Fiscal Year (FY) 2019 President's Budget
Operation and Maintenance, Defense-Wide

Cooperative Threat Reduction Program

February 2018
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## Cooperative Threat Reduction: ($ in Thousands):

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>CTR</td>
<td>325,604</td>
<td>5,524</td>
<td>-6,528</td>
<td>324,600</td>
<td>5,546</td>
<td>5,094</td>
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</table>

### I. Description of Operations Financed:

The Department of Defense (DoD) Cooperative Threat Reduction (CTR) Program is the Department’s most comprehensive tool for preventing the proliferation of weapons of mass destruction (WMD) and eliminating nuclear, high-threat radiological, chemical, and biological threats. Recognizing it is better and more cost effective to work with willing partners now to eliminate, consolidate, detect, and secure WMD to prevent it from falling into the wrong hands, the CTR Program’s mission is to partner with countries to reduce the threat from WMD and WMD-related technologies, facilities, and expertise. The Program focuses on eliminating, securing, and consolidating WMD and WMD-related materials at their source. It also focuses on preventing and detecting WMD materials in transit, and mitigating the risk of intentional or naturally-occurring outbreaks of diseases caused by Especially Dangerous Pathogens (EDPs). The CTR Program’s strategic objectives and layered defensive approach are:

- **Eliminate WMD:** when and where possible, the Program dismantles and destroys WMD and any related systems of materials. The Program permanently eliminates the threat/risk at its source.
- **Secure WMD:** if the Program cannot cooperatively destroy WMD-related materials, it will provide support to consolidate, secure, and account for the materials or items, again addressing the threat at its source. Success means a partner country can maintain sufficient security at a site or facility for as long as the materials exist.
- **Detect and Interdict WMD:** if the Program does not have a willing partner country at the source of the threat or cannot work at the source, it works
I. Description of Operations Financed (cont.)

with partner countries to detect and prevent trafficking or enhance disease detection and surveillance; this may also entail working with neighbor countries to contain the threat and cut off proliferation pathways.

In FY17, the CTR program operated in 31 countries world-wide to advance threat reduction objectives. Regionally, the CTR program is authorized to operate in the former Soviet Union (FSU), East and Southeast Asia, the Middle East, and North Africa. DoD has additional authorities to operate select CTR programs in sub-Saharan Africa and has global authority to facilitate the safe and secure transportation and storage of nuclear and high-threat radiological materials. In close cooperation with the U.S. Department of State and other interagency partners, the CTR Program is seeking a Determination of the Secretary of Defense, with the concurrence of the Secretary of State, that expenditure of CTR Program funds is authorized to build Republic of Korea (ROK) capability to mitigate WMD threats emanating from the Democratic People's Republic of Korea (DPRK). Additionally, an analysis is being conducted of CTR authorities for the Balkans and the Baltics to disrupt WMD trafficking routes by assessing emerging threats in those regions.

The DoD CTR Program consists of the following efforts: Strategic Offensive Arms Elimination, Chemical Weapons Destruction, Global Nuclear Security, the Cooperative Biological Engagement Program, the WMD Proliferation Prevention Program, the Threat Reduction Engagement Program (which will be discontinued in FY 2018), and Other Assessments and Administrative Costs.
I. Description of Operations Financed (cont.)

<table>
<thead>
<tr>
<th>$ in thousands</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuals</td>
<td>Estimate</td>
<td>Estimate</td>
<td></td>
</tr>
<tr>
<td>A. Strategic Offensive Arms Elimination (SOAE)</td>
<td>11,791</td>
<td>12,188</td>
<td>2,823</td>
</tr>
</tbody>
</table>

The SOAE Program supports the destruction of strategic weapons delivery systems, primarily missiles and associated infrastructure.

Ukrainian SS-24 Missile Disassembly, Storage, and Elimination
Facilitate the safe and secure disassembly, storage, and destruction of propellant from SS-24 intercontinental ballistic missile solid rocket motors in Eastern Ukraine.

Contingency Planning and Global Engagement
Remain postured to support the elimination of WMD delivery systems and related infrastructure in the event of a contingency requiring mobilization.
Cooperative Threat Reduction Program  
Operation and Maintenance, Defense-Wide  
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I. Description of Operations Financed (cont.)

<table>
<thead>
<tr>
<th>$ in thousands</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuals</td>
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<td>5,446</td>
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<table>
<thead>
<tr>
<th>B. Chemical Weapons Destruction (CWD)</th>
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</table>

The CWD Program prevents the proliferation of chemical weapons (CW), weapons components, and weapons-related materials and expertise. The CWD Program achieves its mission by securing and facilitating the cooperative elimination of foreign CW stockpiles and chemical agent production facilities and improving the safety and security of foreign facilities housing CW or related materials.

Global Cooperative Chemical Security
Mitigate the risk of adversaries developing and using improvised chemical weapons from toxic industrial chemicals (TICs) and toxic industrial materials (TIMs).

Global Chemical Weapons Destruction Contingency
Plan and prepare for potential CW elimination efforts and sustain the program’s CW elimination expertise, which is critical to the U.S. Government’s ability to respond rapidly to emerging CW crises, as demonstrated by prior efforts in Libya and Syria.
I. Description of Operations Financed (cont.)

<table>
<thead>
<tr>
<th></th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
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</thead>
<tbody>
<tr>
<td>C. Global Nuclear Security (GNS)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Actuals</td>
<td>Estimate</td>
<td>Estimate</td>
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<tr>
<td>Global Nuclear Security (GNS)</td>
<td>24,150</td>
<td>17,887</td>
<td>29,001</td>
</tr>
</tbody>
</table>

The GNS Program prevents the proliferation of nuclear weapons, weapons components, and weapons-related materials and expertise. It also facilitates the elimination of nuclear weapons and nuclear weapons components and supports the safe and secure transportation and storage of nuclear weapons-usable and high-threat radiological materials.

**Global Transportation Security and Disposition Project**
Cooperate with U.S. and global partners to facilitate the safe and secure transport, storage, and disposition of nuclear weapons, nuclear weapons components, and nuclear weapons-useable and high-threat radiological materials to prevent theft, diversion, or proliferation.

**International Atomic Energy Act (IAEA) Nuclear Security Training and Education Project**
Enhance the IAEA’s capabilities to provide web-based and instructor-led training on nuclear and high-threat radiological security best practices to IAEA Member States.

**Jordan Nuclear and Radiological Security Support Project**
Develop and maintain Jordan’s capability to safely secure nuclear and high-threat radiological material in storage, use and during transport. Efforts are focused on
I. Description of Operations Financed (cont.)

training and equipping the Jordanians to secure interdicted nuclear and high-threat radiological materials which improve Jordan’s capability to prevent the proliferation of nuclear and high-threat radiological materials.

Kazakhstan Nuclear Security Engagement Project
Increase physical security at sensitive nuclear sites, provide training to forces engaged in weapons useable nuclear material security, and enhance Kazakhstan’s National Nuclear Material Inventory Management System to track weapons useable nuclear materials at various sites throughout the country.

