

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>
---	---

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	12.494	6.172	6.634	0.000	6.634	9.317	10.639	14.763	11.873	Continuing	Continuing
IP7: <i>INDIVIDUAL PROTECTION OPERATIONAL SYS DEV</i>	4.560	0.000	0.000	0.000	0.000	2.869	4.371	7.548	4.681	Continuing	Continuing
IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>	0.897	1.302	1.821	0.000	1.821	1.669	1.518	1.555	1.577	Continuing	Continuing
TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>	7.037	4.870	4.813	0.000	4.813	4.779	4.750	5.660	5.615	Continuing	Continuing

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

This program element provides development efforts to upgrade systems in the Department of Defense (DoD) Chemical Biological Defense Program that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

Efforts in this program element support the upgrade of fielded CB defense equipment against emerging chemical threat agents and toxic industrial chemicals. Specifically this program supports (1) the upgrade of individual protection systems, (2) the JPEO-CBD Software Support Activity (SSA), and (3) revitalization and technical upgrade of existing instrumentation and equipment at Dugway Proving Ground (DPG).

**UNCLASSIFIED**

R-1 Line Item #181

Page 1 of 31

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b>	<b>R-1 ITEM NOMENCLATURE</b>
0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i>	PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>
BA 7: <i>Operational Systems Development</i>	

**B. Program Change Summary (\$ in Millions)**

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	12.640	6.198	0.000	0.000	0.000
Current President's Budget	12.494	6.172	6.634	0.000	6.634
Total Adjustments	-0.146	-0.026	6.634	0.000	6.634
• Congressional General Reductions		-0.026			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.146	0.000			
• Other Adjustments	0.000	0.000	6.634	0.000	6.634

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

**Project:** IP7: *INDIVIDUAL PROTECTION OPERATIONAL SYS DEV*

Congressional Add: 1) *JCEIII*

	<u>FY 2009</u>	<u>FY 2010</u>
	2.371	0.000
Congressional Add Subtotals for Project: IP7	2.371	0.000
Congressional Add Totals for all Projects	2.371	0.000

**Change Summary Explanation**

Funding: N/A - Adjustments less than 10% of total program.

Schedule: N/A

Technical: N/A

**UNCLASSIFIED**

R-1 Line Item #181

Page 2 of 31

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program								<b>DATE:</b> February 2010				
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>				<b>PROJECT</b> IP7: <i>INDIVIDUAL PROTECTION OPERATIONAL SYS DEV</i>				
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	
IP7: <i>INDIVIDUAL PROTECTION OPERATIONAL SYS DEV</i>	4.560	0.000	0.000	0.000	0.000	2.869	4.371	7.548	4.681	Continuing	Continuing	
Quantity of RDT&E Articles												
<b>A. Mission Description and Budget Item Justification</b>												
This project provides developmental efforts to upgrade fielded Individual Protection (IP) systems to include battle dress uniform, gloves, footwear and masks for protection against Non-Traditional Agents.												
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>												
							<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
1) JSGPM Filtration - <i>FY 2009 Accomplishments:</i> Initiated IPT to explore integration concepts.							1.639	0.000	0.000	0.000	0.000	
2) ESLI - <i>FY 2009 Accomplishments:</i> Conducted critical design review for End-of-Service Life Indicator (ESLI), and fabricated final prototype.							0.550	0.000	0.000	0.000	0.000	
Accomplishments/Planned Programs Subtotals							2.189	0.000	0.000	0.000	0.000	
							<b>FY 2009</b>	<b>FY 2010</b>				
Congressional Add: 1) JCEIII							2.371	0.000				

**UNCLASSIFIED**

R-1 Line Item #181

Page 3 of 31

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IP7: <i>INDIVIDUAL PROTECTION OPERATIONAL SYS DEV</i>
---	---	---

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

	FY 2009	FY 2010
<i>FY 2009 Accomplishments:</i> Congressional Interest Item - JSGPM Filtration. Initiated IPT to explore integration concepts, develop new performance specification with increase Toxic Industrial Chemicals (TIC) requirements, start filter qualification. Awarded contract for new filtration development.		
Congressional Adds Subtotals	2.371	0.000

