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 4: *Advanced Component Development & Prototypes (ACD&P)*				R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*							
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	248.298	277.062	261.143	-	261.143	251.988	224.137	226.719	196.651	Continuing	Continuing
CA4: *CONTAMINATION AVOIDANCE (ACD&P)*	39.396	63.347	33.952	-	33.952	28.703	24.178	37.476	27.930	0.000	254.982
CM4: *HOMELAND DEFENSE (ACD&P)*	5.666	9.526	14.117	-	14.117	2.966	-	-	-	0.000	32.275
DE4: *DECONTAMINATION SYSTEMS (ACD&P)*	14.867	7.051	38.737	-	38.737	30.608	6.430	7.383	12.553	Continuing	Continuing
IP4: *INDIVIDUAL PROTECTION (ACD&P)*	2.305	3.172	-	-	-	1.088	3.661	6.719	4.616	Continuing	Continuing
IS4: *INFORMATION SYSTEMS (ACD&P)*	13.914	11.221	7.420	-	7.420	14.682	-	-	-	0.000	47.237
MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*	95.483	136.975	137.653	-	137.653	150.128	167.604	133.589	119.626	Continuing	Continuing
MC4: *MEDICAL CHEMICAL DEFENSE (ACD&P)*	20.518	-	20.804	-	20.804	3.658	5.045	14.716	3.555	Continuing	Continuing
MR4: *MEDICAL RADIOLOGICAL DEFENSE (ACD&P)*	2.800	-	-	-	-	-	-	-	-	0.000	2.800
TE4: *TEST & EVALUATION (ACD&P)*	28.412	19.304	5.438	-	5.438	16.232	12.461	18.369	19.296	Continuing	Continuing
TT4: *TECHBASE TECHNOLOGY TRANSITION (ACD&P)*	24.937	26.466	3.022	-	3.022	3.923	4.758	8.467	9.075	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 (CB) agent threat environment across the continuum of global, contingency, special operations/low intensity conflict, counternarcotics, and other high risk missions. This program element supports the Advanced Component Development and Prototypes (ACD&P) of CB defensive equipment, both medical and non-medical. DoD missions for civil support operations have recently expanded and have resulted in providing focus to develop technologies to support CB counterterrorism initiatives. Projects within BA4 have been structured to consolidate Joint and Service-unique tasks within four commodity areas: contamination avoidance, force protection (individual and collective), decontamination, and medical countermeasures. ACD&P is conducted for an array of chemical/biological/toxin detection and warning systems providing early warning, collector concentrators, generic detection, improved reagents, and decontamination systems using solutions that will remove and/or detoxify contaminated material

without damaging combat equipment, personnel or the environment. In the medical chemical/biological defense area, ACD&P is conducted for improved medical equipment, vaccines, and drugs essential to counteracting lethal and human performance degrading effects of chemical and biological agent threats. Specific items include improvements to nerve agent antidotes, anticonvulsants, biological agent diagnostics, and vaccines to protect against various Biological Warfare (BW) agents. Transformational Medical Technology Initiatives (TMTI) efforts in this area will include the continual build out of both a genomic sequencing and a bio-chemical informatics capability for the DoD. ACD&P also supports the Product Director Test Equipment, Strategy and Support (PD TESS) providing for the development of updated test capabilities to evaluate Chemical, Biological, Radiological and Nuclear Defense systems. Also included is the Techbase Technology Transition effort which validates high-risk/high-payoff technologies that could significantly improve Warfighter capabilities. This project also funds development of candidate therapeutic medical countermeasures to mitigate the consequences of exposure to ionizing radiation due to nuclear or radiological attacks.

BA4 reductions in support of the DoD Efficiency Initiatives for FY12 include: The Next Generation Chemical Standoff Detector (NGCSD) program, which was deferred as Service requirements/concepts for operation could not be met (-$13.003M); PD TESS efforts reduced in association with program changes (-$1.322M); CBRN MSSKO program delayed by one year as requirements continue to be developed and refined (-1.210M); Program management support reduced (-$2.568M); Service Support Contracts reduced (-$1.007M).

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

B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	209.275	277.062	182.351	-	182.351
Current President's Budget	248.298	277.062	261.143	-	261.143
Total Adjustments	39.023	-	78.792	-	78.792
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-2.148	-			
• SBIR/STTR Transfer	-2.558	-			
• Other Adjustments	43.729	-	78.792	-	78.792

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2010	FY 2011
Project: MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*		
Congressional Add: *1) Broad Spectrum Therapeutic Countermeasure*	1.593	-
Congressional Add Subtotals for Project: MB4	1.593	-

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 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2010	FY 2011
Congressional Add Totals for all Projects	1.593	-

Change Summary Explanation

Funding: FY10 - Realignment between BA4 and BA5 for approved threshold reprogramming to meet FAR guidelines (+$2,000K CA4; +$5,666K CM4; +$12,455K DE4; +$2,305K IP4; +$14,715K IS4; +6,898K MC4); Other program realignments to support CBDP and DoD program initiatives (-$2,297K CA4; +$620K DE4; -$800K IS4; -$5,690K MB4; +$4,300K MC4; +$2,800K MR4; -$1,390K TT4); SBIR Transfer (-$493K CA4; -$1264K MB4; -$118K MC4; -$361K TE4; -$322K TT4).

FY12 - Program realignments to support high priority CBDP and DoD program initiatives (+$25,009K CA4; +$14,139K CO4; +$33,068K DE4; +$4,083K IS4; +$7,787K MB4; +$18,059K MC4; -$6,404K TE4; -$15,538K TT4); Economic assumptions (-$52K CA4; -$22K CM4; -$59K DE4; -$11K IS4; -$214 MB4; -$33K MC4; -$9K TE4; -$4K TT4); Reductions to Service Support Contracts in support of the DoD Efficiency Initiatives (-$98K CA4; -$20K DE4; -$56K IS4; -$638K MB4; -$195K MC4)..

Schedule: N/A

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CA4: *CONTAMINATION AVOIDANCE (ACD&P)*	

COST ($ in Millions)	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
CA4: *CONTAMINATION AVOIDANCE (ACD&P)*	39.396	63.347	33.952	-	33.952	28.703	24.178	37.476	27.930	0.000	254.982
Quantity of RDT&E Articles	0	22	0		0	0	0	0	0		

A. Mission Description and Budget Item Justification

This Advanced Component Development and Prototypes (ACD&P) Project supports Component Advanced Development and System Integration (CAD/SI) of reconnaissance, detection, identification, and hazard prediction equipment, hardware, and software. Individual efforts are: (1) Chemical Biological Radiological Nuclear Dismounted Reconnaissance Systems (CBRN DRS), formerly JNBCRS Increment 2; (2) Joint Biological Standoff Detector System (JBSDS); (3) Joint Biological Tactical Detection System (JBTDS); (4) Joint Chemical Agent Detector (JCAD); (5) Major Defense Acquisition Program (MDAP) Support; (6) Next Generation Chemical Standoff Detection (NGCSD); and (7) Non Traditional Agent Detection (NTA Detection).

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 "JNBCRS Increment 2" was renamed to "CBRN DRS" starting in FY10.

The Joint Biological Standoff Detector System (JBSDS) is employing an incremental acquisition strategy. JBSDS Increment 1 was the first standoff early warning biological detection (BD) system for the Joint Services. The system demonstrated the capability to provide near real time detection of biological attacks/incidents and standoff early detection/warning (Detect to Warn) of biological Warfare (BW) agents at fixed sites or in static mode on vehicles. It demonstrated the capability of providing standoff detection, ranging, tracking, discrimination (bio vs. non-bio), of BW aerosol clouds for advanced warning, reporting, and protection. The JBSDS will augment and integrate with existing BD systems to provide a BD network capable of near real time detection and warning theater-wide to limit the effects of biological agent hazards against U.S. forces at the tactical and operational levels of war. The JBSDS can be employed in support of various areas (e.g., fixed sites, Air Ports of Debarkation/Sea Ports of Debarkation (APODs/SPODs), amphibious landing sites, etc.), or on platforms (ships, aircraft or ground vehicles). The Increment 1 systems will be used for training to support Increment 2 concept of operations development.

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

The Joint Biological Tactical Detection System (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

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CA4: *CONTAMINATION AVOIDANCE (ACD&P)*

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.

The Joint Chemical Agent Detector (JCAD) efforts will evaluate current technologies focusing on capability gaps for emerging threats not addressed by M4 and M4E1 JCAD.

The Major Defense Acquisition Program (MDAP) Support program will integrate System of Systems (SoS) solutions across the Armed Services for MDAPs 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 Next Generation Chemical Standoff Detection (NGCSD), a next generation chemical standoff effort that was initiated under the JSLSCAD program, will provide early warning for both traditional and non-traditional chemical agent attacks at fixed sites, forward operating bases and on Service designated vehicles and ships. This effort will develop and integrate new standoff sensor technologies for future standoff systems. The detection system will interface with the Services and Joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) architectures.

The Non Traditional Agent Detection (NTA Detection) projects will conduct system assessment methodology development, environmental monitor technology research and prototype development. These tasks are in the interest of advancing potential technologies towards fielding solutions.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) CBRN DRS ***FY 2010 Accomplishments:*** Initiated and completed Analysis of Materiel Solutions (AMS) for CBRN DRS program to support CDD development. ***FY 2011 Plans:*** Initiate and complete personal protective equipment (PPE) testing.	0.500	1.986	-
Title: 2) JBSDS Increment 2 ***FY 2010 Accomplishments:*** Provided strategic, tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, acquisition oversight, technical support and milestone documentation. ***FY 2011 Plans:***	3.500	3.850	3.928

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Provide strategic, tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, acquisition oversight, technical support and milestone documentation. ***FY 2012 Plans:*** Continue strategic, tactical planning, government system engineering, program/financial management, costing, contracting, scheduling, acquisition oversight, technical support and milestone documentation.			
Title: 3) JBSDS Increment 2 ***FY 2010 Accomplishments:*** Initiated agent performance assessment, cross section measurements and simulant variability testing. ***FY 2011 Plans:*** Continue agent performance assessment, cross section measurements, simulant variability testing and relative humidity testing. ***FY 2012 Plans:*** Continue agent performance assessment, cross section measurements and agent variability testing.	2.831	2.875	3.300
Title: 4) JBSDS Increment 2 ***FY 2010 Accomplishments:*** Initiated Increment 2 Modeling and Simulation efforts supporting agent performance assessment and standardization of cloud modeling software. Initiate cloud modeling testing to support agent performance assessment and contractor algorithms. ***FY 2011 Plans:*** Continue Increment 2 Modeling and Simulation efforts supporting agent performance assessment and standardization of cloud modeling software. Continue cloud modeling testing and incorporate modeling and simulation capabilities with system algorithms. ***FY 2012 Plans:*** Continue Increment 2 Modeling and Simulation efforts supporting agent performance assessment and standardization of cloud modeling software. Mature system algorithms with continued testing and modeling and simulation results.	1.138	1.000	0.749
Title: 5) JBSDS Increment 2 ***FY 2010 Accomplishments:*** Initiated Increment 2 candidate technology analysis, alternate system analysis and modeling and simulation in support of agent performance assessment for future competitive prototypes. ***FY 2011 Plans:***	1.500	1.250	1.263

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continue Increment 2 candidate technology analysis, alternate system analysis and modeling and simulation in support of agent performance assessment of developmental prototypes. ***FY 2012 Plans:*** Continue Increment 2 candidate technology analysis, alternate system analysis and modeling and simulation in support of agent performance assessment of developmental prototypes.			
Title: 6) JBSDS Increment 2 ***FY 2010 Accomplishments:*** Initiated and completed Family of Systems demonstration and simulation.	0.370	-	-
Title: 7) JBSDS Increment 2 ***FY 2011 Plans:*** Initiate technology development and preliminary designs including competitive prototyping (estimated at $2M per prototype for up to 3 each plus hardware development, software development and testing) to multiple competitive contracts. ***FY 2012 Plans:*** Continue technology development and preliminary designs including competitive prototyping (estimated at $2M per prototype for up to 3 each plus hardware development, software development and testing) to multiple competitive contracts.	-	12.000	11.976
Title: 8) JBSDS Increment 2 ***FY 2010 Accomplishments:*** Provided developmental test organizations funding to support test planning, test support for evaluation of the competitive prototypes and model validation efforts (simulant variability testing and aerosol modeling testing). ***FY 2011 Plans:*** Continue developmental test organizations funding to support test planning, test support for evaluation of the competitive prototypes and model validation efforts (continued simulant variability testing, aerosol modeling testing and initiate relative humidity testing). ***FY 2012 Plans:*** Continue developmental test organizations funding to support test planning, test support for evaluation of the competitive prototypes and model validation efforts (initiate agent variability testing, continue relative humidity testing and initiate competitive prototype testing).	2.389	3.426	2.991
Title: 9) JBSDS Increment 2	0.870	0.750	1.273

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2010 Accomplishments: Initiated alternate systems reports, competitive prototype analysis and acquisition documentation in support of technology development phase. ***FY 2011 Plans:*** Continue competitive prototype analysis and acquisition documentation support of technology development phase. ***FY 2012 Plans:*** Continue competitive prototype analysis and acquisition documentation support of technology development phase.			
Title: 10) JBSDS Increment 2 ***FY 2010 Accomplishments:*** Initiated validation of simulants, models and test support equipment including referee equipment development for the evaluation of competitive prototypes and advanced development hardware. ***FY 2011 Plans:*** Continue validation of simulants, models and test support equipment including referee equipment development for the evaluation of competitive prototypes and advanced development hardware. ***FY 2012 Plans:*** Continue validation of simulants, models and test support equipment including referee equipment development for the evaluation of competitive prototypes and advanced development hardware.	4.085	3.000	2.995
Title: 11) JBTDS ***FY 2012 Plans:*** Initiate activities to develop Engineering and Manufacturing Development (EMD) contract solicitation.	-	-	0.826
Title: 12) JBTDS ***FY 2012 Plans:*** Initiate activities to support Milestone B document development.	-	-	1.000
Title: 13) JBTDS ***FY 2011 Plans:*** Initiate up to three (3) competitive prototyping contracts effort for JBTDS Increment 1.	-	6.500	-
Title: 14) JBTDS ***FY 2011 Plans:***	-	4.500	-

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiate Competitive Prototyping test efforts.			
Title: 15) JBTDS ***FY 2011 Plans:*** Initiate technology readiness assessment of prototypes.	-	0.250	-
Title: 16) JBTDS ***FY 2011 Plans:*** Initiate independent assessment of Competitive Prototyping data and test reports. ***FY 2012 Plans:*** Continue independent assessment of Competitive Prototyping data and test reports.	-	0.400	0.250
Title: 17) JBTDS ***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:*** Continue to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2012 Plans:*** Continue to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.	3.991	3.613	2.743
Title: 18) JBTDS ***FY 2010 Accomplishments:*** Provided user representation and involvement (i.e., Integrated Product Teams and working groups). ***FY 2011 Plans:*** Continue user representation and involvement (i.e., Integrated Product Teams and working groups). ***FY 2012 Plans:*** Continue user representation and involvement (i.e., Integrated Product Teams and working groups).	0.981	0.869	0.658
Title: 19) JBTDS	1.341	-	-

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2010 Accomplishments: Conducted Technology Readiness Evaluation on JBTDS collector and identifier candidates.			
Title: 20) JBTDS ***FY 2010 Accomplishments:*** Initiated test and evaluation methodologies.	0.800	-	-
Title: 21) JBTDS ***FY 2010 Accomplishments:*** Conducted agent to simulant correlation demonstrations.	1.325	-	-
Title: 22) JBTDS ***FY 2010 Accomplishments:*** Conducted risk reduction analysis and studies.	0.477	-	-
Title: 23) JBTDS ***FY 2010 Accomplishments:*** Conducted Analysis of Material Alternatives (AoMA).	0.345	-	-
Title: 24) JBTDS ***FY 2010 Accomplishments:*** Developed Pre Milestone A documentation.	0.804	-	-
Title: 25) JCAD ***FY 2011 Plans:*** Evaluate technology readiness of prototype systems for future increments in advanced chemical point detection.	-	1.350	-
Title: 26) JCAD ***FY 2011 Plans:*** Provide Program Management and Systems Engineering Support.	-	0.636	-
Title: 27) MDAP SPRT ***Description:*** Catalytic Oxidation (CatOx) Technology Demonstration of improved air purification for the Abrams Main Battle Tank (MBT).	0.670	0.900	-

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2010 Accomplishments: Focused on monitoring contractor conceptual design activities. Conducted engineering design options review and design downselect. Conducted contractor familiarization testing of the Abrams MBT. ***FY 2011 Plans:*** Complete the development and fabrication of three prototype CatOx systems at approximately $155 thousand each.			
Title: 28) MDAP SPRT ***Description:*** Chemical, Biological, and Radiological (CBR) Capabilities Analysis. ***FY 2010 Accomplishments:*** Completed CBR Capabilities Analysis for Ground Combat Vehicle (GCV), Joint Strike Fighter, Small Unmanned Ground Vehicle (SUGV), and Multifunction Utility/Logistics Equipment (MULE) Vehicle. ***FY 2011 Plans:*** Conduct CBR Capabilities Analysis for Missile Defense Agency, DDG-51 FLT III, RQ-7C Shadow Unmanned Aerial Vehicle, Joint Light Tactical Vehicle (JLTV), and US Strategic Command (USSTRATCOM).	0.696	0.400	-
Title: 29) MDAP SPRT ***Description:*** Chemical, Biological, and Radiological (CBR) Material Solutions Analysis. ***FY 2010 Accomplishments:*** Initiated the CBR Material Solutions Analysis for Ground Combat Vehicle. ***FY 2011 Plans:*** Conduct CBR Material Solutions Analyses for Missile Defense Agency, RQ-7C Shadow Unmanned Aerial Vehicle, and Joint Light Tactical Vehicle. Complete CBR Material Solutions Analyses for Ground Combat Vehicle. Conduct individual protection equipment compatibility study for Ship to Shore Connector.	0.150	1.331	-
Title: 30) MDAP SPRT ***Description:*** Provide strategic tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2011 Plans:***	-	0.346	-

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CA4: *CONTAMINATION AVOIDANCE (ACD&P)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Conduct strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight, and technical support.			
Title: 31) NGCSD ***FY 2010 Accomplishments:*** Initiated design and development of algorithm and sensor prototype. ***FY 2011 Plans:*** Complete phase of sensor prototype development.	4.467	3.641	-
Title: 32) NGCSD ***FY 2010 Accomplishments:*** Planned and prepared Technology Evaluation (TE). ***FY 2011 Plans:*** Complete Technology Evaluation.	0.462	2.159	-
Title: 33) NGCSD ***FY 2010 Accomplishments:*** Initiated the strategic/tactical planning, systems engineering, program/financial management, and Integrated Product Team (IPT) support. ***FY 2011 Plans:*** Continue the strategic/tactical planning, systems engineering, program/financial management, and IPT support.	3.104	2.100	-
Title: 34) NGCSD ***FY 2011 Plans:*** Fabricate prototype for TE and prototype development support (3 each of 3 technologies at a cost of $300K each).	-	3.600	-
Title: 35) NGCSD ***FY 2011 Plans:*** Provides for program management support.	-	0.615	-
Title: 36) NTA DETECT ***FY 2010 Accomplishments:***	0.794	-	-

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 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** CA4: *CONTAMINATION AVOIDANCE (ACD&P)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Conducted environmental monitor development.			
Title: 37) NTA DETECT ***FY 2010 Accomplishments:*** Conducted design and development of prototype.	0.606	-	-
Title: 38) NTA DETECT ***FY 2010 Accomplishments:*** Initiated and completed system assessment methodology development.	1.200	-	-
Accomplishments/Planned Programs Subtotals	39.396	63.347	33.952

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
• CA5: *CONTAMINATION AVOIDANCE (SDD)*	67.384	124.936	52.114		52.114	63.524	82.148	104.170	95.822	Continuing	Continuing
• 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

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 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** CA4: *CONTAMINATION AVOIDANCE (ACD&P)*

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

JBSDS

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

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.

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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 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.