Nuclear Security Enhancements, Training, and Center of Excellence (COE) Support Project
Develop relationships and conduct initial engagements with countries possessing nuclear weapons, or countries that may interdict nuclear weapons-useable materials, to establish the basis for cooperative activities to enhance security of nuclear weapons and weapons-useable nuclear material and related components. Emphasizes training on how to transport interdicted high-threat radiological materials safely and securely.

Ukraine Nuclear Security Readiness Project
Enhance Ukraine’s capability to prevent and detect the accidental or intentional loss, theft, or diversion of nuclear and high-threat radiological materials. Provide security and response training and equipment to the Ukrainian National Guard, enhancing Ukraine’s ability to coordinate and respond to nuclear incidents. Assist Ukraine with the development of national-level nuclear incident response plans, as part of the Global Partnership agenda. Initiate opportunities and define requirements to provide support to enhance counter nuclear smuggling efforts in Ukraine.
I. Description of Operations Financed (cont.)

China Nuclear Security COE Project
Reduce nuclear material threats by enhancing China’s nuclear security culture in cooperation with the Department of Energy (DOE) at China’s Nuclear Security COE.

<table>
<thead>
<tr>
<th></th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuals</td>
<td>175,684</td>
<td>172,753</td>
<td>197,585</td>
</tr>
</tbody>
</table>

D. Cooperative Biological Engagement Program (CBEP)

CBEP prevents the proliferation of biological weapons, biological weapons components, and biological weapons-related technologies and expertise. The program reduces biological threats by securing and cooperatively eliminating foreign biological weapon (BW) stockpiles and associated infrastructure, securing and enhancing biosafety at facilities that store and handle especially dangerous pathogens (EDPs) for legitimate beneficial purposes, and enhancing detection and reporting of outbreaks of dangerous diseases before they spread. The program’s focus includes diseases caused by EDPs, including zoonotic diseases, which spread easily from animals to humans and can also have devastating economic consequences by impacting food sources. To achieve its mission, CBEP activities include enhancement of partner country and regional biosafety, biosecurity, and biosurveillance capabilities.
I. Description of Operations Financed (cont.)
It is increasingly difficult to prevent biological incidents and disrupt the development of biological weapons, given the diffusion of biological expertise, the rapid pace of advancement in biotechnologies, and the ubiquity of naturally-occurring biological materials. As the 2014 Ebola Virus Disease (EVD) outbreak in West Africa demonstrated, disease outbreaks, whether originating from an intentional attack, an inadvertent release, or a natural occurrence, do not respect national boundaries. Deadly pathogens can spread rapidly in today’s interconnected world. They can be transmitted easily between humans and animals, potentially resulting in high mortality rates, public panic, social and economic disruption, and costly response measures. Against this backdrop, the lack of technical expertise to secure sensitive materials or to quickly detect, diagnose, and report dangerous outbreaks could have significant consequences.

Eastern Europe and Eurasia
Strengthen linkages between and facilitate sharing of biosecurity and biosurveillance best practices between CBEP partner nations in Eastern Europe and Eurasia; ensure tailored but consistent approaches to training, diagnostic processes, and reporting; and enhance regional organizations’ biological threat reduction capabilities and infrastructure investment sustainment through regional and international scientific engagements and partnerships.

Middle East and Southwest Asia
Strengthen linkages and facilitate the adoption of internationally recognized biosecurity best practices among CBEP partner nations in the region; mitigate the risk of the Islamic State of Iraq and Syria (ISIS) and other non-state terrorist groups acquiring biological materials, equipment, and expertise; and sustainably enhance their biosurveillance and
I. Description of Operations Financed (cont.)

biological threat reduction capabilities through engagement with relevant regional organizations.

Africa Regional Engagements

Build on biosecurity and biosurveillance investments and provide tools and guidance for sustainment in sub-regions (i.e., East Africa, West Africa); strengthen linkages and facilitate the adoption of best practices related to biosecurity and biosurveillance among CBEP partner nations on a regional and sub-regional basis; and enhance the biological threat reduction capabilities of partner nations through activities executed and sustained by relevant regional organizations.

East and Southeast Asia Regional Engagement

Enhance the region’s capability to detect, diagnose, and report human and animal diseases of security concern, and enhance the region’s biosecurity capabilities to reduce the risk of accidental or intentional release of EDPs.

CBEP is currently partnering with the following 26 countries: Armenia, Azerbaijan, Georgia, Kazakhstan, Ukraine, Uzbekistan, Iraq, Jordan, Turkey, Cameroon, Ethiopia, Guinea, Kenya, Liberia, Senegal, Sierra Leone, South Africa, Tanzania, Uganda, Cambodia, India, Lao, Malaysia, Philippines, Thailand, and Vietnam. Regional funding will support additional activities in Pakistan and Indonesia.
I. Description of Operations Financed (cont.)

<table>
<thead>
<tr>
<th>E. Proliferation Prevention Program (PPP):</th>
<th>$ in thousands</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Actuals</td>
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<tr>
<td></td>
<td>FY 2017</td>
</tr>
<tr>
<td>E. Proliferation Prevention Program (PPP):</td>
<td></td>
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<td></td>
<td>83,358</td>
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</tbody>
</table>

PPP addresses the trafficking of WMD and related components and helps partner nations prevent the proliferation of WMD materials, components, technology, and expertise across their borders.

PPP is currently partnering with the following countries: Armenia, Georgia, Moldova, Jordan, Lebanon, Kazakhstan, Tunisia, Cambodia, Philippines and Vietnam.

**Armenia Land Border Proliferation Prevention Project**
Improve Armenia’s capability to deter, detect, and interdict attempts to traffic WMD and WMD-related materials across its borders by providing equipment and equipment-related training to the Armenian Border Guard (ABG) to enhance capabilities in communications, surveillance, WMD detection and identification, mobility, tactical infrastructure, and post and patrol operations. Ensures that the ABG can sustain and build upon these capabilities over the long term.

**Georgia Land Border Project**
Provide comprehensive WMD detection and interdiction capabilities to the Georgia Border Police to deter, detect, and interdict WMD and related materials along Georgia’s land borders by installing border surveillance cameras and integrated communications systems,
I. Description of Operations Financed (cont.)

constructing or renovating existing border patrol headquarters, and providing training on
tactics and procedures for green-border surveillance and interdiction operations.

**Kazakhstan Fissile and Radioactive Material Proliferation Prevention Project**
Prevent proliferation of nuclear and radiological materials by working collaboratively with the National Nuclear Center of Kazakhstan.

**Moldova Land Border Proliferation Prevention Project**
Complete WMD detection and interdiction capabilities for the Moldovan Border Police, Moldovan Customs Service, Civil Protection and Emergency Situation Service, and National Agency for the Regulation of Nuclear and Radiological Activities by installing border surveillance cameras and integrated communications systems at key border locations and providing equipment that enhances Moldova’s ability to interdict and characterize WMD-related materials.

