Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Chemical and Biological Defense Program

**Date:** May 2017

Appropriation/Budget Activity

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6:

RDT&E Management Support

#### R-1 Program Element (Number/Name)

PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT)

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	-	100.269	85.754	104.348	-	104.348	103.954	102.283	104.232	104.530	Continuing	Continuing
DT6: JOINT DOCTRINE AND TRAINING SUPPORT (RDT&E MGT SUPPORT)	-	1.550	3.185	3.600	-	3.600	3.600	3.600	3.600	3.600	Continuing	Continuing
DW6: MAJOR RANGE AND TEST FACILITY BASE (MRTFB)	-	50.777	50.639	53.164	-	53.164	52.862	53.039	53.673	53.673	Continuing	Continuin
LS6: LABORATORY SUPPORT	-	9.607	9.339	13.864	-	13.864	13.655	12.949	13.202	13.202	Continuing	Continuin
MS6: RDT&E MGT SUPPORT	-	37.035	21.212	32.220	-	32.220	32.337	31.195	32.257	32.555	Continuing	Continuin
O49: JOINT CONCEPTS, STUDIES, AND ANALYSES (JCSA)	-	1.300	1.379	1.500	-	1.500	1.500	1.500	1.500	1.500	Continuing	Continuing

## A. Mission Description and Budget Item Justification

This Budget Activity includes research, development, testing and evaluation management support for the Department of Defense (DoD) Chemical and Biological Defense Program (CBDP).

Program Element 0605384BP supports Joint Doctrine and Training (Project DT6), sustains the technical test capability at West Desert Test Center (WDTC) (Project DW6); sustains the core Department of Defense (DoD) Science and Technology (S&T) laboratory infrastructure (Project LS6), provides for program management and financial management support (Project MS6), and supports the Joint Concepts, Studies, and Analysis (JCSA) program (Project O49).

The Joint Training and Doctrine Support (DT6) project supports the development of Joint Doctrine and Tactics, Techniques, and Procedures (TTPs) for developing CB defense systems. This project also supports CB modeling and simulation to support the Warfighter.

The Major Range and Test Facility Base (MRTFB) is a set of test installations, facilities, and ranges which are regarded as "national assets". These assets are sized, operated, and maintained primarily for DoD test and evaluation missions. However, the MRTFB facilities and ranges are also available to commercial and other users on a reimbursable basis. WDTC is designated as the primary element of the MRTFB to primarily conduct CB Defense test and evaluation. The DW6 Project provides operating support to WDTC and BTB-ECBC, also part of the MRTFB, to ensure that DoD test customers are only charged direct costs of testing and that overhead expenses are centrally funded. It finances the required institutional test operating costs. Institutional test operating costs include institutional civilian and contractor labor; repair and maintenance of test instrumentation, equipment, and facilities; and replacement of test equipment.

The Laboratory Support (LS6) project includes laboratory infrastructure to maintain and enhance DoD infrastructure capabilities to counter an expanding threat space. exploit advances in technology; and develop and transition CB defense equipment and countermeasures to the Warfighter.

PE 0605384BP: CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT S... UNCLASSIFIED Chemical and Biological Defense Program

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R-1 Line #152

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Chemical and Biological Chemical and Biological Chemical and Biological Chemical Che	Date: May 2017	
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	
0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6:	PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (	RDT&E MGT SUPPORT)
RDT&E Management Support		

The management support (MS6) project, provides management support for the DoD CBDP to allow program overview and integration of overall medical and non-medical programs by the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs (ASD(NCB)), through the Deputy Assistant Secretary of Defense for Chemical Biological Defense Programs (DATSD(CBD)); funds management by the Defense Threat Reduction Agency (DTRA); Development, coordination, and approval of joint CBRND requirements, management of multi-service and joint CBRND doctrine, tactics, techniques and procedures; training, leader development, education, exercises, and development of the CBDP Program Objective Memorandum (POM) by the Joint Requirements Office; Joint RDA planning, input to the Annual Report to Congress and Program Objective Memorandum (POM) development by the Program Analysis and Integration Office (PAIO); review of Joint plans and the consolidated CB Defense POM Strategy by Army in its Executive Agent role.

The management support project also includes the Test and Evaluation (T&E) Executive mission to establish test infrastructure investment strategy and adequate testing for Developmental Testing (DT) and Operational Testing (OT) of Department of Defense (DoD) Chemical Biological Defense (CBD) systems and components throughout the systems' acquisition life cycle, as required in the RDA Plan under the Joint Test Infrastructure Working Group (JTIWG) program. The JTIWG program includes T&E Early Involvement, test threat planning, Fielded Equipment Assessments, T&E studies, and T&E Standards planning and development to support testing the CBD systems for all services to include radiological, nuclear, medical T&E efforts.

