Fiscal Year (FY) 2021 Budget Estimates

Operation and Maintenance, Defense-Wide Cooperative Threat Reduction Program



February 2020

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<u>Cooperative Threat Reduction</u>: (\$ in Thousands):

	FY 2019	Price	Program	FY 2020	Price	Program	FY 2021
	<u>Actuals</u>	<u>Change</u>	<u>Change</u>	<u>Enacted</u>	<u>Change</u>	<u>Change</u>	<u>Estimate</u>
CTR	350,240	6,961	16,499	373,700	7,299	-142,509	238,490
* The FY 2019 Actual	above does not match	the data in the OS	D budget database	e due to a	disconnect discovered	l after budget	database had

* The FY 2019 Actual above does not match the data in the OSD budget database due to a disconnect discovered after budget database had locked; the footnote reflects the correct FY 2019 Actual.

I. <u>Description of Operations Financed</u>: Today's Weapons of Mass Destruction (WMD) threat environment includes State and Non-State actors acquiring, developing, or using WMD through readily available knowledge, technologies, and materials. The Department's Cooperative Threat Reduction (CTR) Program is a threat based, counter-WMD program that works cooperatively with allies and partners to enhance their capabilities to address WMD proliferation threats. The DoD CTR Program strongly supports the priorities of the National Defense Strategy (including Strengthening Alliances and Attracting New Partners) and DoD Geographic Combatant Commands priorities for countering the proliferation of WMD. The DoD CTR Program addresses WMD-related threats as close to the source as possible by focusing on DoD's unique CTR mission and authorities to eliminate, secure, detect, and interdict WMD and related systems and materials as follows:

- Eliminate: When possible, eliminate WMD and related systems or materials.
- Secure: If cooperative elimination is not possible, then consolidate, secure, and account for WMD and related systems or materials at their source.
- Detect and Interdict: If unable to fully address the threat at the source, work with partner countries to detect and prevent trafficking, enhance disease detection and surveillance, and cut off proliferation pathways.

I. <u>Description of Operations Financed (cont.)</u>

The DoD CTR Program consists of the following six program areas: Strategic Offensive Arms Elimination, Chemical Security and Elimination, Global Nuclear Security, the Biological Threat Reduction Program, the WMD Proliferation Prevention Program, and Other Assessments and Administrative Costs. Defense-Wide Review (DWR): SECDEF conducted program reviews across the Department's portfolio and made strategic decisions to reduce resources associated with lower priority efforts in order to resource higher priorities. As a result, the FY 2021 CTR program budget request reflects a \$99.3 million DWR reduction.

						<u>\$ in thousands</u>		
						FY 2019	FY 2020	FY 2021
						<u>Actuals</u>	Enacted	<u>Estimate</u>
A.	<u>Strategic</u>	Offensive	Arms	Elimination	(SOAE)	2,823	492	2,924

The SOAE program supports the safe and secure elimination of WMD delivery systems including missiles and missile launch systems such as silos and submarines, as well as related materials, technologies, and expertise.

<u>Global Contingency Preparedness</u>

Increase U.S. preparedness and partner capacity to secure and eliminate WMD delivery systems and associated capabilities, in order to reduce potential emerging threats and proliferation concerns in an efficient and expeditious manner.

I. <u>Description of Operations Financed (cont.)</u>

		<u>\$ in thousands</u>			
		FY 2019	FY 2020	FY 2021	
		<u>Actuals</u>	Enacted	<u>Estimate</u>	
в.	Chemical Security and Elimination (CSE)	8,246	12,856	11,806	

CSE prevents non-state actors from acquiring and using toxic industrial chemicals or precursors as improvised Chemical Weapons (CW); mitigates the proliferation risk of CW materials and expertise; and secures and eliminates CW stockpiles, chemical agent research, and production infrastructure.

<u>Algeria</u>

Continue to leverage the International Criminal Police Organization (INTERPOL) to strengthen the ability of the Algerian government to detect, deter, and disrupt non-state actor threats to the highest-risk, weaponizable chemicals; collaborate with Algeria to reinforce its commitment to chemical security; and strengthen its ability to monitor security and compliance with various international treaties and conventions.

Morocco

Continue to enhance Morocco's ability to prevent Violent Extremist Organization (VEO) access to chemicals that could be used to create an improvised CW threat by strengthening Morocco's regulations, tightening inventory tracking systems, and developing an advanced chemical security train-the-trainer program; develop Moroccan capability to secure, characterize, package, transport, and securely store interdicted chemical agents; and coordinate with the Organization for the

I. <u>Description of Operations Financed (cont.)</u>

Prohibition of Chemical Weapons (OPCW) in accordance with Morocco's Chemical Weapons Convention (CWC) obligations.

<u>Tunisia</u>

Continue to leverage the INTERPOL to strengthen the ability of the Tunisian government to detect, deter, and disrupt non-state actor threats to the highest-risk weaponizable chemicals; collaborate with Tunisia to reinforce its commitment to chemical security; and strengthen its ability to monitor security and compliance with various international treaties and conventions.

Iraq

Collaborate with the Government of Iraq to improve the security of chemicals that could be used to create an improvised CW by developing Iraq's strategy and action plans and its ability to improve facility security; enhance the Ministry of Defense chemical forensics capability to facilitate attribution; and prevent future CW attacks.

<u>Jordan</u>

Complete oversight of Jordanian led chemical security train the trainer programs; begin transition of bilateral cooperation to sustainment phase.

<u>Philippines</u>

Strengthen chemical security by identifying and mapping the chemical industry landscape; implement a chemical security framework; work with the Strategic Trade Management Office to develop a national chemical inventory database and

I. <u>Description of Operations Financed (cont.)</u>

tracking system; and develop and implement transportation and site security training and standard operating procedures.

Republic of Korea (ROK)

Enhance the ability of Explosive Ordnance Disposal units to eliminate unexploded chemical munitions through training and exercises.

Contingency Preparedness

Continue cooperation with the Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD), the Edgewood Chemical and Biological Center (ECBC), and other key stakeholders to increase preparedness to secure and eliminate CW and associated capabilities focused on the Korean peninsula.