**Jordan Land Border Proliferation Prevention Project**
Improve Jordan’s capability to deter, detect, and interdict attempts to traffic WMD and related materials across its borders with Syria and Iraq and maintain operational capability in the event of a WMD event. Supply training and equipment that improves core proliferation prevention capabilities of the Jordan Armed Forces (JAF), including provision of command and control, communications, surveillance, interdiction, and handheld equipment in order to facilitate the interdiction of WMD on Jordan’s borders. Provide relevant military and civilian responders with equipment and training to detect, characterize, isolate, and secure WMD, as well as training to operate in, respond to, and mitigate the effects of WMD materials. Deliver train-the-trainer capability, preventive and corrective maintenance, and sustainment training to the JAF and civilian agencies in order to sustain and build upon these capabilities for the long term through future human capital development.
I. Description of Operations Financed (cont.)

Lebanon Border Security Project
Improve the capabilities of the Lebanese Armed Forces Land Border Regiments to deter, detect, and interdict WMD and WMD-related materials in transit across Lebanon’s 375-kilometer border with Syria by providing surveillance equipment at border outposts, providing integrated United Kingdom-provided surveillance equipment, delivering border security and WMD detection training and equipment, and conducting Concept of Operations (CONOPs) workshops.

Tunisia Border Security Project
Improve Tunisia’s capability to deter, detect, and interdict attempts to traffic WMD and related materials across its border with Libya by working collaboratively with Tunisia’s Army and National Guard to design, develop, produce, deploy, and sustain an integrated border surveillance system. Deliver training to develop sustainable human capital and equipment to detect, characterize, isolate, and secure WMD and WMD-related materials and to prevent their proliferation. Support CONOPs workshops for Tunisian border security agencies to develop and refine standard operating procedures that better utilize the border security system in a whole-of-government approach to combatting WMD-terrorism and proliferation.

Cambodia Maritime Proliferation Prevention Project
Support Cambodia’s capability to deter, detect, and interdict WMD and related materials transiting through maritime ports and national waters by enhancing radiological detection capabilities at the main river port, the Phnom Penh Autonomous Port New Container Terminal, in partnership with DOE, the European Commission Joint Research Centre, the Secretariat National Counter-Terrorism Committee of Cambodia, and the General Department of Customs and Excise of Cambodia.
I. Description of Operations Financed (cont.)

Philippines Maritime Proliferation Prevention Project
Improve the Philippine’s capability to deter, detect, and interdict attempts to traffic WMD and related materials through or near its territorial waters by providing equipment and training to enhance the Philippine’s maritime domain awareness.

Vietnam Maritime Proliferation Prevention
Improve Vietnam’s capability to deter, detect, and interdict attempts to traffic WMD and related materials through Vietnamese national waters, including the territorial sea and Exclusive Economic Zone by providing patrol vessel-sustainment facilities and WMD-interdiction training.

North Africa and Southeast Asia New Projects
Pursue critical emerging WMD proliferation threats with cooperative North African (Morocco) and Southeast Asian (Malaysia and Indonesia) partner governments.

$ in thousands

<table>
<thead>
<tr>
<th></th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuals</td>
<td>400</td>
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<td>0</td>
</tr>
<tr>
<td>Estimate</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

F. Threat Reduction Engagement Program (TREP)

TREP establishes partnerships with international military and defense authorities responsible for addressing WMD and related materials through strategic events designed to increase a country’s willingness to partner with the United States to reduce WMD threats, prevent chemical, biological, radiological, and nuclear (CBRN) proliferation, and improve detection and reporting capabilities for diseases of security concern.
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I. Description of Operations Financed (cont.)

This program is discontinued beginning in FY 2018. Other authorities in DTRA and the DoD may be used to provide this capability.

<table>
<thead>
<tr>
<th>G. Other Assessments / Administrative Cost (OAAC)</th>
<th>$ in thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2017</td>
<td>FY 2018</td>
</tr>
<tr>
<td>Actuals</td>
<td>Estimate</td>
</tr>
<tr>
<td>27,280</td>
<td>26,980</td>
</tr>
</tbody>
</table>

This program supports small CTR offices at embassies across the globe, and the Audits and Examinations program which ensures CTR assistance is used for the intended purpose in an efficient and effective manner. The program also provides advisory, assistance, and administrative support to the CTR program. Additionally, the program funds management for worldwide CTR contracted logistics support and travel by DTRA and stakeholder personnel not in support of a single CTR program.

II. Force Structure Summary:

N/A
Cooperative Threat Reduction Program  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 President’s Budget

III. Financial Summary ($ in thousands)

<table>
<thead>
<tr>
<th>A. BA Subactivities</th>
<th>FY 2017 Actuals</th>
<th>Budget Request</th>
<th>Amount</th>
<th>Percent</th>
<th>Appropriated</th>
<th>Current Estimate</th>
<th>FY 2019 Estimate</th>
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</thead>
<tbody>
<tr>
<td>1. Strategic Offensive Arms Elimination</td>
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<td>0.0</td>
<td>0</td>
<td>12,188</td>
<td>2,823</td>
</tr>
<tr>
<td>2. Chemical Weapons Destruction</td>
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<td>5,000</td>
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<td>3. Global Nuclear Security</td>
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<td>4. Cooperative Biological Engagement Program</td>
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<td>6. Threat Reduction Engagement</td>
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<tr>
<td>7. Other Assessments/ Administrative Costs</td>
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<td><strong>Total</strong></td>
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<td><strong>0</strong></td>
<td><strong>324,600</strong></td>
<td><strong>335,240</strong></td>
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CTR-1141
Cooperative Threat Reduction Program  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 President’s Budget

III. Financial Summary ($ in thousands)

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2018/FY 2018 Change</th>
<th>FY 2018/FY 2019 Change</th>
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<tbody>
<tr>
<td>Baseline Funding</td>
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<td>324,600</td>
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<tr>
<td>Congressional Adjustments (Distributed)</td>
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<td></td>
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<tr>
<td>Congressional Adjustments (Undistributed)</td>
<td></td>
<td></td>
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<tr>
<td>Adjustments to Meet Congressional Intent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congressional Adjustments (General Provisions)</td>
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<td></td>
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<tr>
<td><strong>Subtotal Appropriated Amount</strong></td>
<td>324,600</td>
<td>324,600</td>
</tr>
<tr>
<td>Fact-of-Life Changes (2018 to 2018 Only)</td>
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</tr>
<tr>
<td><strong>Subtotal Baseline Funding</strong></td>
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<tr>
<td>Supplemental</td>
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<tr>
<td>Reprogrammings</td>
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<tr>
<td>Price Changes</td>
<td></td>
<td>5,546</td>
</tr>
<tr>
<td>Functional Transfers</td>
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<td></td>
</tr>
<tr>
<td>Program Changes</td>
<td></td>
<td>5,094</td>
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<tr>
<td><strong>Current Estimate</strong></td>
<td>324,600</td>
<td>335,240</td>
</tr>
<tr>
<td>Less: Wartime Supplemental</td>
<td></td>
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<tr>
<td><strong>Normalized Current Estimate</strong></td>
<td>324,600</td>
<td>324,600</td>
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### III. Financial Summary ($ in thousands)