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

N/A

**D. Acquisition Strategy**

LCBE

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

**LCBE INCREMENT 1**

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

**UNCLASSIFIED**

R-1 Line Item #181

Page 4 of 31

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IP7: <i>INDIVIDUAL PROTECTION OPERATIONAL SYS DEV</i>
<p>Future increments of LCBE shall be defined via separate Capability Development Document (CDDs)/Capability Production Document (CPDs) and will follow a similar path/process from MS A or MS B through MS C/FRP and will leverage preceding efforts to the greatest extent possible, maintaining commonality and synergy across all increments.</p> <p><b><u>E. Performance Metrics</u></b> N/A</p>		

**UNCLASSIFIED**

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IP7: <i>INDIVIDUAL PROTECTION OPERATIONAL SYS DEV</i>
---	---	---

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
** LCBE - Initiate IPT	■	■	■	■																									
Fabricate ESLI Prototype		■	■																										
ESLI Test & Evaluation		■	■	■	■																								

**UNCLASSIFIED**

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IP7: <i>INDIVIDUAL PROTECTION OPERATIONAL SYS DEV</i>
---	---	---

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** LCBE - Initiate IPT	1	2009	4	2009
Fabricate ESLI Prototype	2	2009	3	2009
ESLI Test & Evaluation	2	2009	1	2010

**UNCLASSIFIED**

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>				<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>	0.897	1.302	1.821	0.000	1.821	1.669	1.518	1.555	1.577	Continuing	Continuing
Quantity of RDT&E Articles											

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

The project supports the JPEO-CBD Software Support Activity (SSA). The JPEO-CBD SSA is a JPEO-CBD enterprise-wide, user developmental support and Service organization focusing on development assistance and net-centric interoperability. The SSA provides the CBRN Warfighter with Joint Service solutions for Information Assurance, Verification, Validation and Accreditation (VV&A), and Data Management; interoperable and integrated net-centric, Service-oriented, composable solutions for CBD; and infusion of latest technologies into programs of record. CBRN user community and related communities of interest have need for CBRN "plug and play" capability to allow interoperability and re-configurability across the enterprise. The requirement for net-centric, composable solutions provides the near term foundation for the Warfighter's ability to communicate his CBRN solutions and interoperate with other Service operational systems. It also supports a longer term ability to interoperate with related agencies and to reduce the Warfighter's CBRN footprint as technologies improve.

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

	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
1) SSA Integrated Architectures Support <i>FY 2009 Accomplishments:</i> Provided and updated program of record integrated architectures.  <i>FY 2010 Plans:</i> Continue to provide and update program of record integrated architectures.  <i>FY 2011 Base Plans:</i> Continue to provide and update program of record integrated architectures.	0.117	0.162	0.224	0.000	0.224
2) SSA Chemical, Biological, Radiological, Nuclear (CBRN) Data Model	0.108	0.153	0.244	0.000	0.244

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program				<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>				
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>						
		<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
<p><i>FY 2009 Accomplishments:</i> Analyzed requirements and assisted programs with implementation of the CBRN data model.</p> <p><i>FY 2010 Plans:</i> Continue to analyze requirements and assist programs with implementation of the CBRN data model.</p> <p><i>FY 2011 Base Plans:</i> Continue to analyze requirements and assist programs with implementation of the CBRN data model.</p>						
<p>3) SSA CBRN Data Model Support</p> <p><i>FY 2009 Accomplishments:</i> Provided CBRN Data Model Reference implementations.</p> <p><i>FY 2010 Plans:</i> Continue to provide CBRN Data Model Reference implementations.</p> <p><i>FY 2011 Base Plans:</i> Continue to provide CBRN Data Model Reference implementations.</p>		0.083	0.162	0.228	0.000	0.228
<p>4) SSA CBRN Data Model Updates</p> <p><i>FY 2009 Accomplishments:</i> Supported CBRN Data Model updates.</p> <p><i>FY 2010 Plans:</i> Continue to support CBRN Data Model updates.</p> <p><i>FY 2011 Base Plans:</i> Continue to support CBRN Data Model updates.</p>		0.051	0.100	0.140	0.000	0.140