		<u>\$</u>	<u>in thousand</u>	<u>ds</u>
		FY 2019	FY 2020	FY 2021
		<u>Actuals</u>	Enacted	<u>Estimate</u>
с.	<u>Global Nuclear Security (GNS)</u>	44,001	48,919	20,152

The GNS program reduces threats posed by vulnerable nuclear weapons, nuclear weaponsrelated and high-threat radiological material, as well as associated components, technology, and expertise through cooperative partnerships with partner countries, the U.S. interagency, and international organizations.

I. <u>Description of Operations Financed (cont.)</u>

<u>Global Contingency Preparedness, Transportation Security, and Disposition</u> Increase preparedness and capabilities to support global transportation and disposition of nuclear weapons and nuclear or high-threat radiological materials.

International Atomic Energy Agency (IAEA)

Continue developing IAEA's capabilities to enhance the quality of and expand access to training on nuclear and high-threat radiological material security best practices for IAEA Member States.

<u>Jordan</u>

Complete Jordan's capabilities to secure, handle, and transport interdicted nuclear and high-threat radiological materials.

Middle East Scientific Institute for Security (MESIS)

Complete efforts of MESIS to serve as a regional leader and training provider for outreach and national capacity-building for safety and security of nuclear and high-threat radiological materials.

<u>Kazakhstan</u>

Increase physical security at sensitive nuclear sites, provide training to forces responsible for weapons-useable nuclear material security and response, and enhance Kazakhstan's National Nuclear Material Inventory

I. <u>Description of Operations Financed (cont.)</u>

Management System to track weapons-useable nuclear materials at sites throughout the country.

<u>Ukraine</u>

Enhance Ukraine's capability to detect the loss, theft, or diversion of nuclear and high threat radiological materials, and return interdicted materials to regulatory control.

Republic of Korea (ROK)

Assess and enhance the ROK capability to reduce nuclear and radiological threats through equipping, training, and conducting exercises for designated ROK military and civilian units.

<u>India</u>

Conduct best-practice exchanges in coordination with U.S. Government and Republic of India partners to improve nuclear site and transportation security.

Romania and Bulgaria

Assess potential requirements and begin development of capacity building efforts in Bulgaria and Romania.

I. <u>Description of Operations Financed (cont.)</u>

		<u>\$ in thousands</u>		
		FY 2019	FY 2020	FY 2021
		<u>Actuals</u>	Enacted	<u>Estimate</u>
D.	Biological Threat Reduction Program (BTRP)	194,786	203,642	127,396

BTRP activities reduce the proliferation of biological weapons (BW), BW components, and BW-related technologies and expertise. The program seeks to facilitate detection and reporting of diseases caused by especially dangerous pathogens (EDPs), including zoonotic diseases, which could affect the armed forces of the United States or its allies and partners. To achieve its mission, the Department works with foreign partners and allies. BTRP's activities include enhancement of partner country and regional biosafety and biosecurity (BS&S) and biosurveillance (BSV) capabilities. These capabilities counter the threat of theft or diversion of dangerous materials, counter the threat of accidental or intentional pathogen release, and establish an early detection capability for biological threats to contain outbreaks at their source before they can become destabilizing regional events or pose a threat to forces, the U.S. homeland, or U.S. interests or allies and partners abroad.

Balkans and Black Sea

Initiate efforts in the Black Sea region consistent with new CTR authorities, prioritizing engagements with Bulgaria and Romania.

I. <u>Description of Operations Financed (cont.)</u>

<u>Eurasia</u>

Support Eurasian partner nation efforts to build self-sustaining regional threat reduction networks: improve communication and threat information sharing between partners; share BS&S and BSV best practices; ensure tailored but consistent approaches to training, diagnostic processes, and reporting; enhance regional organizations' biological threat reduction capabilities and infrastructure sustainment through regional and international scientific engagements and partnerships; and be the partner of choice for biological threat reduction work in the region.

<u>Middle East</u>

Mitigate the risk of the Islamic State in Iraq and Syria (ISIS) and other terrorist groups, especially those sponsored by other nation states, from acquiring biological materials, equipment, and expertise; strengthen linkages and facilitate the adoption of internationally recognized BS&S best practices among BTRP partner nations in the region; sustainably enhance biological threat reduction capabilities with regional organizations; and be the partner of choice for biological threat reduction work in the region.

<u>Africa</u>

Expand on BS&S and BSV investments particularly to decrease the risk of VEOs acquiring biological materials, equipment, and expertise; provide tools and guidance for sustainment in sub-regions (i.e., East Africa, West Africa); strengthen linkages and facilitate the adoption of internationally recognized BS&S and BSV best practices among BTRP partner nations on a regional and sub-

I. <u>Description of Operations Financed (cont.)</u>

regional basis; enhance biological threat reduction capabilities with regional organizations; and be the partner of choice in the region.

<u>Asia</u>

Secure dangerous pathogens in an area dominated with VEO activity and illicit proliferation; enhance partner nations' individual and regional capability to detect, diagnose, and report human and animal EDPs; enhance the region's BS&S capabilities to reduce the risk of accidental or intentional release of EDPs; and be the partner of choice in the region.

		<u>\$ in thousands</u>			
	FY 2019	FY 2020	FY 2021		
	<u>Actuals</u>	Enacted	<u>Estimate</u>		
E. Proliferation Prevention Program (PPP)	74,936	79,869	52,064		

PPP strengthens border and maritime security in partner nations by providing detection, interdiction, and domain awareness capabilities of WMD-related trafficking.

<u>Eurasia</u>

Support Eurasian partner nation efforts as the partner of choice to deter, detect, and interdict attempts to traffic WMD and WMD-related materials across their borders. Provide relevant military and civilian agencies equipment, infrastructure and associated human capital development to improve and then maintain core proliferation prevention, detection, and characterization capabilities.

I. <u>Description of Operations Financed (cont.)</u>

Middle East

Support partner nation efforts as the partner of choice to deter, detect, and interdict attempts to traffic WMD and WMD-related materials by Violent Extremist Organizations (VEOs) associated with ISIS and other non-state terrorist groups. Provide relevant military and civilian agencies equipment, infrastructure and associated human capital development to improve and then maintain core proliferation prevention, detection, and characterization capabilities.

North Africa

Support partner nation efforts as the partner of choice to deter, detect, and interdict attempts to traffic WMD and WMD-related materials by VEOs associated with ISIS. Provide relevant military and civilian agencies equipment, infrastructure and associated human capital development to improve and then maintain core proliferation prevention, detection, and characterization capabilities.

