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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Defense Threat Reduction Agency **Date:** February 2016

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605000BR / <i>WMD Defeat Capabilities</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	71.066	6.667	7.156	4.568	-	4.568	9.092	8.714	7.782	7.938	Continuing	Continuing
RF: <i>Forensics Technologies</i>	6.867	6.667	7.156	4.568	-	4.568	9.092	8.714	7.782	7.938	Continuing	Continuing
RL: <i>Nuclear & Radiological Effects</i>	64.199	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	64.199

Note

*Project RF-Detection and Forensics Technologies subdivides into Projects RD-Detection Technologies and RF-Forensics Technologies in FY 2016. This impacts these projects in PE 0602718BR and PE 0603160BR. See C. Other Program Funding Summary below.

A. Mission Description and Budget Item Justification

The WMD Defeat Capabilities program element supports the development and demonstration of verification and monitoring technologies and systems for the Countering Weapons of Mass Destruction (CWMD) mission. This funding specifically supports International Monitoring System technology requirements under the Nuclear Arms Control Technology program. Through FY 2014, funding also supported the development of collaborative CWMD analysis capabilities between the Department of Defense and key interagency and international partners through a globally accessible net-centric framework in the form of the Integrated Weapons of Mass Destruction Toolset.

B. Program Change Summary (\$ in Millions)

	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017 Base</u>	<u>FY 2017 OCO</u>	<u>FY 2017 Total</u>
Previous President's Budget	6.887	7.156	7.340	-	7.340
Current President's Budget	6.667	7.156	4.568	-	4.568
Total Adjustments	-0.220	0.000	-2.772	-	-2.772
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.220	-			
• Other Reductions	-	-	-2.772	-	-2.772

Change Summary Explanation

The decrease in FY 2017 from the previous President's Budget submission was due to a re-phasing of program activities to FY 2018 and FY 2019. Other reductions were in support of departmental efficiencies.

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Defense Threat Reduction Agency										Date: February 2016		
Appropriation/Budget Activity 0400 / 5					R-1 Program Element (Number/Name) PE 0605000BR / WMD Defeat Capabilities				Project (Number/Name) RF / Forensics Technologies			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
RF: <i>Forensics Technologies</i>	6.867	6.667	7.156	4.568	-	4.568	9.092	8.714	7.782	7.938	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

*Project RF-Detection and Forensics Technologies subdivides into projects RD-Detection Technologies and RF-Forensics Technologies beginning in FY 2016.

A. Mission Description and Budget Item Justification

This project supports the development of verification and monitoring capabilities for the Defense Threat Reduction Agency (DTRA) to counter proliferation and weapons of mass destruction (WMD). DTRA's Nuclear Arms Control Technologies (NACT) program performs Research, Development, Test, and Evaluation (RDT&E) to improve the sustainability, reliability, and effectiveness of capabilities related to its operational mission to install, operate, maintain, and sustain the waveform and radionuclide nuclear detonation detection stations comprising the U.S. portion of the International Monitoring System (IMS). This delivers data to the U.S. monitoring and verification community and enables U.S. compliance with the Comprehensive Nuclear Test Ban Treaty (CTBT) in support of U.S. and Department of Defense (DoD) nonproliferation objectives.

The project addresses WMD monitoring, implementation of, and compliance with arms control agreement requirements validated by the Office of the Under Secretary of Defense, Acquisition, Technology, and Logistics. This project conforms to the administration's research and development priorities related to WMD arms control and disablement. Technical assessments are made against CTBT implementation requirements and U.S. objectives to provide the basis for sound project development, evaluate existing programs, provide data required to inform compliance assessments, and support U.S. monitoring policy, decision-makers, and negotiation teams.

The primary RDT&E program emphasis is on improvements that enable the installation of treaty-specific stations, which reduce costs and increase the reliability in diverse and often harsh environments; improve efficiency, performance, reliability, and sustainability of existing stations and treaty-specified verification capabilities; and improve capabilities to detect, characterize, and enable discrimination of, nuclear weapons tests. The NACT program directly supports U.S. and allied warfighter and national technical monitoring requirements and provides vital data used by the treaty monitoring community, warfighter planners, DoD, other U.S. Government agencies, and international agencies.

