot	JPEO:Falls Church, VA	11.051	-		4.215	Feb 2012	-		4.215	0.000	15.266	0.000
PM/MS S - Award Fee (Maximum 10.5%) #2	C/CPAF	DynPort Vaccine Company:Frederick, MD	12.290	3.146	Feb 2011	3.681	Feb 2012	-		3.681	0.000	19.117	0.000
		Subtotal	57.376	16.592		24.779		-		24.779	0.000	98.747	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*	

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	266.247	141.680		272.345		-		272.345			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

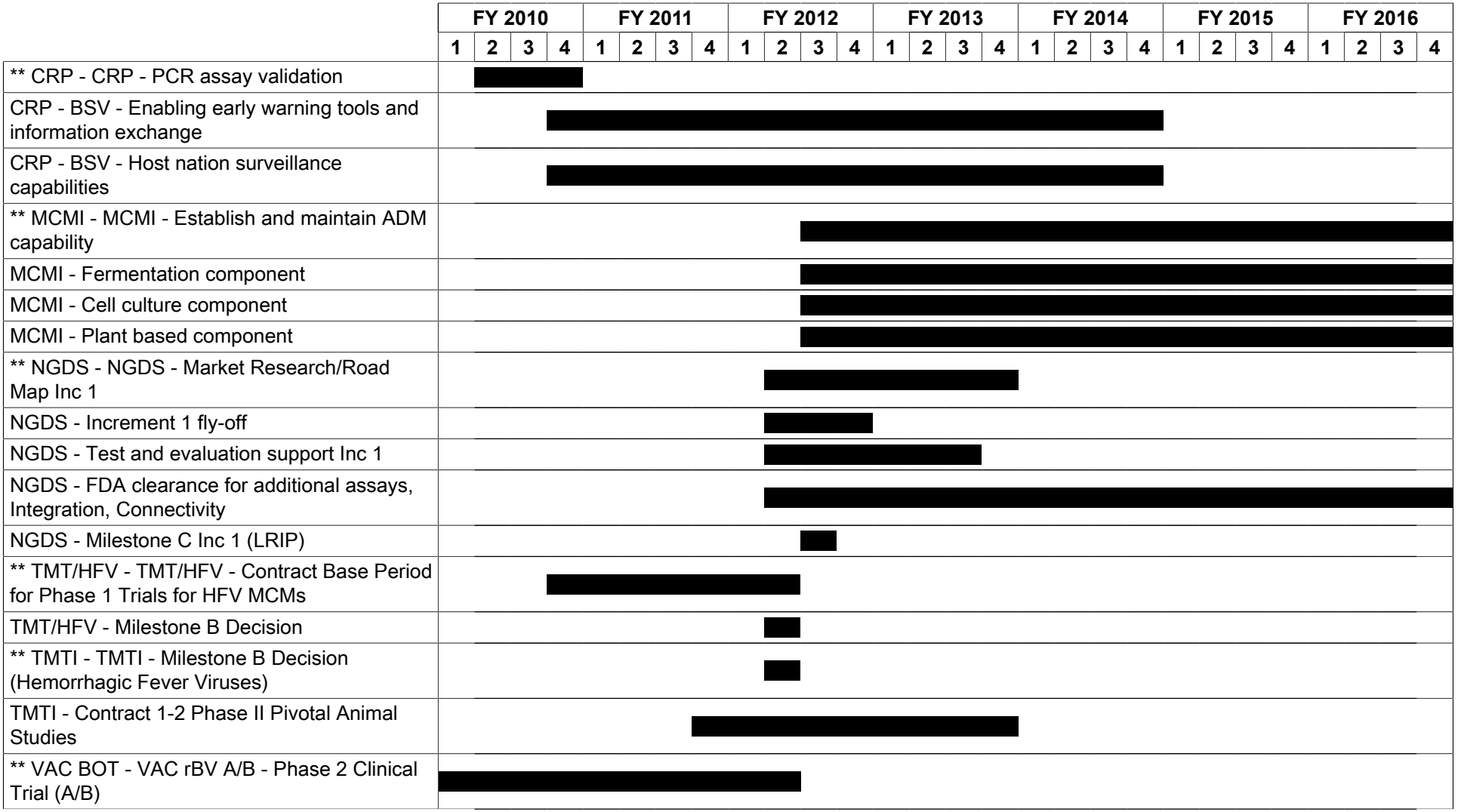

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

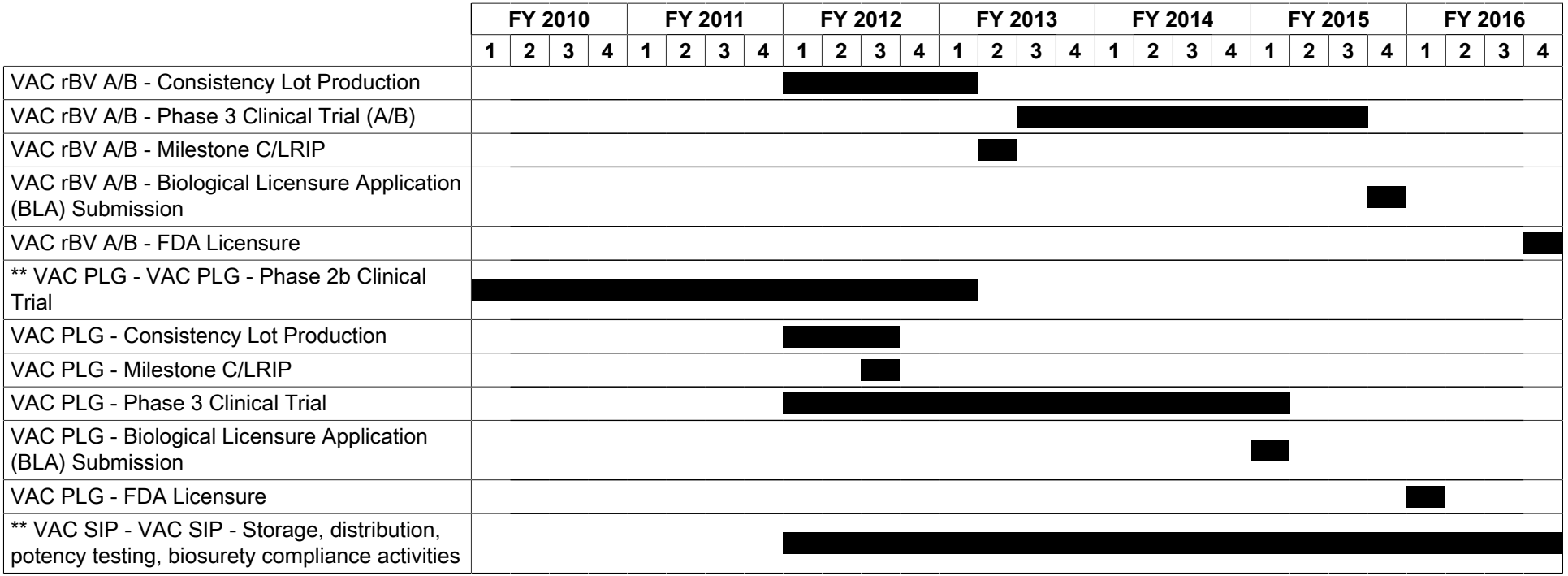

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** CRP - CRP - PCR assay validation	2	2010	4	2010
CRP - BSV - Enabling early warning tools and information exchange	4	2010	4	2014
CRP - BSV - Host nation surveillance capabilities	4	2010	4	2014
** MCMI - MCMI - Establish and maintain ADM capability	3	2012	4	2016
MCMI - Fermentation component	3	2012	4	2016
MCMI - Cell culture component	3	2012	4	2016
MCMI - Plant based component	3	2012	4	2016
** NGDS - NGDS - Market Research/Road Map Inc 1	2	2012	4	2013
NGDS - Increment 1 fly-off	2	2012	4	2012
NGDS - Test and evaluation support Inc 1	2	2012	3	2013
NGDS - FDA clearance for additional assays, Integration, Connectivity	2	2012	4	2016
NGDS - Milestone C Inc 1 (LRIP)	3	2012	3	2012
** TMT/HFV - TMT/HFV - Contract Base Period for Phase 1 Trials for HFV MCMs	4	2010	2	2012
TMT/HFV - Milestone B Decision	2	2012	2	2012
** TMTI - TMTI - Milestone B Decision (Hemorrhagic Fever Viruses)	2	2012	2	2012
TMTI - Contract 1-2 Phase II Pivotal Animal Studies	4	2011	4	2013
** VAC BOT - VAC rBV A/B - Phase 2 Clinical Trial (A/B)	1	2010	2	2012
VAC rBV A/B - Consistency Lot Production	1	2012	1	2013
VAC rBV A/B - Phase 3 Clinical Trial (A/B)	3	2013	3	2015
VAC rBV A/B - Milestone C/LRIP	2	2013	2	2013
VAC rBV A/B - Biological Licensure Application (BLA) Submission	4	2015	4	2015
VAC rBV A/B - FDA Licensure	4	2016	4	2016

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** VAC PLG - VAC PLG - Phase 2b Clinical Trial	1	2010	1	2013
VAC PLG - Consistency Lot Production	1	2012	3	2012
VAC PLG - Milestone C/LRIP	3	2012	3	2012
VAC PLG - Phase 3 Clinical Trial	1	2012	1	2015
VAC PLG - Biological Licensure Application (BLA) Submission	1	2015	1	2015