Southeast Asia

Improve the partners' capability to deter, detect, and interdict attempts to traffic WMD-related materials and enforce WMD-related United Nations Security Council Regulations and other International Regulatory framework through or near their territorial waters by providing equipment and training to enhance the maritime domain awareness.

I. <u>Description of Operations Financed (cont.)</u>

	<u>in thousands</u>		
	FY 2019	FY 2020	FY 2021
	<u>Actuals</u>	Enacted	<u>Estimate</u>
F. <u>Other Assessments / Administration Costs</u>	25,448	27,922	24,148

The Other Assessments / Administrative Costs (OAAC) Program provides general program and administrative support for the CTR Program.

OAAC centrally funds U.S. Embassy and overseas office support; Advisory and Assistance Services (A&AS); program management for worldwide DoD CTR Program; contract logistics support (shipping, travel, and language translation services); and execution of assessments, site surveys, and seminars with critical foreign partners in collaboration with the Combatant Commands and inter-organizational partners. In addition, these funds will be used for DoD CTR Program Operational Evaluations (formerly known as Operational Evaluations), which ensure that DoD CTR Program assistance is used for the intended purpose, as well as travel support for DTRA's senior leadership, Office of the Secretary of Defense personnel, and other stakeholders in support of the DoD CTR Program.

II. Force Structure Summary:

N/A

	-			FY 202	0		_
		-	Cong	ressional	Action		
	FY 2019	Budget	7	Democrat	Annunuistad	Current	FY 2021
A. <u>BA Subactivities</u>	Actuals	Request	Amount	Percent	Appropriated	Enacted	Estimate
1. Strategic Offensive Arms Elimination	2,823	492	0	0.0	492	492	2,924
2. Chemical Security and	8,246	12,856	0	0.0	12,856	12,856	11,806
Elimination							
3. Global Nuclear Security	44,001	33,919	15,000	44.2	48,919	48,919	20,152
4. Biological Threat Reduction Program	194,786	183,642	20,000	10.9	203,642	203,642	127,396
5. Proliferation	74,936	79,869	0	0.0	79,869	79,869	52,064
Prevention							
6. Other Assessments /	25,448	27,922	0	0.0	27,922	27,922	24,148
Administrative Costs							
Total	350,240	338,700	35,000	10.3	373,700	373,700	238,490

B. <u>Reconciliation Summary</u>	Change FY 2020/FY 2020	Change
B. <u>Reconciliation Summary</u> Baseline Funding	<u>F1 2020/F1 2020</u> 338,700	
Congressional Adjustments (Distributed)	35,000	
Congressional Adjustments (Undistributed)		
Adjustments to Meet Congressional Intent		
Congressional Adjustments (General Provisions)		
Subtotal Appropriated Amount	373,700	
Fact-of-Life Changes (2020 to 2020 Only)		
Subtotal Baseline Funding	373,700	
Supplemental		
Reprogrammings		
Price Changes		7,299
Functional Transfers		
Program Changes		-142,509
Current Estimate	373,700	238,490
Less: Wartime Supplemental		
Normalized Current Estimate	373,700	

C. <u>Reconciliation of Increases and Decreases</u> FY 2020 President's Budget Request (Amended, if applicable) 1. Congressional Adjustments	<u>Amount</u>	<u>Totals</u> 338,700 35,000
 a. Distributed Adjustments 1) Biological Threat Reduction Program 2) Global Nuclear Security b. Undistributed Adjustments c. Adjustments to Meet Congressional Intent 	20,000 15,000	
 d. General Provisions FY 2020 Appropriated Amount 2. War-Related and Disaster Supplemental Appropriations 		373,700
3. Fact-of-Life Changes FY 2020 Baseline Funding		373,700
4. Reprogrammings (Requiring 1415 Actions) Revised FY 2020 Estimate		373,700
5. Less: Item 2, War-Related and Disaster Supplemental		373,700
Appropriations and Item 4, Reprogrammings FY 2020 Normalized Current Estimate 6. Price Change 7. Functional Transfers		373,700 7,299
 8. Program Increases a. Annualization of New FY 2020 Program b. One-Time FY 2021 Increases c. Program Growth in FY 2021 1) Strategic Offensive Arms Elimination Funding increase in FY 2021 reflects increasing preparedness by developing processes and procedures 	3 , 298	8,597
to secure and eliminate WMD delivery systems, technologies, and associated infrastructure on the Korean Peninsula in a cooperative, but time-		

С. Е	Reconciliation of Increases and Decreases	Amount	<u>Totals</u>
	constrained environment. (FY 2020 Baseline: \$492		
	thousand)		
	2) Other Assessments/Administrative Costs	2 , 576	
	Funding increase in FY 2021 supports CTR program		
	integration activities to enable the DoD, United		
	States Government and international partners to		
	counter and deter WMD. (FY 2020 Baseline: \$27,922		
	thousand)		
	3) Chemical Security and Elimination	2,140	
	Funding increase in FY 2021 supports preparedness		
	activities for chemical weapons contingency		
	elimination. (FY 2020 Baseline: \$12,856 thousand)		
	4) Global Nuclear Security	583	
	Funding increase in FY 2021 supports nuclear security		
	training efforts. (FY 2020 Baseline: \$48,919		
	thousand)		
9. E	Program Decreases		-151,106
	. Annualization of FY 2020 Program Decreases		
b). One-Time FY 2020 Increases		
	1) Biological Threat Reduction Program	-20,000	
	Funding decrease reflects to FY20 \$20M Congressional		
	add		
	2) Global Nuclear Security	-15,000	
	Funding decrease is due to FY20 \$15M Congressional		
	add.		
С	2. Program Decreases in FY 2021		
	1) Defense Wide Review Reductions - Eliminate/Reduce	-99 , 279	
	Lower Priorities Programs		
	Decisions to reduce resources associated with lower		