The Joint Concepts, Studies, and Analysis (JCSA) program (Project O49) project supports the planning, conduct, evaluation, and reporting on Joint tests (for other than developmental hardware) and accomplishment of operational research assessments in support of requirements received from the Services and the Combatant Commanders for already fielded equipment and systems.

This Budget Activity also provides for Program Element 0605502BP, which supports the Small Business Innovative Research (SBIR) program. The overall objective of the CBD SBIR program is to improve the transition or transfer of innovative CBD technologies between DoD components and the private sector for mutual benefit. The CBD program includes those technology efforts that maximize a strong defensive posture in a CB environment using passive and active means as deterrents. These technologies include CB detection; information assessment (identification, modeling, and intelligence); contamination avoidance; and protection of both individual soldiers and equipment.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Chemical and Biological Defense Program

**Date:** May 2017

Appropriation/Budget Activity

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6:

R-1 Program Element (Number/Name)

PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT)

RDT&E Management Support

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	102.238	85.754	117.960	-	117.960
Current President's Budget	100.269	85.754	104.348	-	104.348
Total Adjustments	-1.969	0.000	-13.612	-	-13.612
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	0.000	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	0.000	-			
<ul> <li>Reprogrammings</li> </ul>	-1.969	-			
SBIR/STTR Transfer	0.000	-			
Other Adjustments	0.000	-	-13.612	-	-13.612

## **Change Summary Explanation**

Funding: FY18 - Adjustements due to underexecution and fact-of-life changes (\$13M).

Schedule: N/A

Technical: N/A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and Biological Defense Program									Date: May	2017		
Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT) Project (Number/Name) DT6 I JOINT DOCTRINE AND TRA							
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
DT6: JOINT DOCTRINE AND TRAINING SUPPORT (RDT&E MGT SUPPORT)	-	1.550	3.185	3.600	-	3.600	3.600	3.600	3.600	3.600	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

The activities of this project directly support the Joint Service CB defense program; in particular, the development of Joint Chemical, Biological, Radiological, and Nuclear (CBRN) defense capability requirements and the improvement of CBRN defense related doctrine, education, training, and awareness at the Joint and Service levels. This effort provides for: (1) Development, coordination, and integration of Joint CBRN defense capability requirements; (2) Development/revision of medical and non-medical CBRN defense Multi-Service Tactics, Techniques, and Procedures (MTTP) and development/revision of Joint Doctrine and Tactics, Techniques, and Procedures (JTTP); (3) The CBDP Joint Senior Leader Course (JSLC); (4) Assistance in correcting training and doctrine deficiencies covered in the lessons learned process, combat operations, capability development studies and Department of Defense Inspector General (DODIG) and Government Accountability Office (GAO) reports and; (5) Support of current and planned CBRN defense studies, analysis, training, exercises, and war games; determine overlaps, duplication, and shortfalls; and build and execute programs to correct shortfalls in all aspects of CBRN defense across all DoD mission areas.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: 1) JRO DT	1.550	3.185	3.600
<b>Description:</b> The purpose of this requirement is to provide technical and subject matter expert (SME) support in the areas of: related Chemical, Biological, Radiological, and Nuclear Defense (CBRND)/Countering Weapons of Mass Destruction (CWMD); Joint and Multi-Service doctrine development; Joint and Service training, leadership development, education, and exercises.			
Specifically, support is needed to:			
1. Conduct technical reviews of Joint and Multi-service CBRN Defense/CWMD doctrinal materials and develop CBRND/CWMD related MTTP manuals.			
2. Plan and conduct CBRN defense/CWMD Joint Professional Military Education (JPME).			
3. Provide CBRN defense/CWMD planning, execution and SME support to Combatant Command (CCMD) and Joint Task Force (JTF) level exercises.			
4. Conduct staff and leader CBRN defense/CWMD training for CCMD and JTF level commands.			
Provides support to the National Defense University (NDU) Center for the Study of Weapons of Mass Destruction (WMD) to support their efforts as the Chairman's focal point for CWMD JPME.			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical a	<b>Date:</b> May 2017			
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT)	Project (Number/ DT6 / JOINT DOC SUPPORT (RDT&		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
FY 2016 Accomplishments: Supported Joint and Multi-service doctrine development. This incl MTTPs. Supported COCOM scenario development and controller, training efforts at various Joint Senior Leadership schools.	·			
FY 2017 Plans: Support Joint and Multi-service doctrine development. This include MTTPs. JRO will continue to support COCOM scenario developmexercises. JRO will continue to support training efforts at various of the continue training efforts at various of the continue training efforts at various of the continue training efforts at various	nent and controller/evaluator training by providing SMEs to			
FY 2018 Plans: Support Joint and Multi-service doctrine development. This include MTTPs. JRO will continue to support COCOM scenario developmexercises. JRO will continue to support training efforts at various of the continue training efforts at various of the continue training efforts	nent and controller/evaluator training by providing SMEs to			