VAC PLG - FDA Licensure	1	2016	1	2016
** VAC SIP - VAC SIP - Storage, distribution, potency testing, biosurety compliance activities	1	2012	4	2016

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*	4.126	51.856	26.407	-	26.407	18.860	18.396	20.824	27.289	Continuing	Continuing
Quantity of RDT&E Articles											

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 agent threats facing U.S. forces in the field. This project supports efforts in the Engineering and Manufacturing Development (EMD) 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 be a replacement for 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; (3) Inhalation Atropine (IA), an improvement to an existing capability leveraging novel delivery, to be used to treat continuing nerve agent-induced effects after the patient has been evacuated to a medical treatment facility; (4) Improved Nerve Agent Treatment System (INATS), a replacement and improvement to an existing capability, to be used as a treatment for nerve agent intoxication and includes obtaining new indications for Pyridostigmine Bromide (PB) to be integrated with current therapeutic regimens; and (5) Pharmaceutical Post Approval and Development Support (PPADS) which provides operations and sustainment support of fielded medical countermeasure to include Soman Nerve Agent Pyridostigmine Pretreatment. Time and Temperature Indicators (TTIs), Item Unique Identification (IUID), and Radio-Frequency Identification (RFID) will be incorporated into the development effort of all medical countermeasures developed by the Medical Identification and Treatment Systems Joint Product Management Office. A TTI is a human readable tab that will provide the Warfighter immediate knowledge if the product is still useable or not. IUID and RFID labels placed medical countermeasures improve inventory management and strategic purchasing, and enable reliable visibility, and capability-based operational readiness.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) AAS ***FY 2010 Accomplishments:*** Completed Phase 2 clinical safety studies.	0.176	-	-
Title: 2) AAS ***FY 2010 Accomplishments:*** Continued process development and current Good Manufacturing Practices (cGMP) requirements. ***FY 2011 Plans:***	0.675	1.490	2.057