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
** CBRN DRS - SW SB - Analysis of Materiel Solutions	C/FP	AGENTASE-ICX:Pittsburgh, PA	0.500	0.986	Feb 2011	-		-		-	0.000	1.486	0.000
** JBSDS - HW SB - Technology Development and Preliminary Designs	C/FPIF	TBD:	-	12.000	May 2011	11.976	Feb 2012	-		11.976	0.000	23.976	0.000
** JBTDS - HW S - Competitive Prototype Contract	C/FFP	TBD:	-	6.500	May 2011	-		-		-	0.000	6.500	0.000
** JCAD - SW SB - Market Research and Readiness Evaluation	C/CPFF	Various:	-	0.850	Feb 2011	-		-		-	0.000	0.850	0.000
** MDAP SPRT - HW S - Catalytic Oxidation (CatOx) Technology Demonstration	C/CPFF	Honeywell Corporation:Phoenix, AZ	2.202	0.900	Feb 2011	-		-		-	0.000	3.102	0.000
** NGCSD - SW SB - Design and Development of Sensor Algorithm and Prototype	C/CPFF	JHU-APL (FY10)/ Various FY11:	1.580	3.641	May 2011	-		-		-	0.000	5.221	0.000
SW SB - Prototype Acquisition (3 each of 3 technologies)	C/CPFF	TBD:	-	3.600	Feb 2011	-		-		-	0.000	3.600	0.000
		Subtotal	4.282	28.477		11.976		-		11.976	0.000	44.735	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
** JBSDS - ES S - INC 2 - Modeling & Simulation Test Support	C/CPFF	Bricks:Sigal & Miller Inc., Kennett Square	0.370	0.400	Feb 2011	0.524	Feb 2012	-		0.524	0.000	1.294	0.000
ES S - INC 2 - Modeling & Simulation Test Support	C/CPFF	NAVSEA:Johns Hopkins-Applied Physics Lab, Baltimore	0.785	1.000	Feb 2011	0.999	Feb 2012	-		0.999	0.000	2.784	0.000
ES S - INC 2 - Modeling & Simulation Test Support #2	MIPR	Sandia National Lab:Albuquerque, NM	3.085	2.400	Feb 2011	1.498	Feb 2012	-		1.498	0.000	6.983	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
** JBTDS - ES S - User involvement	MIPR	Various:	0.981	0.869	Feb 2011	0.658	Feb 2012	-		0.658	0.000	2.508	0.000
ES S - Technology Readiness Assessment	PO	TBD:	-	0.250	May 2011	-		-		-	0.000	0.250	0.000
ES S - Lead evaluation for CP and data reports	MIPR	ATEC:	-	0.400	May 2011	0.250	Nov 2011	-		0.250	0.000	0.650	0.000
ES S - EMD contract preparation	MIPR	JPM BD:	-	-		0.826	Feb 2012	-		0.826	0.000	0.826	0.000
ES S - MS B document development	MIPR	JPM BD:	-	-		1.000	Feb 2012	-		1.000	0.000	1.000	0.000
** MDAP SPRT - ES S - CBR Capability Analysis	MIPR	Various:	1.396	0.400	Feb 2011	-		-		-	0.000	1.796	0.000
ES S - CBR Material Solutions Analysis	MIPR	Various:	1.943	1.331	Feb 2011	-		-		-	0.000	3.274	0.000
		Subtotal	8.560	7.050		5.755		-		5.755	0.000	21.365	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 C - Personal Protective Equipment	MIPR	JPM Individual Protection:Stafford, VA	-	0.700	Feb 2011	-		-		-	0.000	0.700	0.000
** JBSDS - OTHT SB - INC 2 - Developmental Testing Support	MIPR	ECBC:MD, DPG	1.046	1.475	Feb 2011	1.797	Feb 2012	-		1.797	0.000	4.318	0.000
OTHT SB - Cloud modeling analysis	C/CPFF	ITT:Albuquerque, NM/ Battelle	1.138	1.000	Feb 2011	0.750	May 2012	-		0.750	0.000	2.888	0.000
OTHT SB - Agent performance analysis support	MIPR	ECBC:Aberdeen Proving Ground, MD	0.338	0.600	Feb 2011	0.800	Feb 2012	-		0.800	0.000	1.738	0.000
OTHT SB - Agent performance analysis	MIPR		1.500	1.250	Feb 2011	1.750	May 2012	-		1.750	0.000	4.500	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CA4: *CONTAMINATION AVOIDANCE (ACD&P)*

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
		Johns Hopkins - Applied Physics Lab:Baltimore, MD											
OTHT SB - Algorithm Development	MIPR	TBD:	-	1.000	Feb 2011	1.000	May 2012	-		1.000	0.000	2.000	0.000
** JBTDS - DTE S - Competitive Prototyping Testing	MIPR	Dugway Proving Ground:UT, ECBC	-	4.500	Feb 2011	-		-		-	0.000	4.500	0.000
** JCAD - OTHT SB - Technology Evaluation of Prototype Systems	MIPR	Various:	-	0.500	May 2011	-		-		-	0.000	0.500	0.000
** NGCSD - OTHT SB - Conduct Technology Evaluation	MIPR	Various:	0.462	2.159	Feb 2011	-		-		-	0.000	2.621	0.000
		Subtotal	4.484	13.184		6.097		-		6.097	0.000	23.765	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 SB - Program Management & Systems Engineering Support	MIPR	JPM NBC CA:APG, MD	-	0.300	Nov 2010	-		-		-	0.000	0.300	0.000
** JBSDS - PM/MS S - JPM BD & Management Support	MIPR	JPM BD:APG, MD	5.619	6.526	Feb 2011	6.882	May 2012	-		6.882	0.000	19.027	0.000
PM/MS S - PM/MS Other Government Agencies	MIPR	USN:USMC, USAF	0.432	0.500	Feb 2011	0.499	May 2012	-		0.499	0.000	1.431	0.000
** JBTDS - PM/MS S - JPM BD, APG, MD	MIPR	JPM BD:APG, MD	3.991	3.613	Nov 2010	2.743	Nov 2011	-		2.743	0.000	10.347	0.000
** JCAD - PM/MS SB - Program Management and Systems Engineering Support	MIPR	JPM NBC CA:APG, MD	-	0.636	Nov 2010	-		-		-	0.000	0.636	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
** MDAP SPRT - PM/MS S - MDAP SPRT Management & Oversight	MIPR	Various:	-	0.346	Feb 2011	-		-		-	0.000	0.346	0.000
** NGCSD - PM/MS S - Program Management and Systems Engineering Support	MIPR	JPM NBC CA:APG, MD	3.104	2.100	Feb 2011	-		-		-	0.000	5.204	0.000
PM/MS S - Program Management and Systems Engineering Support	MIPR	JPEO-CBD:Falls Church, VA	-	0.615	Aug 2011	-		-		-	0.000	0.615	0.000
		Subtotal	13.146	14.636		10.124		-		10.124	0.000	37.906	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	30.472	63.347		33.952		-		33.952	0.000	127.771	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CA4: *CONTAMINATION AVOIDANCE (ACD&P)*

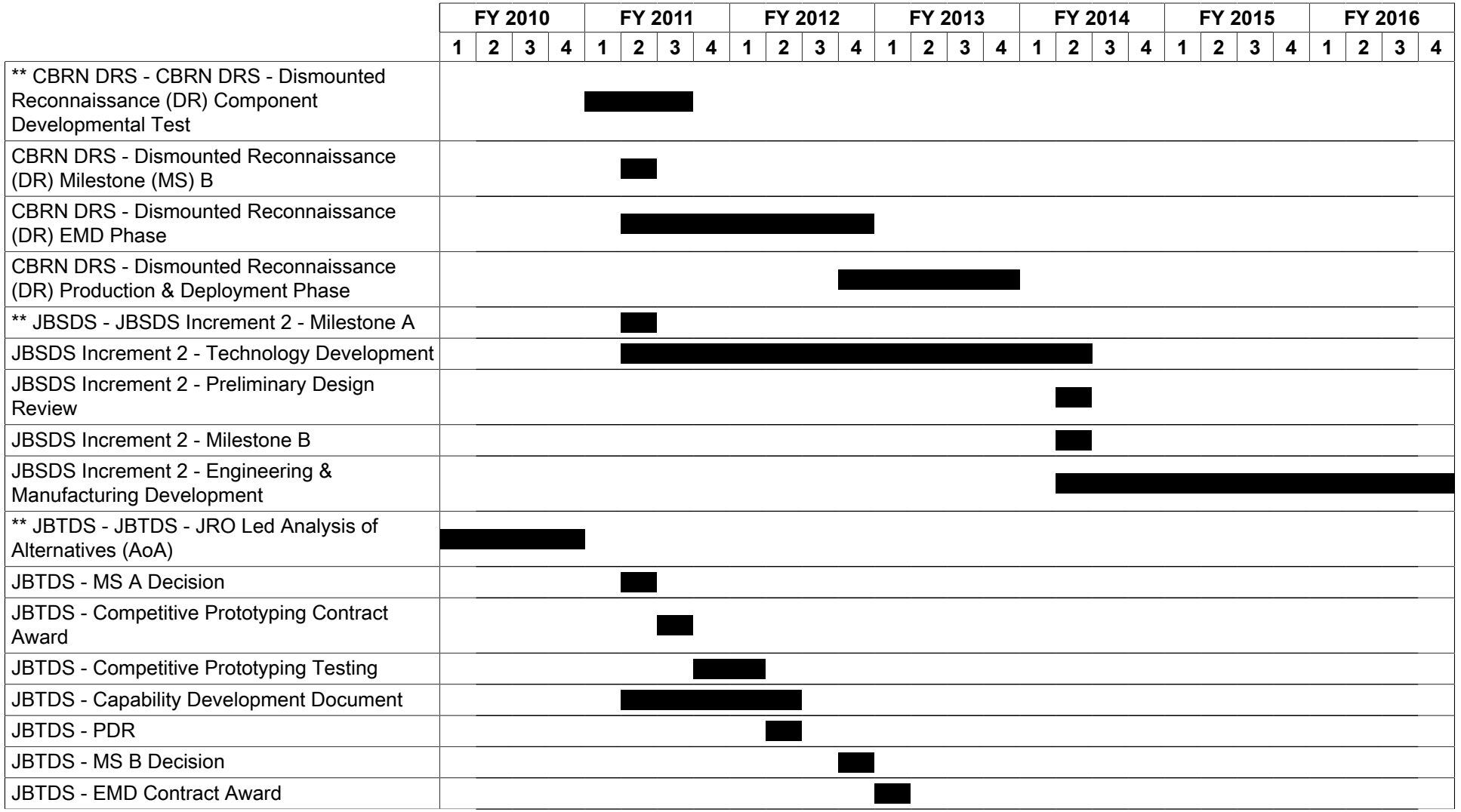

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CA4: *CONTAMINATION AVOIDANCE (ACD&P)*

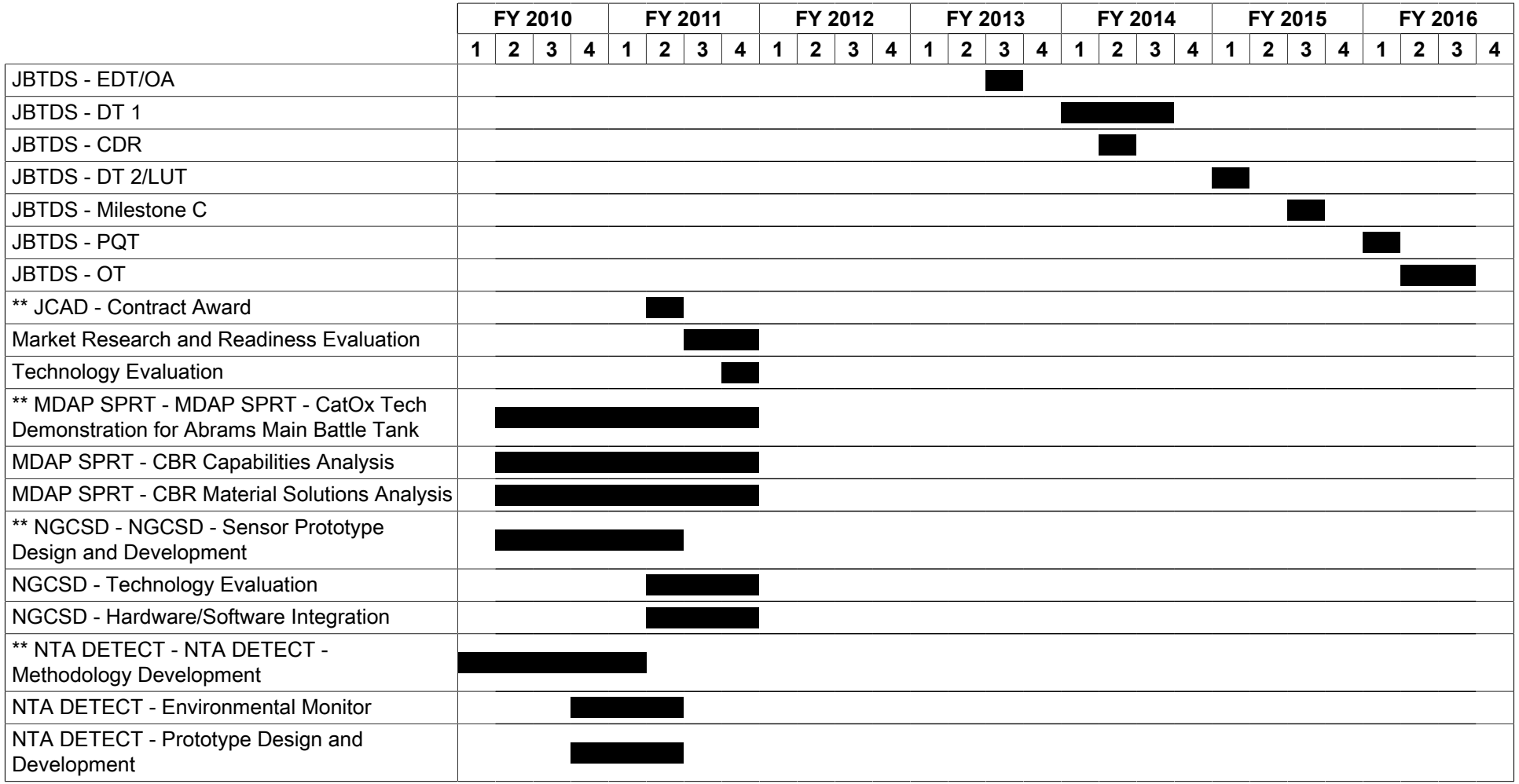

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** CA4: *CONTAMINATION AVOIDANCE (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** CBRN DRS - 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) Production & Deployment Phase	4	2012	4	2013
** JBSDS - JBSDS Increment 2 - Milestone A	2	2011	2	2011
JBSDS Increment 2 - Technology Development	2	2011	2	2014
JBSDS Increment 2 - Preliminary Design Review	2	2014	2	2014
JBSDS Increment 2 - Milestone B	2	2014	2	2014
JBSDS Increment 2 - Engineering & Manufacturing Development	2	2014	4	2016
** JBTDS - JBTDS - JRO Led Analysis of Alternatives (AoA)	1	2010	4	2010
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
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

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	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
JBTDS - PQT	1	2016	1	2016
JBTDS - OT	2	2016	3	2016
** JCAD - Contract Award	2	2011	2	2011
Market Research and Readiness Evaluation	3	2011	4	2011
Technology Evaluation	4	2011	4	2011
** MDAP SPRT - MDAP SPRT - CatOx Tech Demonstration for Abrams Main Battle Tank	2	2010	4	2011
MDAP SPRT - CBR Capabilities Analysis	2	2010	4	2011
MDAP SPRT - CBR Material Solutions Analysis	2	2010	4	2011
** NGCSD - NGCSD - Sensor Prototype Design and Development	2	2010	2	2011
NGCSD - Technology Evaluation	2	2011	4	2011
NGCSD - Hardware/Software Integration	2	2011	4	2011
** NTA DETECT - NTA DETECT - Methodology Development	1	2010	1	2011
NTA DETECT - Environmental Monitor	4	2010	2	2011
NTA DETECT - Prototype Design and Development	4	2010	2	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
CM4: *HOMELAND DEFENSE (ACD&P)*	5.666	9.526	14.117	-	14.117	2.966	-	-	-	0.000	32.275
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This Advanced Component Development and Prototypes (ACD&P) Project supports Component Advanced Development and System Integration (CAD/SI) for programs that provide a comprehensive, integrated and layered CBRN protection and response capability for military installations and specialized military consequence management units both at home and abroad. Particular emphasis is placed on improving military-civilian interoperability in CBRN detection and response capabilities; providing tiered levels of CBRN protection and response capabilities to military installations; and tailored modular and integrated Commercial off-the-shelf (COTS) solutions to consequence management units.

Included in this Project are: Initial development of the Common Analytical Laboratory System (CALS) to include evaluation and selection of subsystems (analytical detection, laboratory information management, data fusion, engineering controls) as well as development of a set of modular designed configurations for system level prototyping utilizing open system architecture. In addition, it provides for the validation and demonstration of desired functional capabilities.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) CALS - System Engineering and Program Management	4.536	2.206	3.315
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 2010 Accomplishments: Initiated System Engineering and Program Management - Engineering Support, System Integration Laboratory Design oversight and ongoing support, Modeling and Simulation, prepared acquisition documentation required for Milestone A, supported Joint User Working Group sessions, and reviewed significant findings arising from the CALS Analysis of Alternatives.			
FY 2011 Plans: Continued System Engineering and Program Management Support at the initiation of the Technology Development Phase, provided Engineering support, System Integration Laboratory efforts, Modeling and Simulation, Oversight to Component Technology Down Select and Contract Development/Procurement actions.			
FY 2012 Plans:			

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continue System Engineering and Program Management to provide engineering support and program and technical guidance to ongoing System Integration Laboratory efforts, maintain oversight of component test completion, contract actions in support of modular design concepts and preparation for Preliminary Design Review.			
Title: 2) CALS - System Integration Laboratory ***Description:*** Establishment of a System Integration laboratory to assist in the mitigation of programmatic risk and facilitate rapid evaluation of Technology, Technical approaches and constraints, configuration designs and logistical issues. ***FY 2010 Accomplishments:*** Initiated and completed stand up of the System Integration Laboratory Capability.	1.130	-	-
Title: 3) CALS - Development Engineering - Component Evaluation and Subsystem Design ***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 2011 Plans:*** Initiated subsystem component evaluation and began module design of alternative system module and system configurations. ***FY 2012 Plans:*** Complete subsystem component evaluation and module design of alternative system module and system configurations.	-	6.812	1.530
Title: 4) CALS - Production Engineering and Planning ***Description:*** Efforts to ensure the producibility of the developmental materiel system, item, or component. Involves engineering tasks necessary to ensure timely, efficient, and economic production of essential materiel and is primarily of a planning nature. Includes efforts related to development of the Technical Data Package (TDP), quality assurance (QA) plans, and special production processes to assess producibility. ***FY 2011 Plans:*** Initiate producibility, quality assurance and logistics studies required to support the development of modules for the CALS. ***FY 2012 Plans:*** Complete producibility, quality assurance and logistics studies required to support development of modules for the CALS.	-	0.508	0.704
Title: 5) CALS - Subsystem (Module) Development Tooling	-	-	1.224

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CM4: *HOMELAND DEFENSE (ACD&P)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: Planning, design, assembly, installation, and rework of all tools, inspection equipment, and test equipment supporting the development of each subsystem component (Module). Includes time expended in determining tool, inspection, and test equipment requirements; as well as, the costs of new materials used in the installation, modification, and rework of dies, jigs, fixtures, inspection equipment, handling equipment, work platforms, and test equipment used to develop each subsystem component (Module). ***FY 2012 Plans:*** Conduct planning and preparation of tools, equipment, work platforms and new materials required to fabricate, integrate and assemble unique CALS subsystem modules for test and evaluation.			
Title: 6) CALS - Subsystem (Module) Prototype Manufacturing ***Description:*** Development of Subsystem (Module) prototypes ensuring integration and connectivity between modules as a general system layout. This includes raw and semi-fabricated material plus purchased parts materials, fabrication, processing, subassembly, final assembly, reworking modification, and installation of parts and equipment, power plants, electronic equipment, and other items (including Government-Furnished equipment [GFE]), and the proving of such equipment and instruments for the specified subsystem prototype (Module). ***FY 2012 Plans:*** Develops and manufactures unique CALS subsystem (Module) prototypes.	-	-	5.508
Title: 7) CALS - System Test and Evaluation ***Description:*** System-related test activities to include detailed planning, conduct, support, data reduction, and reports from such testing. ***FY 2012 Plans:*** Initiate and complete test and evaluation of CALS Subsystem (Modules).	-	-	1.836
Accomplishments/Planned Programs Subtotals	5.666	9.526	14.117

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
• CM5: *HOMELAND DEFENSE (SDD)*	2.861	1.166	9.109		9.109	13.829	4.961	1.979	1.954	Continuing	Continuing
	12.565	39.862	15.900		15.900	28.797	20.044	30.519	32.304	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CM4: *HOMELAND DEFENSE (ACD&P)*

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)*											
• 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.