**UNCLASSIFIED**

R-1 Line Item #181

Page 9 of 31

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program				<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>		<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>		
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>						
		<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
5) SSA Information Assurance Compliance Testing <i>FY 2009 Accomplishments:</i> Provided Information Assurance compliance testing for JPEO-CBD programs.  <i>FY 2010 Plans:</i> Continue to provide Information Assurance compliance testing for JPEO-CBD programs.  <i>FY 2011 Base Plans:</i> Continue to provide Information Assurance compliance testing for JPEO-CBD programs.		0.058	0.123	0.173	0.000	0.173
6) SSA Modeling and Simulation Support <i>FY 2009 Accomplishments:</i> Provided Modeling and Simulation IPT and Accreditation Steering Group support.  <i>FY 2010 Plans:</i> Provide Modeling and Simulation IPT and Accreditation Steering Group support.  <i>FY 2011 Base Plans:</i> Provide Modeling and Simulation IPT and Accreditation Steering Group support.		0.121	0.153	0.208	0.000	0.208
7) SSA Enterprise Information Support Plans <i>FY 2009 Accomplishments:</i> Provided Information Support Plan (ISP) development support for JPEO-CBD programs.  <i>FY 2010 Plans:</i> Continue to provide ISP development support for JPEO-CBD programs.		0.116	0.179	0.248	0.000	0.248

**UNCLASSIFIED**

R-1 Line Item #181

Page 10 of 31

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program				<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>				
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>						
		<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
<i>FY 2011 Base Plans:</i> Continue to provide ISP development support for JPEO-CBD programs.						
8) SSA Help Desk <i>FY 2009 Accomplishments:</i> Provided developmental Help Desk support for JPEO-CBD programs and users until they transitioned to sustainment funding.		0.075	0.000	0.000	0.000	0.000
9) SSA <i>FY 2009 Accomplishments:</i> Provided Net-Centric Policy implementation assistance.  <i>FY 2010 Plans:</i> Continue to provide Net-Centric Policy implementation assistance.  <i>FY 2011 Base Plans:</i> Continue to provide Net-Centric Policy implementation assistance.		0.066	0.087	0.123	0.000	0.123
10) SSA <i>FY 2009 Accomplishments:</i> Provided Common CBRN Sensor Interface (CCSI) reference implementation guidance.  <i>FY 2010 Plans:</i> Provide CCSI reference implementation guidance.  <i>FY 2011 Base Plans:</i> Provide CCSI reference implementation guidance.		0.064	0.084	0.118	0.000	0.118

**UNCLASSIFIED**

R-1 Line Item #181

Page 11 of 31

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>
---	---	--

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
11) SSA <i>FY 2009 Accomplishments:</i> Supported CCSI updates.  <i>FY 2010 Plans:</i> Support CCSI updates.  <i>FY 2011 Base Plans:</i> Support CCSI updates.	0.038	0.083	0.115	0.000	0.115
12) SBIR <i>FY 2010 Plans:</i> Small Business Innovative Research.	0.000	0.016	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals	0.897	1.302	1.821	0.000	1.821

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

N/A

**D. Acquisition Strategy**

SSA

The JPEO-CBD Software Support Activity (SSA) is a JPEO-CBD user support organization spanning and supporting all Joint Project Managers (JPMs) and JPEO-CBD Directorates. The SSA provides enterprise-wide services and coordination across all JPEO-CBD Programs of Record (PORs) that contain data or software, or are capable of linking to the Global Information Grid (GIG). The SSA facilitates interoperability, integration, and supportability of existing and developing IT and National Security Systems (NSS) across the JPEO and all JPMs.

**UNCLASSIFIED**

R-1 Line Item #181

Page 12 of 31

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>
<p>Phase 1a identifies JPEO-CBD JPMs and programs that deal with data or software, and have an IT component. This will be followed by coordination with the JPMs and programs to facilitate the concepts of interoperability, integration and supportability of enterprise-wide services. Next follows work with user communities to develop and demonstrate enterprise-wide common architectures, products and services. [BA5 - System Development and Demonstration].</p> <p>Phase 1b established management and control measures for tracking and reporting progress of the various elements described in Phases 1 and 2. This includes establishing, tracking, and performing configuration management of inventories and databases of IT systems and their states of interoperability and information assurance compliance. [BA6 - RDT&amp;E Management Support].</p> <p>Phase 2 will support the application of the enterprise-wide architectures, products and services into the programs, with verification of compliance with the defined products and services. [BA7 - Operational Systems Development].</p> <p><b><u>E. Performance Metrics</u></b> N/A</p>		

**UNCLASSIFIED**

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>
---	---	--

**Product Development (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** SSA - Development Services	MIPR	SPAWAR System Center San Diego, CA	0.602	0.393	Oct 2009	0.609	Oct 2010	0.000		0.609	0.000	1.604	0.000
<b>Subtotal</b>			0.602	0.393		0.609		0.000		0.609	0.000	1.604	0.000