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continue process development and current Good Manufacturing Practices (cGMP) requirements. ***FY 2012 Plans:*** Complete process development and current Good Manufacturing Practices (cGMP) requirements.			
Title: 3) AAS ***FY 2010 Accomplishments:*** Continued Good Laboratory Practices (GLP) animal efficacy studies. ***FY 2011 Plans:*** Complete Good Laboratory Practices (GLP) animal efficacy studies.	0.293	0.391	-
Title: 4) AAS ***FY 2010 Accomplishments:*** Continued preparation of New Drug Application (NDA). ***FY 2011 Plans:*** Continue preparation of New Drug Application (NDA). ***FY 2012 Plans:*** Complete preparation of New Drug Application (NDA) and submit to FDA.	1.963	0.628	0.311
Title: 5) AAS ***FY 2010 Accomplishments:*** Completed Developmental Testing/Operational Testing (DT/OT) of packaging.	0.281	-	-
Title: 6) BSCAV Increment 1 ***FY 2011 Plans:*** Initiate manufacturing and process qualification at small scale to support delivery of a capability for a limited user group. ***FY 2012 Plans:*** Continue manufacturing and process qualification at small scale to support delivery of a capability for a limited user group. Initiate process scale-up (NTA).	-	4.133	7.900
Title: 7) BSCAV Increment 1 ***Description:*** NTA	-	9.000	5.235

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2011 Plans: Initiate process development and non-clinical safety and efficacy animal studies to demonstrate efficacy against a broad spectrum of nerve agents including non-traditional agents (NTA). ***FY 2012 Plans:*** Continue process development and non-clinical safety and efficacy animal studies to demonstrate efficacy against a broad spectrum of nerve agents including non-traditional agents (NTA).			
Title: 8) BSCAV Increment 1 ***FY 2011 Plans:*** Initiate establishment of a manufacturing contract to support delivery of a capability for a limited user group. ***FY 2012 Plans:*** Continue establishment of a manufacturing contract to support delivery of a capability for a limited user group.	-	6.200	6.504
Title: 9) BSCAV Increment 1 ***FY 2012 Plans:*** Initiate PK and efficacy bridging studies (NTA).	-	-	1.000
Title: 10) BSCAV Increment 2 ***FY 2011 Plans:*** Continue studies for alternative manufacturing technologies to support delivery of a capability for full force. ***FY 2012 Plans:*** Continue analysis of alternative manufacturing technologies to support delivery of a capability for full force.	-	6.000	3.400
Title: 11) IA ***FY 2011 Plans:*** Complete process development and current Good Manufacturing Practices (cGMP) requirements.	-	1.605	-
Title: 12) IA ***FY 2011 Plans:*** Complete formulation, analytical methods, and device optimization.	-	0.900	-
Title: 13) INATS ***FY 2011 Plans:***	-	7.300	-

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiate Phase 1 clinical trial.			
Title: 14) INATS ***FY 2011 Plans:*** Continue process development and Chemistry Manufacturing and Controls (CMC) efforts of the enhanced formulation to support clinical trials.	-	3.609	-
Title: 15) INATS ***Description:*** NTA ***FY 2011 Plans:*** Initiate testing of candidate oxime against non-traditional agents (NTA).	-	10.600	-
Title: 16) PPADS ***FY 2010 Accomplishments:*** Initiated and completed development of a Time Temperature Indicator (TTI) capability for Soman Nerve Agent Pre-Treatment Pyridostigmine (SNAPP) and Reactive Skin Decontamination Lotion (RSDL) packets to provide visual indicator of product reliability.	0.738	-	-
Accomplishments/Planned Programs Subtotals	4.126	51.856	26.407

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• JM6500: *INHALATIONAL ATROPINE (IA)*	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000
• JM6555: *IMPROVED NERVE AGENT TREATMENT SYSTEM (INATS)*	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000
• JM6677: *ADVANCED ANTICONVULSANT SYSTEM (AAS)*	0.000	0.000	0.000		0.000	4.411	8.836	0.000	0.000	0.000	13.247

D. Acquisition Strategy

AAS

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APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*

The Medical Identification and Treatment Systems (MITS) Joint Product Management Office is managing the development of Advanced Anticonvulsant System, which consists of midazolam in an autoinjector. Midazolam, injected intramuscularly, will treat against traditional nerve agent and non-traditional agent-induced seizures and prevent subsequent neurological damage. Midazolam is more water-soluble than diazepam (the currently fielded medication to control nerve agent-induced seizures) and terminates nerve agent-induced seizures more quickly than diazepam. AAS will not eliminate the need for other protective and therapeutic systems.

A 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 Engineering and Manufacturing Development (EMD) Phase, large scale manufacturing, Phase 2 human clinical safety studies and definitive animal efficacy studies will be conducted. FDA approval of the countermeasure is an exit criterion for the EMD phase. During the Production and Deployment Phase, sufficient quantities of product to meet Initial Operational Capability and Full Operational Capability will be purchased. Subsequent purchases will be made by the Defense Logistics Agency. Any post-marketing surveillance requested by the FDA will be the responsibility of the contractor. 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

Bioscavenger acquisition strategy uses a serial evaluation of candidates to achieve competitive prototyping in Technology Development. Initially, the Medical Identification and Treatment Systems (MITS) Joint Product Management Office (JPMO) exercised management oversight and a commercial partner as the system integrator during the Technology Development to examine a human plasma-derived butyrylcholinesterase (i.e. pBioscavenger). Activities included small scale manufacturing, conduct of pre-clinical animal safety studies, submission of an Investigational New Drug (IND) application, and completion of a Phase 1 human clinical safety study. Subsequently, the MITS JPMO evaluated a recombinant butyrylcholinesterase expressed in goat milk (i.e., rBioscavenger) and multiple small molecule candidates. The small molecule candidates were not pursued beyond initial toxicology/safety testing in animals. For rBioscavenger, activities included small scale manufacturing, conduct of pre-clinical animal safety studies, submission of an IND application, completion of a Phase 1 human clinical safety study and conduct of preliminary animal efficacy studies.

The path forward will include a formal Request For Proposal to select the Best Value for the government for a prophylaxis to support an initial limited user group requirement. Concurrently the MITS JPMO will conduct an analysis of alternative manufacturing technologies. Subsequently, a full force solution prophylaxis will be pursued, once appropriate alternate manufacturing technologies have matured. Following a successful Milestone B and entry into Engineering and Manufacturing Development (EMD), the MITS JPMO 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. Prior to FDA licensure, the 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 EMD phase will culminate in FDA licensure of the Bioscavenger. During the Production and Deployment phase, the MITS JPMO, in conjunction with a commercial partner, will pursue full rate and stockpile production and conduct any FDA-mandated post-marketing surveillance studies.