<table>
<thead>
<tr>
<th>C. Reconciliation of Increases and Decreases</th>
<th>Amount</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2018 President's Budget Request (Amended, if applicable)</td>
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<td></td>
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<tr>
<td>1. Congressional Adjustments</td>
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<tr>
<td>a. Distributed Adjustments</td>
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<tr>
<td>1) Program Decrease</td>
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<tr>
<td>b. Undistributed Adjustments</td>
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<tr>
<td>c. Adjustments to Meet Congressional Intent</td>
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<td></td>
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<tr>
<td>d. General Provisions</td>
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<tr>
<td>FY 2018 Appropriated Amount</td>
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<tr>
<td>2. War-Related and Disaster Supplemental Appropriations</td>
<td></td>
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<tr>
<td>3. Fact-of-Life Changes</td>
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<tr>
<td>FY 2018 Baseline Funding</td>
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<td></td>
</tr>
<tr>
<td>4. Reprogrammings (Requiring 1415 Actions)</td>
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</tr>
<tr>
<td>Revised FY 2018 Estimate</td>
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<tr>
<td>5. Less: Item 2, War-Related and Disaster Supplemental Appropriations and Item 4, Reprogrammings</td>
<td></td>
<td></td>
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<tr>
<td>FY 2018 Normalized Current Estimate</td>
<td>324,600</td>
<td></td>
</tr>
<tr>
<td>6. Price Change</td>
<td></td>
<td>5,546</td>
</tr>
<tr>
<td>7. Functional Transfers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Transfers In</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Enter Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Program Increases</td>
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<td>33,167</td>
</tr>
<tr>
<td>a. Annualization of New FY 2018 Program</td>
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<td></td>
</tr>
<tr>
<td>b. One-Time FY 2019 Increases</td>
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<td></td>
</tr>
<tr>
<td>c. Program Growth in FY 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Cooperative Biological Engagement Program</td>
<td>22,019</td>
<td></td>
</tr>
<tr>
<td>The funding increase in FY 2019 reinstates prior program requirement levels in Africa, Southeast Asia, Eurasia, and the Middle East, and reflects deferred activities and investments to meet program</td>
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</tbody>
</table>
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III. Financial Summary ($ in thousands)

C. Reconciliation of Increases and Decreases

objectives. FY 2019 funding enables biological nonproliferation and protects the United States and its allies from especially dangerous pathogens by collaborating with partner countries and the international community to minimize the threat of deliberate, accidental, and natural infectious disease outbreaks through enhanced biosafety, security, and surveillance measures. (FY 2018 Baseline: $172,753 thousand)

2) Global Nuclear Security  
The funding increase in FY 2019 reflects ongoing maturation of program efforts in Jordan and Kazakhstan, focusing on providing training and equipment to secure nuclear materials. This funding increase will enable activities in the Republic of India as well as the expansion of work with a key international partner, the International Atomic Energy Agency. (FY 2018 Baseline: $17,887 thousand)

3) Chemical Weapons Destruction  
The funding increase in FY 2019 reflects ongoing maturation of the program in Middle East/North Africa (MENA) partner nations as the program enters its second year of execution in MENA. The program will build upon initial baseline assessments and refine requirements that focus on chemical characterization; training on supply chain management, reporting, and ethics; and security enhancements for facilities housing toxic industrial chemicals and materials. (FY 2018 Baseline: $5,000 thousand)
III. Financial Summary ($ in thousands)

<table>
<thead>
<tr>
<th>C. Reconciliation of Increases and Decreases</th>
<th>Amount</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Program Decreases</td>
<td></td>
<td>-28,073</td>
</tr>
<tr>
<td>a. Annualization of FY 2018 Program Decreases</td>
<td></td>
<td></td>
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<tr>
<td>b. One-Time FY 2018 Increases</td>
<td></td>
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<tr>
<td>c. Program Decreases in FY 2019</td>
<td></td>
<td></td>
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<tr>
<td>1) Proliferation Prevention Program</td>
<td>-16,471</td>
<td></td>
</tr>
<tr>
<td>The funding decrease in FY 2019 is primarily due to the program’s estimated completion of one of its major efforts in Kazakhstan. (FY 2018 Baseline: $89,792 thousand)</td>
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<tr>
<td>2) Strategic Offensive Arms Elimination</td>
<td>-9,584</td>
<td></td>
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<tr>
<td>The funding decrease in FY 2019 is due to the completion of efforts to safely store and eliminate SS-24 solid rocket motor propellant in Ukraine, per the current agreement with the Government of Ukraine. By FY 2019, the program will provide full capability to the Ukrainians to independently complete the project, and the requested budget will allow a demobilization of the U.S. in-country integrating contractor. The demobilization and transition of remaining project responsibilities to Ukraine is scheduled to occur in Q1 FY 2019. (FY 2018 Baseline: $12,188 thousand)</td>
<td></td>
<td></td>
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<tr>
<td>3) Other Assessments Administrative Costs</td>
<td>-2,018</td>
<td></td>
</tr>
<tr>
<td>The funding decrease in FY 2019 reflects a reduction in A&amp;AS support costs. (FY 2018 Baseline: $26,980 thousand)</td>
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</table>

**FY 2019 Budget Request** 335,240
IV. **Performance Criteria and Evaluation Summary:**

A. **Strategic Offensive Arms Elimination (SOAE):**

*Eastern Europe and Eurasia*

FY 2017 funds executed over three years will:
- Assist Ukraine by financing elimination of Solid Rocket Motor (SRM) propellant and SRM cases; and
- Address WMD delivery system threats in other countries.

FY 2018 funds executed over three years will:
- Assist Ukraine by financing elimination of remaining SRM propellant and SRM cases through December 31, 2018 completion date;
- Store Ukraine’s remaining SRMs and continue maintenance and repair SRM storage facilities;
- Address WMD delivery system threats in other countries; and
- Provide logistical, administrative and advisory support.

FY 2019 funds executed over three years will:
- Complete and demobilize the project to eliminate SRM propellant in Ukraine by December 31, 2018; and
- Address WMD delivery system threats in other countries.
IV. Performance Criteria and Evaluation Summary:

Asia

FY 2017 funds: N/A

Upon receiving Secretary of Defense Approval, and concurrence from the Secretary of State, for the CTR program to conduct activities in the Republic of South Korea (ROK), FY 2018 funds executed over three years will:

Assess requirements to build the capacity of the ROK to secure, account for, transport, consolidate, dismantle and destroy WMD delivery systems and related infrastructure in compliance with U.S. and international law;
Assess requirements for a post-conflict or collapse scenario on the Korean Peninsula.

FY 2019 funds executed over three years will:

• Continue to build the capacity of the ROK to secure, account for, transport, consolidate, dismantle and destroy WMD delivery systems and related infrastructure in compliance with U.S. and international law; and
• Continue to assess a post-conflict or collapse scenario on the Korean Peninsula.
IV. **Performance Criteria and Evaluation Summary:**

B. **Chemical Weapons Destruction (CWD):**

*Global planning*

FY 2017 funds executed over three years will:
- Plan chemical security enhancements to partner nation facilities in MENA including Iraq, Jordan, Algeria, Lebanon, Morocco, and Tunisia housing toxic industrial chemicals and materials;
- Provide training to partner nation personnel on effective chemical security; and
- 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.