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CM4: *HOMELAND DEFENSE (ACD&P)*

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
** CALS - HW SB - CALS Subsystem Down Selection	C/CPIF	TBD:	-	0.756	Feb 2011	-		-		-	0.000	0.756	0.000
HW SB - CALS Subsystem Down Selection	MIPR	TBD:	-	0.381	Feb 2011	-		-		-	0.000	0.381	0.000
HW S - CALS Module Design	C/CPIF	TBD:	-	0.635	Feb 2011	0.491	Nov 2011	-		0.491	0.000	1.126	0.000
HW S - CALS Module Design #2	MIPR	TBD:	-	0.323	Feb 2011	0.184	Nov 2011	-		0.184	0.000	0.507	0.000
HW S - CALS Prototype Systems	C/CPIF	TBD:	-	-		5.508	Feb 2012	-		5.508	0.000	5.508	0.000
		Subtotal	-	2.095		6.183		-		6.183	0.000	8.278	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
** CALS - ES S - Engineering Support System - CALS	MIPR	Edgewood Chemical and Biological Center:Edgewood, Md	1.101	0.797	Feb 2011	0.782	Nov 2011	-		0.782	0.000	2.680	0.000
ES S - Modeling and Simulation Support	MIPR	Edgewood Chemical and Biological Center:Edgewood, Md	0.181	0.131	Feb 2011	0.129	Feb 2012	-		0.129	0.000	0.441	0.000
ILS C - Retooling and Preparation for Module Manufacture	C/CPIF	TBD:	-	-		1.224	Feb 2012	-		1.224	0.000	1.224	0.000
		Subtotal	1.282	0.928		2.135		-		2.135	0.000	4.345	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CM4: *HOMELAND DEFENSE (ACD&P)*

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
** CALS - OTHT C - Analytical Detection Component Testing	C/CPIF	TBD:	-	4.063	Feb 2011	0.732	Nov 2011	-		0.732	0.000	4.795	0.000
OTHT C - Analytical Detection Component Testing	MIPR	TBD:	-	0.660	May 2011	0.122	Nov 2011	-		0.122	0.000	0.782	0.000
DTE SB - CALS Module Test and Evaluation	MIPR	TBD:	-	-		1.836	May 2012	-		1.836	0.000	1.836	0.000
		Subtotal	-	4.723		2.690		-		2.690	0.000	7.413	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
** CALS - PM/MS S - Program Office - Planning and Programming	MIPR	Various:	3.254	1.278	Feb 2011	2.405	Feb 2012	-		2.405	0.000	6.937	0.000
PM/MS SB - Module Production Engr and Planning	C/CPIF	TBD:	-	0.502	May 2011	0.704	Feb 2012	-		0.704	0.000	1.206	0.000
		Subtotal	3.254	1.780		3.109		-		3.109	0.000	8.143	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	4.536	9.526		14.117		-		14.117	0.000	28.179	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT CM4: *HOMELAND DEFENSE (ACD&P)*

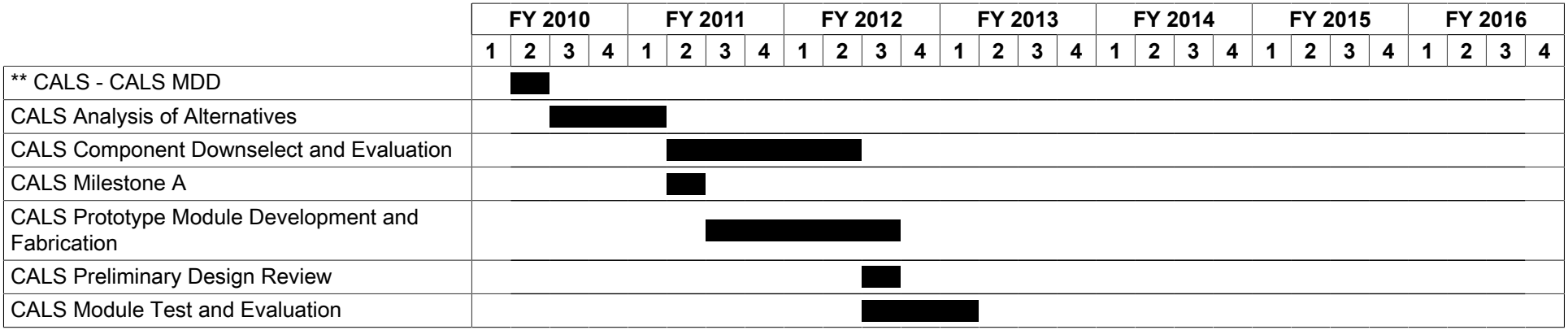

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** CM4: *HOMELAND DEFENSE (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** CALS - CALS MDD	2	2010	2	2010
CALS Analysis of Alternatives	3	2010	1	2011
CALS Component Downselect and Evaluation	2	2011	2	2012
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 Module Test and Evaluation	3	2012	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT DE4: *DECONTAMINATION SYSTEMS (ACD&P)*	

COST ($ in Millions)	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
DE4: *DECONTAMINATION SYSTEMS (ACD&P)*	14.867	7.051	38.737	-	38.737	30.608	6.430	7.383	12.553	Continuing	Continuing
Quantity of RDT&E Articles	1	0	10		10	0	0	0	0		

A. Mission Description and Budget Item Justification

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

This funding supports Decontamination Competitive Prototype (DC PROTO), Decontamination Family of Systems (DFoS), Human Remains Decontamination System (HRDS), Joint Platform Interior Decontamination (JPID) and Congressional Interest Item programs.

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 documentation 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 or Contamination Mitigation ICD 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, to include equipment, to improve decontamination processes, and decontaminant solutions to meet the capability gaps for decontaminating NTA and chemical and biological warfare agents from personnel, equipment, vehicle interiors/exteriors, terrain, and fixed facilities.

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

The Contaminated Human Remains Pouch (CHRP) will provide the capability to protect personnel handling Chemical (C) and Biological (B) Warfare Agents (WA) Contaminated Human Remains (CHR). The CHRP Inc I will contain CHR from point of fatality to the Mortuary Affairs (MA) activity. Starting in FY12, the CHRP will be funded under the Decontamination Family of Systems (DFoS) program funding line.

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 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** DE4: *DECONTAMINATION SYSTEMS (ACD&P)*

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) DC PROTO ***FY 2010 Accomplishments:*** Conduct engineering, testing and logistics planning and documentation to support JPID MS A and competitive prototype.	5.461	-	-
Title: 2) DC PROTO ***FY 2010 Accomplishments:*** Develop/release Request for Proposal (RFP) and conduct source selection activities.	1.500	-	-
Title: 3) DC PROTO ***FY 2010 Accomplishments:*** Acquisition/transport/sustainment of test support assets.	1.800	-	-
Title: 4) DFoS ***FY 2010 Accomplishments:*** Initiated development of test plans and formulation studies of surfactant technology.	0.300	-	-
Title: 5) DFoS ***FY 2010 Accomplishments:*** Initiated development of test plans and formulation of contamination indicator/decontamination assurance spray technology.	0.320	-	-
Title: 6) DFoS ***FY 2011 Plans:*** Initiate engineering, testing and logistics planning and documentation to support non-traditional agent (NTA) test and evaluation (efficacy, materials compatibility, live agent tests) efforts for decontamination assurance spray, chemical decontaminant, reactive skin decontamination lotion/oxime evaluation for NTA decontamination on equipment, effluent control and strippable/sealant coatings in support of 20th Support Command UNS. ***FY 2012 Plans:*** Conduct development of non-traditional agent (NTA) efforts to include initial studies and modeling for effluent decontamination and strippable/sealant coatings; conduct sensitivity efficacy for the decontamination assurance spray; conduct chemical efficacy	-	7.051	7.882

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
and material compatibility for decontaminants; evaluation of reactive skin decontamination lotion/oxime for NTA decontamination on equipment.			
Title: 7) DFoS ***FY 2012 Plans:*** Initiate engineering, testing and logistics planning and documentation to support tech development of Contamination Indicator.	-	-	0.499
Title: 8) DFoS ***FY 2012 Plans:*** Initiate engineering, testing and logistics planning and documentation to support tech development of Dial A Decon.	-	-	0.998
Title: 9) DFoS ***FY 2012 Plans:*** Continue developmental testing (i.e. efficacy, material compatibility) of General Purpose Decon, Decontaminant Wipes, Man Portable Decon System and Coatings.	-	-	8.818
Title: 10) HRDS ***FY 2010 Accomplishments:*** Develop and refine metrics to support Analysis of Alternatives; conduct engineering, testing, logistics planning and documentation (Technology Development Strategy (TDS), Test and Evaluation Strategy (TES) and Systems Engineering Plan (SEP)) to support the CHRP.	2.796	-	-
Title: 11) HRDS ***FY 2010 Accomplishments:*** Contaminated Human Remains Pouch (CHRP) document preparation, technical support and test planning in support of milestone decision.	0.898	-	-
Title: 12) JPID ***FY 2010 Accomplishments:*** Congressional Interest Item - Development of a prototype (at $900 thousand each), conduct engineering, design, fabrication, program management, and develop documentation to support Tactical, Cargo, & Rotary Wing Aircraft Decontamination.	1.792	-	-
Title: 13) JPID ***FY 2012 Plans:***	-	-	14.552

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
Develop test plans and fabricate 10 Prototypes (at $550 thousand each) for Competitive Prototype Testing.			
Title: 14) JPID	-	-	5.988
FY 2012 Plans: Conduct Competitive Prototype testing (Chem/Bio efficacy, functionality and large frame aircraft testing).			
Accomplishments/Planned Programs Subtotals	14.867	7.051	38.737

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
• DE5: *DECONTAMINATION SYSTEMS (SDD)*	17.195	28.499	4.370		4.370	9.189	27.426	22.381	12.410	Continuing	Continuing
• JD0050: *DECONTAMINANT SYSTEM OF SYSTEMS*	0.000	0.000	0.000		0.000	0.000	2.096	10.680	22.466	Continuing	Continuing
• 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

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 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** DE4: *DECONTAMINATION SYSTEMS (ACD&P)*

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.

HRDS

The Human Remains Decontamination System (HRDS) acquisition will employ an incremental development strategy, leveraging Commercial-off-the-Shelf (COTS)/ Non-developmental Item (NDI) technologies that will lead to a fielded capability to fulfill gaps as described in the Mortuary Affairs (MA) Initial Capabilities Document (ICD) for safe intra-theater handling and transport of CHR. Due to maturity of technology and initiatives to reduce redundancy as defined by the HRDS FoS Analysis of Alternatives, the Contaminated Human Remains Pouch (CHRP) will be the sole system developed in this budget cycle. Successful development and procurement of the CHRP will provide Warfighters with the capability to safely handle, transport and temporarily store or inter CHR in a theater of operations.

HRDS will integrate into the DFoS program.

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 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.

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT DE4: *DECONTAMINATION SYSTEMS (ACD&P)*

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
** DFoS - HW S - UNS NTA Decon Assurance Spray	C/FFP	TBD:	-	0.500	Feb 2011	0.699	Feb 2012	-		0.699	Continuing	Continuing	0.000
HW S - UNS NTA Chemical Decon	C/FFP	TBD:	-	0.322	Feb 2011	1.014	Feb 2012	-		1.014	Continuing	Continuing	0.000
HW S - UNS Effluent Decon for NTA Contaminated Run-off	C/FFP	TBD:	-	-		0.969	Feb 2012	-		0.969	Continuing	Continuing	0.000
HW S - UNS NTA Strippable/ Sealant Coatings	C/FFP	TBD:	-	0.200	Feb 2011	0.899	Feb 2012	-		0.899	Continuing	Continuing	0.000
HW S - Contamination Indicator/Decon Assurance Spray	C/FFP	AGENTASE LLC:Pittsburgh, PA	0.320	-		0.500	Feb 2012	-		0.500	Continuing	Continuing	0.000
HW S - General Purpose Decon	C/FFP	TBD:	-	-		0.999	Feb 2012	-		0.999	Continuing	Continuing	0.000
HW S - Decon Wipes	C/FFP	TBD:	-	-		0.699	Feb 2012	-		0.699	Continuing	Continuing	0.000
HW S - Man Portable Decon System	C/FFP	TBD:	-	-		0.999	Feb 2012	-		0.999	Continuing	Continuing	0.000
HW S - Coatings	C/FFP	TBD:	-	-		0.399	Feb 2012	-		0.399	Continuing	Continuing	0.000
HW S - Dial A Decon	C/FFP	TBD:	-	-		0.836	Feb 2012	-		0.836	Continuing	Continuing	0.000
** JPID - HW S - Prototype Development Contract	C/FFP	Various:	-	-		8.989	Nov 2011	-		8.989	Continuing	Continuing	0.000
		Subtotal	0.320	1.022		17.002		-		17.002			0.000

Remarks

DFoS funding increased for NTAs in FY11.

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
** DFoS - ES S - IPT Technical Support	MIPR	Various:	-	0.629	Feb 2011	0.499	Feb 2012	-		0.499	0.000	1.128	0.000
	MIPR	TBD:	-	-		0.649	Feb 2012	-		0.649	0.000	0.649	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT DE4: *DECONTAMINATION SYSTEMS (ACD&P)*

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
** JPID - ES S - Competitive Prototype assessment													
		Subtotal	-	0.629		1.148		-		1.148	0.000	1.777	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 S - UNS NTA Decon Assurance Spray	MIPR	TBD:	-	0.760	Feb 2011	1.034	Feb 2012	-		1.034	0.000	1.794	0.000
DTE S - UNS NTA Chemical Decon	MIPR	TBD:	-	1.500	Feb 2011	1.697	Feb 2012	-		1.697	0.000	3.197	0.000
DTE S - UNS RSDL/Oxime evaluation for NTA Decon on Equipment	MIPR	TBD:	-	1.300	Feb 2011	-		-		-	0.000	1.300	0.000
DTE S - UNS Effluent Decon for NTA Contaminated Run-off	MIPR	TBD:	-	0.190	Feb 2011	0.165	Feb 2012	-		0.165	0.000	0.355	0.000
DTE S - UNSNTA Strippable / Sealant Coatings	MIPR	TBD:	-	1.010	Feb 2011	0.435	Feb 2012	-		0.435	0.000	1.445	0.000
DTE S - General Purpose Decon	MIPR	TBD:	-	-		1.570	May 2012	-		1.570	0.000	1.570	0.000
DTE S - Decon Wipes	MIPR	TBD:	-	-		1.056	May 2012	-		1.056	0.000	1.056	0.000
DTE S - Man Portable Decon System	MIPR	TBD:	-	-		0.835	May 2012	-		0.835	0.000	0.835	0.000
DTE S - Coatings TTI	MIPR	TBD:	-	-		1.435	May 2012	-		1.435	0.000	1.435	0.000
** JPID - DTE S - Competitive Prototype testing	MIPR	Various:	-	-		5.988	May 2012	-		5.988	0.000	5.988	0.000
		Subtotal	-	4.760		14.215		-		14.215	0.000	18.975	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT DE4: *DECONTAMINATION SYSTEMS (ACD&P)*

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 S - DFoS Program Management Support, Integrated Product Team and Technical Support	MIPR	RDECOM:Natick, MA	-	-		0.800	Nov 2011	-		0.800	0.000	0.800	0.000
PM/MS S - Program Management Support, Integrated Product Team and Technical Support (ATs)	MIPR	Marine Corps Systems Command:Quantico, VA	-	0.640	Feb 2011	0.658	Feb 2012	-		0.658	0.000	1.298	0.000
** JPID - PM/MS S - Program Management Support, Integrated Product Team and Technical Support	MIPR	Various:	0.179	-		4.914	Nov 2011	-		4.914	0.000	5.093	0.000
		Subtotal	0.179	0.640		6.372		-		6.372	0.000	7.191	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	0.499	7.051		38.737		-		38.737			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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT DE4: *DECONTAMINATION SYSTEMS (ACD&P)*

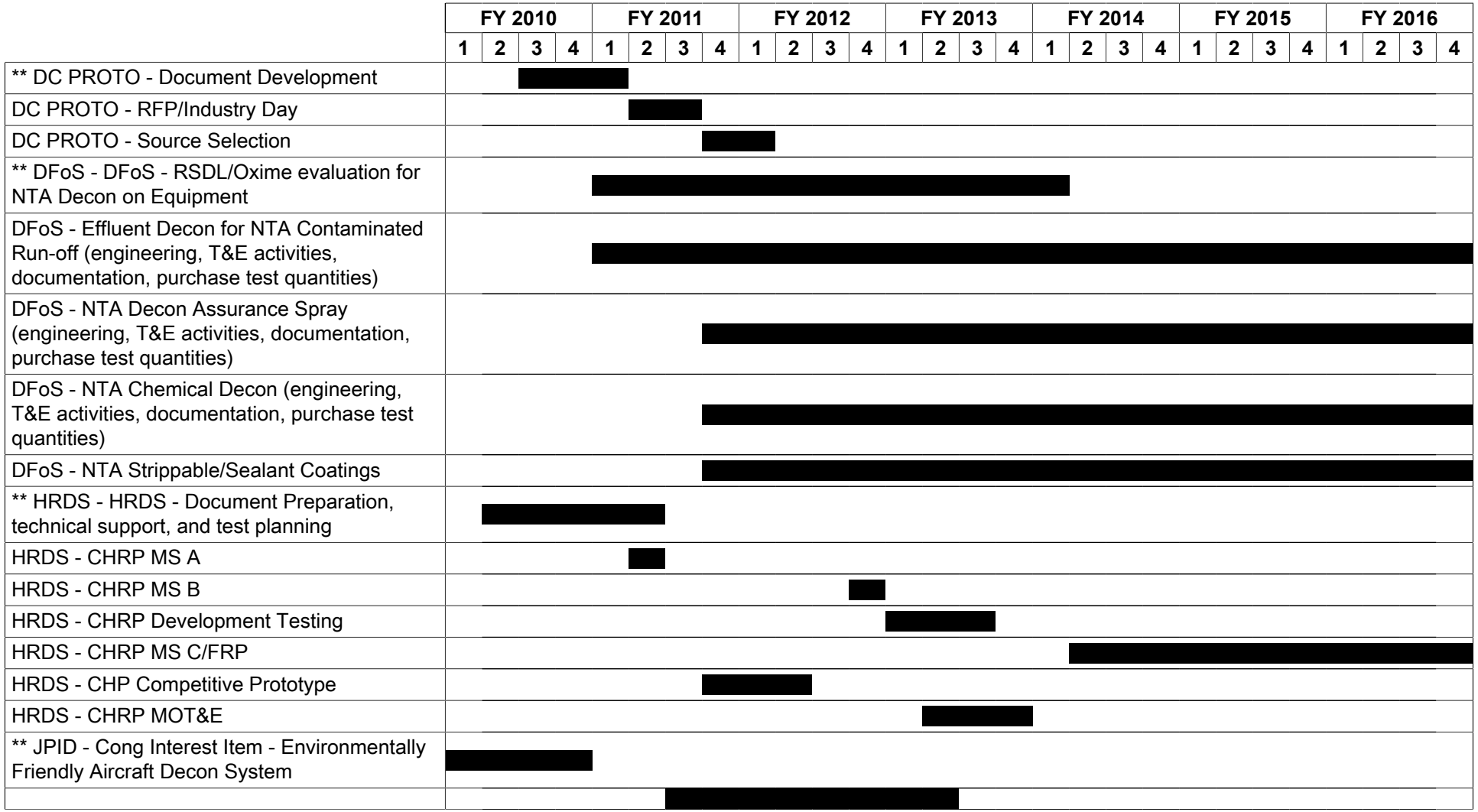

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT DE4: *DECONTAMINATION SYSTEMS (ACD&P)*