**Accomplishments/Planned Programs Subtotals** 

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

N/A

Remarks

## D. Acquisition Strategy

N/A

## E. Performance Metrics

N/A

1.550

3.185

3.600

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and Biological Defense Program									Date: May	2017		
0400 / 6						PE 0605384BP I CHEMICAL/BIOLOGICAL DW6 I MA				lumber/Name) JOR RANGE AND TEST BASE (MRTFB)		
COST (\$ in Millions)	COST (\$ in Millions)						FY 2021	FY 2022	Cost To Complete	Total Cost		
DW6: MAJOR RANGE AND TEST FACILITY BASE (MRTFB)	-	50.777	50.639	53.164	-	53.164	52.862	53.039	53.673	53.673	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

Project provides the technical and operational capability for testing Department of Defense (DoD) Chemical and Biological (CB) defense materiel, equipment, and systems from concept through production to include associated special operations Tactics, Techniques and Procedures Development (TTPD) activities at West Desert Test Center (WDTC), and the Biological Test Branch of the Edgewood Chemical and Biological Center (BTB-ECBC), both part of the Major Range and Test Facility Base (MRTFB) located at Dugway Proving Ground (DPG). Project provides overhead (institutional) funding required to operate WDTC and BTB-ECBC in compliance with Section 232 of the National Defense Authorization Act (NDAA) for FY03 (Public Law 107-314 - December 2002).

WDTC and BTB-ECBC are the reliance center for all DoD CB defense testing and provide the United States' only combined range, chamber, toxic chemical lab, and biosafety level-3 (BSL-3) test facility. Total institutional test operating costs are to be provided by the OSD Chemical and Biological Defense Program IAW Program Budget Decision 250 (1996).

WDTC and BTB-ECBC use state-of-the-art chemical and life sciences test facilities and test chambers to perform CB defense testing of protective gear, decontamination systems, detectors, equipment, and non-material CB defense solutions while maintaining safety, security, and surety of chemical agents and biological pathogens. WDTC also provides test ranges, to include fully instrumented outdoor ranges, for TTPD activities and testing with simulants that can be correlated to the laboratory testing with live agents to ensure reliable and repeatable data is generated to support acquisition decisions of CB defense equipment.

Secretary of the Army has been directed to conduct additional research addressing existing gaps in scientific knowledge encompassing the Biological Select Agents and Toxins (BSAT) Program. The transition of the Bio-Test Branch (BTB) to Edgewood Chemical Biological Center (ECBC) will enable the DoD BSAT Biosafety Program to meet end to end enterprise tracking, reporting, and auditability requirements within an approved Governance, Risks, and Compliance framework. The laboratory commanders and directors are best able to identify potential risk through the use of local risk assessments and are responsible to promote cultures of safety and responsibility. Direct liaison with and oversight by the EA-RO will ensure laboratory directors or MRTFB commander are empowered and supported in their operational environment. The ultimate responsibility for the safe and secure receipt, storage, handling, shipment and transfer of BSAT resides with the laboratory director or MRTFB commander in accordance with Army, Navy, Air Force, and Federal policies and regulations. The implementation of a structured BSAT Biosafety Program includes clear standards and procedures, policy and regulations, peer review, quality control, accountability and oversight, adequate resources and infrastructure, and continuous process improvement. Through these means employees and members of the public are protected against the hazards associated with BSAT.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: 1) BTB TEST	-	-	4.188

PE 0605384BP: CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT S... UNCLASSIFIED Chemical and Biological Defense Program

	UNCLASSII ILD			
Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and	d Biological Defense Program	Date: N	lay 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT)	Project (Number/Name) DW6 I MAJOR RANGE AND TEST FACILITY BASE (MRTFB)		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
FY 2018 Plans: Maintain BTB-ECBC, MRTFB technical test capability and operations personnel will ensure the safe and efficient operations of the MRTFB operations, range control, environmental oversight, workload manag MRTFB operating costs required to support operations, which cannot	B and include safety, security, resource management, sur ement, and training. This represents the civilian labor ar	ety		
Title: 2) BTB TEST		-	-	0.700
<b>FY 2018 Plans:</b> Provide dedicated and specially trained, 24-hour, support staff who c specific heating, ventilation, and air conditioning (HVAC) systems an (LSTF) Complex				
Title: 3) BTB TEST		-	-	0.800
FY 2018 Plans: Provides for ongoing sustainment of existing test instrumentation and Support annual service contracts for equipment operation, diagnostic related replacement of existing field, administrative, and analytical in	cs, and calibration, as well as routine life-cycle and use-			
Title: 4) BTB TEST		-	-	0.600
FY 2018 Plans: Support the BTB-ECBC defense mission by funding contractor labor contractual effort to this MRTFB including chemical and biological ar Will provide the additional support through contractual efforts to support the provided by civilian authorization limits.	nalysis, field support, planning, and report documentation			
Title: 5) WDTC, MRTFB		29.491	24.525	24.504
FY 2016 Accomplishments:  Maintained WDTC/BTB-ECBC technical test capability and operation personnel ensured the safe and efficient operations of the MRTFB a operations, range control, environmental oversight, workload manag MRTFB operating costs required to support operations, which cannot be a control of the management of the control of the management of the control of the management o	nd included safety, security, resource management, sure ement, and training. This represented the civilian labor a	ty		
FY 2017 Plans: Will maintain WDTC/BTB-ECBC technical test capability and operat personnel will ensure the safe and efficient operations of the MRTFE				