C. <u>Reconciliation of Increases and Decreases</u>	Amount	<u>Totals</u>
priority efforts in order to resource higher		
priorities.		
Biological Threat Reduction Program - (\$51,786)		
(FY 2020 Baseline: \$203,642 thousand)		
Proliferation Prevention - (\$20,934)		
(FY 2020 Baseline: \$79,869 thousand)		
Global Nuclear Security- (\$15,328)		
(FY 2020 Baseline: \$48,919 thousand)		
Other Assessments/Administration Costs - (\$6,908) (FY 2020 Baseline: \$27,922 thousand)		
(FI 2020 Baseline: \$27,922 chousand)		
Chemical Security and Elimination - (\$3,447)		
(FY 2020 Baseline: \$12,856 thousand)		
Strategic Offensive Arms Elimination - (\$876)		
(FY 2020 Baseline: \$492 thousand)	0.460	
2) Proliferation Prevention	-8,468	
Funding decrease due to completing efforts in		
Vietnam, Georgia, Tunisia and Armenia. (FY 2020 Baseline: \$79,869 thousand)		
3) Biological Threat Reduction Program	-8,359	
To reduced FY21 efforts in the EUCOM and AFRICOM AOR.	0,000	
(FY 2020 Baseline: \$203,642 thousand)		
FY 2021 Budget Request		238,490
		•

IV. Performance Criteria and Evaluation Summary:

Strategic Offensive Arms Elimination (SOAE):

FY 2019 funds executed over three years will:

Global

- Develop high-confidence processes and procedures to quickly disable and permanently eliminate ballistic missile systems and related infrastructure in a cooperative but time-constrained environment; and
- Build partner capacity to secure and eliminate WMD delivery system commodities, technologies, and expertise.

Asia

• Assess and enhance preparedness to secure and eliminate WMD delivery systems and related infrastructure on the Korean Peninsula.

FY 2020 funds executed over three years will:

Asia

• Continue to increase U.S. preparedness to secure and eliminate WMD delivery systems and associated capabilities on the Korean Peninsula.

IV. Performance Criteria and Evaluation Summary:

FY 2021 funds executed over three years will:

Global

• Continue to build partner capacity to secure and eliminate WMD delivery system commodities, technologies, and expertise.

B. Chemical Security and Elimination (CSE):

FY 2019 funds executed over three years will:

Global

- Work through multilateral institutions to establish common chemical security standards and share best practices;
- Provide technical advice and support for contingency planning to eliminate chemical weapons and to improve safety and security of chemical weapons until they can be safely eliminated; and
- Support an upgraded chemical laboratory to improve the capacity of the OPCW to assist partner countries with detection, attribution, and prevention of CW proliferation or use.

Asia

• Continue to build the capacity of the Republic of Korea (ROK) to secure, characterize, account for, handle, transport, consolidate, store, and destroy CW materials and associated

IV. Performance Criteria and Evaluation Summary:

infrastructure while meeting U.S. laws and international treaty obligations; and

• Continue to increase preparedness for WMD elimination scenarios on the Korean Peninsula.

FY 2020 funds executed over three years will:

Middle East and North Africa

- Continue training in Algeria, Morocco, Tunisia, and Iraq on effective chemical security, chemical characterization, supply chain management, and reporting; and
- Deliver final series of planned chemical security trainings in Jordan and begin monitoring sustainment and partner ability to institutionalize and deliver independently.

Asia

- Continue to build ROK capacity to perform chemical security and elimination;
- Continue to increase preparedness to secure and eliminate chemical weapons and associated capabilities on the Korean peninsula;
- Facilitate chemical security framework implementation and associated training in the Philippines; and
- Assess chemical security requirements in Indonesia.

IV. Performance Criteria and Evaluation Summary:

FY 2021 funds executed over three years will: Global

• Continue to increase preparedness for chemical weapon contingency elimination operations, including demonstration of material solutions needed to close critical destruction technology gaps.

Asia

- Continue to enhance the capability of the ROK to respond to chemical unexploded ordinance (UXO) munitions; and secure, account for, transport, and/or destroy CW on the Korean peninsula;
- Implement chemical security framework and national chemical inventory tracking systems and associated training in the Philippines; and
- Identify new priority chemical security vulnerabilities in Indonesia and initiate a project as applicable.

Middle East and North Africa

- Continue training in Algeria, Morocco, Tunisia, and Iraq on effective chemical security, chemical characterization, supply chain management, and reporting; and
- Continue to build capacity of the Iraqi Ministry of Defense chemical forensics laboratory to facilitate attribution and prevent future CW attacks.

IV. Performance Criteria and Evaluation Summary:

C. <u>Global Nuclear Security (GNS)</u>:

FY 2019 funds executed over three years will:

Middle East

- Continue to provide training, tabletop exercises, and equipment to build Jordan's capabilities to secure, handle, and transport interdicted radiological material, and secure nuclear materials and facilities to prevent potential proliferation; and
- Support MESIS capability to serve as a regional nuclear and highthreat radiological training resource.

Eastern Europe and Eurasia

- Complete physical security upgrades at Kazakhstan nuclear sites, providing guard and response force equipment, building nuclear security capabilities through training, and continuing development of an enhanced inventory management system for nuclear materials;
- Continue training, tabletop, and field exercises and begin transitioning to a train-the-trainer approach to enhance nuclear security in Ukraine and initiate opportunities to provide support to enhance counter-nuclear smuggling efforts in Ukraine; and
- Assess Bulgaria and Romania counter nuclear smuggling requirements.

IV. Performance Criteria and Evaluation Summary:

Asia

- Support nuclear security workshops, best practice exchanges, and related activities in India; and
- Support anticipated new requirements to assist the ROK with nuclear security activities.

Global

- Support shipments of weapons-usable nuclear material to consolidate and facilitate the disposition of the nuclear material;
- Ensure the capability to work with United States Government partners to securely transport weapons-useable nuclear material and high-threat radiological material by participating in transportation exercises; and
- Continue support to the IAEA's nuclear security training efforts and other international nuclear security exchanges.

FY 2020 funds executed over three years will:

Global

- Increase preparedness and capabilities to support global transportation and disposition of nuclear weapons and nuclear or high-threat radiological materials; and
- Continue support to the IAEA's nuclear security training efforts, initiatives and other international nuclear security exchanges.

IV. Performance Criteria and Evaluation Summary:

Middle East

- Transition sustainment of capabilities provided to Jordan to train, exercise, and maintain equipment to secure, handle, and transport interdicted nuclear and high-threat radiological materials and secure nuclear materials and facilities; and
- Complete planned support to MESIS to increase its ability to serve as a regional leader and training provider for outreach and national capacity building for safety and security of nuclear and high-threat radiological materials.

Eastern Europe and Eurasia

- Continue efforts to increase physical security at sensitive nuclear sites.
- Provide training to forces responsible for weapons-useable nuclear materials; and
- Continue implementation of counter nuclear smuggling efforts in Ukraine and transition sustainment of capabilities for nuclear site security.