The increase from FY 2015 to FY 2016 is due to investment in research on radionuclide sampling and analytical capabilities. The decrease from FY 2016 to FY 2017 is due to re-phasing of program activities to FY 2018 and FY 2019.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: RF - Forensics Technologies	6.667	7.156	4.568
Description: Project RF supports the NACT Program, conducting RDT&E to meet IMS technology requirements in support of CTBT implementation, compliance, monitoring, inspection, and other emerging nuclear arms control activities.			
FY 2015 Accomplishments:			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Defense Threat Reduction Agency	Date: February 2016
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Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / <i>WMD Defeat Capabilities</i>	Project (Number/Name) RF / <i>Forensics Technologies</i>
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
<ul style="list-style-type: none"> - Continued to improve the sustainability, reliability, and effectiveness of the 36 IMS stations. - Completed Provisional Technical Secretariat certification of U.S. IMS Infrasound monitoring station on Wake Island and Auxiliary Seismic monitoring station on Shemya Island, Alaska. - Continued to improve U.S. IMS operations efficiency, capabilities, and quality of monitoring data and decrease false alarms. - Continued support of Office of the Secretary of Defense (OSD) treaty management objectives. - Continued participating in International CTBT Organization Office Provisional Technical Secretariat sponsored technology development exchanges and field exercises. - Continued research and development to inform required design-build-test activities across the monitoring system. - Continued IMS prototype sensor and station calibration capabilities development. - Continued development of monitoring station in-situ calibration and performance monitoring capabilities. - Continued performing experiments or field demonstrations to evaluate monitoring system performance. - Continued to enhance baseline radionuclide particulate and noble gas detection capabilities, efficiency, and reliability. - Continued development and calibration of infrasound and seismic propagation models. - Continued field experiments to collect data required to calibrate and constrain and validate IMS relevant propagation models. - Continued U.S. IMS sensor event signal identification technique research and development of the transportable xenon laboratory. <p>FY 2016 Plans:</p> <ul style="list-style-type: none"> - Continue support of Office of the Secretary of Defense (OSD) Threat Reduction and Arms Control treaty management objectives. - Continue development and implementation of IMS sensor and station calibration capabilities. - Continue development and implementation of in-situ calibration concepts. - Participate in CTBT Organization Provisional Technical Secretariat sponsored technology development exchanges. - Sponsor U.S. specific technology development exchanges. - Develop and implement U.S. IMS specific life-cycle management software to enable cost effective and efficient spare part replacement and long-range recapitalization. - Develop and implement concepts to improve the reliability of the radionuclide stations. - Develop and implement concepts to improve radionuclide and infrasound signal to noise. - Improve and develop system of health monitoring software. <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> - Optimize IMS technology and operations to comply with CTBT language and evolving operational manual requirements and to increase cost efficiency. - Validate alternative filter media against Provisional Technical Secretariat certification standards for U.S. IMS particulate radionuclide sensor to enhance aerosol collection efficiency for the Radionuclide Aerosol Sampler/Analyzer system. - Conduct Analysis of Alternatives for Hydroacoustic monitoring. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Defense Threat Reduction Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / <i>WMD Defeat Capabilities</i>	Project (Number/Name) RF / <i>Forensics Technologies</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
<ul style="list-style-type: none"> - Annually, provide analysis of up to 800 additional International Atomic Energy Agency verification samples in support of the OSD, Nuclear, Chemical and Biological Threat Reduction Advisory Committee. - Complete evaluation of U.S. IMS operational options determined from life-cycle modeling and simulation to determine most cost-effective operational models. - Evaluate alternative backup power options for arctic to improve reliability and performance in remote locations as defined by CTBT Operations Manuals. - Participate in CTBT Organization Provisional Technical Secretariat sponsored technology development exchanges. - Finalize testing for Provisional Technical Secretariat qualification of alternative infrasound waveform sensor that improves efficiency, reliability, or cost effectiveness at equal or greater data quality objectives. - Run models and simulations to improve understanding of CTBT IMS network viability/limitations. 			
Accomplishments/Planned Programs Subtotals	6.667	7.156	4.568

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

Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• 20/0602718BR: <i>WMD Defeat Technologies</i>	31.403	9.356	10.008	-	10.008	10.274	10.505	10.717	10.933	Continuing	Continuing
• 27/0603160BR: <i>Proliferation Prevention and Defeat</i>	63.115	38.427	38.540	-	38.540	42.454	43.727	42.518	43.367	Continuing	Continuing

Remarks

D. Acquisition Strategy

Assess government, academic, and industrial performers and make selections based upon a "best fit for task" criteria. Common government awardees include DoD Service Laboratories and the Department of Energy National Laboratories.