PE 0605384BP: CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT S... UNCLASSIFIED

Chemical and Biological Defense Program Page 7 of 19

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical ar	nd Biological Defense Program	Date: N	lay 2017		
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT)	Project (Number/Name) DW6 / MAJOR RANGE AND TEST FACILITY BASE (MRTFB)			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018	
operations, range control, environmental oversight, workload mana MRTFB operating costs required to support operations, which cann		nd			
FY 2018 Plans: Will maintain WDTC technical test capability and operations to incluvill ensure the safe and efficient operations of the MRTFB and inclurange control, environmental oversight, workload management, and operating costs required to support operations, which cannot be directly and the control of the plant of the control of	ude safety, security, resource management, surety operated training. This represents the civilian labor and MRTFB				
Title: 6) WDTC, MRTFB		12.492	10.340	5.82	
<b>FY 2016 Accomplishments:</b> Provided for ongoing sustainment of existing test instrumentation at operations. Supported annual service contracts for equipment operand use-related replacement of existing field, administrative, and an	ration, diagnostics, and calibration, as well as routine life-	cycle			
FY 2017 Plans: Provide for ongoing sustainment of existing test instrumentation and operations. Support annual service contracts for equipment operat and use-related replacement of existing field, administrative, and an	ion, diagnostics, and calibration, as well as routine life-cyc	cle			
FY 2018 Plans: Provide for ongoing sustainment of existing test instrumentation and annual service contracts for equipment operation, diagnostics, and replacement of existing field, administrative, and analytical instrument	calibration, as well as routine life-cycle and use-related	port			
Title: 7) WDTC, MRTFB		1.954	1.985	2.01	
FY 2016 Accomplishments: Provided WDTC/BTB-ECBC with a dedicated and specially trained, control systems, such as, HVAC systems and decontamination sys Chemical Test Facility (CCTF), and Life Sciences Test Facility (LST	tems within WDTC's Materiel Test Facility (MTF), Combin				
<b>FY 2017 Plans:</b> Will provide WDTC/BTB-ECBC with a dedicated and specially train control systems, such as, test specific HVAC systems and decontain Complex.		ritical			
FY 2018 Plans:					

PE 0605384BP: CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT S... UNCLASSIFIED

Chemical and Biological Defense Program

0400 / 6	Program Element (Number/Name)	Project (Number/N	1ay 2017 Name)	
0400 / 6 PE (		, -	Name)	
12	R-1 Program Element (Number/Name) PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT) Project (Number/Name) DW6 I MAJOR RANG			ST
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
Will provide WDTC with a dedicated and specially trained, 24-hour, support staff who systems, such as, test specific HVAC systems and decontamination systems within				
Title: 8) WDTC, MRTFB		5.865	12.846	13.50
FY 2016 Accomplishments: Supported the WDTC/BTB-ECBC defense mission by funding contractor labor overhof providing contractual effort to this MRTFB including chemical and biological analydocumentation.				
FY 2017 Plans: Will support the WDTC/BTB-ECBC defense mission by funding contractor labor over of providing contractual effort to this MRTFB including chemical and biological analy documentation. Will provide the additional support through contractual efforts to support shortfalls created by civilian authorization limits.	sis, field support, planning, and report			
FY 2018 Plans: Will support the WDTC defense mission by funding contractor labor overhead costs. contractual effort to this MRTFB including chemical and biological analysis, field sup Will provide the additional support through contractual efforts to support variable wo created by civilian authorization limits.	pport, planning, and report documentation			
Title: 9) NON-TRADITIONAL AGENT (NTA) TEST		0.975	0.943	1.02
FY 2016 Accomplishments:  Continued the verification and validation efforts of infrastructure improvements for proposed capability for other than Class 1 compounds. Maintained operational reading and equipment. Adapted current test procedures to compounds other than Class 1.	ness of test infrastructure, instrumentation	n,		
FY 2017 Plans: Will maintain synthesis capability of Class 1 NTA compounds and other NTA classes evaluation. Will develop NTA test methods for uniform materials and protective mass				
challenge monitoring methods for other NTA classes.				