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IA

The Medical Identification and Treatment Systems (MITS) Joint Product Management Office is managing the development of Inhalation Atropine for the Department of Defense (DoD). Inhalation Atropine is intended as a broad spectrum treatment of mild to moderate continuing symptoms of traditional nerve agent and non-traditional agent poisoning for patients within deployable and fixed medical treatment facilities. Utilizing the Chemical Biological Medical Systems Broad Agency Announcement, MITS will develop an Inhalation Atropine candidate to Technology Readiness Level 6. A contractor will serve as the product integrator and shall be responsible for conducting formulation / device optimization and feasibility demonstration activities associated with drug development in a manner consistent with Food and Drug Administration (FDA) regulations and guidelines. The DoD is coordinating with the Department of Health and Human Services (HHS) on the development of Inhalation Atropine capability in support of the Integrated National Biodefense Portfolio.

INATS

The Medical Identification and Treatment Systems (MITS) Joint Product Management Office (JPMO) will serve as the system integrator during the Technology Development Phase and conduct formulation development, pre-clinical animal studies and Phase 1 human clinical safety studies for the candidate oxime to replace 2-pralidoxime chloride in the Antidote Treatment Nerve Agent Autoinjector (ATNAA). After Milestone B, during the Engineering and Manufacturing (EMD) Phase, the MITS JPMO and/or a commercial partner (product dependent) will serve as the system integrator to conduct Phase 2 human clinical safety, definitive animal efficacy and toxicology studies required for FDA approval. The system integrator will also develop and manufacture a product formulation and autoinjector delivery system that is stable under operationally relevant temperatures. The system integrator will submit a New Drug Application and seek FDA approval for the INATS product during the EMD Phase. During the Production and Deployment Phase, and full rate and stockpile production will be pursued. Any FDA mandated post-marketing surveillance studies will be conducted during the Production and Deployment Phase.

PPADS

Medical Identification and Treatment Systems (MITS) and/or a commercial partner will serve as the systems integrator for efforts that may include Large-scale production, packaging issues, time-temperature indicator (TTI) testing, individual unique identification (IUID) implementation and any FDA mandated post-marketing testing and surveillance for FDA approved products in the Production and Deployment Phase. Products include Antidote Treatment - Nerve Agent, Autoinjector (ATNAA), Convulsant Antidote Nerve Agent (CANA), Reactive Skin Decontamination Lotion (RSDL), and Soman Nerve Agent Pyridostigmine Pretreatment (SNAPP).

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** AAS - HW S - AAS - cGMP Manufacturing Requirements	C/CPIF	Meridian Medical Technologies:Columbia, MD	5.340	1.029	Feb 2011	1.576	Feb 2012	-		1.576	Continuing	Continuing	0.000
** BSCAV - HW S - BSCAV Inc 1 - cGMP Manufacturing	C/CPIF	TBD:	8.724	3.726	Aug 2011	4.671	May 2012	-		4.671	Continuing	Continuing	0.000
** IA - HW S - cGMP Manufacturing requirements	C/CPIF	TBD:	-	0.945	May 2011	-		-		-	Continuing	Continuing	0.000
** INATS - HW S - INATS - NTA Study	C/CPIF	Defense Technical Information Center:Edgewood, MD (Battelle)	-	10.496	May 2011	-		-		-	Continuing	Continuing	0.000
HW S - Phase 1 Clinical Trial	C/CPFF	Defense Technical Information Center:Edgewood, MD (Battelle)	-	4.000	May 2011	-		-		-	Continuing	Continuing	0.000
HW S - Enhanced Formulation Development	C/CPFF	Defense Technical Information Center:Edgewood, MD (Battelle)	-	2.513	Feb 2011	-		-		-	Continuing	Continuing	0.000
		Subtotal	14.064	22.709		6.247		-		6.247			0.000