E. Performance Metrics

The goal of the NACT RDT&E program is to enable full compliance of all emerging data quality requirements and other requirements as documented in CTBT treaty language, CTBT-issued Radionuclide and Waveform Operations Manuals, other CTBT Organization communications, and DOD Treaty Implementation Manager directives. RDT&E is conducted in support of NACT's operational mission to operate, maintain, and sustain the Provisional Technical Secretariat certified waveform and radionuclide CTBT monitoring stations and radionuclide laboratory in accordance with CTBT requirements. CTBT IMS data availability/timeliness performance specifications are currently 98% data availability for IMS waveform and 95% for IMS radionuclide systems. Data quality metrics continue to evolve as the entire CTBT IMS capability is exercised and tested.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Defense Threat Reduction Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / WMD Defeat Capabilities	Project (Number/Name) RF / Forensics Technologies
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Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Radionuclide Sensor, Station, Laboratory and Network improvements	FFRDC	Pacific Northwest National Laboratory : Richland, WA	2.317	1.265	Apr 2015	1.478	Jun 2016	1.000	Jun 2017	-		1.000	Continuing	Continuing	Continuing
Waveform Analysis Technology	C/Various	Space and Missile Defense Labs : Huntsville, AL	1.669	0.086	Mar 2015	0.045		0.000		-		0.000	0.000	1.800	1.800
Radionuclide Sensor, Station, and Network Improvements	C/CPFF	General Dynamics : Fairfax, VA	0.500	0.494	Jul 2015	0.494	Mar 2016	0.229	Jun 2017	-		0.229	Continuing	Continuing	Continuing
Seismic and Infrasound Sensor, Station, and Network Improvements	C/CPFF	University of Alaska : Fairbanks, AK	-	0.093	Jul 2015	0.093	Apr 2016	0.100	Apr 2017	-		0.100	Continuing	Continuing	Continuing
Seismic and Infrasound Sensor, Station, and Network Improvements, Validation, and Verification Testing	FFRDC	Sandia National Laboratory : Albuquerque, NM	0.506	2.259	Apr 2015	1.600	Mar 2016	1.304	Apr 2017	-		1.304	Continuing	Continuing	Continuing
Sample Analysis	MIPR	Air Force Technical Application Center : Patrick AFB, FL	0.800	0.800	Mar 2015	0.800	Aug 2016	0.800	Jun 2017	-		0.800	Continuing	Continuing	Continuing
Station failure and logistics modeling and simulation	C/CPFF	Systems Exchange, Inc. : Carmel, CA	-	0.196	Mar 2015	0.035	Mar 2016	0.035	Mar 2017	-		0.035	Continuing	Continuing	Continuing
Station and network improvements	C/Various	Lockheed Martin : Bethesda, MD	-	0.165	Jan 2016	1.511	Mar 2015	0.000		-		0.000	Continuing	Continuing	Continuing
Seismic and Infrasound Sensor, Station, and Network Improvements	MIPR	Naval Research Laboratory : Washington, DC	-	0.204	Oct 2015	0.000		0.000		-		0.000	0.000	0.204	0.204
Engineering & Technical Services	C/CPFF	TASC, Inc. : Chantilly, VA	0.800	0.800	Dec 2014	0.800	Dec 2015	0.760	Dec 2016	-		0.760	Continuing	Continuing	Continuing
Subtotal			6.592	6.362		6.856		4.228		-		4.228	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Defense Threat Reduction Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / WMD Defeat Capabilities	Project (Number/Name) RF / Forensics Technologies
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Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Advisory & Assistance Services Support to Program Office	C/CPFF	TASC, Inc. : Chantilly, VA	0.200	0.200	Apr 2015	0.200		0.200		-		0.200	Continuing	Continuing	Continuing
Travel	C/Various	Various : Various	0.075	0.105		0.100		0.140		-		0.140	Continuing	Continuing	Continuing
Subtotal			0.275	0.305		0.300		0.340		-		0.340	-	-	-

	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		6.867	6.667	7.156	4.568	-	-	-	-

Remarks

The Defense Threat Reduction Agency (DTRA) Nuclear Arms Control program installs, operates, maintains, and sustains the waveform and radionuclide nuclear detonation detection stations comprising the U.S. portion of the International Monitoring Systems (IMS) in order to deliver data to the U.S. monitoring and verification community and to enable U.S. compliance to the terms of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) in support of U.S. and Department of Defense (DOD) nonproliferation objectives. The project addresses weapons of mass destruction (WMD) monitoring requirements validated by the Office of the Under Secretary of Defense, Acquisition, Technology, and Logistics. This project conforms to the administration's research and development priorities as related to WMD arms control and disablement. Technical assessments are made against CTBT implementation requirements and U.S. objectives to provide the basis for sound project development, evaluate existing programs, and provide the data required to inform compliance assessments, and support U.S. monitoring policy and decision-makers, and negotiation teams. NOTE: As this program and its requirements mature and legacy contract vehicles expire, the composition of the performer base under DTRA program management will be dynamic.