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and Biological		Date: May 2017				
Appropriation/Budget Activity	Project (No	umber/Name)				
	PE 0605384BP I CHEMICAL/BIOLOGICAL DV					
	BASE (MRTFB)					

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Will maintain synthesis capability of Class 1 NTA compounds and other NTA classes in support of program of record test and evaluation. Will develop NTA test methods for uniform materials and protective masks. Will develop chemical dissemination and			
challenge monitoring methods for other NTA classes.			
Accomplishments/Planned Programs Subtotals	50.777	50.639	53.164

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

N/A

Remarks

D. Acquisition Strategy

N/A

**E. Performance Metrics** 

N/A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and Biological Defense Program											2017	
						umber/Nan ORATORY	,					
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
LS6: LABORATORY SUPPORT	-	9.607	9.339	13.864	-	13.864	13.655	12.949	13.202	13.202	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

This project (LS6/Laboratory Support) provides for the sustainment and modernization of the DoD laboratory infrastructure capabilities to counter an expanding threat space, exploit advances in technology, and develop and transition chemical and biological (CB) defense equipment and countermeasures to the Warfighter. This laboratory infrastructure project upgrades key systems to the current state-of-the-art capabilities. Key systems include: gas filters, mechanical/electrical, fume hoods, duct work and structural systems. Provides for the initial equipment outfitting of new facilities. Ensures that the necessary surety operations can be conducted effectively and safely in support of Chemical and Biological Defense Program (CBDP) RDT&E programs. As a force multiplier, this project will provide more robust capabilities to the CBDP and ensure continuity of operations and environmental compliance.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: 1) LABINF - Edgewood Chemical Biological Center Surety Facility Sustainment	8.710	8.839	12.264
FY 2016 Accomplishments: Performed general facility sustainment and modernization in key surety facilities that support the Chemical Biological Defense Program (CBDP). Provided for gas filter maintenance and changeout, sustainment of critical laboratory systems (fume hoods, exhaust systems, control systems, electrical/mechanical systems, plumbing, emergency backup power), and modernization of key chemical and biological surety laboratories.			
FY 2017 Plans: Perform general facility sustainment and modernization in key surety facilities that support the CBDP. Provides for gas filter maintenance and change out, sustainment of critical laboratory systems (fume hoods, exhaust systems, control systems, electrical/mechanical systems, plumbing, emergency backup power), and modernization of key chemical and biological surety laboratories.			
FY 2018 Plans: Perform general facility sustainment and modernization in key surety facilities that support the CBDP. Provides for gas filter maintenance and change out, sustainment of critical laboratory systems (fume hoods, exhaust systems, control systems, electrical/mechanical systems, plumbing, emergency backup power), and modernization of key chemical and biological surety laboratories. Modernization efforts include bringing laboratories up to state of the art standards by completing the following: toxic lab demolition, done IAW environmental law and standards, installing new stainless steel bench top fume hoods with security			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and Biolog	gical Defense Program		Date: N	lay 2017	
Appropriation/Budget Activity 0400 / 6	, ,		lumber/N ORATOR	lame) RY SUPPORT	-
B. Accomplishments/Planned Programs (\$ in Millions)	FY	2016	FY 2017	FY 2018	
complishments/Planned Programs (\$ in Millions)  new case work for existing fume hoods, new case work with acid and flammable cabinets, new epoxy coated floors and new energy efficient security windows, and upgrades to the electrical systems.  2) LABINF - USAMRIID/USAMRICD Infrastructure Support  16 Accomplishments:  ed laboratory infrastructure support to laboratory operations, facilities sustainment, and regulatory compliance for critical biological defense activities at the U.S. Army Medical Research Institute for Infectious Diseases and the U.S. Army					
Title: 2) LABINF - USAMRIID/USAMRICD Infrastructure Support			0.897	0.500	1.600
<b>FY 2017 Plans:</b> Provide laboratory infrastructure support to laboratory operations, facilities s	sustainment, and regulatory compliance for critica	ıl			

#### FY 2018 Plans:

Continue to provide laboratory infrastructure support to laboratory operations, facilities sustainment, and regulatory compliance for critical chemical biological defense activities at the U.S. Army Medical Research Institute for Infectious Diseases and the U.S. Army Medical Research Institute for Chemical Defense.

chemical biological defense activities at the U.S. Army Medical Research Institute for Infectious Diseases and the U.S. Army

**Accomplishments/Planned Programs Subtotals** 9.607 9.339 13.864

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

Medical Research Institute for Chemical Defense.

N/A

Remarks

D. Acquisition Strategy

N/A

**E. Performance Metrics** 

N/A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and Biological Defense Program										Date: May 2017		
Appropriation/Budget Activity 0400 / 6				R-1 Program Element (Number/Name) PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT)				Project (Number/Name) MS6 / RDT&E MGT SUPPORT				
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
MS6: RDT&E MGT SUPPORT	-	37.035	21.212	32.220	-	32.220	32.337	31.195	32.257	32.555	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	_	_	-	-	-		

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

This project provides management support for the DoD Chemical and Biological Defense Program (CBDP). It includes program oversight and integration of overall non-CBRN Defense Equipment (non-CDE) and CBRN Defense Equipment (CDE) programs by the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs (ASD(NCB)) and defense programs through the Deputy Assistant Secretary of Defense for Chemical and Biological Defense (DASD(CBD)). Funds execution management is provided by DTRA.