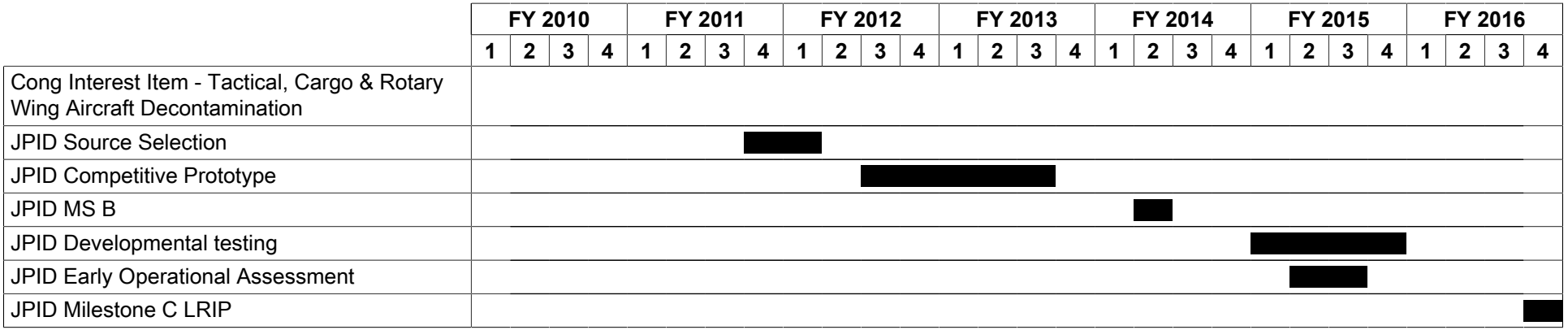

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** DE4: *DECONTAMINATION SYSTEMS (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** DC PROTO - Document Development	3	2010	1	2011
DC PROTO - RFP/Industry Day	2	2011	3	2011
DC PROTO - Source Selection	4	2011	1	2012
** DFoS - DFoS - RSDL/Oxime evaluation for NTA Decon on Equipment	1	2011	1	2014
DFoS - Effluent Decon for NTA Contaminated Run-off (engineering, T&E activities, documentation, purchase test quantities)	1	2011	4	2016
DFoS - NTA Decon Assurance Spray (engineering, T&E activities, documentation, purchase test quantities)	4	2011	4	2016
DFoS - NTA Chemical Decon (engineering, T&E activities, documentation, purchase test quantities)	4	2011	4	2016
DFoS - NTA Strippable/Sealant Coatings	4	2011	4	2016
** HRDS - HRDS - Document Preparation, technical support, and test planning	2	2010	2	2011
HRDS - CHRP MS A	2	2011	2	2011
HRDS - CHRP MS B	4	2012	4	2012
HRDS - CHRP Development Testing	1	2013	3	2013
HRDS - CHRP MS C/FRP	2	2014	4	2016
HRDS - CHP Competitive Prototype	4	2011	2	2012
HRDS - CHRP MOT&E	2	2013	4	2013
** JPID - Cong Interest Item - Environmentally Friendly Aircraft Decon System	1	2010	4	2010
Cong Interest Item - Tactical, Cargo & Rotary Wing Aircraft Decontamination	3	2011	2	2013
JPID Source Selection	4	2011	1	2012
JPID Competitive Prototype	3	2012	3	2013
JPID MS B	2	2014	2	2014

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 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** DE4: *DECONTAMINATION SYSTEMS (ACD&P)*

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
JPID Developmental testing	1	2015	4	2015
JPID Early Operational Assessment	2	2015	3	2015
JPID Milestone C LRIP	4	2016	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT IP4: *INDIVIDUAL PROTECTION (ACD&P)*	

COST ($ in Millions)	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
IP4: *INDIVIDUAL PROTECTION (ACD&P)*	2.305	3.172	-	-	-	1.088	3.661	6.719	4.616	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project funds ACD&P of a Uniform Integrated Protection Ensemble (UIPE) (formerly Lightweight Chemical Biological Ensemble (LCBE)), aimed at improving current protection levels while reducing physiological and logistical burdens. The goal is to provide equipment that allows the individual soldier, sailor, airman, or Marine to operate in a contaminated Chemical and Biological (CB) environment with no or minimal degradation to his/her performance. UIPE is supported by an Initial Capabilities Document (ICD), MS A and ongoing technology development phase to provide UIPE Increment 1 ensembles to USSOCOM and the U.S. Navy.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) UIPE Incr. 1 (LCBE)	2.305	3.172	-
FY 2010 Accomplishments: UIPE Incr. 1 (LCBE) - Prepared MS A documentation and completed MS A. Continued baseline assessments of thermal burden and heat stress reduction. Initiated validation, verification, and accreditation processes for thermal burden models. Completed Request for Information (RFI). Completed Technology Readiness Assessment (TRA).			
FY 2011 Plans: UIPE Incr. 1 (LCBE) - Prepare Request for Proposal (RFP). Initiate developmental testing (DT) efforts for UIPE Increment 1. Acquire prototypes and perform physical testing and chemical agent testing. Initiate development to reduce thermal burden/bulk/ weight over existing CB ensemble, increase cooling/venting potential, and improve operational capabilities. Prepare TRA for MS B.			
Accomplishments/Planned Programs Subtotals	2.305	3.172	-

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
• IP5: *INDIVIDUAL PROTECTION (SDD)*	19.848	9.678	11.490		11.490	11.768	1.979	0.989	1.963	Continuing	Continuing
• JSM001: *JOINT SERVICE MASK LEAKAGE TESTER (JSMLTS)*	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

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT IP4: *INDIVIDUAL PROTECTION (ACD&P)*

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
• MA0401: *CBRN UNIFORM INTEGRATED PROTECTION ENSEMBLE (UIPE)*	0.000	0.000	1.000		1.000	7.247	13.595	12.774	16.867	Continuing	Continuing

D. Acquisition Strategy

LCBE

The LCBE program has been renamed as the Uniform Integrated Protection Ensemble (UIPE) program.

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
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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
** LCBE - HW S - UIPE Competitive Prototyping	MIPR	Various:	-	0.612	May 2011	-		-		-	Continuing	Continuing	0.000
		Subtotal	-	0.612		-		-		-			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
** LCBE - TD/D SB - UIPE Engineering IPT	MIPR	Various:	2.326	0.600	Feb 2011	-		-		-	0.000	2.926	0.000
		Subtotal	2.326	0.600		-		-		-	0.000	2.926	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
** LCBE - PM/MS SB - Program Management	MIPR	Various:	1.158	1.960	Feb 2011	-		-		-	0.000	3.118	0.000
		Subtotal	1.158	1.960		-		-		-	0.000	3.118	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	3.484	3.172		-		-		-			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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT IP4: *INDIVIDUAL PROTECTION (ACD&P)*

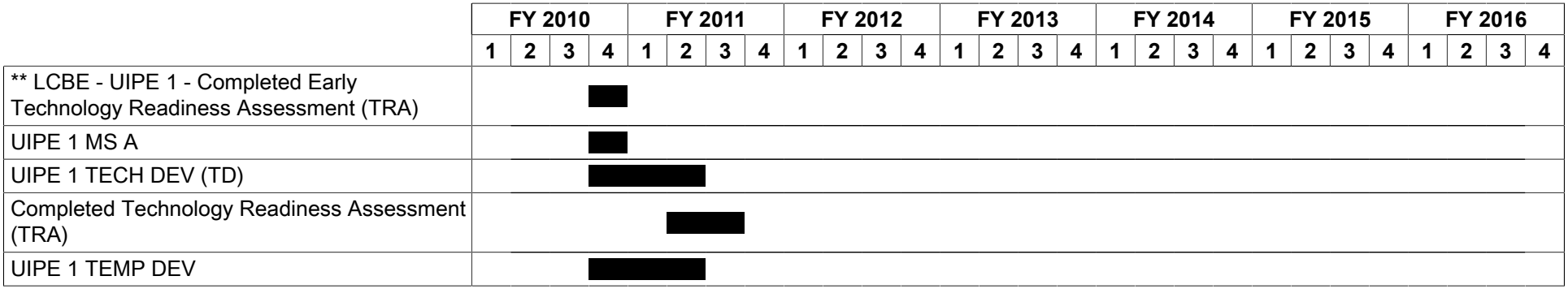

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** IP4: *INDIVIDUAL PROTECTION (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** LCBE - UIPE 1 - Completed Early Technology Readiness Assessment (TRA)	4	2010	4	2010
UIPE 1 MS A	4	2010	4	2010
UIPE 1 TECH DEV (TD)	4	2010	2	2011
Completed Technology Readiness Assessment (TRA)	2	2011	3	2011
UIPE 1 TEMP DEV	4	2010	2	2011

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT IS4: *INFORMATION SYSTEMS (ACD&P)*	

COST ($ in Millions)	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
IS4: *INFORMATION SYSTEMS (ACD&P)*	13.914	11.221	7.420	-	7.420	14.682	-	-	-	0.000	47.237
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This Project provides for Advanced Component Development and Prototypes (ACD&P). Specifically it supports the Joint Effects Model (JEM) Program and the Joint Warning and Reporting Network (JWARN) Program.

The Joint Effects Model (JEM) is DoD's only accredited model for predicting hazards associated with the release of contaminants into the environment. JEM is a software-only, ACAT III program that is being developed in separate increments and is capable of modeling hazards in a variety of scenarios including: counterforce, passive defense, accident and/or incidents; high altitude releases, incident source prediction to include NTA events, urban CBRN/Toxic Industrial Hazard environments, human inhalation, contagious/infectious disease, population movements, efficacy of medical countermeasures, industrial transport; building interiors, and human performance degradation. Battlespace commanders and first responders must have a CBRN hazard prediction capability in order to make decisions that will minimize risks of CBRN contamination and enable them to continue mission operations. JEM operates in an integrated fashion with operational and tactical Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems, and in a standalone mode. JEM interfaces and communicates with the other programs such as JWARN, weather systems, intelligence systems, and various databases.

The Joint Warning and Reporting Network (JWARN) 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 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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) JEM	4.341	0.689	-
Description: Analysis of Alternatives Support			

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 2010 Accomplishments: Evaluated and provided CBRN subject matter experts to support the JEM Increment 2 AoA. Compiled assessment data and published the report. Provided report and supporting documentation to the Joint Requirements Office for CBD. ***FY 2011 Plans:*** Provide Chemical, Biological, Radiological and Nuclear subject matter experts to support the Analysis of Technical Alternatives (ATA) on the next required increment of capability.			
Title: 2) JEM ***Description:*** Prototyping ***FY 2011 Plans:*** Initiate prototyping effort for the next increment of JEM capability. Modeling to support biological surveillance, medical incidents, urban modeling, source term estimation, population migration, and littoral/coastal zone weather.	-	4.863	-
Title: 3) JEM ***Description:*** User Assessments and Demonstrations ***FY 2011 Plans:*** Conduct FY11 User Assessments and Demonstrations to validate requirements and system performance. Evaluate critical science and technology within software prototype(s). Verify and validate S&T component capabilities align with the user requirements.	-	1.326	-
Title: 4) JEM ***Description:*** Test & Evaluation (T&E) ***FY 2010 Accomplishments:*** Initiated work on the Test and Evaluation Strategy (TES). Supported development of the JEM AoA Study Plan Guidance and Study Plan. ***FY 2011 Plans:*** Continue the development and staffing of the TES. Initiate development testing, analysis and provide input on source selection on competitive prototypes. Support Technology Readiness Assessments of software transitioned from Science and Technology	2.514	0.961	-

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
providers. Develop Test & Evaluation Master Plan (TEMP) for the next increment of capability of JEM. Support Capabilities Development Document (CDD) generation.			
Title: 5) JEM ***Description:*** Administrative Preparation for Development and Prototyping Contracts ***FY 2010 Accomplishments:*** Initiated contractual planning efforts in preparation for MS A and Technology Development/prototyping phase. ***FY 2011 Plans:*** Continue contractual planning efforts in preparation for MS A and Technology Development/prototyping phase. As a cost cutting measure, evaluate option to continue use of existing contract vehicle in support of Prototyping efforts. Initiate pre-MS B contractual efforts: develop proposal package, release draft Request for Proposal (RFP), prepare final Engineering and Manufacturing Development (EM&D) phase request for proposal, release RFP, conduct source selection training, conduct source selection and complete proposal evaluations.	0.626	0.396	-
Title: 6) JEM ***Description:*** Management Support ***FY 2010 Accomplishments:*** Provided program planning, financial management, contracting, schedule, and acquisition oversight support. Developed integrated master schedule, Technology Development Strategy (TDS) and other statutory and regulatory acquisition documents required for MS A. ***FY 2011 Plans:*** Continue efforts to provide strategic, tactical planning, program/financial management, costing, contracting, scheduling and acquisition oversight support. Assist in the development of Capabilities Development Document (CDD) and other acquisition documents required for MS B. Perform Life-Cycle Cost Estimate.	1.580	1.349	-
Title: 7) JEM ***Description:*** Technical Support ***FY 2010 Accomplishments:***	4.753	1.637	-

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
Initiated Systems Engineering Plan (SEP) in support of MS A. Supported development of JEM Increment 2 integrated master schedule, Test & Evaluation Strategy (TES), Technology Development Strategy (TDS) and other documents required for MS A. ***FY 2011 Plans:*** Continue risk-reduction efforts to demonstrate viability of the technology concepts proposed for the next increment of JEM capability. Develop preliminary design documentation and support Technology development phase and competitive prototyping. Provide technical support during the development of the Capabilities Development Document (CDD) and requirements analysis processes.			
Title: 8) JWARN - Increment 3 ***Description:*** Analysis of Alternatives (AoA) Support and Analysis of Technical Alternatives (ATA) Evaluation ***FY 2012 Plans:*** Initiate programmatic and Chemical, Biological, Radiological and Nuclear (CBRN) subject matter expertise to support the next increment of JWARN capabilities during the AoA. Evaluate and assess results of AoA/ATA including a Technology Readiness Assessment of the candidate technologies. Analyze impact of implementing the emerging technologies into the JWARN architecture.	-	-	0.446
Title: 9) JWARN Increment 3 ***Description:*** Prototyping ***FY 2012 Plans:*** Initiate competitive prototyping contracting efforts for JWARN to reduce technical risk, validate design and cost estimates as well as refine requirements.	-	-	4.270
Title: 10) JWARN Increment 3 ***Description:*** Technology Demonstrations and User Assessments ***FY 2012 Plans:*** Prepare for and conduct JWARN Technology Demonstrations and User Assessments to evaluate and prove component and subsystem maturity of critical science and technology, system performance, and validate requirements within the developed software prototype(s).	-	-	0.526
Title: 11) JWARN Increment 3 ***Description:*** Test and Evaluation	-	-	0.668

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT IS4: *INFORMATION SYSTEMS (ACD&P)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2012 Plans: Initiate government developmental testing and analysis of component and subsystem maturity, to include Technology Readiness Assessment(s), of software submitted for evaluation during competitive prototyping.			
Title: 12) JWARN Increment 3 ***Description:*** Administrative Preparation for Development Contract ***FY 2012 Plans:*** Initiate pre-MS B contractual efforts to include: developing and releasing Technology Development Request for Proposal (RFP), conducting source selection training, and completing proposal evaluations.	-	-	0.446
Title: 13) JWARN Increment 3 ***Description:*** Management Support ***FY 2012 Plans:*** Provide strategic, tactical planning, program/financial management, costing, contracting, scheduling, acquisition oversight, and milestone documentation for the program.	-	-	0.612
Title: 14) JWARN Increment 3 ***Description:*** Technical Support ***FY 2010 Accomplishments:*** Technical evaluation of Analysis of Alternatives (AOA) process for the next increment of JWARN capability. ***FY 2012 Plans:*** Provide engineering and technical support for JWARN development. Provide independent system verification, validation and class type accreditation as required.	0.100	-	0.452
Accomplishments/Planned Programs Subtotals	13.914	11.221	7.420

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

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT IS4: *INFORMATION SYSTEMS (ACD&P)*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 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
• 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.

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT IS4: *INFORMATION SYSTEMS (ACD&P)*	

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
** JEM - SW SB - JEM Increment 2	MIPR	SPAWAR Systems Center:San Diego, CA	-	7.521	Feb 2011	-		-		-	1.205	8.726	0.000
** JWARN - SW S - JWARN	SS/CPAF	TBD:	-	-		4.270	Feb 2012	-		4.270	3.359	7.629	0.000
		Subtotal	-	7.521		4.270		-		4.270	4.564	16.355	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 - TD/D SB - JEM Increment 2	C/CPFF	Various:	9.720	0.994	Feb 2011	-	Feb 2012	-		-	1.995	12.709	0.000
** JWARN - TD/D S - JWARN	MIPR	Various:	-	-		0.453	Feb 2012	-		0.453	0.453	0.906	0.000
		Subtotal	9.720	0.994		0.453		-		0.453	2.448	13.615	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 S - JEM Increment 2	MIPR	Various:	2.514	0.961	Feb 2011	-		-		-	3.795	7.270	0.000
** JWARN - OTHT SB - JWARN	PO	Various:	-	-		1.195	Feb 2012	-		1.195	1.754	2.949	0.000
		Subtotal	2.514	0.961		1.195		-		1.195	5.549	10.219	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 - JEM Increment 2	C/CPFF	Battelle Memorial Institute:	1.580	1.745	Feb 2011	-		-		-	1.415	4.740	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT IS4: *INFORMATION SYSTEMS (ACD&P)*

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
** JWARN - PM/MS S - JWARN Management Support	SS/CPAF	Various:	0.100	-		1.502	Nov 2011	-		1.502	0.792	2.394	0.000
		Subtotal	1.680	1.745		1.502		-		1.502	2.207	7.134	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	13.914	11.221		7.420		-		7.420	14.768	47.323	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT IS4: *INFORMATION SYSTEMS (ACD&P)*

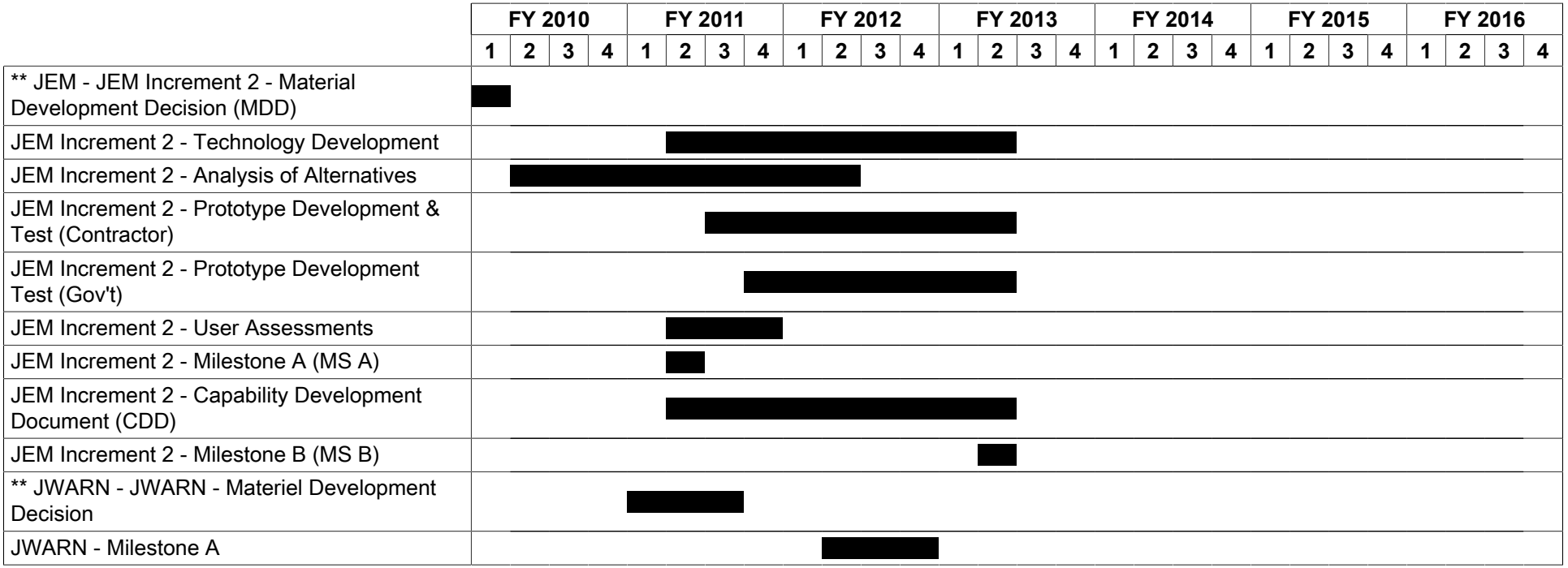

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** IS4: *INFORMATION SYSTEMS (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** JEM - JEM Increment 2 - Material Development Decision (MDD)	1	2010	1	2010
JEM Increment 2 - Technology Development	2	2011	2	2013
JEM Increment 2 - Analysis of Alternatives	2	2010	2	2012
JEM Increment 2 - Prototype Development & Test (Contractor)	3	2011	2	2013
JEM Increment 2 - Prototype Development Test (Gov't)	4	2011	2	2013
JEM Increment 2 - User Assessments	2	2011	4	2011
JEM Increment 2 - Milestone A (MS A)	2	2011	2	2011
JEM Increment 2 - Capability Development Document (CDD)	2	2011	2	2013
JEM Increment 2 - Milestone B (MS B)	2	2013	2	2013
** JWARN - JWARN - Materiel Development Decision	1	2011	3	2011
JWARN - Milestone A	2	2012	4	2012

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

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
MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*	95.483	136.975	137.653	-	137.653	150.128	167.604	133.589	119.626	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

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

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 will address three technical functional areas and capabilities within MB4: technology development of flexible manufacturing platforms, a process development laboratory, and pilot plant.