Asia

• Continue to conduct nuclear security workshops, best practice exchanges, training courses, table-top exercises, and related activities in India; and

IV. Performance Criteria and Evaluation Summary:

• Continue to enhance ROK capability to reduce nuclear and radiological threats through equipping, training, and conducting exercises for designated ROK military and civilian unit.

FY 2021 funds executed over three years will: Global

- Continue to increase preparedness and capabilities to support global transportation and disposition of nuclear weapons and nuclear or high-threat radiological materials; and
- Continue support to the IAEA's nuclear security training efforts, initiatives, and other international nuclear security exchanges.

Eastern Europe and Eurasia

- Continue efforts to increase physical security at sensitive nuclear sites, provide training to forces responsible for weapons-useable nuclear material security and response, and transition sustainment of Kazakhstan's National Nuclear Material Inventory Management System;
- Continue implementation of counter nuclear smuggling efforts in Ukraine and transition sustainment of nuclear security capabilities; and
- Initiate counter nuclear smuggling projects in Bulgaria and Romania if applicable based on previous assessments.

IV. Performance Criteria and Evaluation Summary:

Asia

- Continue cooperation with India on nuclear security workshops, best practice exchanges, training courses, table-top exercises, and related activities; and
- Continue to enhance the ROK capability to reduce nuclear and radiological threats through equipping, training, and conducting exercises for designated ROK military and civilian units.

D. <u>Biological Threat Reduction Program (BTRP):</u>

FY 2019 funds executed over three years will:

Eastern Europe and Eurasia

- Continue to strengthen Turkey's Biosafety and Biosecurity (BS&S) capacity through mentorship and training opportunities for emerging biosafety professionals;
- Continue regional technical exchanges to improve the security of vulnerable laboratories and strengthen ability to detect unusual biological events, including potential intentional spread;
- Continue to support laboratory surveillance network optimization, especially dangerous pathogens (EDP) consolidation, and BS&S regulatory reform in Ukraine;
- Continue a Field Epidemiology Training Program in Ukraine;
- Continue engagement with regional biological threat

IV. Performance Criteria and Evaluation Summary:

surveillance networks;

- Continue engagement with partner country researchers to improve understanding and early warning of endemic and emergent biological threats;
- Continue to conduct regional mentorship seminars to prevent the proliferation of research and practices of security concern;
- Continue to engage regional partners and organizations to improve multi-sectoral partnerships between the Health and Security elements during an EDP outbreak;
- Continue Electronic Integrated Disease Surveillance System (EIDSS) implementation, training, and upgrades in Armenia, Azerbaijan, Georgia, and Ukraine;
- Continue deployment of online tools for improved clinical diagnostics of EDP outbreaks in Azerbaijan, Georgia, and Ukraine;
- Complete establishment of two national veterinary surveillance laboratories in Ukraine;
- Complete remediation assistance for the central reference laboratory in Azerbaijan;
- Complete national brucellosis monitoring project in Armenia;
- Complete a Full Operational Capability demonstration and field exercise with Armenia; and
- Complete sustainment support of the Laboratory Information Management system in Georgia.

IV. Performance Criteria and Evaluation Summary:

Middle East Southwest Asia

- Continue to improve Pakistan's capacity to prevent, detect, diagnose, and report biological threats through collaborative research engagements in partnership with U.S. universities;
- Continue training on biosafety and biosecurity topics, tabletop and field training exercises, and continue to promote sustainable training using the train-the-trainer method in Kazakhstan;
- Continue EIDSS implementation, training, and upgrades in Iraq and Kazakhstan;
- Continue technical exchanges to improve the security of vulnerable laboratories and strengthen ability to detect unusual biological events, including potential intentional spread;
- Continue engagement with partner country researchers to improve understanding and early warning of endemic and emergent biological threats;
- Complete laboratory renovations, equipment provision, and training activities in Iraq;
- Complete Central Reference Laboratory (CRL) sustainment assistance in Kazakhstan;
- Complete development of Bio Risk Management (BRM) competency in laboratory and healthcare workforce and serve as a regional resource for BRM training in Jordan;
- Complete assistance to Jordan to develop and implement BRM laws,

IV. Performance Criteria and Evaluation Summary:

regulations, and/or policies to standardize requirements for facilities and organizations that handle or store EDPs; and

• Complete support to Jordan to develop the physical infrastructure needed to detect and diagnose diseases caused by EDPs.

Africa

- Complete construction of the National Public Health Institute of the Liberia National Reference Laboratory and the Bong County Regional Laboratory in Phebe, Liberia to ensure diagnostic capabilities for diseases caused by EDPs are available to prevent future outbreaks;
- Complete subject matter expertise and consumable procurement support in Guinea, Sierra Leone, and Liberia;
- Continue Field Epidemiology Training Program in Cameroon, Kenya, Senegal, and Tanzania;
- Initiate implementation of Bio Risk Management (BRM) national strategic planning in Kenya, Tanzania, and Uganda;
- Initiate sample repository BS&S upgrades at the Ugandan Central Public Health Institute and National Livestock Resources Research Institute;
- Complete efforts to assist Kenyan partners in their development of a national Biosecurity Bill and complete additional BS&S laboratory upgrades at new district/regional human and animal health laboratories;

IV. Performance Criteria and Evaluation Summary:

- Continue to engage regional partners and organizations on disease tracking, facilitate annual preparedness exercises, and conduct trainings and outbreak investigations;
- Complete development of the Ministry of Public Health Concept of Operations for public health emergency response and establish the sustainment plan for the Health Emergency Operations Center in Cameroon;
- Complete installation of Pathogen Asset Control System (PACS) at human and animal health facilities throughout Cameroon;
- Complete BS&S laboratory renovations at the National Animal Health Diagnosis and Investigation Center, begin construction management oversight and commissioning support to the Ethiopian Public Health Institute National Reference Laboratory in Ethiopia;
- Continue genomics and bioinformatics mentorship and training provided to National Animal Health Diagnosis and Investigation Center, the Armaeur Hansen Research Institute, and the Ethiopian Public Health Institute;
- Complete transition of the Health Emergency Operations Center and improvement of BS&S capabilities at the National Laboratory for Livestock and Veterinary Research and the National Public Health Laboratory in Senegal;
- Initiate construction of the Biological Safety Lab (BSL-2) Training Center and continue BS&S mentorship and research activities in South Africa; and

IV. Performance Criteria and Evaluation Summary:

• Initiate exploratory efforts and requirements gathering in Nigeria.