**Remarks**

**Support (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** SSA - Develop Support Activities	MIPR	SPAWAR Systems Center San Diego, CA	0.555	0.408	Oct 2009	0.628	Oct 2010	0.000		0.628	0.000	1.591	0.000
<b>Subtotal</b>			0.555	0.408		0.628		0.000		0.628	0.000	1.591	0.000

**Remarks**

**UNCLASSIFIED**

R-1 Line Item #181

Page 14 of 31

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>
---	---	--

**Test and Evaluation (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** SSA - Integration Verification and Valuation (IV&V)	MIPR	SPAWAR Systems Center San Diego, CA	0.425	0.485	Oct 2009	0.584	Oct 2010	0.000		0.584	0.000	1.494	0.000
<b>Subtotal</b>			0.425	0.485				0.000		0.584	0.000	1.494	0.000

**Remarks**

**Management Services (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** ZSBIR - SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	MIPR	HQ AMC, Alexandria	0.000	0.016		0.000		0.000		0.000	0.000	0.016	0.000
<b>Subtotal</b>			0.000	0.016				0.000		0.000	0.000	0.016	0.000

**Remarks**

Project Cost Totals	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	1.582	1.302		1.821		0.000		1.821	0.000	4.705	0.000

**UNCLASSIFIED**

R-1 Line Item #181

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>
---	---	--

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

**Remarks**

**UNCLASSIFIED**

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>
---	---	--

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
** SSA - Provide Data Model Implementation Guidance	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Provide Enterprise Architecture Products and Services	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Provide Information Assurance Site Compliance Testing	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Provide Integration and Test, M&S, VV&A Certification and Accreditation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Demonstrate Technology Transition Capabilities	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Provide CM Services for Common User Products and Services	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Provide Net-Centric Assessment and assist programs with implementation of policy	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Develop and provide CBRN Data Model implementation guidance, including reference implementations	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Architecture advisory services to support Warfighter Enterprise and Program Integrated Architectures	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Demonstrate, Verify, Test Technology Transition capabilities especially for Common Components and Services	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

**UNCLASSIFIED**

R-1 Line Item #181

Page 17 of 31

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>
---	---	--

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Provide Information Assurance Certification/ Acceptance products/services, including compliance testing																																
Provide Modeling, Simulation, VV&A, Integration/Test support and interoperability demonstrations.	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Provide FISMA and J6 Interoperability certification support	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Provide CBRN Interface Standards, including reference implementations, e.g. Common CBRN Sensor Interface	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sustain CBRN Data Model	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sustain CCSI, including investigation, as an industry standard	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

**UNCLASSIFIED**

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>
---	---	--

**Schedule Details**

Event	Start		End	
	Quarter	Year	Quarter	Year
** SSA - Provide Data Model Implementation Guidance	1	2008	4	2015
Provide Enterprise Architecture Products and Services	3	2007	4	2015
Provide Information Assurance Site Compliance Testing	3	2006	4	2015
Provide Integration and Test, M&S, VV&A Certification and Accreditation	2	2007	4	2015
Demonstrate Technology Transition Capabilities	1	2008	4	2015
Provide CM Services for Common User Products and Services	1	2008	4	2015
Provide Net-Centric Assessment and assist programs with implementation of policy	4	2007	4	2015
Develop and provide CBRN Data Model implementation guidance, including reference implementations	1	2008	4	2015
Architecture advisory services to support Warfighter Enterprise and Program Integrated Architectures	1	2008	4	2015
Demonstrate, Verify, Test Technology Transition capabilities especially for Common Components and Services	1	2008	4	2015
Provide Information Assurance Certification/Acceptance products/services, including compliance testing	1	2008	4	2015
Provide Modeling, Simulation, VV&A, Integration/Test support and interoperability demonstrations.	1	2008	4	2015
Provide FISMA and J6 Interoperability certification support	1	2008	4	2015
Provide CBRN Interface Standards, including reference implementations, e.g. Common CBRN Sensor Interface	1	2008	4	2015

**UNCLASSIFIED**

R-1 Line Item #181

Page 19 of 31

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> IS7: <i>INFORMATION SYSTEMS (OP SYS DEV)</i>
---	---	--

Event	Start		End	
	Quarter	Year	Quarter	Year
Sustain CBRN Data Model	1	2008	4	2015
Sustain CCSI, including investigation, as an industry standard	1	2008	4	2015