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 agents, infectious diseases, and engineered diseases). 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 specific to BW agents and agents of operational concern, and protocols for sample preparation. System operation for use in laboratories and potentially point of care environments. A COTS system will be procured to meet this requirement. 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 program will use Procurement funding in FY12 to purchase COTS systems that have FDA clearance. BA5 funding in FY12 will support systems engineer/program management, assay transitions and optimization to the platform(s), and shelf-life testing. FY13-16 BA5 funding will support additional assay development and FDA clearance testing efforts on the COTS platform(s).

NGDS Increment 2 will explore adding new complementary technologies to the NGDS design. A separate Milestone A review will be conducted to start this technology insertion effort, followed by a Milestone B to fully develop a new technology prior to fielding to DoD users. Increment 2 will have a Milestone A by 3QFY12 and will use BA4 funding to mature the technology to compliment the technology in Increment 1.

The Transformational Medical Technologies Initiative (TMTI) was launched to respond to the threat of emerging or intentionally bioengineered biological threats. During FY10 the program was redesignated as the Transformational Medical Technologies (TMT) Program. The TMT mission is to protect the Warfighter from genetically

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

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) and platform-based therapeutics against biological warfare (BW) agents (i.e. one drug that treats multiple agents). TMT has been successful in transitioning previous Science and Technology (S&T) efforts into advanced development. Beginning in FY12 TMT has been separated into four product lines to provide greater program control and granularity: 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 (i.e. drugs that target common pathways within a human to prevent or treat a variety of diseases) or pathogen-directed therapeutics (i.e. drugs that attack a common pathway found in multiple threat agents). TMT's development of medical countermeasures against HFV, IBP and EID FLU requires extensive interaction with the FDA, from pre-clinical research to safety tests in human subjects (Phase 1 clinical studies), efficacy tests in humans/animals (Phase 2 clinical studies or pivotal animal efficacy studies), and expanded safety or efficacy studies (Phase 3 clinical studies), which culminate with a request to the FDA to license/approve, market, and produce a drug. This interaction between the DoD and the FDA results in a coordinated, unified, and safe effort. Additionally, TMT is developing Platform Technologies. These are standalone enabling capabilities that support MCM development and are strategically aligned to 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 three functional areas: Pathogen Characterization, Target Identification, and Bioinfomatics..

The Joint Vaccine Acquisition Program (JVAP) under Chemical Biological Medical Systems (CBMS) funds the technology development phase for vaccines that are directed against validated biological warfare (BW) weapons to include bacteria, viruses, and toxins of biological origin. Effective medical countermeasures to negate the threat of these BW agents are urgently needed. Vaccines have been identified as the most efficient countermeasure against the validated threat of BW weapons. JVAP initiated the Filovirus Vaccine program in FY10. The Filovirus Vaccine will protect the Warfighter against both Ebola and Marburg exposures. Efforts to be conducted during this period include development of pilot scale manufacturing process to support nonclinical and clinical studies; development of a vaccine formulation that meets the logistical requirements of the DoD; conduct non-clinical studies to demonstrate safety and efficacy; submit an Investigational New Drug (IND) application; and conduct Phase 1 clinical human safety studies. JVAP anticipates that the FDA will approve this product using the Animal Rule, which allows for demonstrating of efficacy in relevant animal model(s).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) MCMI	-	-	13.769
FY 2012 Plans: Establish an advanced development capability for technology development of manufacturing platforms for medical countermeasures (MCMs). Compile and manage technology information for MCMs and perform advanced process development activities for selected MCMs to be manufactured at the advanced development and manufacturing Technology Center of Excellence (TCE). Activities will support technology transfer and process optimization.			
Title: 2) MCMI	-	-	11.050
FY 2012 Plans:			

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiate and maintain a process development laboratory. Benchmark process laboratory activities in various stages of development for expression platforms. Initiate and maintain a pilot plant capable of performing scale-up studies and manufacture of bulk products for early stage clinical trials or bridging studies.			
Title: 3) MCMI ***FY 2012 Plans:*** Initiate evaluation of candidate manufacturing platform processes to be transitioned to the TCE.	-	-	2.763
Title: 4) NGDS Increment 2 ***FY 2012 Plans:*** Initiate evaluation of prototype systems transitioned from the Joint Science and Technology Office (JSTO).	-	-	0.439
Title: 5) NGDS Increment 2 ***FY 2012 Plans:*** Initiate a market survey for the integration of Increment 2 capabilities.	-	-	0.310
Title: 6) NGDS Increment 2 ***FY 2012 Plans:*** Initiate Other Test Agencies (OTA) and Director, Office of Test and Evaluation support.	-	-	0.250
Title: 7) TMT/EID FLU ***Description:*** Transformational Medical Technologies (TMT)/Emerging Infectious Diseases (EID) - Upon Milestone A approval (planned for 2Q FY11), TMT will advance experimental broad-spectrum drug candidates with an Investigational New Drug (IND) application accepted by the Food and Drug Administration (FDA) through the Technology Development (TD) phase. In order to advance drug candidates, TMT will complete Phase I clinical studies, where drug candidates are introduced into humans and early evidence is gathered on drug safety. TMT will conclude the TD Phase by completing all activities associated with Phase 2 clinical studies where drug candidates are evaluated for efficacy. The results of the TD Phase clinical studies will support a Milestone B decision to continue toward a New Drug Application (NDA) and FDA approval/licensure. ***FY 2012 Plans:*** Conduct clinical trials for drug candidates that have achieved IND status for prophylaxis or treatment against influenza and conduct additional TD Phase activities as identified in the IND filing and by the FDA.	-	-	13.728
Title: 8) TMT/HFV	-	-	33.494

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: Transformational Medical Technologies (TMT) Program/Hemorrhagic Fever Virus (HFV) - TMT will advance broad-spectrum or platform-based MCM candidates against viruses such as Ebola, Marburg and Junin through the Technology Development phase. TMT will complete preclinical evaluation to achieve IND status (as necessary) and initiate and complete Phase I clinical studies where drug candidates are introduced into humans and early evidence is gathered on drug safety. TMT will conclude the TD Phase by completing all activities associated with Phase 1 clinical studies. The results of the TD Phase clinical studies will support a Milestone B decision to continue toward a New Drug Application (NDA) and FDA approval/licensure. ***FY 2012 Plans:*** Complete Phase 1 clinical trials for three existing platform-based Medical Countermeasure (MCM) candidates. As attrition is high throughout the drug development process and less than 10% of compounds initiated during S&T activities actually become an approved drug, TMT will replenish the MCM candidate advanced development pipeline as appropriate. Continue to refine animal models in preparation for pivotal animal efficacy studies. Conduct additional TD Phase activities as identified by the FDA. Obtain Milestone B decision approval.			
Title: 9) TMT/IBP ***Description:*** Transformational Medical Technologies (TMT)/Intracellular Bacterial Pathogens (IBPs) - Upon Milestone A approval, TMT will advance experimental broad-spectrum drug candidates against bacterial diseases such as anthrax and plague through the Technology Development phase. TMT will initiate and complete Phase I clinical studies, where drug candidates are introduced into humans and early evidence is gathered on drug safety. TMT will conclude the TD Phase by completing all activities associated with Phase 2 clinical studies where drug candidates are evaluated for efficacy. The results of the TD Phase clinical studies will support a Milestone B decision to continue toward a New Drug Application (NDA) and FDA approval/licensure. ***FY 2012 Plans:*** Conduct preclinical and clinical trials as appropriate for drug candidates for post-exposure prophylaxis or treatment against IBPs and conduct additional TD Phase activities as identified by the FDA. Support the development of animal models required for pivotal animal efficacy studies to evaluate medical countermeasures currently in advanced development. Refine animal models to determine appropriate range of product doses, optimal route of administration and timing/schedule using data from Phase I clinical studies.	-	-	16.691
Title: 10) TMT/PLTFM ***Description:*** TMT/Platform Technologies: TMT will establish three functional areas to support MCM development and respond to a biological event: 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.	-	-	19.656

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Bioinformatics - provides databases, tools, processing power, and connectivity to enable response system interoperability. TMT will integrate the three functional areas. TMT will use exercises to competitively prototype the functional areas and identify remaining gaps and determine. the "best of breed' technology. The ultimate goal is to provide a time and cost-effective response to an unknown, genetically modified or emerging pathogen threat. ***FY 2012 Plans:*** Continue maturation of pathogen characterization functional area, focusing on integration and timeline reduction. Continue maturation of bioinformatics functional area, focusing on integration and incorporation of additional functionality. Plan and execute two exercises to evaluate the integration of functional areas.			
Title: 11) TMTI ***Description:*** Multiagent Broad Spectrum Medical Countermeasures - This effort will advance experimental broad-spectrum drug candidates at a Technology Readiness Level (TRL) 4 through the Technology Development phase. This includes further preclinical evaluation (as necessary) and initiation and completion of Phase I clinical studies, where a new drug is introduced into humans and early evidence is gathered on drug safety. Approved performers who have had their Investigational New Drug (IND) applications accepted by the Food and Drug Administration (FDA) will initiate Phase 1 clinical trials and other studies necessary to support a Milestone B decision and progress toward a New Drug Application (NDA) with the FDA. ***FY 2010 Accomplishments:*** Initiated preclinical evaluation for one TRL-4 platform-based candidate that showed promise against Ebola. Completed preclinical evaluation for two platform-based candidates that are IND status and showed promise against Ebola and Marburg, respectively. Supported the development of animal models required for pivotal animal efficacy studies to evaluate medical countermeasures currently in advanced development. Continued strategic and tactical planning, program/financial management, costing, contracting, scheduling, and technical direction and support. ***FY 2011 Plans:*** Continue to conduct Phase I clinical trials for the two platform-based candidates. Conduct additional research as required by the FDA prior to granting IND status or conduct Phase I clinical trials, as necessary, for the third platform-based candidate. Refine animal models to determine appropriate range of product doses, optimal route of administration and timing/schedule using data from Phase I clinical studies. Continue strategic and tactical planning, program/financial management, costing, contracting, scheduling, and technical direction and support.	82.921	98.593	-
Title: 12) TMTI	-	21.764	-

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Description: Platform Technologies: Exercises will commence 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 capability goal of TMT. Platform technologies will continue to be refined, and final improvements will be made as needed. Platforms will be evaluated as stand-alone platforms to determine their capability in their respective area. Platforms providing a similar capability will be competed against each other to determine how each can best contribute to the response capability. The bioinformatics system will be evaluated for overall architecture, connectivity, processing capability, and user-friendliness. Lessons learned from each exercise will be analyzed and incorporated into future exercises. The ultimate goal is to improve countermeasure efficacy and to shorten the time required to produce an approved countermeasure for an unknown or genetically modified pathogen. ***FY 2011 Plans:*** Begin to develop and refine platforms to advance TMT capability needs, particularly in the pathogen characterization and bioinformatics areas. Plan and execute up to two exercises and evaluations. Collect and analyze data with the goal of improving the performance of the individual platforms. Exercise the integrated rapid response capabilities to incorporate enhanced functionality, establish standardized processes and procedures and identify areas for improvement with the goal of increasing system effectiveness and reducing overall system execution timeline.			
Title: 13) JVAP - Filovirus Vaccine ***FY 2010 Accomplishments:*** Prepared supporting acquisition documentation, conducted Milestone A, and entered into the Technology Development Phase. Prepared Resource Allocation Decision Plan (RADP) and selected single vaccine candidate for further development.	0.400	-	-
Title: 14) JVAP - Filovirus Vaccine ***FY 2010 Accomplishments:*** Initiated non-clinical studies through Interagency Agreements. Initiated procedures for safeguarding biological select agents and toxins. ***FY 2011 Plans:*** Continue non-clinical studies through Interagency Agreements. Continue procedures for safeguarding biological select agents and toxins. ***FY 2012 Plans:*** Continue non-clinical studies through Interagency Agreements. Continue procedures for safeguarding biological select agents and toxins.	9.143	3.858	10.374
Title: 15) JVAP - Filovirus Vaccine	-	10.600	11.482

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
FY 2011 Plans: Initiate small-scale manufacturing process development. ***FY 2012 Plans:*** Continue small-scale manufacturing process development.			
Title: 16) VAC FILO ***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:*** Continue to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support. ***FY 2012 Plans:*** Continue to provide strategic/tactical planning, government systems engineering, program/financial management, costing, technology assessment, contracting, scheduling, acquisition oversight and technical support.	1.426	2.160	3.147
Title: 17) VAC FILO ***FY 2012 Plans:*** Plan and conduct pre-Investigational New Drug application meeting.	-	-	0.500
Accomplishments/Planned Programs Subtotals	93.890	136.975	137.653

	FY 2010	FY 2011
Congressional Add: 1) Broad Spectrum Therapeutic Countermeasure ***FY 2010 Accomplishments:*** Congressional Interest Item - Broad Spectrum Therapeutic Countermeasure to Organophosphorous Nerve Agents. Initiated development of a broad-spectrum therapeutic capable of protecting both the central and peripheral nervous systems from injury by nerve agents and reducing reliance on pretreatments.	1.593	-
Congressional Adds Subtotals	1.593	-

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*

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
• MB5: *MEDICAL BIOLOGICAL DEFENSE (SDD)*	57.563	141.680	272.345		272.345	259.039	354.900	331.308	310.104	Continuing	Continuing
• MB7: *MEDICAL BIOLOGICAL DEFENSE (OP SYS DEV)*	0.000	0.000	5.448		5.448	0.492	0.493	8.851	15.459	Continuing	Continuing

D. Acquisition Strategy

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.

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.

TMT/PLTFM

The Transformational Medical Technologies (TMT) Program will incrementally develop and integrate pathogen characterization, target identification and bioinformatics functional areas. In order to create this DoD-inherent capability, TMT will invest in USG labs to buy equipment, train personnel and establish pathogen characterization/ identification and bioinformatics capabilities. Through the USG labs, TMT will leverage capabilities of USG agencies, academia and industry to mature/refine DoD processes and train personnel.

TMTI

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 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*

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 FILO

The mission of the Chemical Biological Medical Systems (CBMS) - Joint Vaccine Acquisition Program (JVAP) is to develop, produce, and stockpile FDA licensed vaccine products to protect the Warfighter against biological warfare agents. The Filovirus Vaccine program was initiated in FY10 with the ultimate goal to deliver a single trivalent vaccine to protect the Warfighter against exposure to Ebola viruses and Marburg viruses. JVAP will serve as the integrator for the Technology Development Phase by managing and coordinating the various vaccine development contracts and intergovernmental efforts from Milestone (MS) A to MS B. The development contracts will be a mix of Cost Plus and Firmed Fix Priced. JVAP will leverage similar contract efforts with the Department of Health and Human Services to satisfy the intent of the requirement and reduce risk. JVAP anticipates that the FDA will approve this product using the Animal Rule, which allows for demonstrating of efficacy in relevant animal model(s).

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
** MCMI - HW S - Tech Dev Manufacturing Platforms	C/CPFF	TBD:	-	-		27.582	Feb 2012	-		27.582	Continuing	Continuing	0.000
** TMT/EID FLU - SW SB - EID MCM Development Contract #1	C/CPIF	TBD:	-	-		6.364	Nov 2011	-		6.364	Continuing	Continuing	0.000
SW SB - EID MCM Development Contract #2	C/CPIF	TBD:	-	-		6.364	Nov 2011	-		6.364	Continuing	Continuing	0.000
** TMT/HFV - SW SB - FDA Licensure of SNALP Platform-based Medical Countermeasure (MCM) Products for Ebola	C/CPIF	Tekmira:Vancouver, Canada (Contract Option)	-	-		4.900	May 2012	-		4.900	Continuing	Continuing	0.000
SW SB - FDA Licensure of PMO Platform-based Medical Countermeasure (MCM) Products for Ebola and Marburg	C/CPIF	AVI BioPharma (Marburg):Corvallis, OR (Contract Option)	-	-		11.060	May 2012	-		11.060	Continuing	Continuing	0.000
SW S - Animal Modeling Support	MIPR	USAMRIID:Frederick, MD	-	-		5.305	May 2012	-		5.305	Continuing	Continuing	0.000
** TMT/IBP - SW SB - MCM Development Contract #1	C/CPIF	TBD:	-	-		3.882	Aug 2012	-		3.882	Continuing	Continuing	0.000
SW SB - MCM Development Contract #2	C/CPIF	TBD:	-	-		3.882	Aug 2012	-		3.882	Continuing	Continuing	0.000
SW S - MCM Development Contract #3	C/CPIF	TBD:	-	-		3.882	Aug 2012	-		3.882	Continuing	Continuing	0.000
SW S - MCM Development Contract #4	C/CPIF	TBD:	-	-		3.882	Aug 2012	-		3.882	Continuing	Continuing	0.000
** TMT/PLTFM - SW SB - Platform Technology - Bioinformatics	MIPR	ECBC:Edgewood, MD	-	-		9.164	Feb 2012	-		9.164	Continuing	Continuing	0.000
SW S - Platform Technology - Pathogen Characterization	MIPR	USAMRIID:Frederick, MD	-	-		9.164	Feb 2012	-		9.164	Continuing	Continuing	0.000
	C/CPIF		9.755	19.331	May 2011	-		-		-	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
** TMTI - SW SB - FDA Licensure of Medical Countermeasure (MCM) Products		Tekmira - Vancouver:Canada											
SW SB - FDA Licensure of Medical Countermeasure (MCM) Products	C/CPIF	AVI BioPharma - Corvallis:OR	26.441	53.955	May 2011	-		-		-	Continuing	Continuing	0.000
SW SB - Animal Model Development	MIPR	USAMRIID:Frederick, MD	6.987	5.313	May 2011	-		-		-	Continuing	Continuing	0.000
SW SB - Therapeutic Validation Contract #1	C/CPIF	TBD:	5.705	5.764	Aug 2011	-		-		-	Continuing	Continuing	0.000
HW SB - Therapeutic Validation Contract #2	C/CPIF	TBD:	-	7.381	May 2011	-		-		-	Continuing	Continuing	0.000
HW SB - Therapeutic Validation Contract #3	C/CPIF	TBD:	-	8.583	May 2011	-		-		-	Continuing	Continuing	0.000
** VAC FILO - HW S - Manufacturing, Validation, Pilot Lot, and Consistency Lot Production	C/CPIF	TBD:	-	2.442	Feb 2011	4.711	Feb 2012	-		4.711	Continuing	Continuing	0.000
HW S - Non Clinical Studies	MIPR	USAMRIID:Fort Detrick, MD	9.034	2.250	Feb 2011	3.000	Feb 2012	-		3.000	Continuing	Continuing	0.000
		Subtotal	57.922	105.019		103.142		-		103.142			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
** NGDS - ES S - Analysis of Alternatives	C/CPFF	TBD:	-	-		0.250	Feb 2012	-		0.250	0.000	0.250	0.000
** TMT/HFV - TD/D SB - TMT Advanced Development Support	C/FFP	Booz Allen & Hamilton:McLean, VA	-	-		10.140	May 2012	-		10.140	0.000	10.140	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
** TMTI - TD/D SB - Acquisition, Program and Financial Management Support	C/FFP	Booz-Allen & Hamilton - McLean:VA	9.477	9.800	May 2011	-		-		-	0.000	19.277	0.000
** VAC FILO - ES S - Regulatory Integration (Environmental and FDA Documentation) and Delivery System	C/CPIF	TBD:	-	2.745	Feb 2011	3.294	Feb 2012	-		3.294	0.000	6.039	0.000
		Subtotal	9.477	12.545		13.684		-		13.684	0.000	35.706	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
** NGDS - DTE S - Evaluation of Increment 2 prototypes	MIPR	USAMRIID:Fort Detrick, MD	-	-		0.349	Feb 2012	-		0.349	0.000	0.349	0.000
** VAC FILO - DTE S - Testing, Evaluation, and Clinical Trials	C/CPIF	TBD:	-	5.943	Feb 2011	8.765	Feb 2012	-		8.765	0.000	14.708	0.000
		Subtotal	-	5.943		9.114		-		9.114	0.000	15.057	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
** NGDS - PM/MS S - Product Management Support	MIPR	RDECOM:APG, MD	-	-		0.150	Nov 2011	-		0.150	0.000	0.150	0.000
PM/MS S - Chem Bio Medical Systems	Allot	CBMS:Frederick, MD	-	-		0.250	Feb 2012	-		0.250	0.000	0.250	0.000
** TMT/EID FLU - PM/MS S - JPEO Management Support	MIPR	JPEOCBD:Falls Church, VA	-	-		1.000	Aug 2012	-		1.000	0.000	1.000	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*