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** AAS - ES S - AAS - Regulatory Integration and NDA Support Efforts	C/CPIF	Meridian Medical Technologies:Columbia, MD	1.822	0.391	Feb 2011	0.311	Feb 2012	-		0.311	0.000	2.524	0.000
** BSCAV - ES S - BSCAV Inc 1 - Contract Support Efforts	C/CPIF	TBD:	-	2.667	Feb 2011	1.850	May 2012	-		1.850	0.000	4.517	0.000
** IA - ES S - Regulatory Integration and NDA support efforts	C/CPIF	TBD:	-	0.390	May 2011	-		-		-	0.000	0.390	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** INATS - ES S - INATS - Regulatory Integration and IND Support Efforts	C/CPIF	Defense Technical Information Center:Edgewood, MD (Battelle)	-	1.000	Feb 2011	-		-		-	0.000	1.000	0.000
		Subtotal	1.822	4.448		2.161		-		2.161	0.000	8.431	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** AAS - DTE S - AAS - GLP Animal Efficacy Studies	C/CPFF	Battelle Memorial Institute:Columbus, OH	3.813	0.698	Feb 2011	-		-		-	0.000	4.511	0.000
** BSCAV - DTE S - BSCAV Inc 1 - NTA Studies	C/CPIF	TBD:	-	8.500	Aug 2011	10.900	May 2012	-		10.900	0.000	19.400	0.000
DTE S - BSCAV Inc 2 - Alternate Manufacturing Technology Studies	C/CPFF	TBD:	-	5.600	May 2011	3.400	May 2012	-		3.400	0.000	9.000	0.000
** IA - DTE S - Formulation and device development studies	C/CPIF	TBD:	-	0.780	May 2011	-		-		-	0.000	0.780	0.000
		Subtotal	3.813	15.578		14.300		-		14.300	0.000	33.691	0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** AAS - PM/MS S - AAS - Product Management Support	MIPR	USAMMDA:Fort Detrick, MD	0.762	0.170	Feb 2011	0.170	Feb 2012	-		0.170	0.000	1.102	0.000
PM/MS S - AAS - Chem Bio Medical Systems	Allot	CBMS:Frederick, MD	1.260	0.221	Feb 2011	0.311	Feb 2012	-		0.311	0.000	1.792	0.000
	SS/FFP	Goldbelt Raven:LLC, Frederick	-	1.440	Feb 2011	1.540	May 2012	-		1.540	0.000	2.980	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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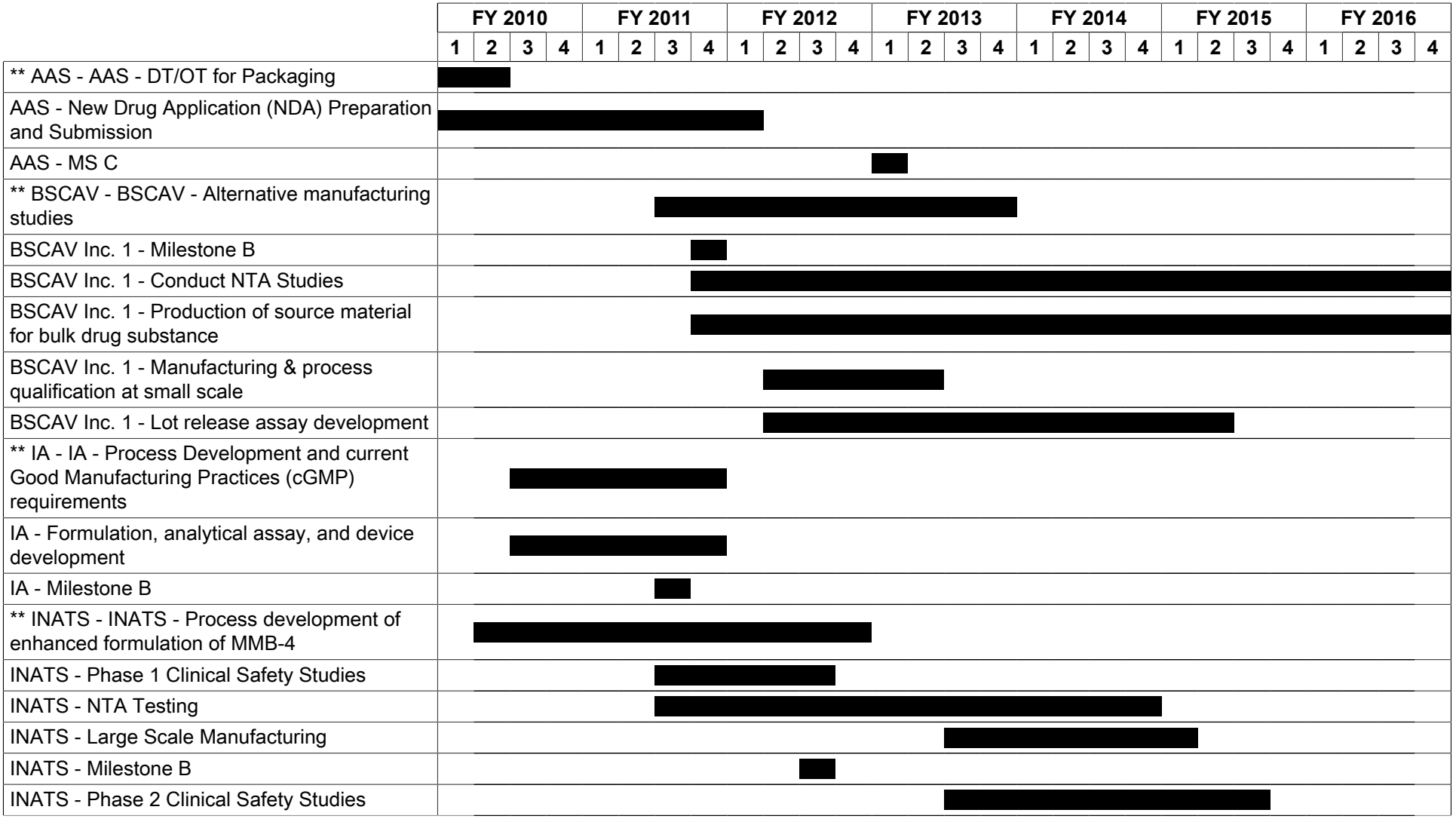
Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** BSCAV - PM/MS S - BSCAV Inc 1 - Product Management Support													
PM/MS S - BSCAV Inc 1- Chem Bio Medical Systems	Allot	CBMS:Frederick, MD	-	0.600	May 2011	0.545	May 2012	-		0.545	0.000	1.145	0.000
PM/MS S - BSCAV Inc 2 - Joint Program Executive Office	Allot	JPEO:Falls Church, VA	-	2.600	May 2011	0.979	May 2012	-		0.979	0.000	3.579	0.000
PM/MS S - USAMMDA, Fort Detrick, MD	Allot	USAMMDA:Fort Detrick, MD	-	0.200	May 2011	0.154	May 2012	-		0.154	0.000	0.354	0.000
** IA - PM/MS S - IA - Management Support	Allot	CBMS:Frederick, MD	-	0.260	May 2011	-		-		-	0.000	0.260	0.000
PM/MS S - IA - Management Support	Allot	JPEO:Falls Church, VA	-	0.130	May 2011	-		-		-	0.000	0.130	0.000
** INATS - PM/MS S - INATS - Product Management Support	SS/FFP	Goldbelt Raven:LLC, Frederick	-	2.160	Feb 2011	-		-		-	0.000	2.160	0.000
PM/MS S - INATS - Product Management Support	MIPR	USAMMDA:Fort Detrick, MD	-	0.200	May 2011	-		-		-	0.000	0.200	0.000
PM/MS S - INATS - Chem Bio Medical Systems	Allot	CBMS:Frederick, MD	-	0.400	Feb 2011	-		-		-	0.000	0.400	0.000
PM/MS S - INATS - Joint Program Executive Office	Allot	JPEO:Falls Church, VA	1.000	0.740	Feb 2011	-		-		-	0.000	1.740	0.000
		Subtotal	3.022	9.121		3.699		-		3.699	0.000	15.842	0.000