FY 2018 funds executed over three years will:
- Initiate chemical security enhancements to partner nation facilities housing toxic industrial chemicals and materials with a focus on MENA including Iraq, Jordan, Morocco, and Tunisia;
- Expand training to MENA partner nation personnel on effective chemical security, chemical characterization, supply chain management, reporting, and ethics;
- Provide training to partner nation personnel on effective chemical security;
- 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
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IV. Performance Criteria and Evaluation Summary:

- Provide logistical, administrative, and advisory support.

FY 2019 funds executed over three years will:

- Continue and expand chemical security enhancements to partner nation facilities housing toxic industrial chemicals and materials; and
- 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.

Asia

FY 2017 funds will: N/A

Upon receiving Secretary of Defense Approval, and concurrence from the Secretary of State, for the CTR program to conduct activities in the Republic of South Korea (ROK), FY 2018 funds executed over three years will:

- Assess requirements to build the capacity of the ROK to secure, characterize, account for, handle, transport, consolidate, store, and destroy CW materials and associated infrastructure while meeting U.S. laws and international treaty obligations; and
- Assess a post-conflict or collapse scenario on the Korean Peninsula.

FY 2019 funds will:
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IV. Performance Criteria and Evaluation Summary:

- Continue to build the capacity of the ROK to secure, characterize, account for, handle, transport, consolidate, store, and destroy CW materials and associated infrastructure while meeting U.S. laws and international treaty obligations; and
- Continue to assess a post-conflict or collapse scenario on the Korean Peninsula.

C. Global Nuclear Security (GNS):

FY 2017 funds executed over three years will:

Middle East North Africa
- Provide training, tabletop exercises, and equipment to build Jordan’s capabilities to secure nuclear material and ensure the security of interdicted nuclear and high-threat radiological material; and
- Support nuclear security workshops, training courses, exercises, and related activities in the United Arab Emirates and other emerging partner countries.

Eastern Europe and Eurasia
- Continue support for Nuclear Security Centers of Excellence in countries including Kazakhstan;
- Enhance nuclear security in Kazakhstan by improving physical security at nuclear sites, providing guard and response force equipment, building nuclear security capabilities through training and
IV. Performance Criteria and Evaluation Summary:

institutionalizing Kazakhstani training capacity, and implementing an enhanced inventory management system for nuclear materials; and

- Provide training, tabletop and field exercises, guard force equipment, and operations center renovations to enhance nuclear security in Ukraine.

Asia

- Continue support for Nuclear Security Centers of Excellence; and
- Support nuclear security workshops, training courses, exercises, and related activities in India and other emerging partner countries.

Global

- Continue support to the IAEA’s nuclear security training efforts;
- Support shipments of weapons-usable nuclear material to consolidate and facilitate the disposition of the nuclear material; and
- 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.

FY 2018 funds executed over three years will:

Middle East North Africa

- Conduct workshops and training events and begin transitioning to a train-the-trainer approach that will result in a Jordanian-led
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IV. Performance Criteria and Evaluation Summary:

- Training process at the conclusion of GNS engagement to secure nuclear material and ensure the security of interdicted nuclear and high-threat radiological material in Jordan; and
- Support nuclear security workshops, training courses, exercises, and related activities in the United Arab Emirates and other emerging partner countries in the Middle East and North Africa.

Eastern Europe and Eurasia

- Continue support for Nuclear Security Center of Excellence (COE) in countries including Kazakhstan;
- Enhance nuclear security in Kazakhstan by improving physical security at nuclear sites, providing guard and response force equipment, building nuclear security capabilities through training, and beginning development of an enhanced inventory management system for nuclear materials; and
- Provide training, tabletop and field exercises, emergency response and sustainment/maintenance equipment, and training center equipment to enhance nuclear security in Ukraine.

Asia

- Continue support for Nuclear Security COEs in Asia; and
- Support nuclear security workshops, training courses, exercises, and related activities in India and other emerging partner countries in Southeast Asia.
IV. Performance Criteria and Evaluation Summary:

Upon receiving Secretary of Defense approval, and concurrence from the Secretary of State, for the CTR program to conduct activities in the Republic of South Korea (ROK), the GNS program will:

- Conduct assessments and engage with the ROK and international organizations to determine requirements for meeting international treaty obligations to support dismantlement, destruction, and disposal operations; and
- Assess a post-conflict or collapse scenario on the Korean Peninsula.

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;
- Continue support to the IAEA’s nuclear security training efforts and other international nuclear security exchanges; and
- Provide logistical, administrative, and advisory support.

FY 2019 funds executed over three years will:

Middle East North Africa
Cooperative Threat Reduction Program
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IV. Performance Criteria and Evaluation Summary:

- Continue to provide training, tabletop exercises, and equipment to build Jordan’s capabilities to secure, handle, and transport interdicted radiological and secure nuclear materials and facilities to prevent potential proliferation;
- Work to transition training courses through a train-the-trainer approach; and
- Support nuclear security workshops, training courses, exercises, and related activities focused on enhancing counter nuclear smuggling capabilities and begin assessing post interdiction capabilities to compliment assistance provided through other CTR Programs in the United Arab Emirates, Morocco, and other key emerging partner countries in the Middle East and North Africa.

Eastern Europe and Eurasia
- Continue support for Nuclear Security COEs in countries including Kazakhstan;
- Enhance nuclear security in Kazakhstan by completing physical security upgrades at 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; and
- 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.

Asia
- Support anticipated new requirements to assist the Republic of Korea with
Cooperative Threat Reduction Program
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IV. Performance Criteria and Evaluation Summary:

nuclear security activities;

- Continue support for Nuclear Security COEs in Asia; and
- Support nuclear security workshops, training courses, exercises, and related activities in India, and other emerging partner countries in Southeast Asia.

Upon receiving Secretary of Defense Approval, and concurrence from the Secretary of State, for the CTR program to conduct activities in the Republic of South Korea (ROK), the GNS program will:

- Continue to conduct assessments and engage with the ROK and international organizations to determine requirements for meeting international treaty obligations to support dismantlement, destruction, and disposal operations; and
- Continue to assess a post-conflict or collapse scenario on the Korean Peninsula.

Sub-Saharan Africa

- Support potential requirements in the Republic of South Africa if specific gaps are identified through the DOE/ Nuclear Regulatory Commission (NRC) needs assessment.