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
** TMT/HFV - PM/MS S - Project Management, JPEO MGMT	MIPR	JPEOCBD:Falls Church, VA	-	-		2.089	Aug 2012	-		2.089	0.000	2.089	0.000
** TMT/IBP - PM/MS SB - Program Management, JPEO	MIPR	JPEO:Falls Church, VA	-	-		1.163	Aug 2012	-		1.163	0.000	1.163	0.000
** TMT/PLTFM - PM/MS S - Program Management, JPEO	MIPR	JPEO:Falls Church, VA	-	-		1.328	Aug 2012	-		1.328	0.000	1.328	0.000
** TMTI - PM/MS S - Project Management, JPEO MGMT	MIPR	JPEOCBD:Falls Church, VA	24.556	10.230	Aug 2010	-		-		-	0.000	34.786	0.000
** VAC FILO - PM/MS S - Program Management/ Program Manager Support	Allot	CBMS:Frederick, MD	0.145	1.004	Aug 2011	1.806	Aug 2012	-		1.806	0.000	2.955	0.000
PM/MS S - Contractor Systems Engineering/Program Management Support	SS/FFP	Goldbelt Raven:LLC, Frederick	1.440	0.720	Nov 2010	1.400	Feb 2012	-		1.400	0.000	3.560	0.000
PM/MS - Joint Vaccine Acquisition Program Management	Allot	CBMS:Frederick, MD	0.350	0.664	Feb 2011	1.023	Feb 2012	-		1.023	0.000	2.037	0.000
PM/MS C - PM/MS S- Program Management Program Manager Support	Allot	JPEO:Falls Church, VA	-	0.850	Feb 2011	1.504	Feb 2012	-		1.504	0.000	2.354	0.000
		Subtotal	26.491	13.468		11.713		-		11.713	0.000	51.672	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	93.890	136.975		137.653		-		137.653			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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*

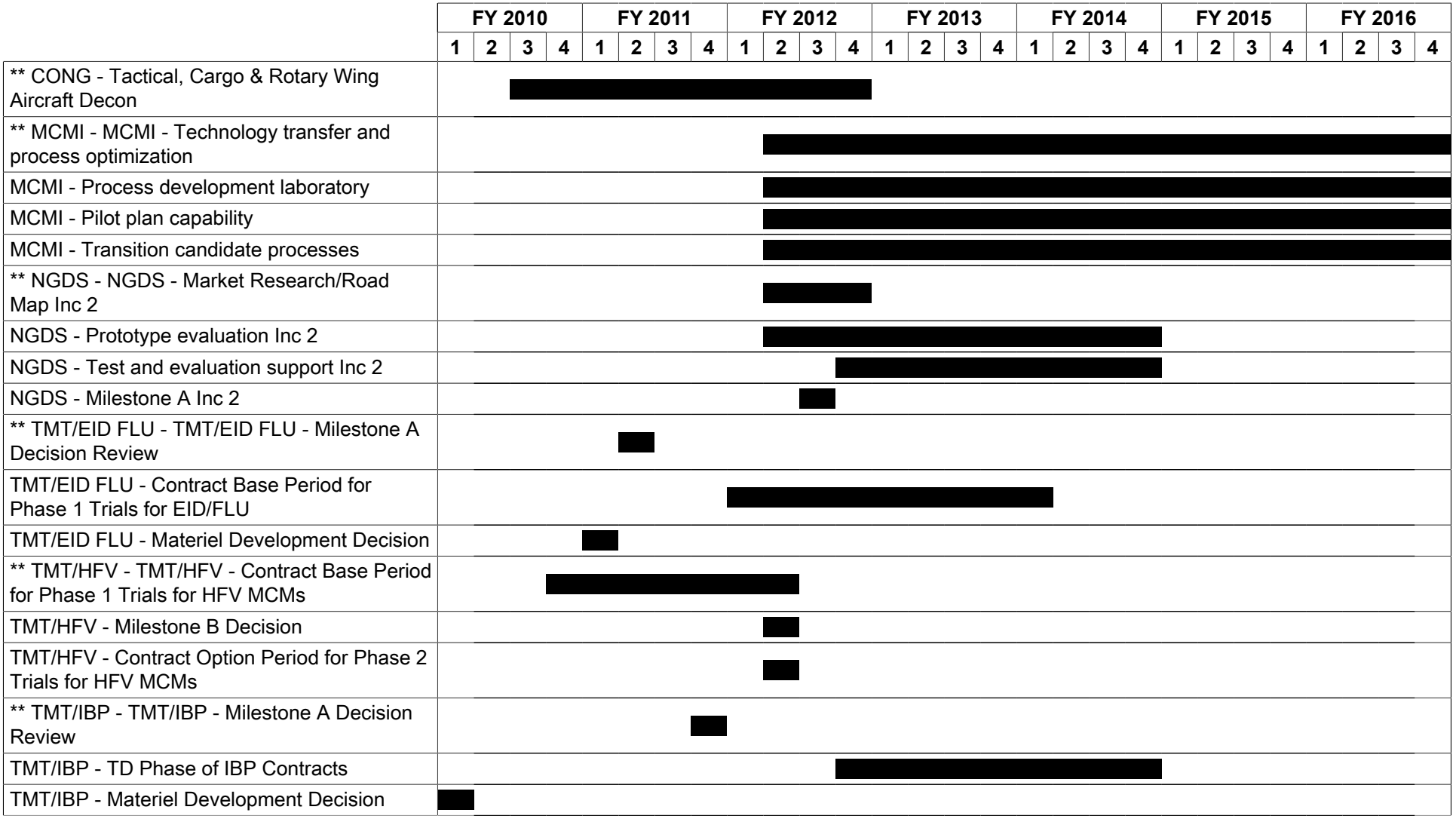

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*

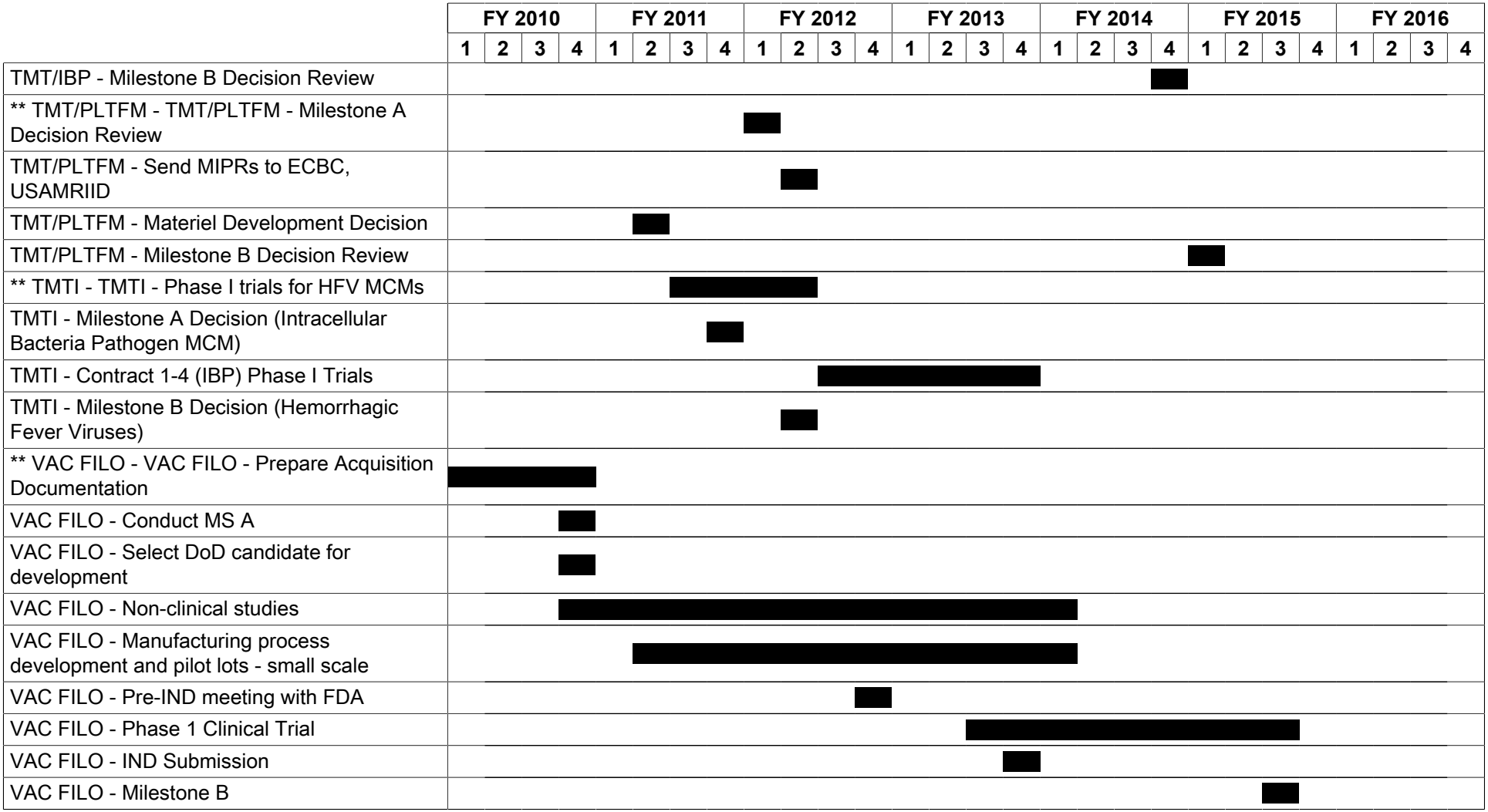

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** MB4: *MEDICAL BIOLOGICAL DEFENSE (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** CONG - Tactical, Cargo & Rotary Wing Aircraft Decon	3	2010	4	2012
** MCMI - MCMI - Technology transfer and process optimization	2	2012	4	2016
MCMI - Process development laboratory	2	2012	4	2016
MCMI - Pilot plan capability	2	2012	4	2016
MCMI - Transition candidate processes	2	2012	4	2016
** NGDS - NGDS - Market Research/Road Map Inc 2	2	2012	4	2012
NGDS - Prototype evaluation Inc 2	2	2012	4	2014
NGDS - Test and evaluation support Inc 2	4	2012	4	2014
NGDS - Milestone A Inc 2	3	2012	3	2012
** TMT/EID FLU - TMT/EID FLU - Milestone A Decision Review	2	2011	2	2011
TMT/EID FLU - Contract Base Period for Phase 1 Trials for EID/FLU	1	2012	1	2014
TMT/EID FLU - Materiel Development Decision	1	2011	1	2011
** 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
TMT/HFV - Contract Option Period for Phase 2 Trials for HFV MCMs	2	2012	2	2012
** TMT/IBP - TMT/IBP - Milestone A Decision Review	4	2011	4	2011
TMT/IBP - TD Phase of IBP Contracts	4	2012	4	2014
TMT/IBP - Materiel Development Decision	1	2010	1	2010
TMT/IBP - Milestone B Decision Review	4	2014	4	2014
** TMT/PLTFM - TMT/PLTFM - Milestone A Decision Review	1	2012	1	2012
TMT/PLTFM - Send MIPRs to ECBC, USAMRIID	2	2012	2	2012
TMT/PLTFM - Materiel Development Decision	2	2011	2	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**
TMT/PLTFM - Milestone B Decision Review	1	2015	1	2015
** TMTI - TMTI - Phase I trials for HFV MCMs	3	2011	2	2012
TMTI - Milestone A Decision (Intracellular Bacteria Pathogen MCM)	4	2011	4	2011
TMTI - Contract 1-4 (IBP) Phase I Trials	3	2012	4	2013
TMTI - Milestone B Decision (Hemorrhagic Fever Viruses)	2	2012	2	2012
** VAC FILO - VAC FILO - Prepare Acquisition Documentation	1	2010	4	2010
VAC FILO - Conduct MS A	4	2010	4	2010
VAC FILO - Select DoD candidate for development	4	2010	4	2010
VAC FILO - Non-clinical studies	4	2010	1	2014
VAC FILO - Manufacturing process development and pilot lots - small scale	2	2011	1	2014
VAC FILO - Pre-IND meeting with FDA	4	2012	4	2012
VAC FILO - Phase 1 Clinical Trial	3	2013	3	2015
VAC FILO - IND Submission	4	2013	4	2013
VAC FILO - Milestone B	3	2015	3	2015

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
MC4: *MEDICAL CHEMICAL DEFENSE (ACD&P)*	20.518	-	20.804	-	20.804	3.658	5.045	14.716	3.555	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 Technology Development phase of the acquisition life cycle for the advanced development of medical countermeasures for chemical agents including diagnostic equipment; prophylactic, pre-treatment, and therapeutic drugs; and individual/casualty decontamination compounds. A system-of-systems approach for medical defense against chemical agents is required to provide protection, to sustain performance in a chemical environment, and to provide for self-aid/buddy-aid and medical treatment of chemical casualties. Fielding of prophylactic, pre-treatment, and therapeutic drugs and medical devices requires Food and Drug Administration (FDA) approval. Multiple long-term studies are required to obtain FDA approval resulting in longer program timelines treatment for nerve agent intoxication to include new indications for Pyridostigmine Bromide (PB) that will be integrated with current therapeutic regimens. Efficacy testing of most candidate drugs against chemical warfare agents cannot be conducted in humans; therefore, animal surrogate models must be developed and employed. The program currently funds: (1) Bioscavenger, a new capability, to be used as a prophylaxis against nerve agents; (2) Centrally Acting Nerve Agent Treatment System (CANATS), an augmentation to current capability, to treat adverse effects occurring in the central nervous system following nerve agent intoxication and will provide protection against neurological damage, especially brain damage; (3) Inhalation Atropine (IA), an improvement to existing capability leveraging novel delivery, to be used to treat mild to moderate continuing nerve agent induced effects after the patient has been evacuated to a medical treatment facility; and (4) Improved Nerve Agent Treatment System (INATS), a replacement and improvement to existing capability, to be used as a treatment for nerve agent intoxication; the INATS effort also includes expanding the indications for Pyridostigmine Bromide (PB) that will be integrated with current therapeutic regimens.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) BSCAV Increment 2 ***FY 2010 Accomplishments:*** Initiated analysis of alternative manufacturing technologies to support delivery of a capability for full force.	1.800	-	-
Title: 2) BSCAV Increment 2 ***FY 2010 Accomplishments:*** Continued lot release assay development and qualification.	1.037	-	-
Title: 3) BSCAV Increment 2 ***FY 2010 Accomplishments:***	3.300	-	-

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MC4: *MEDICAL CHEMICAL DEFENSE (ACD&P)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Completed production of source material for bulk drug substance.			
Title: 4) BSCAV Increment 2 ***FY 2010 Accomplishments:*** Completed manufacturing and process qualification at small scale.	5.061	-	-
Title: 5) CANATS ***FY 2012 Plans:*** Initiate pre-clinical safety/toxicology studies.	-	-	2.966
Title: 6) Inhalation Atropine ***Description:*** NTA ***FY 2010 Accomplishments:*** Initiated process development and cGMP requirements (NTA).	0.800	-	-
Title: 7) Inhalation Atropine ***Description:*** NTA ***FY 2010 Accomplishments:*** Initiated formulation, analytical methods and device optimization (NTA).	1.167	-	-
Title: 8) INATS ***FY 2010 Accomplishments:*** Initiated and completed Investigational New Drug (IND) amendment (NTA).	0.500	-	-
Title: 9) INATS ***FY 2012 Plans:*** Continue Phase 1 Clinical Trial.	-	-	4.940
Title: 10) INATS ***FY 2010 Accomplishments:*** Completed safety and toxicology studies of candidate oximes; completed preliminary efficacy studies of traditional agents.	2.353	-	-
Title: 11) INATS ***FY 2012 Plans:***	-	-	6.040

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MC4: *MEDICAL CHEMICAL DEFENSE (ACD&P)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Continue testing of candidate oxime against non-traditional agents (NTA).			
Title: 12) INATS	4.500	-	6.858
FY 2010 Accomplishments: Initiated process development and Chemistry Manufacturing and Controls (CMC) efforts of enhanced formulation to support clinical trials (NTA).			
FY 2012 Plans: Complete process development and Chemistry Manufacturing and Controls (CMC) efforts of enhanced formulation to support clinical trials.			
Accomplishments/Planned Programs Subtotals	20.518	-	20.804

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
• MC5: *MEDICAL CHEMICAL DEFENSE (SDD)*	4.126	51.856	26.407		26.407	18.860	18.396	20.824	27.289	Continuing	Continuing

D. Acquisition Strategy

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.

CANATS

Medical Identification and Treatment Systems (MITS) Joint Product Management Office (JPMO) will serve as the system integrator during the Technology Development Phase and conduct pre-clinical animal studies and Phase 1 human clinical safety studies with the centrally acting drug candidate(s) that will serve as adjunct therapy to the already available nerve agent treatment regimen. If multiple centrally acting candidates are transitioned from tech base, MITS JPMO will down-select when appropriate, but no later than Milestone B, and will determine the final configuration of the CANATS autoinjector prior to Milestone B. 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 seek FDA approval for the CANATS 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.

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.

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MC4: *MEDICAL CHEMICAL DEFENSE (ACD&P)*

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.