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>				<b>PROJECT</b> TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>	7.037	4.870	4.813	0.000	4.813	4.779	4.750	5.660	5.615	Continuing	Continuing
Quantity of RDT&E Articles											
<b>A. Mission Description and Budget Item Justification</b>											
This project provides revitalization and technology upgrades of existing instrumentation and equipment at Dugway Proving Ground (DPG), a Major Range and Test Facility Base (MRTFB), in support of their Chemical Biological test mission.											
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>											
						<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	
1) DPG - MRTFB						1.790	0.904	0.866	0.000	0.866	
<i>FY 2009 Accomplishments:</i> Provided upgrades of the Life Sciences Test Facility instrumentation and equipment at Dugway Proving Ground (DPG), in support of their CB defense mission. This is the only U.S. facility equipped to test with aerosolized Bio-Safety Level 3 (BSL-3) agents. Upgrades and technology enhancements included: (1) Replacement of old Scanning Electron Microscopes, light microscopes, and old Aerodynamic Particle Sizers with newer Fluorescent Aerodynamic Particle Sizers. These items are replaced using a phased approach over several years; (2) Development of biological aerosols in various conditions inside the test chambers; (3) Full characterization of biological aerosols in various conditions inside the test chambers; (4) An automated aerosol dissemination systems that will vary the concentration of the aerosol cloud; (5) New methods of sampling biologics using mimetics; (6) Development of a deployable Polymerase Chain Reaction sampling system for use in the field testing of biological detection systems; (7) Continued upgrades/improvements to the Containment Aerosol Chamber (CAC) with capability to create environmental conditions with varying combinations of air											

**UNCLASSIFIED**

R-1 Line Item #181

Page 21 of 31

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>

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

	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
<p>temperature and relative humidity; and, (8) Continued procurement of microbiological laboratory equipment needed to utilize new Bio-Safety level 3 laboratories.</p> <p><i>FY 2010 Plans:</i> Provides upgrades of the Life Sciences Test Facility instrumentation and equipment at Dugway Proving Ground (DPG), in support of their CB defense mission. This is the only U.S. facility equipped to test with aerosolized Bio-Safety Level 3 (BSL-3) agents. Upgrades and technology enhancements include the following: (1) Replacement of a Scanning Electron Microscope and light microscopes; (2) Replacement of Aerodynamic Particle Sizers with newer Fluorescent Aerodynamic Particle Sizers; (3) Full characterization of biological aerosols in various conditions inside the test chambers; (4) An automated liquid aerosol dissemination systems that will vary concentrations of aerosols in chamber and field clouds; (5) Procure aerosol samplers for chamber and field testing; (6) Continued upgrades/improvements to the Containment Aerosol Chamber (CAC) with capability to create environmental conditions with varying combinations of air temperature and relative humidity; and, (7) Continued procurement of microbiological laboratory equipment needed to utilize new Bio-Safety level 3 laboratories.</p> <p><i>FY 2011 Base Plans:</i> Provides upgrades of the Life Sciences Test Facility instrumentation and equipment at Dugway Proving Ground (DPG), in support of their CB defense mission. This is the only U.S. facility equipped to test with aerosolized Bio-Safety Level 3 (BSL-3) agents. Upgrades and technology enhancements include the following: (1) Regular replacement of aging Aerodynamic Particle Sizers with newer Fluorescent Aerodynamic Particle Sizers; (2) Full characterization of biological aerosols in various conditions out in the field; (3) An automated dry powder dissemination system that will vary the concentration of aerosols in test chambers and in the field; (4) Procure aerosol samplers for chamber and field tests; (5) Continue to enhance genotyping system and procure genotyping analysis software; (6) Upgrade aerosol particles generation capabilities for standoff and point detector characterization;</p>					