The project also provides for the development, coordination and integration of Joint Chemical, Biological, Radiological and Nuclear (CBRN) defense capability requirements, including assistance and support to the Combatant Commanders (COCOMs) and Services to improve CBRN defense related doctrine, education, training, and awareness by the Joint Requirements Office (JRO); preparation of Joint Capability Integration and Development System (JCIDS) documents in accordance with Chairman of The Joint Chiefs of Staff Instruction CJCSI 3170.01I dated 23 January 2015; Joint CBRN Defense Research, Development, and Acquisition (RDA) planning; input to the CBD Annual Report to Congress; and program guidance development by the Program Analysis and Integration Office (PAIO).

The Biological Select Agent and Toxin (BSAT) Biosafety Program Office (BBPO) will advise the Executive Agent Responsible Official (EA RO) for the DoD BSAT Biosafety Program on biosafety and all matters that pertain to risk associated with BSAT operations, provide oversight of DoD BSAT laboratory biosafety operations, serve as a unified DoD interface with external regulatory agencies, ensure safety and standardization of procedures used in DoD BSAT laboratories, and identify industry-wide best practices to enhance biosafety across the full spectrum of DoD BSAT operations. As the EA RO for BSAT the program is tasked with technical review, inspection, and harmonization of biosafety protocols and procedures across DoD laboratories that handle BSAT. As such, the program manages the Biosafety and Scientific Review Panel, inspection of DoD laboratories, harmonization of DoD BSAT-related regulations and procedures, coordinating interaction and information with the CDC, establishing a Defense Business System to track and manage BSAT across DoD, providing laboratory biosafety oversight, and advancing BSAT-related scientific research to address knowledge gaps. This office was established in March 2016 and prior to FY 2018 is funded within the OSD Management line.

The project includes programming support for the Joint Service CB Information System (JSCBIS) which serves as a budgetary and informational database for the DoD CBDP. Also included within the project is financial management services to include fund distribution, execution reporting, and fiscal financial statements.

This project also supports the Chemical, Biological, Radiological and Nuclear Defense (CBRND) Test and Evaluation (T&E) Executive, who is responsible for the planning, balancing, and oversight of test infrastructure and test technology requirements to support Developmental Testing (DT) and Operational Testing (OT) of DoD CBRND systems, as outlined in the RDA Plan. The CBRND T&E Executive oversees the Enterprise processes to develop and sustain standardized T&E methodologies and validated instrumentation and infrastructure to ensure the adequacy of test for CBRND systems in alignment with acquisition milestones and associated decision points. The Joint Test Infrastructure Working Group (JTIWG) program supports T&E Early Involvement; test threat planning; T&E studies; and T&E standards planning and development to support CBRND testing for all Services to include medical T&E efforts.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical a	and Biological Defense Program	Date: N	1ay 2017		
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT)	Project (Number/Name)  MS6 I RDT&E MGT SUPPORT			
The CBRND T&E Executive directly supports OSD T&E oversight process. The CBRND T&E Executive provides the T&E infrastructhe Joint Service Community to ensure that program needs are management to the Warfighter.	ture investment strategy and coordinates investment planr	ing and T&E capab	ilities validatio	on among	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018	
Title: 1) OSD BIOSAFETY		-	-	2.719	
FY 2018 Plans: Achieve full program staffing. Provide oversight of DoD BSAT insp Continue development of BSAT training products. Execute regula BSAT training and conduct protocol reviews, and publish guidance coordination with CDC. Maintain and improve the Defense BSAT E laboratory site visits, and fund research to address safety-related s	r council stakeholder meetings. Continue to advance and procedures from biannual BSRP meetings. Continue Business System. Implement third-party testing. Perform				
Title: 2) JRO MGT		4.211	5.474	6.500	
FY 2016 Accomplishments: Implemented CBRN Defense medical and non-medical capabilities in JCIDS and acting as their proponent for coordinating and integral Working Group for the Protection Functional Capabilities Board (Frassessments, meetings, agreements, concepts and studies, ATDs Prepared various JCIDS documents, including AoAs, IS ICDs, CD	ating CBRND operational capabilities. Chaired the CWMD CB). Served as the Joint Staff focal point for CBRN reports, and JCTDs. Led the CBDP Enterprise POM developmen	S,			
FY 2017 Plans: Will implement CBRN Defense medical and non-medical capabiliti in JCIDS and acting as their proponent for coordinating and integral Working Group for the Protection FCB. Will serve as the Joint State agreements, concepts and studies, ATDs, and JCTDs. Will lead the JCIDS documents, including AoAs, IS ICDs, CDDs, and CPDs.	ating CBRND operational capabilities. Will chair the CWM ff focal point for CBRN reports, assessments, meetings,	D			
FY 2018 Plans: Will implement CBRN Defense medical and non-medical capabiliti in JCIDS and acting as their proponent for coordinating and integral Working Group for the Protection FCB. Will serve as the Joint Sta	ating CBRND operational capabilities. Will chair the CWM				