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MC4: *MEDICAL CHEMICAL DEFENSE (ACD&P)*

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
** CANATS - HW S - CANATS - Pre-clinical safety/toxicology studies	C/CPIF	TBD:	-	-		2.396	Feb 2012	-		2.396	Continuing	Continuing	0.000
** INATS - HW S - Phase 1 Clinical Trial	MIPR	Defense Technical Information Center:Edgewood, MD (Battelle)	-	-		2.995	Feb 2012	-		2.995	Continuing	Continuing	0.000
HW S - NTA Study	MIPR	Defense Technical Information Center:Edgewood, MD (Battelle)	-	-		6.087	Feb 2012	-		6.087	Continuing	Continuing	0.000
HW S - Enhanced Formulation Development	MIPR	Defense Technical Information Center:Edgewood, MD (Battelle)	3.865	-		4.355	Feb 2012	-		4.355	Continuing	Continuing	0.000
		Subtotal	3.865	-		15.833		-		15.833			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
** INATS - ES S - INATS - Regulatory Integration, IND, and NDA Support Efforts	MIPR	Defense Technical Information Center:Edgewood, MD (Battelle)	1.528	-		0.998	Feb 2012	-		0.998	0.000	2.526	0.000
		Subtotal	1.528	-		0.998		-		0.998	0.000	2.526	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
** CANATS - PM/MS C - CANATS - Product Management Support	C/CPIF	USAMMDA:Fort Detrick, MD	-	-		0.150	Feb 2012	-		0.150	0.000	0.150	0.000
PM/MS C - CANATS - Management Support	Allot	CBMS:Frederick, MD	-	-		0.270	Feb 2012	-		0.270	0.000	0.270	0.000
PM/MS C - CANATS - Management Support #2	Allot	JPEO:Falls Church, VA	-	-		0.150	Feb 2012	-		0.150	0.000	0.150	0.000
** INATS - PM/MS S - INATS - Product Management Support	SS/FFP	Goldbelt Raven:LLC, Frederick	1.903	-		1.203	Feb 2012	-		1.203	0.000	3.106	0.000
PM/MS S - INATS - Product Management Support	MIPR	USAMMDA:Fort Detrick, MD	0.546	-		0.200	Feb 2012	-		0.200	0.000	0.746	0.000
PM/MS S - INATS - Chem Bio Medical Systems	Allot	CBMS:Frederick, MD	0.938	-		1.000	Feb 2012	-		1.000	0.000	1.938	0.000
PM/MS S - INATS - Joint Program Executive Office	Allot	JPEO:Falls Church, VA	0.928	-		1.000	May 2012	-		1.000	0.000	1.928	0.000
		Subtotal	4.315	-		3.973		-		3.973	0.000	8.288	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	9.708	-		20.804		-		20.804			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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MC4: *MEDICAL CHEMICAL DEFENSE (ACD&P)*

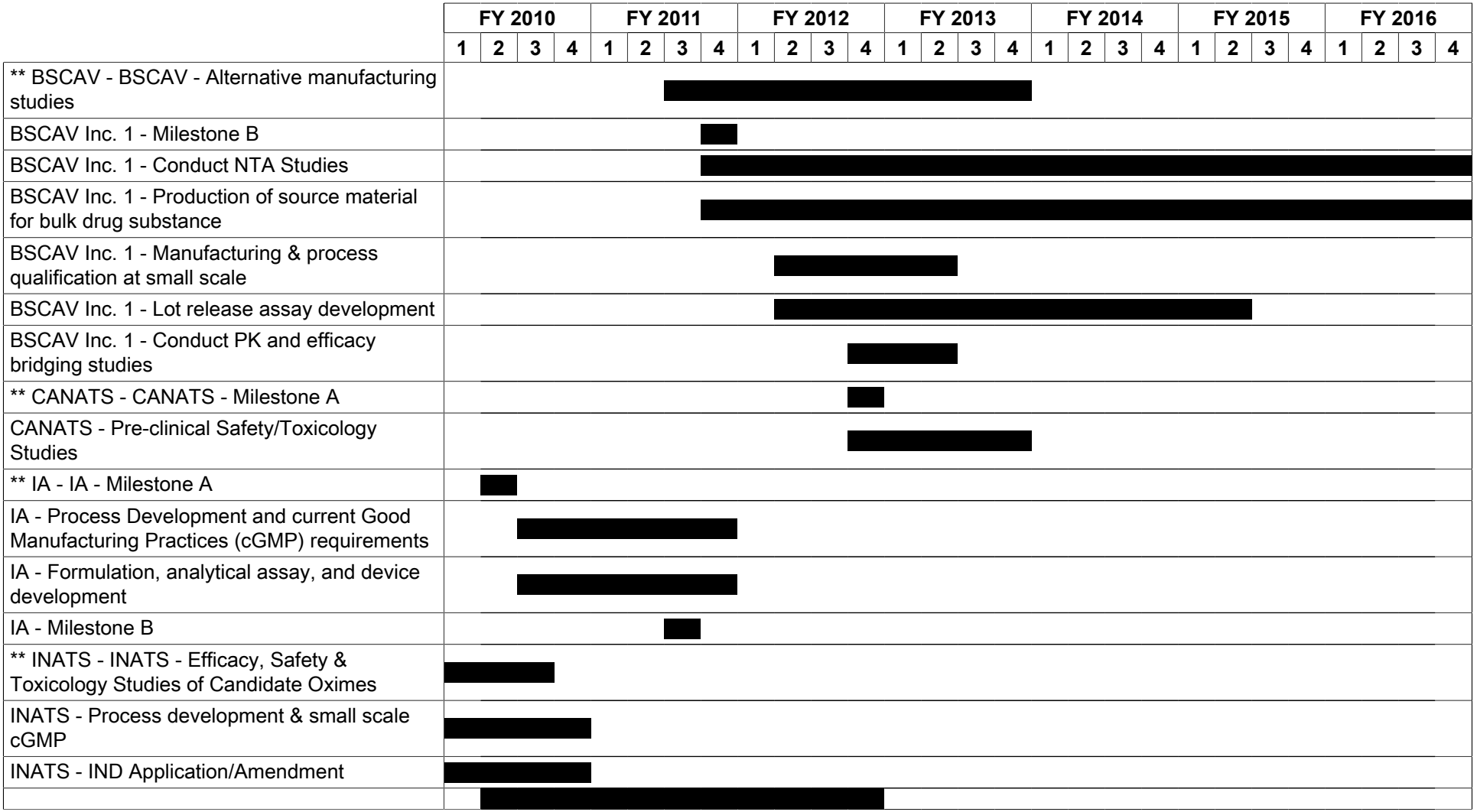

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MC4: *MEDICAL CHEMICAL DEFENSE (ACD&P)*

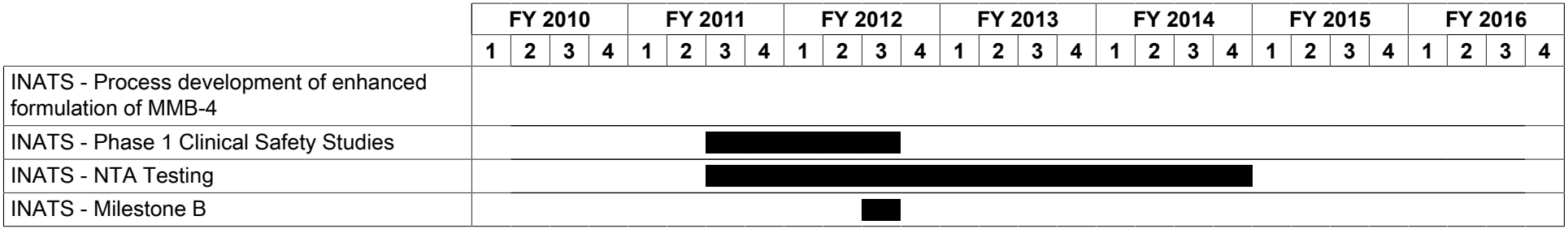

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** MC4: *MEDICAL CHEMICAL DEFENSE (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** 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
BSCAV Inc. 1 - Conduct PK and efficacy bridging studies	4	2012	2	2013
** CANATS - CANATS - Milestone A	4	2012	4	2012
CANATS - Pre-clinical Safety/Toxicology Studies	4	2012	4	2013
** IA - IA - Milestone A	2	2010	2	2010
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 - Efficacy, Safety & Toxicology Studies of Candidate Oximes	1	2010	3	2010
INATS - Process development & small scale cGMP	1	2010	4	2010
INATS - IND Application/Amendment	1	2010	4	2010
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 - Milestone B	3	2012	3	2012

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MR4: *MEDICAL RADIOLOGICAL DEFENSE (ACD&P)*	

COST ($ in Millions)	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
MR4: *MEDICAL RADIOLOGICAL DEFENSE (ACD&P)*	2.800	-	-	-	-	-	-	-	-	0.000	2.800
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 2010 Accomplishments:*** Initiated pilot animal efficacy studies.	2.500	-	-
Title: 2) MRADC ***FY 2010 Accomplishments:*** Initiated documentation for Milestone B decision.	0.300	-	-
Accomplishments/Planned Programs Subtotals	2.800	-	-

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT MR4: *MEDICAL RADIOLOGICAL DEFENSE (ACD&P)*

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
• MR5: *MEDICAL RADIOLOGICAL DEFENSE (SDD)*	0.000	1.143	0.000		0.000	0.000	0.000	0.000	0.000	0.000	1.143

D. Acquisition Strategy

MRADC

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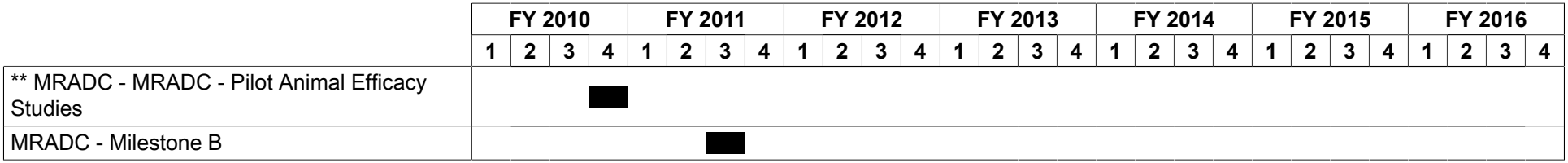

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** MR4: *MEDICAL RADIOLOGICAL DEFENSE (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** MRADC - MRADC - Pilot Animal Efficacy Studies	4	2010	4	2010
MRADC - Milestone B	3	2011	3	2011

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TE4: *TEST & EVALUATION (ACD&P)*	

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
TE4: *TEST & EVALUATION (ACD&P)*	28.412	19.304	5.438	-	5.438	16.232	12.461	18.369	19.296	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 three groups to include: (1) Sense Laboratory (Chemical); (2) Sense Laboratory (Biological); and (3) Individual Protection, Collective Protection and Decontamination (Shield and Sustain).

(1) Sense Laboratory (Chemical): The product for this area is the Non-Traditional Agent (NTA) Test System. The NTA System provides a new capability at the Edgewood Chemical Biological Center (ECBC) to conduct highly toxic materials testing using new, emerging threat agents. The NTA System supports testing of decontamination, collective protection, individual protection, and contamination avoidance products. The CBD acquisition program supported is the Joint Chemical Agent Detector (JCAD).

(2) Sense Laboratory (Biological): The product for this area is a biological live agent standoff chamber. The Chamber supports Joint Biological standoff detection testing in biological live agent environments. The CBD acquisition program supported is the Joint Biological Standoff Detection System (JBSDS) Increment 2.

(3) Individual Protection, Collective Protection and Decontamination (Shield and Sustain): The product for the area is an Individual Protection Ensemble Mannequin System (IPEMS), and Chemical Biological Agent Resistance Test Fixtures (CBART). 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. CBART provides a state of the art material swatch test fixture for individual and collective protection system. The Acquisition Programs supported are: Joint Protective Aircrew Ensemble (JPACE); Joint Service General Purpose Mask (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); and Joint Chemical/Biological Coverall for Combat Vehicle Crewmen (JC3).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) PD TESS - Non-Traditional Agent (NTA) Test System	23.566	13.638	-
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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TE4: *TEST & EVALUATION (ACD&P)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Initiated design, fabrication and installation of the NTA Test System. Completed NTA simulant fixtures and environmentally controlled test fixtures for NTA testing. ***FY 2011 Plans:*** Continue facility fabrication.			
Title: 2) PD TESS - Bio Standoff Facility ***FY 2010 Accomplishments:*** Developed final design concepts for the Bio Standoff Facility. Initiated final specifications and drawings for Bio Standoff Facility. ***FY 2011 Plans:*** Initiate Bio Standoff Facility design. ***FY 2012 Plans:*** Continue design, fabrication and installation of the Bio Standoff Facility.	0.900	0.300	4.290
Title: 3) PD TESS - IPEMS ***FY 2010 Accomplishments:*** Completed mannequin chemical sensor repackaging, test, and evaluation.	0.726	-	-
Title: 4) PD TESS Chemical Biological Agent Resistance Test Fixture (CBART) ***FY 2012 Plans:*** Compile final specifications and drawings for the CBART test fixture.	-	-	0.500
Title: 5) PD TESS - Program Management ***FY 2010 Accomplishments:*** Continued Program Management, Engineering Support and Integrated Product Team (IPT) support. ***FY 2011 Plans:*** Continue Program Management, Engineering Support and IPT support. ***FY 2012 Plans:*** Continue Program Management, Engineering Support and IPT support.	3.220	5.366	0.648
Accomplishments/Planned Programs Subtotals	28.412	19.304	5.438

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TE4: *TEST & EVALUATION (ACD&P)*

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
• TE5: *TEST & EVALUATION (SDD)*	39.372	15.901	11.043		11.043	5.748	11.866	12.217	15.562	Continuing	Continuing
• 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

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

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 - NTA Test Facility Design/ Fabrication/Installation	C/CPFF	Midwest Research Institute:Kansas City Missouri	17.500	10.938	May 2011	-		-		-	Continuing	Continuing	0.000
HW S - NTA Test System Design/Fabrication/Installation	MIPR	Various:	6.066	2.700	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW S - Bio Standoff Facility Feasibility/Design	MIPR	Various:	2.400	0.300	Feb 2011	4.290	Feb 2012	-		4.290	Continuing	Continuing	0.000
SW SB - CBART - Design/ Fabrication	MIPR	Various:	-	-		0.500	Feb 2012	-		0.500	Continuing	Continuing	0.000
		Subtotal	25.966	13.938		4.790		-		4.790			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 - Management/Systems/ Engineering Support	MIPR	JPM NBC CA:APG, MD	3.020	5.366	Nov 2010	0.648	Nov 2011	-		0.648	0.000	9.034	0.000
		Subtotal	3.020	5.366		0.648		-		0.648	0.000	9.034	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	28.986	19.304		5.438		-		5.438			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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TE4: *TEST & EVALUATION (ACD&P)*

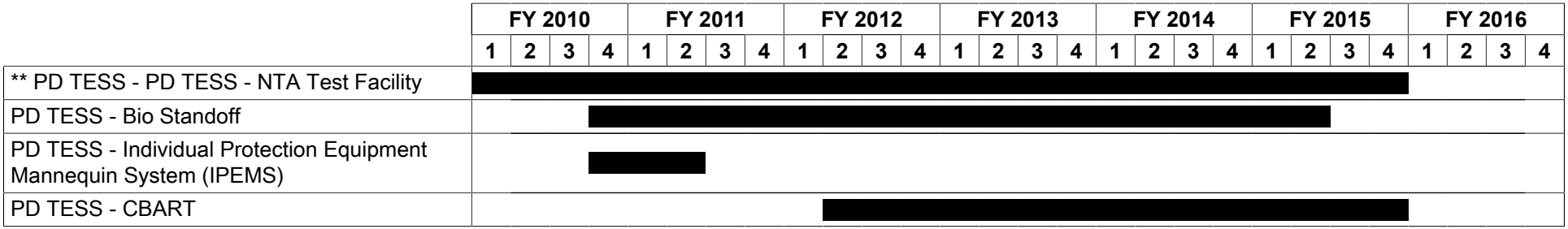

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** TE4: *TEST & EVALUATION (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** PD TESS - PD TESS - NTA Test Facility	1	2010	4	2015
PD TESS - Bio Standoff	4	2010	2	2015
PD TESS - Individual Protection Equipment Mannequin System (IPEMS)	4	2010	2	2011
PD TESS - CBART	2	2012	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TT4: *TECHBASE TECHNOLOGY TRANSITION (ACD&P)*	

COST ($ in Millions)	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
TT4: *TECHBASE TECHNOLOGY TRANSITION (ACD&P)*	24.937	26.466	3.022	-	3.022	3.923	4.758	8.467	9.075	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project (TT4) validates high-risk/high-payoff technologies, concepts-of-operations, and reconnaissance and surveillance platforms that could significantly improve Warfighter capabilities in preparation for transition of mature technologies to advanced development programs requiring chemical and biological (CB) defense technologies. These programs offer an opportunity to identify and efficiently mature emerging technologies from laboratory experiments to acquisition programs through risk reduction, engineering and integration. These Advanced Technology Demonstrations (ATDs) and Joint Concept Technology Demonstrations (ACTDs) seek to demonstrate the potential for enhanced military operational capability and/or cost effectiveness. Upon conclusion of the technical and operational demonstrations, the user or sponsor provides a determination of the military utility and operational impact of the technology and capability demonstrated. Successfully demonstrated technologies with proven military utility can either be left in place for extended user evaluations, accepted into advanced stages of the formal acquisition process, proceed directly into limited or full-scale production or be returned to the technical base for further development. This project funds four major thrust areas (one of which is a new thrust areas to address DoD emphasis on an interagency collaboration for biological detection, surveillance, recovery and resilience and is annotated as such below): Hazard Mitigation, Early Warning, Comprehensive Innovative Protection (CIP) and Interagency Countering Bio-threats Initiative (ICBI). The Hazard Mitigation thrust area addresses Chemical, Biological, and Radiological (CBR) remediation and decontamination processes and demonstrates technologies and methods to restore assets such as mobile equipment, fixed sites, critical infrastructures, personal, and equipment to operational status as a result of having reduced or eliminated CBR contamination. The Early Warning thrust area achieves enhanced command and control decision making capabilities as a result of a combined and orchestrated family of chemical and biological defense systems deployed on various platforms in remote locations. The CIP transitions mature technologies to improve individual and collective protection capabilities for U.S. and coalition Warfighters. The Interagency Countering Bio-threats Initiative is targeted to reduce biological threats by: (1) improving DoD access to the life sciences to combat infectious disease regardless of its cause; (2) establishing and reinforcing DoD concept of operations (CONOPS) against the misuse of the life sciences; and (3) instituting a suite of coordinated DoD and interagency activities that collectively will help influence, identify, inhibit, and/or interdict those who seek to misuse the life sciences. The following is a description of specific efforts funded under each thrust area:

Hazard Mitigation:
Automated Detailed Equipment Decontamination for Land Vehicles (Auto Decon) - A chemical and biological decontamination process for land vehicles, which will prototype an improved decontamination process and will evaluate the current Detailed Equipment Decontamination (DED), which is the most thorough of Joint Service decontamination procedures. This effort will merge into the Decontamination Family of Systems, also known as HaMMER (see below for description).

Hazard Mitigation Material and Equipment Restoration (HaMMER) - A layered strategy to identify individual technologies that may be collectively applied to reduce or eliminate chemical and biological hazards. It includes a Decontamination Family of Systems that gives the Warfighter multiple capabilities to reduce or eliminate chemical hazards. This effort leverages upon and consolidates Auto Decon and SPIDER efforts described above.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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Early Warning:
Military Applications in Reconnaissance Systems for Joint Force Protection (MARS-JFP) - A data fusion ATD that leverages early warning technologies developed in Budget Activity 3 (Project TT3) to improve the capability to detect and react to an initial chemical and biological attack, as well as prevent a second attack. Specifically, this effort focuses on force protection decision making for external, cross domain sensors for cueing/tipping, and managing resources of dynamically deployable high quality chemical and biological sensors.

Rapid Area Surveillance Reconnaissance (RASR) - A sensitive-site exploration, standoff reconnaissance, ATD that leverages early warning technologies developed in Budget Activity 3 (Project TT3) to survey large areas (whole rooms, courtyards, fields) and assess and identify contamination with Chemical Warfare Agents (CWAs), Toxic Industrial Chemicals (TICs) and Non-Traditional Agents (NTAs).

Post Intercept Weapons of Mass Destruction Identification (PIWID) - An ATD that leverages early warning technologies developed in Budget Activity 3 (Project TT3), which addresses both operational and technical issues associated with the capability to determine the presence of Weapons of Mass Destruction (WMD) in the threat payload of ballistic or cruise missile delivery systems after a successful active defense intercept.

Comprehensive Innovative Protection (CIP):
Demo-Low Burden Individual Protection Demonstration (IP Demo) - An ATD that leverages lightweight chemical and biological protective textiles developed in Budget Activity 3 (Project CB3, Protection and Hazard Mitigation), and will support the next generation Joint Chemical Ensemble. This effort will provide significantly decreased thermal burden correlated with acceptable levels of chemical and biological protection, as well as significantly increase the ability of the Warfighter to accomplish a mission in a contaminated environment.

Joint Medical Distance Support and Evaluation (JMDSE) - A Joint Concept Technology Demonstration (JCTD) that leverages the results of the EBD (see above for description) and seeks new detect-to-treat CONOPS enabled by the deployment of new chemical and biological detection and identification capabilities to front line forces.

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

Transatlantic Collaborative Biological Resiliency Demonstration (TaCBRD) - A Department of Defense (DoD) managed effort in collaboration with Department of State and Department of Homeland Security (DHS). This collaborative effort that will provide a coordinated, systems approach to the response and recovery of a overseas partner nation with DoD assistance. This will include Department of Defense (DoD) infrastructures and high traffic areas.