**UNCLASSIFIED**

R-1 Line Item #181

Page 22 of 31

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program				<b>DATE:</b> February 2010	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>		<b>PROJECT</b> TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>	
<b>B. Accomplishments/Planned Program (\$ in Millions)</b>					
and, (7) Continued procurement of microbiological laboratory equipment needed to fully utilize Bio-Safety level 3 laboratories.					
2) DPG - MRTFB					
<i>FY 2009 Accomplishments:</i> Provided for modernization of existing instrumentation and equipment in the major test chambers at DPG, in support of the CB defense mission. These consisted of the following: (1) the Materiel Test Facility which is a unique test chamber where real-world decontamination operations can be tested; (2) Building 4165, which houses updated chemical-surety test facilities and laboratories used for the testing of chemical protective material with chemical agents and simulants; and, (3) Building 3445, which houses two large chambers where testing of large panel decontaminants, filter systems, and Individual Protection Equipment (IPE) in a chemical environment is conducted. Modernization of instrumentation in the chambers included: (1) Continued development of a chemical aerosol generation and sampling capability; and, (2) Characterization of improved and/or articulated testing fixtures.					
<i>FY 2010 Plans:</i> Provides for modernization of existing instrumentation and equipment in the major test chambers at DPG, in support of the CB defense mission. These consist of the following: (1) the Materiel Test Facility which is a unique test chamber where real-world decontamination operations can be tested; (2) Building 4165, which houses updated chemical-surety test facilities and laboratories used for the testing of chemical protective material with chemical agents and simulants, and (3) Bldg 3445, which houses two large chambers where testing of large panel decontaminants, filter systems, and Individual Protection Equipment (IPE) in a chemical environment is conducted. Modernization of instrumentation in the chambers included: (1) Continued development of a chemical aerosol generation and sampling capability; (2) Characterization of improved and/or articulated testing fixtures; (3) Enhanced toxic industrial chemical detection and control capability; and (4) Initial enhancements in preparation for non traditional agent test capability.					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
	1.980	1.020	1.059	0.000	1.059

**UNCLASSIFIED**

R-1 Line Item #181

Page 23 of 31







**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Chemical and Biological Defense Program		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A		
<b>D. Acquisition Strategy</b> T&E UPGRAD  T&E Range Instrumentation/Technology Upgrades is a continuing project. It provides for technical upgrades to DPG capabilities for Chemical and Biological training and testing DoD Chemical and Biological (CB) materiel, weapons, and weapons systems from concept through production.		
<b>E. Performance Metrics</b> N/A		

**UNCLASSIFIED**

R-1 Line Item #181

Page 27 of 31

**UNCLASSIFIED**

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

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>
---	---	--

**Test and Evaluation (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** T&E UPGRAD - Technology Upgrades - DPG, UT	C/FP	Dugway Proving Grounds DPG, UT	13.924	4.811	Jan 2010	4.813	Jan 2011	0.000		4.813	0.000	23.548	0.000
<b>Subtotal</b>			13.924	4.811		4.813		0.000		4.813	0.000	23.548	0.000

**Remarks**

**Management Services (\$ in Millions)**

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
** ZSBIR - SBIR/STTR - Aggregated from ZSBIR-SBIR/STTR	MIPR	HQ AMC, Alexandria	0.000	0.059		0.000		0.000		0.000	0.000	0.059	0.000
<b>Subtotal</b>			0.000	0.059		0.000		0.000		0.000	0.000	0.059	0.000

**Remarks**

Project Cost Totals	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
		Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Project Cost Totals</b>	13.924	4.870		4.813		0.000		4.813	0.000	23.607	0.000

**UNCLASSIFIED**

R-1 Line Item #181

Page 28 of 31

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2011 Chemical and Biological Defense Program							<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>			<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>			<b>PROJECT</b> TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>			
	<b>Total Prior Years Cost</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
<b>Remarks</b>									

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2011 Chemical and Biological Defense Program		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
** T&E UPGRAD - LSTF Instrumentation & Equip Upgrades, DPG	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Modernization of Major Test Chambers, DPG	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Enhance Instrumentation & Equip at Target S, Downwind, & Tower CB Test Grids, DPG	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Revitalize & Upgrade Instrumentation & Equip at Combined Chemical Test Facility, DPG	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2011 Chemical and Biological Defense Program		<b>DATE:</b> February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0607384BP: <i>CHEMICAL/BIOLOGICAL DEFENSE (OP SYS DEV)</i>	<b>PROJECT</b> TE7: <i>TEST &amp; EVALUATION (OP SYS DEV)</i>

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
** T&E UPGRAD - LSTF Instrumentation & Equip Upgrades, DPG	2	2008	2	2016
Modernization of Major Test Chambers, DPG	2	2008	2	2016
Enhance Instrumentation & Equip at Target S, Downwind, & Tower CB Test Grids, DPG	2	2008	2	2016
Revitalize & Upgrade Instrumentation & Equip at Combined Chemical Test Facility, DPG	2	2008	2	2016

**UNCLASSIFIED**

R-1 Line Item #181

Page 31 of 31