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	22.721	51.856		26.407		-		26.407			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*



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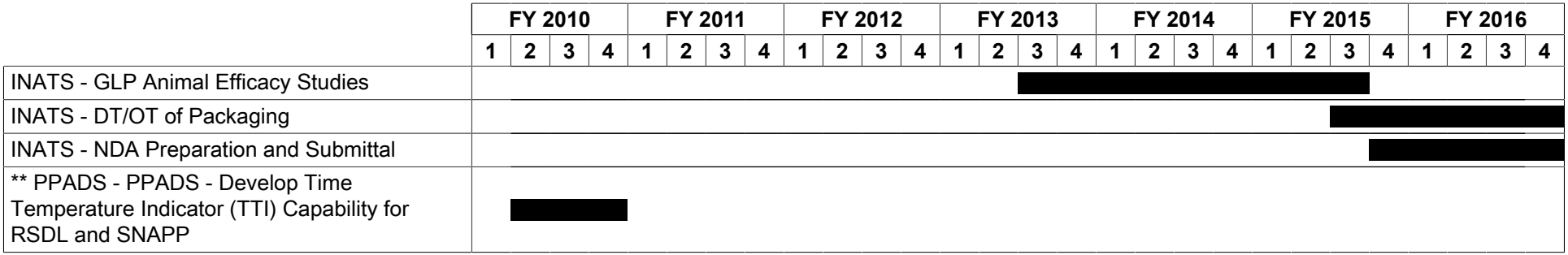
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*



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Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** AAS - AAS - DT/OT for Packaging	1	2010	2	2010
AAS - New Drug Application (NDA) Preparation and Submission	1	2010	1	2012
AAS - MS C	1	2013	1	2013
** BSCAV - BSCAV - Alternative manufacturing studies	3	2011	4	2013
BSCAV Inc. 1 - Milestone B	4	2011	4	2011
BSCAV Inc. 1 - Conduct NTA Studies	4	2011	4	2016
BSCAV Inc. 1 - Production of source material for bulk drug substance	4	2011	4	2016
BSCAV Inc. 1 - Manufacturing & process qualification at small scale	2	2012	2	2013
BSCAV Inc. 1 - Lot release assay development	2	2012	2	2015
** IA - IA - Process Development and current Good Manufacturing Practices (cGMP) requirements	3	2010	4	2011
IA - Formulation, analytical assay, and device development	3	2010	4	2011
IA - Milestone B	3	2011	3	2011
** INATS - INATS - Process development of enhanced formulation of MMB-4	2	2010	4	2012
INATS - Phase 1 Clinical Safety Studies	3	2011	3	2012
INATS - NTA Testing	3	2011	4	2014
INATS - Large Scale Manufacturing	3	2013	1	2015
INATS - Milestone B	3	2012	3	2012
INATS - Phase 2 Clinical Safety Studies	3	2013	3	2015
INATS - GLP Animal Efficacy Studies	3	2013	3	2015
INATS - DT/OT of Packaging	3	2015	4	2016
INATS - NDA Preparation and Submittal	4	2015	4	2016
	2	2010	4	2010

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*

	Start		End	
Events	Quarter	Year	Quarter	Year
** PPADS - PPADS - Develop Time Temperature Indicator (TTI) Capability for RSDL and SNAPP				

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
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COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
MR5: *MEDICAL RADIOLOGICAL DEFENSE (SDD)*	-	1.143	-	-	-	-	-	-	-	0.000	1.143
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

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

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) MRADC ***FY 2011 Plans:*** Initiate and complete pivotal animal efficacy studies.	-	0.954	-
Title: 2) MRADC ***FY 2011 Plans:*** Initiate regulatory integration and BLA support efforts.	-	0.189	-
Accomplishments/Planned Programs Subtotals	-	1.143	-

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

MRADC

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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Medical Identification and Treatment Systems (MITS) Joint Product Management Office is the life-cycle manager of Medical Radiation Countermeasures (MRADC) for the Department of Defense (DoD). The DoD is working very closely with the Department of Health and Human Services (HHS), which also has a radiation countermeasure program. 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 establishment of an interagency working group provides oversight and guidance to both agency programs and allows leveraging of knowledge and successes to advance the DoD MRADC program. Under the MOU, MITS executes Interagency Agreements with the Biomedical Advanced Research and Development Authority (BARDA), HHS' advanced developer, to promote the science of MRADC.

All MRADC will be developed using a system-of-systems approach to provide a full spectrum capability to protect against the radiation threat. Individual countermeasure solutions will be developed using a single step to a full capability (FDA approval) strategy. Multiple contractors will serve as individual product integrators throughout development and will be responsible for conducting activities associated with drug development in a manner consistent with eventual approval by the Food and Drug Administration (FDA). Each contractor will sponsor the drug to the FDA and hold all approvals and/or licenses. The Technology Development phase includes pre-clinical studies and Phase 1 human clinical safety studies. During the Engineering and Manufacturing Development (EMD) phase, large scale manufacturing, Phase 2 human clinical safety studies and definitive animal efficacy studies will be conducted. FDA approval of the countermeasure is an exit criterion for the EMD phase. During the Production and Deployment Phase, sufficient quantities of product to meet Initial Operational Capability and Full Operational Capability will be purchased. Subsequent purchases will be made by the Defense Logistics Agency. Any post-marketing surveillance studies requested by the FDA will be conducted.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MR5: *MEDICAL RADIOLOGICAL DEFENSE (SDD)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** MRADC - ES S - MRADC - Regulatory Integration and Support Efforts	C/CPIF	TBD:	-	0.100	Feb 2011	-		-		-	0.000	0.100	0.000
		Subtotal	-	0.100		-		-		-	0.000	0.100	0.000