Global

- Support shipments of weapons-usable nuclear material to consolidate and
IV. Performance Criteria and Evaluation Summary:

- 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.
IV. Performance Criteria and Evaluation Summary:

D. Cooperative Biological Engagement Program:

FY 2017 funds executed over three years will:

Eastern Europe and Eurasia

- Continue upgrades to diagnostic laboratories in Ukraine;
- Assist with construction deficiency remediation and commissioning of Government of Azerbaijan funded Central Reference Laboratory (CRL) and complete a Full Operating Capability demonstration;
- Improve Ukraine’s sustainable diagnostic capabilities through construction and upgrades to the current laboratory infrastructure;
- In Armenia, Azerbaijan, Georgia, Kazakhstan, Ukraine, and Uzbekistan continue:
  o the transition of U.S. sustainment support of laboratories to partner governments;
  o existing Pathogen Asset Control System (PACS) engagements and Electronic Integrated Disease Surveillance System (EIDSS) implementation, training, and upgrades;
  o human and veterinary sector training in epidemiology, laboratory management, biological Risk Management, and differential diagnosis;
  o the development and implementation of biosecurity Standard Operating Procedures (SOPs) and training to increase quality management capability; and
  o research activities.
- Develop and implement a Laboratory Information Management system in Georgia integrated with EIDSS;
- Support the Centers for Disease Control and Prevention (CDC) development and
IV. **Performance Criteria and Evaluation Summary:**

- implementation of a sustainable transition of the South Caucasus Field Epidemiology and Training Program to the Georgian Government;
- Support the establishment of an independent and sustainable Field Epidemiology Training Program in Ukraine;
- Develop and implement science engagement activities to include an international fellowship program, network building, training and workshops, in Uzbekistan, Ukraine, and Armenia;
- Expand research engagement with the Government of Armenia;
- Institutionalize CBEP-provided training material into the public health and veterinary educational systems; and
- Implement sustainable approaches to epidemiology training, specifically though distance learning, in Armenia, Azerbaijan, Georgia, and Ukraine.

**Middle East Southwest Asia**

- Complete the operations commissioning and validation of the CRL in Almaty, Kazakhstan to ensure compliance with international biosecurity standards and begin facility laboratory operation;
- Convene Turkish human and animal health stakeholders in a scenario-based, One Health workshop to identify requirements for establishing a multi-sectoral biosurveillance system capable of detecting, diagnosing, and reporting zoonotic EDPs;
- Initiate collaborative research projects with Aga Khan University and the University of Karachi in Pakistan, to enhance understanding of occurrence, distribution, and
IV. **Performance Criteria and Evaluation Summary:**

- biological characterization of EDPs;  
  - Assist Jordan in establishing a One Health, inter-ministerial, multi-sectorial electronic disease surveillance system to improve reporting;
  - Conduct laboratory renovations, procure equipment, and conduct associated biosecurity and biosurveillance training throughout Iraq; and
  - Develop and continue Mass Gatherings Workshops to share techniques that address biological threats compounded by trans-border animal and human movement and mass social gatherings in the region.

**Africa**

- Design, construct, and commission a Health Emergency Operations Center (EOC) to improve Cameroon’s capability to detect, diagnose, and report EDPs;
- Support international efforts to restore and augment Guinea’s capability to survey for, detect, identify, and report biological events through expanded training initiatives, SOP development, and regional conference sponsorship;
- Support international efforts to restore and augment Liberia’s capability to survey for, detect, identify, and report biological events safely, rapidly, and accurately in a sustainable manner and in accordance with World Health Organization International Health Regulations (2005), the World Organization for Animal
IV. Performance Criteria and Evaluation Summary:

Health, and Global Health Security Agenda plans;

• Contribute to international efforts to restore and augment Sierra Leone’s capability to detect, identify, and report biological events safely, rapidly, and accurately in a sustainable manner;

• Construct, equip, and commission the biosurveillance component of a Health EOC that will improve Senegal’s ability to detect, surveil, and report diseases of security concern; and

• Complete biosecurity laboratory renovations at three national laboratories in Uganda and initiate construction of a fourth to provide Uganda with the capability to prevent accidental infection of laboratory workers and/or potential theft or acquisition of EDPs.

East and Southeast Asia and India

• Begin to build biosecurity and sample transport capacities in Cambodia and assisted the Ministry of Health with drafting and implementing national regulations on sample collection and packaging and transport of clinical samples for disease diagnosis in alignment with international guidelines to enhance the safety and security throughout the sample transport process;

• Continue to engage with and train the Lao Military Medical Department on vector-borne disease surveillance to strengthen military-sector detection of and response to disease outbreaks caused by EDPs and integrate military and civilian health data;
IV. Performance Criteria and Evaluation Summary:

- Complete infrastructure and equipment upgrades at the Thai National EOC along with similar improvements at 12 other provincial EOCs to allow for proper and timely notification and coordination of outbreaks and response activities for improved health security;

- Conduct outbreak response exercises, quarterly multilateral discussion forums on disease reporting data, and joint outbreak investigation training in Thailand with invited partners at both Ministerial and provincial levels to improve routine communications, coordination/cooperation and information sharing regarding disease outbreaks in the Mekong Basin region;

- Convened a series of workshops to train Malaysian officials from the public, animal health, and law enforcement sectors and train them on investigating and responding to a biological incident from a joint law enforcement and epidemiological perspective;

- Initiate renovation and equipment upgrades at six Regional Animal Disease Diagnostic Laboratories (RADDLs) and the Animal Disease Diagnostic Reference Laboratory in the Philippines. Initiate construction of two new Biological Safety Level (BSL-2) RADDLs and one anthrax diagnostic laboratory for the Department of Agriculture in order to enhance disease diagnostic capacities and reporting capabilities;

- Conducted biosecurity assessments of Indian laboratories that work with EDPs and determined strategies to address these gaps and improve biosecurity norms;

- Assist Vietnamese with designs for safe and secure BSL-2 laboratories to reduce the chance of accidental or intentional pathogen release; and Install equipment for a regional emergency operations and disease surveillance center in Vietnam.
IV. **Performance Criteria and Evaluation Summary:**

FY 2018 funds executed over three years will:

- Fund biosecurity enhancements as detailed below:

**Eastern Europe and Eurasia**
- Support integration of diagnostic laboratory capabilities to perform biosurveillance in the region;
- Continue EIDSS implementation, training, and upgrades and support to existing PACS engagements with partner countries;
- Conduct Threat Agent Detection and Reporting table top exercises in Uzbekistan to enhance disease surveillance capabilities and initiate a field-study to better understand the presence of especially dangerous pathogens in the soil of the area surrounding the Aral Sea and Vozrozhdeniya Island, where the Soviet Union conducted large-scale biological weapons testing;
- Develop and implement sustainable approaches to tailored training, specifically through distance learning, in Armenia, Azerbaijan, Georgia, and Ukraine; and
- Continue research activities and the development and implementation of biosecurity SOPs in Armenia, Azerbaijan, Georgia, Kazakhstan, and Ukraine.

**Middle East Southwest Asia**
- Support country-wide implementation of electronic disease reporting systems, including in Kurdistan, Iraq to improve the timeliness and accuracy of the detection and reporting of potential outbreaks of EDPs;
- Transition responsibility for the Bio-risk Management training series to Jordan.
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IV. Performance Criteria and Evaluation Summary:

by end of FY 2018; and

- Identify where the program can help build capability to mitigate biological threats leveraging Middle East investments compared to other DoD CTR Program partners.

Africa
- Complete biosecurity renovation upgrades at the Kenya Medical Research Institute in Kenya to ensure the facility complies with international standards;
- Continue construction activities for the National Reference Laboratory and begin construction of Bong Country Regional Laboratory in Liberia to ensure diagnostic capabilities for disease of security concern are available to prevent future outbreaks;
- Assist Tanzania in drafting a national EDPs list and coordinate the development and implementation of a consolidation plan; and
- Complete construction of the Virus Institute Plague Station in Uganda to provide enhanced diagnostics and surveillance capabilities to detect, diagnose, and report on outbreaks caused by EDPs securely and in a timely manner.