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and E		Date: M	lay 2017				
Appropriation/Budget Activity 0400 / 6							
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018		
agreements, concepts and studies, ATDs, and JCTDs. Will lead the C JCIDS documents, including AoAs, IS ICDs, CDDs, and CPDs.	BDP Enterprise POM development. Will prepare vario	ous					
Title: 3) JTIWG		5.742	3.716	7.389			
FY 2016 Accomplishments:  Continued T&E Executive mission support to ensure credible testing; To decision support for CBDP systems; support the DOT&E for OSD T&E provided input to the POM process; and established T&E Standards to and other interagency groups. Continued efforts to develop, refine, an and addressing gaps in T&E capabilities to ensure timely support to act the quality and reduce the costs of test planning and execution; elimina Continued direct support of the JRO ICTs and IPTs providing technica for Analysis of Alternatives, and developing test scopes. Continued direct and other T&E organizations in T&E infrastructure planning, developm support documentation to support DT and OT. Continued direct support DTS; NGCD Increments 1 through 3; UIPE II; JECP; NGDS; JBADS Decontamination—Heavy Materiel Equipment (JGPD-HME); JEM; JCA Chemical Reconnaissance System; JWARN; CALS; all variants of JSA JUPITR ATD. Continued support to JPEO-CBD, JSTO, and WDTC for technology transition planning for T&E methodologies, resources and in Continued to provide guidance to improve TEMPs for acquisition progradocumentation; and validation of T&E Capabilities and associated star OTA assignment, integration of test planning, issue resolution, and for to lead the International T&E methodology development and standardi US MOU and other international partnering agreements. Provided T& the Services, JRO, PAIO, and NCB in development and defense of PC Top Exercises (TTXs) and TEMP training for IPTs. Participated in DT testing planning was adequate for execution.	Oversight; and support the NCB in infrastructure plane support the White House Subcommittee on Standards of streamline processes for identifying, assessing, equisition programs. Continued mission to improve ated unnecessary redundancies in test infrastructure. I assistance to structure acquisition programs, planning rect coordination of early involvement of the OTAs ent, and validation. Continued to develop threat test ort to the JPEO-CBD. Programs supported included S; CIDAS; ECD JCACS; JSEW; Joint General Purpose D. integration in into Stryker Nuclear, Biological, and AM; and other active acquisition programs including a specific test methodology and test technology needs; infrastructure; and participation in scientific review paneams; approval of TEMPs; development of threat supported and accommittee of the Stryker Nuclear in Continued Supporting OTAs in coordination of cilitation of OSD approval of test documents. Continued attacks and support the Australia, Canadian, UK, a E infrastructure input to the POM process and supported and Budget submissions. Conducted Red Team, T	g els. ort Lead d and ed					
FY 2017 Plans: Continue T&E Executive mission support to ensure credible testing; T& decision support for CBDP systems; support the DOT&E for OSD T&E input to the POM process; and establishing T&E Standards to support interagency groups. Continue efforts to develop, refine, and/or stream	Oversight; and support the NCB in infrastructure plan the White House Subcommittee on Standards and oth	ner					

	UNCLASSIFIED						
Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical a	and Biological Defense Program	Date: N	ay 2017				
Appropriation/Budget Activity 0400 / 6		<b>Project (Number/Name)</b> MS6 <i>I RDT&amp;E MGT SUPPORT</i>					
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018			
gaps in T&E capabilities to ensure timely support to acquisition protection the costs of test planning and execution; eliminate unnecessary remitigate critical Test and Evaluation Gaps in order to reduce cost/s and processes to support more efficient and effective management	edundancies in test infrastructure. Sponsor technical efforts to test schedule impacts to near-term PORs. Develop new policies						
FY 2018 Plans: Continue T&E Executive mission support to ensure credible testin decision support for CBDP systems; support the DOT&E for OSD input to the POM process; and establishing T&E Standards to sup interagency groups. Continue efforts to develop, refine, and/or str gaps in T&E capabilities to ensure timely support to acquisition process of test planning and execution; eliminate unnecessary redurmitigate critical Test and Evaluation Gaps in order to reduce cost/streamline policies and processes to support more efficient and efforts methodologies.	T&E Oversight; and support the NCB in infrastructure planning; oport the White House Subcommittee on Standards and other reamline processes for identifying, assessing, and addressing ograms. Continue mission to improve the quality and reduce the indancies in test infrastructure. Continue efforts to identify and feet schedule impacts to near-term PORs. Continue to align and						
Title: 4) OSD MGT		20.338	6.922	9.11			
FY 2016 Accomplishments: Performed program reviews/assessments, provided programmatic analysis and support. Supported financial management services preporting.							
FY 2017 Plans: Perform program reviews/assessments, provide programmatic PP and support. Support financial management services provided by							
<b>FY 2018 Plans:</b> Perform program reviews/assessments, provide programmatic PP and support. Support financial management services provided by							
Title: 5) PAIO MGT		6.744	5.100	6.49			
FY 2016 Accomplishments:  Developed assessments to support RDA Planning. Provided anal guidance, the Program, Budget and Execution Reviews, and the F							