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** MRADC - DTE S - MRADC - Definitive Animal Efficacy studies	C/CPIF	TBD:	-	0.843	Aug 2011	-		-		-	0.000	0.843	0.000
		Subtotal	-	0.843		-		-		-	0.000	0.843	0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** MRADC - PM/MS S - MRADC - Chem Bio Medical Systems	Allot	CBMS:Frederick, MD	-	0.100	May 2011	-		-		-	0.000	0.100	0.000
PM/MS S - MRADC - Product Management Services	MIPR	USAMMDA:Ft Detrick, MD	-	0.100	Feb 2011	-		-		-	0.000	0.100	0.000
		Subtotal	-	0.200		-		-		-	0.000	0.200	0.000

	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	1.143		-		-		-	0.000	1.143	0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	PROJECT MR5: *MEDICAL RADIOLOGICAL DEFENSE (SDD)*

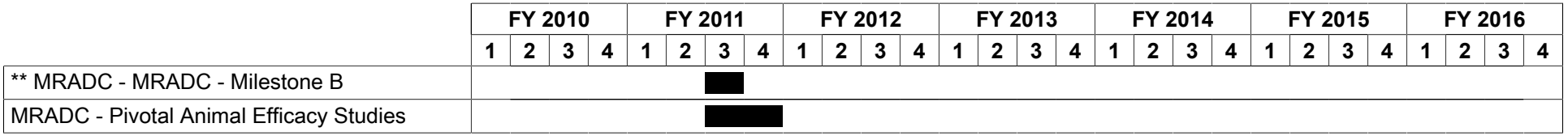

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604384BP: *CHEMICAL/BIOLOGICAL DEFENSE (SDD)*	**PROJECT** MR5: *MEDICAL RADIOLOGICAL DEFENSE (SDD)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** MRADC - MRADC - Milestone B	3	2011	3	2011
MRADC - Pivotal Animal Efficacy Studies	3	2011	4	2011

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
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COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
TE5: *TEST & EVALUATION (SDD)*	39.372	15.901	11.043	-	11.043	5.748	11.866	12.217	15.562	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This funding supports the Joint Project Manager Nuclear, Biological, Chemical Contamination Avoidance Product Director, Test Equipment, Strategy, and Support (PD TESS) efforts. PD TESS provides test infrastructure products for testing and evaluating chemical and biological defense systems throughout the life cycle acquisition process in support of the Milestone Decision Authority, Joint Project Managers, and the Test and Evaluation (T&E) community. PD TESS test infrastructure products are aligned in four groups to include: (1) Chemical Laboratory (Sense); (2) Biological Laboratory (Sense); (3) Field Simulant Test (Sense); (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 (NTA) Test System. The Dynamic Test Chamber provides a new capability for testing chemical point detection systems against chemical warfare agents in various environmental conditions. The NTA Test System provides a new capability at Edgewood Chemical Biological Center to conduct highly toxic material testing using new emerging threats. The NTA Test System supports testing of Decontamination, Collective Protection, Individual Protection, and Contamination Avoidance products. The CBD programs supported are: the Joint Chemical Agent Detector (JCAD) and Improved Point Detection System (IPDS).

(2) Sense Laboratory (Biological): The product for this area is the Whole System Live Agent Test (WSLAT) "Full System" Chamber. The WSLAT "Full System" Chamber supports testing of all biological point detection systems in production configuration in biological live agent environments. The chemical biological defense (CBD) programs supported are: the Joint Biological Point Detection System (JBPDS)/JBPDS Block II; and the Joint Biological Standoff Detection System (JBSDS) Inc. 2.

(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 simulant test capability that integrates cloud tracking equipment; meteorological equipment; and test data network.. The CBD programs supported are: the Joint Chemical Agent Detector (JCAD); Next Generation Chemical Standoff Detection (NGCSD) System; the Joint NBC Reconnaissance System (JNBCRS); and the Joint Warning and Reporting Network (JWARN).

(4) Individual Protection, Collective Protection and Decontamination (Shield and Sustain): Products for this area include: a Small Item Decontamination (SID) Chamber; Individual Protection Ensemble Mannequin System (IPEMS); and Collective Protection (ColPro) instrumentation and facilities. The Small Item Decontamination Chamber provides an enhanced ability to conduct decontamination and residual agent off-gassing testing. 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 mannequin, exposure chamber, control room, and real time under-ensemble sensor system. Collective Protection instrumentation and fixture upgrades provide improved test capabilities at Dugway Proving Ground, and the Edgewood Chemical Biological Center for the evaluation of entire ColPro systems, subsystems and individual components. The CBD programs supported are: Joint Protective Aircrew Ensemble (JPACE); Joint Service General Purpose Mask

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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(JSGPM); Joint Service Aircrew Mask (JSAM) - Fixed Wing (FW), Rotary Wing (RW), and Joint Strike Fighter (JSF) variants; Joint Service Chemical Environment Survivability Mask (JSCESM); Joint Chemical Ensemble (JCE); Uniform Individual Protective Ensemble (UIPE); Joint Service Lightweight Integrated Suit Technology (JSLIST); Joint Chemical/Biological Coverall for Combat Vehicle Crewmen (JC3); Joint Material Decontamination System (JMDS) (Includes Joint Platform Interior Decontamination/Joint Service Sensitive Equipment Decontamination (JPID/JSSED)); Joint Service Transportable Decontamination System (JSTDS); Joint Expeditionary Collective Protection (JECP); and Joint Collective Protection Equipment (JCPE).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) PD TESS - Dynamic Test Chamber (DTC) ***FY 2010 Accomplishments:*** Completed verification and validation testing of the DTC.	2.691	-	-
Title: 2) PD TESS - WSLAT ***FY 2010 Accomplishments:*** Completed WSLAT design and initiated fabrication. ***FY 2011 Plans:*** Continue WSLAT build and installation. ***FY 2012 Plans:*** Conduct verification and validation testing.	8.556	1.915	1.500
Title: 3) PD TESS - Test Grid ***FY 2010 Accomplishments:*** Completed system characterization testing and operational demonstration (Op-Demo). Demonstrated capability for chemical simulant testing. Procured data network software and hardware build a wired and wireless network and demonstrated at the Op-Demo. Initiated instrumentation support and information effort. ***FY 2011 Plans:*** Prepare and conduct DoD Information Assurance Certification and Accreditation Process (DIACAP) for the Test Grid project. Insert and interface the AU9200 dissemination devices into the Test Grid network.	11.740	1.502	-
Title: 4) PD TESS - Small Item Decon (SID) ***FY 2010 Accomplishments:*** Completed verification and validation testing.	0.130	-	-
Title: 5) PD TESS - Individual Protection Ensemble Mannequin System (IPEMS) ***FY 2010 Accomplishments:***	12.720	10.891	4.224