Southeast Asia
- Complete construction of the new BSL-2 Regional Animal Disease Diagnostic Laboratories in the Philippines at the Department of Agriculture’s Regional Field Unit campus;
- Provide laboratory equipment and upgrades to the Foot-and-Mouth Disease (FMD) laboratory to bolster its ability to diagnose, study, and contain FMD throughout the
IV. **Performance Criteria and Evaluation Summary**:

- region; and

  • Conduct series of workshops with Vietnam government stakeholders to draft a National EDPs concern list and assist with the creation of an oversight body for controlling these pathogens.

Asia

Upon receiving Secretary of Defense Approval, and concurrence from the Secretary of State, for the CTR program to conduct activities in the Republic of South Korea (ROK), the CBEP program will:

- Assess the capacity of the ROK to identify, consolidate, and secure collections of especially dangerous pathogens (EDPs) to prevent proliferation or accidental release; and assess the capability to rapidly and accurately survey, detect, diagnose, and report an intentional or accidental outbreaks of EDPs in accordance with international reporting requirements, U.S. law, and international treaty obligations; and

- Assess a post-conflict or collapse scenario on the Korean Peninsula.
IV. Performance Criteria and Evaluation Summary:

FY 2019 funds executed over three years will:

**Eastern Europe and Eurasia**

- Engage regional partners and organizations to highlight the importance of multi-sectoral partnerships between the Health and Security elements during an EDP outbreak;
- Conduct a regional scientific mentorship seminar for junior and developing researchers, providing opportunities to present and receive feedback from senior leaders and scientists;
- Develop scientific research capacity through program development grants and micro-grants for CBEP supported laboratories and organizations in Ukraine, Armenia, Georgia, and Azerbaijan;
- Continue to establish an independent and sustainable Field Epidemiology Training Program in Ukraine;
- Advise Ukraine on laboratory optimization, EDP consolidation, and biosecurity regulatory reform;
- Conduct a Full Operational Capability demonstration and field exercise with Armenia; and
- Provide help desk support to sustain the Laboratory Information Management system in Georgia.

**Middle East Southwest Asia**

- Support Jordan to develop Bio Risk Management (BRM) competency in laboratory and healthcare workforce and serve as a regional resource for BRM training;
- Assist Jordan to develop and implement BRM laws, regulations, and/or policies
IV. Performance Criteria and Evaluation Summary:

to standardize requirements for facilities and organizations that handle or store EDPs;

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

• Improve Pakistan’s capacity to prevent, detect, diagnose, respond to, and report a full range of biological agents, support One-Health initiatives, and identify new collaborative projects;

• Strengthen Turkey’s biosecurity capacity through mentorship and training opportunities for emerging biosafety professionals;

• Promote Turkey’s multi-sectoral, interagency communication and coordination to strengthen public health response and biosurveillance capacities throughout the country;

• Complete laboratory renovations, equipment provision, and training activities in Iraq. CBEP will also focus on sustainment activities and research opportunities, including BRM training and biosurveillance capacity building activities and continued support for electronic disease reporting; and

• Complete CRL sustainment efforts, begin new cooperative biological research and threat agent detection and response activity projects, organize and execute One Health and Global Health Security Agenda workshops, continue training on biosafety and biosecurity topics, conduct tabletop and field training exercises, and continue to promote sustainable training using the train-the-trainer method in Kazakhstan.

Africa

• Complete
IV. **Performance Criteria and Evaluation Summary:**

construction of the National Public Health Institute of the Liberia National Reference Laboratory and the Bong Country 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. Transition to sustainment efforts, research sponsorship, and laboratory twinning efforts;
- Continue Field Epidemiology Training Program through CDC in Kenya and Tanzania;
- Implement BRM national strategic planning in Tanzania;
- Implement sample repository biosecurity upgrades at the Ugandan Central Public Health Institute and National Livestock Resources Research Institute, develop and promote a national Biosecurity Bill, and conduct additional biosecurity laboratory upgrades at new district/regional human and animal health laboratories;
- Engage regional partners and organizations on disease tracking, facilitate annual preparedness exercises, and conduct trainings and outbreak investigations. Train approximately 100 students from the animal health sector through the Field Epidemiology Training Program, assess the improvement of animal health laboratories, and develop the Ministry of Public Health CONOPs for the public health emergency response and Health Emergency Operations Center sustainment.
IV. **Performance Criteria and Evaluation Summary:**

plan in Cameroon. Complete installation of PACS at human and animal health facilities across the country;

- Complete biosecurity laboratory renovations at the National Animal Health Diagnosis and Investigation Center (NAHDIC), begin construction management oversight and commissioning support to the Ethiopian Public Health Institute (EPHI) National Reference Laboratory in Ethiopia. Conduct biosecurity gap assessments at regional human and animal health laboratories and commence subsequent biosecurity upgrades;

- Continue genomics and bioinformatics mentorship and training provided to NAHDIC, the Armauer Hansen Research Institute (AHRI), and EPHI, and begin BRM systems training and standard operating procedure implementation at EPHI and AHRI;

- Transition the HEOC to a fully trained staff capable of independently operating and sustaining the facility, improve biosecurity capabilities at National Laboratory for Livestock and Veterinary Research and the National Public Health Laboratory to meet World Health Organization international standards, and develop a list of EDPs in Senegal to identify facilities that work with EDPs in Senegal;

- Begin potential construction of the BSL-2 Training Center and continue biosecurity mentorship and research activities in South Africa; and

- Begin exploratory efforts and requirements gathering in Nigeria.
IV. Performance Criteria and Evaluation Summary:

East and Southeast Asia and India

- Provide laboratory capacity through training, workshops on biosecurity and epidemiology, and facility upgrades for human and animal health sectors in Cambodia to facilitate the country’s ability for sustainment in accurately detecting and characterizing pathogens and responding to outbreaks;

- Conduct 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;

- Conduct biosecurity training and assist Lao in developing self-sustaining, institutionalized capacity to train staff in field epidemiology and move them toward receiving financial sustainment for programs through the Government of Lao;

- Provide lab designs/upgrades, pathogen tracking systems inclusion of instruction in curriculum, and training for biosafety equipment in human and animal health laboratories in Vietnam;

- Conduct Field Epidemiology Training exercises through CDC in Vietnam to build capability for human and animal health professionals;

- Conduct a series of biosecurity trainings targeting facility, laboratory, and management personnel in Indian laboratories to strengthen disease surveillance and
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IV. Performance Criteria and Evaluation Summary:

diagnostic capacity;

- Enhance
Thailand’s biosecurity and biosurveillance capabilities through integrated real-time disease reporting that will lead to a reporting sustainment plan for the country;

- Hold forums
through the Mekong Basin Disease Surveillance Network to leverage the resources of each country to control an outbreak;

- Conduct
biosecurity training and epidemiology trainings to strengthen the national epidemiological capabilities through the World Health Organization;