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Defense Threat Reduction Agency		Date: February 2016
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / <i>WMD Defeat Capabilities</i>	Project (Number/Name) RF / <i>Forensics Technologies</i>

FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
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

<i>Nuclear Arms Control Technology (NACT)</i>																											
Optimize and improve International Monitoring Station (IMS) seismic, infrasound, and radionuclide sensors: infrasound calibration standards, procedures, instrumentation																											
Optimize and improve IMS seismic, infrasound, and radionuclide sensors: automated seismic calibration process																											
Optimize and improve IMS seismic, infrasound, and radionuclide sensors: radionuclide system improvements to address detection limits and cost effectiveness																											
Optimize and improve IMS station performance: validation and verification testing of RDT&E concepts to enable operational implementation																											
Optimize and improve IMS network performance: Exercises and experiments to optimize sustainability and reliability of the network																											
Provide analysis of 800 additional nuclear material samples for treaty verification purposes																											

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Defense Threat Reduction Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / <i>WMD Defeat Capabilities</i>	Project (Number/Name) RF / <i>Forensics Technologies</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Nuclear Arms Control Technology (NACT)</i>				
Optimize and improve International Monitoring Station (IMS) seismic, infrasound, and radionuclide sensors: infrasound calibration standards, procedures, instrumentation	2	2015	4	2018
Optimize and improve IMS seismic, infrasound, and radionuclide sensors: automated seismic calibration process	2	2015	4	2016
Optimize and improve IMS seismic, infrasound, and radionuclide sensors: radionuclide system improvements to address detection limits and cost effectiveness	1	2015	4	2018
Optimize and improve IMS station performance: validation and verification testing of RDT&E concepts to enable operational implementation	1	2015	1	2021
Optimize and improve IMS network performance: Exercises and experiments to optimize sustainability and reliability of the network	2	2016	1	2021
Provide analysis of 800 additional nuclear material samples for treaty verification purposes	1	2015	1	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Defense Threat Reduction Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 5					R-1 Program Element (Number/Name) PE 0605000BR / WMD Defeat Capabilities				Project (Number/Name) RL / Nuclear & Radiological Effects			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
RL: Nuclear & Radiological Effects	64.199	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	64.199
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Efforts in this project were completed in FY 2014. Under Project RL, the Net-Centric Architecture program integrated legacy capabilities and facilitated data sharing through a net-centric framework. It provided near-real time collaborative analysis capabilities between the Department of Defense (DoD) and key interagency and international partners through a globally accessible net-centric framework known as the Integrated Weapons of Mass Destruction Toolset. This toolset migrated the Defense Threat Reduction Agency's (DTRA's) chemical, biological, radiological, and nuclear (CBRN) modeling and simulation codes to provide an integrated suite of Countering Weapons of Mass Destruction (CWMD) decision support capabilities. The framework was the only operational chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) framework in the world that provided capabilities through web applications, net-centric web services, and stand-alone mobile deployments which are validated and accredited for operational use by international, national, state, and local authorities.

The decrease in FY 2015 is due to the completion of Integrated Weapons of Mass Destruction Toolset investments.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: RL: Nuclear & Radiological Effects	0.000	-	-
Description: Project RL develops and provides a real-time globally accessible net-centric framework which migrates the DTRA CBRNE modeling and simulation codes to provide an integrated suite of CWMD decision support capabilities.			
FY 2015 Accomplishments: N/A			
Accomplishments/Planned Programs Subtotals			
	0.000	-	-

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

Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• 20/0602718BR: WMD Defeat Technologies	31.666	22.698	28.668	-	28.668	31.146	31.829	32.467	33.120	Continuing	Continuing
• 27/0603160BR: Proliferation, Prevention, and Defeat	0.000	0.000	3.528	-	3.528	1.582	1.617	1.658	1.691	Continuing	Continuing

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Defense Threat Reduction Agency	Date: February 2016
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Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / <i>WMD Defeat Capabilities</i>	Project (Number/Name) RL / <i>Nuclear & Radiological Effects</i>
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D. Acquisition Strategy

The program for Integrated Weapons of Mass Destruction Toolset was executed through a competed cost plus fixed-fee contract. This contract was a 3-year effort for software development, test, and integration.