Asia

- Initiate requirements definition in Indonesia, to include potential laboratory renovations, as well as research and training efforts;
- Continue to engage with the ROK to assess and enhance capability to reduce biological threats through equipping, training, and/or conducting exercises for designated ROK military and civilian units;
- Continue engagement with regional biological threat surveillance networks including holding forums through the Association of Southeast Asian Nations (ASEAN) and coordinate exercises to leverage the resources of countries in the region to detect and control an outbreak;
- Continue to provide laboratory capacity through training, workshops on BS&S and epidemiology in Cambodia;
- Continue BS&S training and assist Laos in developing selfsustaining institutionalized capacity to train staff in field epidemiology;
- Continue laboratory designs/upgrades, pathogen tracking systems inclusion of instruction in curriculum, and training for biosafety equipment in human and animal health laboratories in Vietnam;
- Continue Field Epidemiology Training exercises in Vietnam to build capability for human and animal health professionals;

IV. Performance Criteria and Evaluation Summary:

- Continue a series of BS&S trainings targeting facility, laboratory, and management personnel in Indian laboratories to strengthen disease surveillance and diagnostic capacity;
- Continue to enhance Thailand's BS&S and Biosurveillance (BSV) capabilities through integrated real time disease reporting;
- Continue engagement with regional biological threat surveillance networks through the Mekong Basin Disease Surveillance Network to leverage the resources of partner countries in the region to control outbreaks;
- Continue engagement with partner country researchers to improve understanding and early warning of endemic and emergent biological threats;
- Continue to engage partners and organizations such as the Lao Military to improve multi-sectoral partnerships between the Health and Security elements during an EDP outbreak;
- Complete facility upgrades for human and animal health sectors to enhance accurate detection and characterization of pathogens during disease outbreaks in Cambodia;
- Complete a series of workshops to train Malaysian officials from the public, animal health, and law enforcement sectors to facilitate investigation and response to a biological incident at the national level; and

IV. Performance Criteria and Evaluation Summary:

• Complete site assessments to determine requirements for BS&S facility and equipment upgrades, training, and procedures in Philippines.

FY 2020 funds executed over three years will:

Eurasia

- Continue regional technical exchanges to improve the security of vulnerable laboratories and strengthen ability to detect unusual biological events, including potential intentional spread;
- Continue to support laboratory surveillance network optimization, EDP consolidation, and BS&S regulatory reform in Ukraine;
- Continue a Field Epidemiology Training Program in Ukraine;
- Continue engagement with regional biological threat surveillance networks;
- Continue engagement with partner country researchers to improve understanding and early warning of endemic and emergent biological threats;
- Continue to conduct regional mentorship seminars to prevent the proliferation of research and practices of security concern;
- Continue to engage regional partners and organizations to improve multi-sectoral partnerships between the Health and Security elements during an EDP outbreak;

IV. Performance Criteria and Evaluation Summary:

- Complete EIDSS implementation, training, and upgrades in Armenia, Azerbaijan, Georgia, and Ukraine; and
- Complete deployment of online tools for improved clinical diagnostics of EDP outbreaks in Azerbaijan, Georgia, and Ukraine.

Balkans and the Black Sea

• Initiate efforts in the Black Sea region, consistent with new CTR authorities, prioritizing engagements with Bulgaria and Romania.

Middle East Southwest Asia

- Initiate assessments of current biosecurity, biosafety, and biosurveillance capabilities within the Gulf Cooperation Council (GCC) States;
- Initiate technical support to enhance the GCC leadership role in regional networks to prevent the illicit acquisition or use of dangerous biological materials by Iran and ISIS;
- Continue to monitor for new or emerging biological threats and engage in capacity-building efforts in Pakistan and Egypt that are focused on preventing the theft, loss, diversion, or misuse of especially dangerous pathogens;
- Continue technical exchanges to improve the security of vulnerable laboratories and strengthen ability to detect unusual biological events, including potential intentional spread;

IV. Performance Criteria and Evaluation Summary:

- Continue EIDSS implementation, training, and upgrades in Iraq and Kazakhstan;
- Continue sustainment activities and research opportunities, including BRM training and BSV capacity building activities and continued support for electronic disease reporting in Iraq;
- Continue engagement with partner country researchers to improve understanding and early warning of endemic and emergent biological threats; and
- Continue scientific engagement projects, One Health and Global Health Security Agenda workshops, training on biosafety and biosecurity topics, tabletop and field training exercises, and incorporating BS&S training in educational curricula.
- Conclude capacity-building efforts in Pakistan.

Africa

- Initiate BS&S engagement and security improvements in Nigeria;
- Initiate BRM systems training and standard separating procedures implementation in Ethiopia;
- Continue sample repository BS&S upgrades in Uganda;
- Complete construction of a BSL-2 Diagnostic Training Center, BS&S mentorship, and research activities in South Africa;
- Continue Field Epidemiology Training program in Kenya, Tanzania, Senegal, and Cameroon;

IV. Performance Criteria and Evaluation Summary:

- Continue BRM national strategic planning in Tanzania, Senegal, and Uganda;
- Continue engagement with regional biological threat surveillance networks;
- Continue engagement with partner country researchers to improve understanding and early warning of endemic and emerging biological threats; and
- Continue to engage regional partners and organizations to improve multi-sectoral partnerships between the Health and Security elements during an EDP outbreak.

Asia

- Continue to refine requirements for BS&S facility and equipment upgrades, and procedures in Indonesia and Philippines;
- Continue to provide BS&S training in Cambodia, India, Laos, and Philippines;
- Continue to develop and implement field epidemiology training and exercises in Cambodia, Laos, and Vietnam;
- Continue to enhance Thailand's BS&S and BSV capabilities through integrated real time disease reporting;
- Continue engagement with regional biological threat surveillance networks;

IV. Performance Criteria and Evaluation Summary:

- Continue engagement with partner country researchers to improve understanding and early warning of endemic and emergent biological threats;
- Continue to engage regional partners and organizations to improve multi-sectoral partnerships between the Health and Security elements during an EDP outbreak; and
- Complete lab designs/upgrades, pathogen tracking systems, BS&S instruction, and training for biosafety equipment in human and animal health laboratories in Vietnam.