PE 0605384BP: CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT S... **UNCLASSIFIED** Chemical and Biological Defense Program

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and Biological		Date: May 2017	
0400 / 6	PE 0605384BP I CHEMICAL/BIOLOGICAL	, ,	umber/Name) T&E MGT SUPPORT
	DEFENSE (RDT&E MGT SUPPORT)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
evaluation studies throughout the PPBE process. Provided Joint Service Chemical Biological Information System database management.			
FY 2017 Plans:  Develop assessments to support RDA Planning. Provide analytic programmatic support for development of program guidance, the Program, Budget and Execution Reviews, and the President's Budget submissions. Respond to specialized evaluation studies throughout the PPBE process. Provide Joint Service Chemical Biological Information System database management.			
FY 2018 Plans:  Develop assessments to support RDA Planning. Provide analytic programmatic support for development of program guidance, the Program, Budget and Execution Reviews, and the President's Budget submissions. Respond to specialized evaluation studies throughout the PPBE process. Provide Joint Service Chemical Biological Information System database management.			
Accomplishments/Planned Programs Subtotals	37.035	21.212	32.220

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

N/A

Remarks

# D. Acquisition Strategy

N/A

# E. Performance Metrics

N/A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Chemical and Biological Defense Program										Date: May	2017	
Appropriation/Budget Activity 0400 / 6					am Elemen 34BP / CHE (RDT&E M	MICAL/BIO	LOGIČAL	Project (N O49 / JOIN ANALYSES	IT CONCE	ne) PTS, STUDI	ES, AND	
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
O49: JOINT CONCEPTS, STUDIES, AND ANALYSES (JCSA)	-	1.300	1.379	1.500	-	1.500	1.500	1.500	1.500	1.500	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

Assemblishments/Dispused Dressess (C. in Millians)

The objectives of the Joint Concepts, Studies, and Analyses (JCSA) program are to support the Joint Requirements Office to develop, coordinate, and execute CBRND studies, experiments, analyses and architecture, in order to develop future operational concepts and support the efficient and effective generation of CBRN requirements.

Specific lines of effort across the Future Years Defense Program (FYDP) include: qualitatively characterizing emerging CBRN threats and operational risks to the Joint Force; conducting innovative approaches to deal with technical studies; analyzing Concepts of Operations for employing and developing capabilities; and analyzing specific issues that contribute to POM development.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: 1) JCDE	1.300	1.379	-
FY 2016 Accomplishments: Continued JCDE analysis. Continued to perform Advanced Threat Analysis with several more categories of threat. Updated best representative agents for consideration in requirements and testing. Conducted detailed quantitative analyses to determine detection and challenge levels from key representative threats determined in the FY15 Advanced Threat Studies. Updated detailed operational risk analyses to support CBDP leadership decisions.			
FY 2017 Plans: Continue JCDE analysis. Will continue to perform Advanced Threat Analysis with several more categories of threat. Will update best representative agents for consideration in requirements and testing. Will conduct detailed quantitative analyses to determine detection and challenge levels from key representative threats determined in the FY15 Advanced Threat Studies. Will update detailed operational risk analyses to support CBDP leadership decisions.			
Title: 2) JCSA	-	-	1.500
<b>Description:</b> This program was formerly called Joint Combat Development and Experimentation (JCDE). Will continue JCDE analysis. This program performs Advanced Threat Analysis with several more categories of threat than JCDE. JCSA updates the best representative agents for consideration in requirements and testing. This program also conducts detailed quantitative			

<b>Exhibit R-2A</b> , <b>RDT&amp;E Project Justification:</b> FY 2018 Chemical and Biological Defense Program		<b>Date:</b> May 2017		
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605384BP I CHEMICAL/BIOLOGICAL DEFENSE (RDT&E MGT SUPPORT)	Project (Number/Name) O49 I JOINT CONCEPTS, STUDIES, AND ANALYSES (JCSA)		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
analyses to determine detection and challenge levels from key Studies. JCSA also updates detailed operational risk analyses FY 2018 Plans:	·	eat		
Funds in JCDE were transferred to this program, Joint Conception lieu of direct tactical level experimentation, to better define of	, , ,			

**Accomplishments/Planned Programs Subtotals** 

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

N/A

Remarks

decisions.

# D. Acquisition Strategy

N/A

# E. Performance Metrics

N/A

1.379

1.300

1.500