E. Performance Metrics

Demonstrate and provide over 80% of the customer-required CBRN modeling and simulation capabilities over networks, e.g., DoD Global Information Grid. Integrate mission-required legacy DTRA CBRNE codes into a net-centric architecture through a process-controlled verification, validation, and accreditation standards-based method necessary to promote the National Strategy for Countering Biological Threats.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Defense Threat Reduction Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / WMD Defeat Capabilities	Project (Number/Name) RL / Nuclear & Radiological Effects
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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
System Development - IWMDT	C/CPAF	Leidos : San Diego, CA	21.280	-		-		-		-		-	0	21.280	21.280
System Development - NuCS	C/CPFF	Applied Research Associates : Raleigh, NC	5.880	-		-		-		-		-	0	5.880	5.880
System Development - COE	C/CPFF	Titan : Kingstowne, VA	5.533	-		-		-		-		-	0.000	5.533	5.533
System Development - Component Contracts	C/Various	Various : Various	5.073	-		-		-		-		-	0	5.073	5.073
Subtotal			37.766	-		-		-		-		-	0.000	37.766	37.766

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Configuration Management	C/CPAF	Leidos : San Diego, CA	0.941	-		-		-		-		-	0	0.941	0.941
Software Integration	C/CPAF	Leidos : San Diego, CA	7.550	-		-		-		-		-	0	7.550	7.550
Technical Data	C/CPAF	Leidos : San Diego, CA	0.739	-		-		-		-		-	0	0.739	0.739
Engineering Services	C/CPAF	Leidos : San Diego, CA	2.601	-		-		-		-		-	0	2.601	2.601
Accreditation & Certification	C/CPAF	Leidos : San Diego, CA	1.387	-		-		-		-		-	0	1.387	1.387
Subtotal			13.218	-		-		-		-		-	0.000	13.218	13.218

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Defense Threat Reduction Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / WMD Defeat Capabilities	Project (Number/Name) RL / Nuclear & Radiological Effects
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Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Developmental Test & Evaluation	C/CPAF	Leidos : San Diego, CA	2.984	-		-		-		-		-	0	2.984	2.984
Operational Test & Evaluation	C/FFPLOE	Leidos : San Diego, CA	2.421	-		-		-		-		-	0	2.421	2.421
Subtotal			5.405	-		-		-		-		-	0.000	5.405	5.405

Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management	C/Variou	TASC, Inc. : Lorton, VA	3.389	-		-		-		-		-	0	3.389	3.389
Travel	C/Variou	Various : Various	1.618	-		-		-		-		-	0	1.618	1.618
Overhead	C/Variou	Various : Various	2.803	-		-		-		-		-	0	2.803	2.803
Subtotal			7.810	-		-		-		-		-	0.000	7.810	7.810

	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	64.199	-	0.000	-	-	-	0.000	64.199	64.199

Remarks
 IWMDT was funded in 2004 by a competitive Cost Plus Award Fee (CPAF) contract for \$12.425M over a 3-year period. At end of FY 2006, its follow-on contract was awarded with an initial \$0.300M increment. IWMDT efforts continued into FY 2013 with \$58.555M applied. The Joint Collaborative Analysis Model, a subcomponent within IWMDT was openly competed under one of the new DTRA Indefinite Delivery/Indefinite Quantity contracts for approximately \$2.500M for FY 2014.

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Defense Threat Reduction Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / <i>WMD Defeat Capabilities</i>	Project (Number/Name) RL / <i>Nuclear & Radiological Effects</i>
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FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014			
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

<i>Integrated Weapons of Mass Destruction (IWMDT)</i>	
IWMDT-System Development, Test, and Integration-Phase III	

FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
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

<i>Integrated Weapons of Mass Destruction (IWMDT)</i>	
IWMDT-System Development, Test, and Integration-Phase III	

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Defense Threat Reduction Agency **Date:** February 2016

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605000BR / <i>WMD Defeat Capabilities</i>	Project (Number/Name) RL / <i>Nuclear & Radiological Effects</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Integrated Weapons of Mass Destruction (IWMDT)</i>				
IWMDT-System Development, Test, and Integration-Phase III	1	2014	3	2014