FY 2021 funds executed over three years will:

Eurasia

- Continue regional technical exchanges to improve the security of vulnerable laboratories and strengthen ability to detect unusual biological events, including potential intentional spread;
- Continue to strengthen Turkey's BS&S capacity through targeted mentorship and training opportunities for emerging biosafety professionals;
- Continue to support laboratory surveillance network optimization, EDP consolidation, and BS&S regulatory reform in Ukraine;
- Continue engagement with regional biological threat surveillance networks;

IV. Performance Criteria and Evaluation Summary:

- Continue technical exchanges to improve the security of vulnerable laboratories and strengthen ability to detect unusual biological events, including potential intentional spread;
- Continue assessment efforts in the Balkan and the Black Sea regions, consistent with new CTR authorities, prioritizing engagements with Bulgaria and Romania;
- Complete EIDSS implementation, training, and upgrades; and
- Reduce program activities to prepare for host-country sustainment in Armenia, Azerbaijan, and Georgia.

Middle East Southwest Asia

- Continue assessments of building current regional BS&S capabilities within the Gulf Cooperation Council (GCC) States;
- Continue technical support to enhance the GCC's leadership role in regional networks to prevent the illicit acquisition or use of dangerous biological materials;
- Continue technical exchanges to improve the security of vulnerable laboratories and strengthen ability to detect unusual biological events, including potential intentional spread;
- Continue EIDSS implementation, training, and upgrades in Iraq and Kazakhstan;
- Continue activities to ensure sustainable transition of operations of the Kazakhstan Central Reference Laboratory;

IV. Performance Criteria and Evaluation Summary:

- Continue sustainment activities and research opportunities, including BRM training and BSV capacity building activities and continued support for electronic disease reporting in Iraq;
- Continue scientific engagement projects, One Health and Global Health Security Agenda workshops, training on biosafety and biosecurity topics, tabletop and field training exercises, and incorporating BS&S training in educational curricula; and
- Reduce program activities to prepare for host-country sustainment in Jordan and Uzbekistan.

Africa

- Continue BS&S engagement and security improvements in Nigeria;
- Continue BRM systems training and standard operating procedures implementation in Ethiopia, South Africa and Kenya;
- Continue Field Epidemiology Training program in South Africa;
- Continue to enhance pathogen diagnostics and reporting in South Africa and Kenya;
- Continue engagement with regional biological threat surveillance networks;
- Continue engagement with partner country researchers to improve understanding and early warning of endemic and emerging biological threats;

IV. Performance Criteria and Evaluation Summary:

- Continue to engage regional partners and organizations to improve multisectoral partnerships between the Health and Security elements during an EDP outbreak;
- Continue establishment and operationalization of a Regional Collaborating Center for the African Union (AU) Center for Disease Control (CDC) to enhance partner capability to contain disease outbreaks at their source;
- Complete work with AU CDC to assist them in developing biosecurity guidelines;
- Continue to strengthen BRM network throughout the continent;
- Reduce program activities to prepare for host-country sustainment in Cameroon, Guinea, Liberia, North Africa, Senegal, Tanzania, and Uganda; and
- Conclude BTRP activities in Sierra Leone.

Asia

- Initiate efforts to train regional partner nations in the requirements to plan, organize and execute a series of workshops and tabletop exercises;
- Continue building a network of regional experts within Asia on biological issues that can enhance collaboration on detection of biological agents;

IV. Performance Criteria and Evaluation Summary:

- Continue to engage with the ROK to assess and enhance capability to reduce biological threats through equipping, training, and/or conducting exercises for designated ROK military and civilian units;
- Continue to refine requirements for BS&S facility and equipment upgrades, and procedures in Indonesia and Philippines;
- Continue to provide BS&S training in Philippines;
- Continue fostering Track 2 biosecurity dialogue in India transitioning to Track 1.5 and Track 1 dialogues;
- Continue to develop Malaysian One Health network as a regional leader in Emergency Operation Center development and sustainment within Asia;
- Initiate establishment of national laboratory BS&S regulatory standards and provide technical subject matter expertise for India-funded laboratory construction;
- Continue engagement with regional biological threat surveillance networks;
- Continue engagement with partner country researchers to improve understanding and early warning of endemic and emergent biological threats;
- Continue to engage regional partners and organizations to improve multisectoral partnerships between the Health and Security elements during an EDP outbreak; and

IV. Performance Criteria and Evaluation Summary:

• Reduce program footprint to prepare for host-country sustainment in Cambodia, Laos, Thailand, and Vietnam.

E. Proliferation Prevention Program (PPP):

FY 2019 funds executed over three years will:

Eurasia

- Continue long-term WMD threat reduction activities with CTR partners sharing borders with Russia;
- Provide sustainment transition to Armenia and Moldovan Border Guards for provided WMD proliferation prevention capacity;
- Continue efforts in Georgia to improve detection, surveillance, and interdiction capabilities along its green border with Armenia and Turkey;
- Prevent proliferation of nuclear and radiological materials by working collaboratively with the National Nuclear Center of Kazakhstan; and
- Initiate efforts in the Balkans, Black Sea, and Baltic regions consistent with new CTR authorities, prioritizing engagements with Bulgaria and Romania.

IV. Performance Criteria and Evaluation Summary:

Middle East and North Africa

- Continue and complete engagements in Jordan along the Syrian and Iraqi borders, focusing on sustainment capabilities to prevent the illicit flow of WMD and related components and to ensure resilience in the event of a WMD incident;
- Provide equipment and training to those agencies in Lebanon responsible for preventing the illicit flow and use of WMD;
- Enhance WMD detection and interdiction capabilities in Tunisia along the Libya green border; and
- Initiate engagements with other Middle East and North Africa countries.

Southeast Asia

- In the Philippines, sustain existing efforts and provide training and mentoring that will better facilitate interagency coordination in the maritime domain;
- Complete improvements in Vietnam to enhance the maritime security and law enforcement equipment and infrastructure support capabilities;
- Continue engagements in Southeast Asia countries such as Malaysia and Indonesia to enhance national maritime security and WMD detection capabilities and bolster regional proliferation prevention awareness and capabilities; and
- Initiate engagements with other countries in the region.