Biosurveillance and Response ATD - An interagency ATD that will improve operational capability to detect, locate, characterize and attribute the use, or potential use, of biological agents. ATD will integrate whole-of-Government solutions to provide militarily useful Biosurveillance situation awareness. Timeliness and accuracy

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results will be correlated with militarily useful command and control responses, to include tasking of additional CBRN and non-CBRN/MASINT sensing assets. Effort will address pre-event deployment of syndromic surveillance assets, assessment of background/naturally existing hazards, exposure monitoring, and records and data analysis/fusion from all media and information sources. Effort will seamlessly integrate with whole-of-government threat genome identification and countermeasure response efforts coupled with quick reaction global military deployment capabilities to effectively contain and respond to a biological WMD attack.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
Title: 1) TT DEMO ***Description:*** ICBI (Interagency Biological Restoration Demonstration (IBRD)): ***FY 2010 Accomplishments:*** Completed IBRD development of restoration plans. Completed established risk assessment and clearance goals. Developed sampling, characterization, and long term monitoring plans. Developed and exercised wide-area decontamination methods. Developed and demonstrated restoration system tools and conduct table top exercises, field exercises, and workshops. Planned, coordinated, and executed the IBRD Final Demo/Table Top Exercise (TTX) in the Seattle urban area. Transitioned decontamination methods, restoration tools, agent fate and transport data to the advanced developer (Joint Program Manager for Guardian and Decontamination - see Budget Activities 4 and 5).	2.693	-	-
Title: 2) TT DEMO ***Description:*** ART (Automated Detailed Equipment Decontamination for Land Vehicles (Auto Decon)): ***FY 2010 Accomplishments:*** Completed baseline evaluation of current detailed equipment decontamination processes and prototype automated decontamination solutions. Recommended optimized process for automated decontamination. Transitioned detailed Process Evaluation Toolset (PET) to the advanced developer (Joint Program Manager for Decontamination - see Budget Activities 4 and 5).	1.773	-	-
Title: 3) TT DEMO ***Description:*** ART (Hazard Mitigation Material and Equipment Restoration (HaMMER)): ***FY 2010 Accomplishments:*** Conducted component decontamination processes in which collective applications can be employed to eliminate or reduce chemical and biological decontamination. ***FY 2011 Plans:*** Conduct and complete total system decontamination processes to ensure collective applications can be employed to eliminate or reduce chemical and biological decontamination. The completed project will define and provide a flexible system design that leverages individual technologies that address both hazard mitigation and dose-based risk assessment concepts. Transition	7.701	7.982	-

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B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011	FY 2012
system of systems chemical/biological decontamination apparatus; Tactics, Techniques, and Procedures (TTPs); and CONOPS to JPM-Decontamination.			
Title: 4) TT DEMO ***Description:*** EW-MARS (Military Applications in Reconnaissance Systems for Joint Force Protection (MARS-JFP)): ***FY 2010 Accomplishments:*** Continued operational concept generation. Began software development, operational and mockup development, and developed test plans and procedures. Executed initial laboratory-based technology demonstration. ***FY 2011 Plans:*** Continue operational concept generation, software development, operational prototype and mockup development. Continue development of test plans and procedures. Initiate integration planning and testing for field demonstration.	2.924	3.336	-
Title: 5) TT DEMO ***Description:*** EW-MARS (Rapid Area Surveillance/Reconnaissance (RASR)): ***FY 2010 Accomplishments:*** Continued operational concept planning and exercises. Conducted pathfinder demonstrations to baseline current state of the art and determine critical path. Initiated competitive prototype industry awards and conduct technology readiness assessments. Initiated operational mockup, lesson plans and final development planning. ***FY 2011 Plans:*** Continue operational concept planning and exercise planning; technology readiness assessments; initiate operational mockup, lesson plans and final development planning; downselect prototype industry awards; conduct and finalize surety testing; conduct several technical and operational demonstrations; conduct Military Utility Assessment (MUA) to assess value to Warfighter; recondition complete systems in preparation for transition to operational managers and combat developers.	3.899	11.847	-
Title: 6) TT DEMO ***Description:*** EW-MARS Thrust Area (Post Intercept Weapons of Mass Destruction Identification (PIWID)): ***FY 2010 Accomplishments:*** Conducted post-intercept WMD simulant payload data collection while leveraging missile intercept event. Demonstrated sidecar re-processing of non-chemical and biological sensors to extract useful cue/tipping information. ***FY 2011 Plans:***	1.950	1.796	-

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
Assess standoff data, chem/bio data, and current plan for Unmanned Aerial Vehicle (UAV) point-based, sensor approaches. Conduct standoff sensor and UAV CONOPS. Laboratory demonstration within cross domain environment. Transition data to JPM-NBC CA and JPM-BD.			
Title: 7) TT DEMO ***Description:*** CIP (Low Burden Individual Protection Demonstration (IP Demo)): ***FY 2010 Accomplishments:*** Performed and completed system level technical performance measure evaluations. Initiated and completed a system level user demonstration. Conducted and complete component level testing. Transitioned low burden individual protection overgarment to the advanced developer (Joint Program Manager for Individual Protection and the Program Manager for Soldier Equipment). Initiated risk reduction activities to demonstrate Catalytic Oxidation air purification prototypes, to include initial system and tank test bed designs.	3.022	-	-
Title: 8) TT DEMO ***Description:*** CIP (Joint Medical Distance Support and Evaluation (JMSDE)): ***FY 2010 Accomplishments:*** Completed JMDSE to Joint Biological Tactical Detection System (JBTDS) interface evaluation. Conducted field demonstrations and military utility assessments. Developed CONOPS, training, test and security plans. Initiated software development. ***FY 2011 Plans:*** Complete field demonstrations and military utility assessments; complete CONOPS and training, test, and security plans. Complete software development and integration. Transition to JPM-Bio Detection.	0.975	1.505	-
Title: 9) TT DEMO ***Description:*** (ICBI) Transatlantic Collaborative Biological Recovery Demonstration (TaCBRD) ***FY 2012 Plans:*** Initiate concept exploration and risk reduction efforts. Conduct baseline study to understand capability gaps associated with partner nation recovery and resilience in an overseas environment.	-	-	3.022
Accomplishments/Planned Programs Subtotals	24.937	26.466	3.022

Exhibit R-2A, RDT&E Project Justification: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
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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
• TE3: *TEST & EVALUATION (ATD)*	12.296	11.875	11.199		11.199	11.081	0.992	0.991	0.990	Continuing	Continuing
• TT3: *TECHBASE TECHNOLOGY TRANSITION*	7.381	4.504	0.000		0.000	0.000	0.000	0.000	0.000	0.000	11.885

D. Acquisition Strategy

TT DEMO

The Advanced Technology Demonstrations (ATDs) and Joint Concept Technology Demonstrations (JCTDs) exploit mature and maturing technologies to solve important military problems. ATDs and ACTDs emphasize technology assessment and integration rather than technology development. The goal is to provide a prototype capability to the Warfighter and to support in the evaluation of that capability. The Warfighters evaluate the capabilities in real military exercises and at a scale sufficient to fully assess military utility. When possible, the ATDs will leverage results from existing chemical and biological science and technology (S&T) efforts and prior ATDs. Market research/baselining is performed prior to ATD initiation to determine if a suitable solution exists or whether a solicitation/sole source is required to develop a solution. The ATDs are typically managed by DoD, Federally Funded Research Development Centers (FFRDCs) or University Affiliated Research Centers (UARCs). This is done through the Military Interdepartmental Purchase Request (MIPR) or the Interagency Cost Reimbursable Order (IACRO) in accordance with the Economy Act. In addition, the ATDs utilize the Defense Threat Reduction Agency (DTRA) Broad Area Announcement process to fund promising technologies between Technology Readiness Level (TRL) 4 and TRL 6. The ATD manager, who is typically responsible for total system development, can subcontract industry, academia, or other government agencies to perform individual component development.

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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TT4: *TECHBASE TECHNOLOGY TRANSITION (ACD&P)*

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
** TT DEMO - HW C - (ART) HaMMER Product Development	MIPR	Army-ECBC:Edgewood, MD	8.749	2.850	Nov 2010	-		-		-	Continuing	Continuing	0.000
HW S - (ART) Hammer Product Development-SME	MIPR	Army-ECBC:Edgewood, MD	0.600	0.200	Nov 2010	-		-		-	Continuing	Continuing	0.000
HW C - (EW) MARS JFP Product Development	PO	MITRE:Bedford, MA	0.600	0.200	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW C - (EW) MARS JFP Product Development #2	PO	Johns Hopkins Univ/ Applied Physics Lab (JHU-APL):Laurel, MD	0.600	0.200	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW C - (EW) MARS JFP Product Development #3	PO	MIT/Lincoln Labs:Lexington, MA	0.600	0.200	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW C - (EW) RASR Product Development	PO	MIT/Lincoln Labs:Lexington, MA	5.050	1.650	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW C - (EW) RASR Product Development #2	PO	Georgia Tech Institute of Technology:Atlanta, GA	1.500	0.500	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW C - (EW) RASR Product Development #3	PO	MITRE:Bedford, MA	1.150	1.150	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW C - (EW) RASR Product Development #4	PO	John Hopkins University/ Applied Physics Laboratory:Laurel, MD	1.150	1.150	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW C - (EW) RASR Product Development #5	PO	Kansas City Plant (DOE):Kansas City, MO	1.150	1.150	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW C - (EW) RASR Product Development #6	PO	Naval Postgraduate School:Monterey, CA	1.150	1.150	Feb 2011	-		-		-	Continuing	Continuing	0.000
HW C- TaCBRD ATD	PO	Sandia National Laboratory:Albuquerque, NM	-	-		0.400	Nov 2011	-		0.400	Continuing	Continuing	0.000
HW C - (EW) PIWID Product Development	MIPR	JLENS:Huntsville, AL	1.261	0.500	Nov 2010	-		-		-	Continuing	Continuing	0.000
HW C- TaCBRD ATD #2	MIPR		-	-		1.000	Nov 2011	-		1.000	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
		SPAWAR:San Diego, CA											
HW C - (CIP) JMDSE Product Development	MIPR	US Army Natick Soldier RD&E Center:Natick, MA	0.450	0.350	Nov 2010	-		-		-	Continuing	Continuing	0.000
		Subtotal	24.010	11.250		1.400		-		1.400			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
** TT DEMO - ILS S - (ART) HaMMER System Support	MIPR	Research:Development & Engineering Cmd (RDECOM), Edgewood	4.214	1.414	Nov 2010	-		-		-	0.000	5.628	0.000
ILS S - (ART) Hammer OM Support	MIPR	US European Command (USEUCOM):Stuttgart, GE	0.450	0.150	Nov 2010	-		-		-	0.000	0.600	0.000
ILS S - (ART) HaMMER Support	MIPR	Edgewood Chemical and Biological Center:Edgewood, MD	1.500	0.500	Nov 2010	-		-		-	0.000	2.000	0.000
ILS C - (EW) MARS JFP Support	MIPR	Edgewood Chemical and Biological Center:Edgewood, MD	1.895	0.965	Nov 2010	-		-		-	0.000	2.860	0.000
ILS C - (EW) RASR OM Support	MIPR	20th Support Command:Aberdeen Proving Ground, MD	0.645	0.215	Nov 2010	-		-		-	0.000	0.860	0.000
ILS C - (EW) RASR OM Support #2	MIPR	MARFORPAC (PACOM):Camp Smith, HI	0.660	0.220	Nov 2010	-		-		-	0.000	0.880	0.000
ILS C- TaCBRD ATD	MIPR	SPAWAR:San Diego	-	-		0.300	Nov 2011	-		0.300	0.000	0.300	0.000
ILS C - (EW) PIWID Support-Data Analysis	MIPR		0.600	0.200	Nov 2010	-		-		-	0.000	0.800	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TT4: *TECHBASE TECHNOLOGY TRANSITION (ACD&P)*

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
		Air Force Research Laboratory:Wright Patterson AFB, OH											
ILS C - (EW) PIWID Support-Data Analysis #2	MIPR	JLENS:Huntsville, AL	0.600	0.200	Nov 2010	-		-		-	0.000	0.800	0.000
ILS C-TaCBRD ATD	PO	Sandia National Laboratory:Sandia, NM	-	-		0.200	Nov 2011	-		0.200	0.000	0.200	0.000
ILS C-TaCBRD ATD #2	MIPR	US European Command:Stuttgart, GE	-	-		0.300	Nov 2011	-		0.300	0.000	0.300	0.000
ILS C - (CIP) IP Demo Component Support	MIPR	US Army Natick Soldier RD&E Center:Natick, MA	0.660	0.110	Nov 2010	-		-		-	0.000	0.770	0.000
ILS C - (CIP) JMDSE Support	MIPR	US Army Natick Soldier RD&E Center:Natick, MA	0.600	0.200	Nov 2010	-		-		-	0.000	0.800	0.000
		Subtotal	11.824	4.174		0.800		-		0.800	0.000	16.798	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
** TT DEMO - OTE S - (ART) HaMMER System Testing	MIPR	Army-ECBC:Edgewood, MD	2.250	0.750	Nov 2010	-		-		-	0.000	3.000	0.000
OTE S - (ART) HaMMER T&E Oversight	MIPR	Army-ECBC:Edgewood, MD	1.200	0.400	Nov 2010	-		-		-	0.000	1.600	0.000
OTE C - (EW) MARS JFP Support	MIPR	US Army Environmental Command (AEC):Aberdeen, MD	1.000	0.200	Nov 2010	-		-		-	0.000	1.200	0.000
OTE C - (EW) MARS JFP Support #2	MIPR	Dugway Proving Ground (DPG):DPG, UT	1.300	0.300	Nov 2010	-		-		-	0.000	1.600	0.000
	MIPR		1.125	0.675	Nov 2010	-		-		-	0.000	1.800	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TT4: *TECHBASE TECHNOLOGY TRANSITION (ACD&P)*

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 C - (EW) RASR Component Testing		US Army Environmental Command (AEC):Aberdeen, MD											
OTE C - (EW) RASR Component Testing #2	MIPR	DPG:DPG, UT	1.125	0.675	Nov 2010	-		-		-	0.000	1.800	0.000
OTE C - (EW) RASR Component Testing #3	MIPR	US Army Developmental Test Command:Aberdeen, MD	1.181	0.729	Nov 2010	-		-		-	0.000	1.910	0.000
OTE C - (EW) PIWID Component Testing	MIPR	DPG:DPG, UT	1.200	0.400	Nov 2010	-		-		-	0.000	1.600	0.000
OTE C - (EW) PIWID Component Testing #2	MIPR	JLENS:Huntsville, AL	1.200	0.400	Nov 2010	-		-		-	0.000	1.600	0.000
OTE C-TaCBRD ATD	Allot	DTRA Test and Evaluation (CXT):Albuquerque, NM	-	-		0.300	Nov 2011	-		0.300	0.000	0.300	0.000
OTE C - (CIP) IP Demo T&E	MIPR	US Army Natick Soldier RD&E Center:Natick, MA	4.690	1.200	Nov 2010	-		-		-	0.000	5.890	0.000
OTE C-TaCBRD ATD #2	MIPR	SPAWAR:San Diego, CA	-	-		0.150	Nov 2011	-		0.150	0.000	0.150	0.000
OTE C - (CIP) JMDSE Demo and Evaluation	MIPR	US Army Natick Soldier RD&E Center:Natick, MA	1.200	0.400	Nov 2010	-		-		-	0.000	1.600	0.000
		Subtotal	17.471	6.129		0.450		-		0.450	0.000	24.050	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
** TT DEMO - PM/MS S - HaMMER System Management	MIPR	Army - ECBC:Edgewood, MD	2.013	0.740	Nov 2010	-		-		-	0.000	2.753	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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TT4: *TECHBASE TECHNOLOGY TRANSITION (ACD&P)*

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
PM/MS S - HaMMER System Program Management	MIPR	Army - ECBC:Edgewood, MD	2.529	0.940	Nov 2010	-		-		-	0.000	3.469	0.000
PM/MS S - MARS JFP Program Management	MIPR	Army - ECBC:Edgewood, MD	2.712	0.985	Nov 2010	-		-		-	0.000	3.697	0.000
PM/MS S - RASR Program Management	MIPR	Army - ECBC:Edgewood, MD	2.723	1.500	Nov 2010	-		-		-	0.000	4.223	0.000
PM/MS S - PIWID System Program Management	MIPR	JLENS:Huntsville, AL	0.784	0.300	Nov 2010	-		-		-	0.000	1.084	0.000
PM/MS C - IP Demo Program Management	MIPR	US Army Natick Soldier RD&E Center:Natick, MA	1.256	0.200	Nov 2010	-		-		-	0.000	1.456	0.000
PM/MS C - TaCBRD ATD	MIPR	SPAWAR:San Diego, CA	-	-		0.200	Nov 2011	-		0.200	0.000	0.200	0.000
PM/MS C -TaCBRD ATD	PO	Sandia National Laboratory:Sandia, NM	-	-		0.172	Nov 2011	-		0.172	0.000	0.172	0.000
PM/MS C - JMDSE Program Management	MIPR	US Army Natick Soldier RD&E Center:Natick, MA	0.654	0.248	Nov 2010	-		-		-	0.000	0.902	0.000
		Subtotal	12.671	4.913		0.372		-		0.372	0.000	17.956	0.000

Remarks

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

	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	65.976	26.466		3.022		-		3.022			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 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	PROJECT TT4: *TECHBASE TECHNOLOGY TRANSITION (ACD&P)*

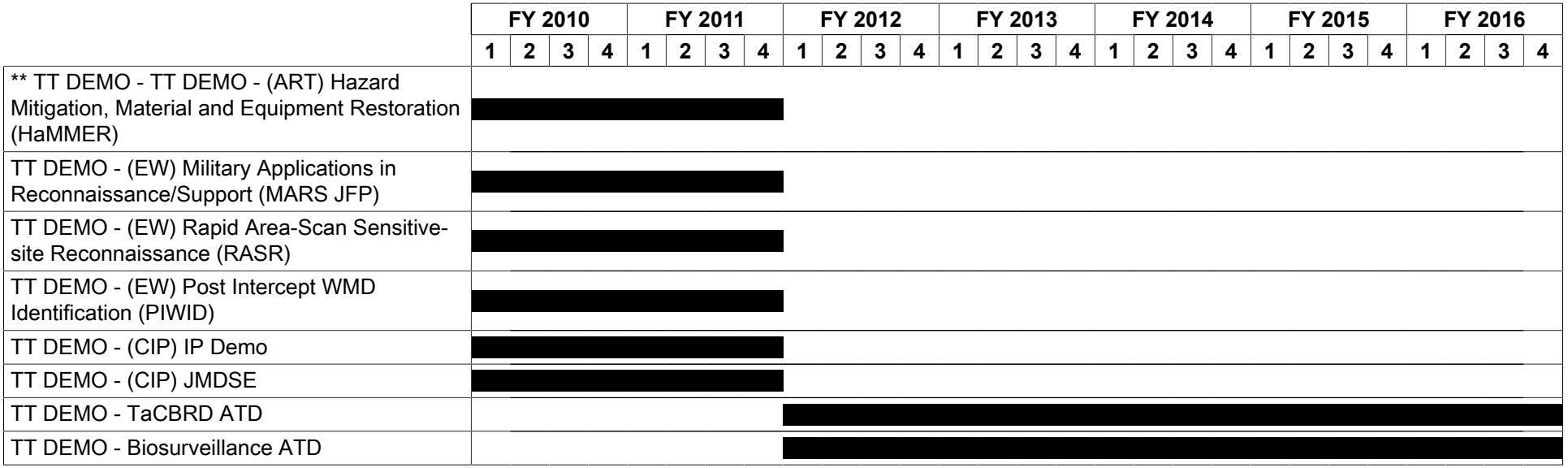

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Chemical and Biological Defense Program		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603884BP: *CHEMICAL/BIOLOGICAL DEFENSE (ACD&P)*	**PROJECT** TT4: *TECHBASE TECHNOLOGY TRANSITION (ACD&P)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
** TT DEMO - TT DEMO - (ART) Hazard Mitigation, Material and Equipment Restoration (HaMMER)	1	2010	4	2011
TT DEMO - (EW) Military Applications in Reconnaissance/Support (MARS JFP)	1	2010	4	2011
TT DEMO - (EW) Rapid Area-Scan Sensitive-site Reconnaissance (RASR)	1	2010	4	2011
TT DEMO - (EW) Post Intercept WMD Identification (PIWID)	1	2010	4	2011
TT DEMO - (CIP) IP Demo	1	2010	4	2011
TT DEMO - (CIP) JMDSE	1	2010	4	2011
TT DEMO - TaCBRD ATD	1	2012	4	2016
TT DEMO - Biosurveillance ATD	1	2012	4	2016