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiated IPEMS and chamber system fabrication and installation. ***FY 2011 Plans:*** Complete installation and initiate verification and validation testing. ***FY 2012 Plans:*** Complete fabrication, installation, verification and validation testing.			
Title: 6) PD TESS - ColPro Upgrades ***FY 2010 Accomplishments:*** Completed fabrication, verification and validation testing of the Advanced Air Purification Test System and Mechanical Facility Test Fixture.	0.264	-	-
Title: 7) PD TESS ***FY 2010 Accomplishments:*** **Need Text** ***FY 2011 Plans:*** Initiate program management, engineering support and Integrated Product Team (IPT) support. ***FY 2012 Plans:*** Continue program management, engineering support and IPT support.	3.271	1.593	1.501
Title: 8) PD TESS - Non-Traditional Agent (NTA) Test System ***FY 2012 Plans:*** Continue fabrication and installation of the NTA Test System.	-	-	3.818
Accomplishments/Planned Programs Subtotals	39.372	15.901	11.043

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• TE7: *TEST & EVALUATION (OP SYS DEV)*	4.805	4.813	3.597		3.597	3.348	2.888	2.855	2.004	Continuing	Continuing

D. Acquisition Strategy

PD TESS

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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The PD TESS program provides for the development and acquisition of new and enhanced test infrastructure to support the sense, shield, shape, and sustain mission areas for the Chemical and Biological Defense Program (CBDP). The efforts are supported through competitive contract actions, academia, and other Government agencies. Infrastructure solutions will leverage commercially available systems to provide state-of-the-art capabilities that address current and future CBDP test and evaluation needs.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** PD TESS - HW S - WSLAT Chamber Fabrication/ Installation	C/CPFF	Teledyne Brown Engineering:Huntsville, Alabama	8.500	1.915	May 2011	1.500	Feb 2012	-		1.500	Continuing	Continuing	0.000
HW S - Test Grid Instrumentation, Data Network and C4ISR	MIPR	Dugway Proving Ground:Utah	2.047	0.177	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW S - Test Grid Instrumentation, Data Network and C4ISR #2	C/FFP	EMC2:Irvine, California	-	2.200	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW S - IPE Mannequin System Fabricate/Install	C/CPFF	Midwest Research Institute:Kansas City, Missouri	31.666	10.786	Nov 2010	3.481	Nov 2011	-		3.481	Continuing	Continuing	0.000
HW S - IPEMS Design/ Fabrication/Installation	MIPR	Various:	0.554	0.105	Feb 2011	0.743	Feb 2012	-		0.743	Continuing	Continuing	0.000
HWS - NTA Test System Design/Fabrication/Installation	MIPR	Various:	-	-		0.467	Feb 2012	-		0.467	Continuing	Continuing	0.000
HW S - NTA Test System Design, Fabrication, Install	C/CPFF	Midwest Research Institute:Kansas City, Missouri	-	-		3.351	Feb 2012	-		3.351	Continuing	Continuing	0.000
		Subtotal	42.767	15.183		9.542		-		9.542			0.000

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
** PD TESS - PM/MS S - Program Management/ Systems Engineering Support	MIPR	JPM NBCCA:APG, MD	3.231	0.718	Nov 2010	1.501	Nov 2011	-		1.501	0.000	5.450	0.000
		Subtotal	3.231	0.718		1.501		-		1.501	0.000	5.450	0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Chemical and Biological Defense Program			DATE: February 2011
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	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	45.998	15.901		11.043		-		11.043			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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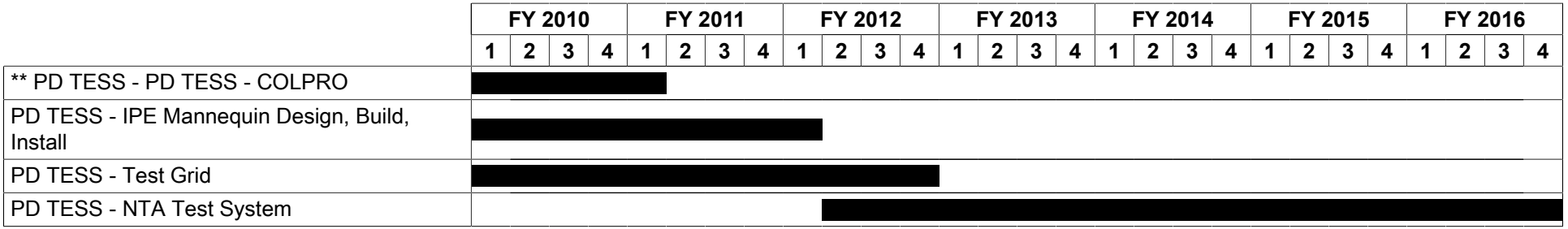

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** PD TESS - PD TESS - COLPRO	1	2010	1	2011
PD TESS - IPE Mannequin Design, Build, Install	1	2010	1	2012
PD TESS - Test Grid	1	2010	4	2012
PD TESS - NTA Test System	2	2012	4	2016