IV. Performance Criteria and Evaluation Summary:

FY 2020 funds executed over three years will:

Eurasia

- Continue long-term WMD threat reduction activities with CTR partners sharing borders with Russia;
- Provide sustainment transition to Armenia WMD proliferation prevention capacity; and
- Continue efforts to improve detection, surveillance, and interdiction capabilities along Georgia's green border with Armenia and Turkey.

Middle East and North Africa

- Complete engagement in Jordan along the Syrian and Iraqi borders, focusing on sustainment capabilities to prevent the illicit flow of WMD and related components and to ensure resilience in the event of a WMD incident;
- Provide equipment and training to those agencies in Lebanon responsible for preventing the illicit flow and use of WMD;
- Enhance WMD detection and interdiction capabilities in Tunisia along the Libya green border; and
- Initiate engagements with other Middle East and North Africa countries.

IV. Performance Criteria and Evaluation Summary:

Southeast Asia

- In the Philippines, sustain existing efforts and provide training and mentoring that will better facilitate interagency coordination in the maritime domain;
- Complete improvements in Vietnam to enhance the maritime security and law enforcement equipment and infrastructure support capabilities; and
- Continue engagements in Southeast Asia countries such as Malaysia and Indonesia to enhance national maritime security and WMD detection capabilities and bolster regional proliferation prevention awareness and capabilities.

FY 2021 funds executed over three years will:

Eurasia

- Continue long-term WMD threat reduction activities with CTR partners sharing borders with Russia;
- Provide sustainment transition to Armenia for provided WMD proliferation prevention capacity;
- Complete efforts to improve detection, surveillance, and interdiction capabilities along Georgia's green border with Armenia and Turkey; and

IV. Performance Criteria and Evaluation Summary:

• Continue assessment efforts in Bulgaria and Romania, consistent with new CTR authorities, and begin capability development as warranted.

Middle East and North Africa

- Complete engagement in Jordan along the Syrian and Iraqi borders, focusing on sustainment capabilities to prevent the illicit flow of WMD and related components and to ensure resilience in the event of a WMD incident;
- Provide equipment and training to those agencies in Lebanon responsible for preventing the illicit flow and use of WMD;
- Complete WMD detection and interdiction capabilities in Tunisia along the Libya green border; and
- Continue efforts in Iraq and initiate new engagements, consistent with new authorities, in North Africa and the Arabian Peninsula to counter the spread of WMD from state-based actors and VEO threat networks.

Southeast Asia

- In the Philippines, sustain existing efforts and provide training and mentoring that will better facilitate interagency coordination in the maritime domain;
- Continue improvements in Vietnam to enhance the maritime security and law enforcement equipment and infrastructure support capabilities; and

IV. Performance Criteria and Evaluation Summary:

• Continue engagements in Southeast Asia countries such as Malaysia and Indonesia to enhance national maritime security and WMD detection capabilities and bolster regional proliferation prevention awareness and capabilities.

F. Other Assessments/Administrative Costs (OAAC):

FY 2019, FY 2020, and FY 2021 OAAC funds over three years will:

- Fund U.S. Embassy and overseas office support, Advisory and Assistance Services (A&AS), program management for worldwide DoD CTR Program contract logistics support (shipping, travel, and language translations services);
- Fund assessments, site surveys, and seminars with critical foreign partners in collaboration with the Combatant Commands and interorganizational partners;
- Facilitate collaboration and synchronization in order to integrate CTR Program activities to enable the DoD, United States Government and international partners to counter and deter WMD, and to advance CTR's ability to build friendly networks by enhancing partner nations' capabilities and capacity to maintain and sustain Countering Weapons of Mass Destruction programs;

IV. Performance Criteria and Evaluation Summary:

• Fund DoD CTR Program Operational Evaluations, which ensure that DoD CTR Program assistance is used for the intended purpose. Fund travel for DTRA senior leadership, Office of the Secretary of Defense personnel, and other stakeholders in support of the DoD CTR Program.

V. <u>Personnel Summary</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	Change FY 2019/ <u>FY 2020</u>	Change FY 2020/ <u>FY 2021</u>
<u>Contractor FTEs (Total)</u>	447	<u>638</u>	<u>513</u>	<u>191</u>	-125

The decrease in FTEs in FY 2021 is due to a reduced number of countries engaged in threat reduction activities. This decrease results in accompanying reductions in performer contractors, contracted subject matter expertise, and logistical support to include travel, shipping, and linguistic services.

VI. OP 32 Line Items as Applicable (Dollars in thousands):

	Change			Change			
	FY 2019	<u>FY 2019/FY 2020</u>		FY 2020 FY 2020/FY 2021		<u>ry 2021</u>	FY 2021
OP 32 Line	<u>Actuals</u>	Price	Program	Enacted	Price	Program	<u>Estimate</u>
308 Travel of Persons	3,260	65	2,972	6,297	126	-2,449	3,974
399 Total Travel	3,260	65	2,972	6,297	126	-2,449	3,974
914 Purchased Communications (Non- Fund)	0	0	4,284	4,284	86	-4,320	50
920 Supplies & Materials (Non- Fund)	20,419	408	-18,640	2,187	44	18 , 755	20,986
923 Facilities Sust, Rest, & Mod by Contract	15,047	301	-15,348	0	0	7,644	7,644
925 Equipment Purchases (Non-Fund)	2,115	42	-2,157	0	0	6,310	6,310
932 Mgt Prof Support Svcs	11,995	240	2,419	14,654	293	-4,638	10,309
933 Studies, Analysis & Eval	16	0	-16	0	0	0	0
934 Engineering & Tech Svcs	134,831	2,697	-14,204	123,324	2,466	-59,836	65,954
957 Other Costs (Land and Structures)	21,503	430	-18,968	2,965	59	10,882	13,906
985 Research & Development, Contracts	2,107	0	6,623	8,730	0	-7,456	1,274
987 Other Intra-Govt Purch	74,556	1,491	-15,039	61,008	1,220	-613	61,615
988 Grants	31,519	630	-21,372	10,777	216	-3,255	7,738
989 Other Services	26,059	521	105,034	131,614	2,632	-101,149	33,097
990 IT Contract Support Services	6,813	136	911	7,860	157	-2,384	5,633
999 Total Other Purchases	346,980	6,896	13,527	367,403	7,173	-140,060	234,516
Total	350,240	6,961	16,499	373,700	7,299	-142,509	238,490