- Train the Lao
Military on vector-borne disease surveillance to leverage both health and military sector capabilities when responding to an outbreak;

- Begin
developing requirements in Indonesia, to include potential laboratory renovations, as well as research and training efforts;

- Engage new
sites to determine requirements for biosecurity facility and equipment upgrades, training, and procedures in Philippines; and

- Conduct
surveillance activities on zoonotic diseases and strengthen the national biosecurity system through CDC in Lao and Thailand.
IV. **Performance Criteria and Evaluation Summary:**

Asia

Upon receiving Secretary of Defense Approval, and concurrence from the Secretary of State, for the CTR program to conduct activities in the Republic of South Korea (ROK), CBEP will:

- Continue to work with the ROK to identify, consolidate, and secure collections of especially dangerous pathogens (EDPs) to prevent proliferation or accidental release; and continue to rapidly and accurately survey, detect, diagnose, and report an intentional or accidental outbreaks of EDPs in accordance with international reporting requirements, U.S. law, and international treaty obligations; and
- Continue to assess a post-conflict or collapse scenario on the Korean Peninsula.

E. **Proliferation Prevention:**

FY 2017 funds executed over three years will:
IV. Performance Criteria and Evaluation Summary:

**Eastern Europe and Eurasia**

- Continue to develop modest but longer-term WMD threat reduction activities with CTR partners sharing borders with Russia;
- Complete improvements to Armenia and Moldovan Border Guard command and control, communications, surveillance, and WMD detection and interdiction capabilities;
- Continue efforts in Georgia to improve detection, surveillance, and interdiction capabilities along its green borders with Armenia and Turkey; and
- Prevent proliferation of nuclear and radiological materials by working collaboratively with the National Nuclear Center of Kazakhstan.

**Middle East, North Africa and Southeast Asia**

- Continue engagement in Jordan along the Syrian and Iraqi borders, focusing on capabilities in order 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; and
- Enhance WMD detection and interdiction capabilities in Tunisia along the Libya green border.
IV. Performance Criteria and Evaluation Summary:

- Southeast Asia
- In the Philippines, sustain existing efforts and complete planned improvements of the National Coast Watch Center (NCWS). The NCWS will increase WMD and maritime security command, control, communications, surveillance, detection, and interdiction capabilities;
- In the Philippines, support development of a CONOPs to 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 other littoral Southeast Asia countries to enhance national maritime security and WMD detection capabilities and bolster regional proliferation prevention awareness and capabilities.

FY 2018 funds executed over three years will:

- East Europe and Eurasia
  - Continue modest but longer-term WMD threat reduction activities with CTR partners sharing borders with Russia;
  - Provide
IV. Performance Criteria and Evaluation Summary:

- Sustainment transition to Armenia for provided WMD proliferation prevention capacity and continue Moldovan Border Guard command and control, communications, surveillance, and WMD detection and interdiction capabilities.
- Continue efforts in Georgia to improve detection, surveillance, and interdiction capabilities along its green borders with Armenia and Turkey; and
- Prevent proliferation of nuclear and radiological materials by working collaboratively with the National Nuclear Center of Kazakhstan.

Middle East, North Africa, and Southwest Asia

- Continue engagement in Jordan along the Syrian and Iraqi borders, focusing on 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; and
- Enhance WMD detection and interdiction capabilities in Tunisia along the Libya green border.

Southeast Asia

- In the Philippines, sustain existing efforts and complete planned improvements of the NCWS that will increase WMD and maritime security command, control,
IV. **Performance Criteria and Evaluation Summary:**

- Communications, surveillance, detection, and interdiction capabilities;
- In the Philippines, support development of a CONOPS to 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 other littoral Southeast Asia countries to enhance national maritime security and WMD detection capabilities and bolster regional proliferation prevention awareness and capabilities.

**Asia**

Upon receiving Secretary of Defense Approval, and concurrence from the Secretary of State, for the CTR program to conduct activities in the Republic of South Korea (ROK), the PPP program will:

- Assess the capacity of the ROK to detect WMD and related materials coming into or out of the DRPK along its land and maritime borders; and
- Assess a post-conflict or collapse scenario on the Korean Peninsula.

**FY 2019 funds executed over three years will:**
IV. Performance Criteria and Evaluation Summary:

Eastern Europe and Eurasia

- Continue modest but longer-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; and

- Prevent proliferation of nuclear and radiological materials by working collaboratively with the National Nuclear Center of Kazakhstan.

Middle East, North Africa, and Southwest Asia

- Continue engagement in Jordan along the Syrian and Iraqi borders, focusing on 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
IV. Performance Criteria and Evaluation Summary:

- Initiate engagements with other North Africa countries.
- East and Southeast Asia and India
- 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 other littoral Southeast Asia countries to enhance national maritime security and WMD detection capabilities and bolster regional proliferation prevention awareness and capabilities.

Asia

Upon receiving Secretary of Defense Approval, and concurrence from the Secretary of State, for the CTR program to conduct activities in the Republic of South Korea (ROK), the PPP program will:

- Provides concepts for the ROK to detect WMD and related materials coming into or out of the DRPK along its land and maritime borders; and
- Continue to assess a post-conflict or collapse scenario on the Korean
Cooperative Threat Reduction Program  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 President’s Budget

IV. **Performance Criteria and Evaluation Summary:**

Peninsula.

F. **Other Assessments/Administrative Costs:**

- FY 2017 through FY 2019 OAAC funds support advisory and assistance services to all CTR programs, U.S. Embassy support, and operating costs for the overseas Defense Threat Reduction Offices and Regional Cooperative Engagement Offices. This effort also funds administrative and contracted support services to the CTR program, program management for worldwide CTR contract logistics support, approximately 6-10 Audits and Examinations per year, and travel by DTRA and stakeholder personnel in support of the CTR program.
Cooperative Threat Reduction Program
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2019 President’s Budget

V. Personnel Summary

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Contractor FTEs (Total)</td>
<td>452</td>
<td>567</td>
<td>518</td>
<td>115</td>
<td>-49</td>
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Changes in Program Growth/Reduction: CTR had a $17.3 million decrease in contract services from FY 2018 current year estimate to FY 2019 budget request. Attributable to the Proliferation Prevention Program (PPP). DTRA remains responsive to new requests as appropriate to expand the capability of partner nations to prevent proliferation of WMD materials, related components, and technologies across their borders. This reduces the trafficking by non-state networks in regions that are destabilized. This should reduce the Islamic State of Iraq and the Levant (ISIL) threat in the Middle East, and reduce trafficking of dual-use items in Southeast Asia. The decrease to contract services in FY 2019 is primarily due to the program’s estimated completion of one of its major efforts in Kazakhstan.
Cooperative Threat Reduction Program  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 President’s Budget

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

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>308 Travel of Persons</td>
<td>4,532</td>
<td>77</td>
<td>1,498</td>
<td>6,107</td>
<td>110</td>
<td>10</td>
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<tr>
<td><strong>399 Total Travel</strong></td>
<td><strong>4,532</strong></td>
<td><strong>77</strong></td>
<td><strong>1,498</strong></td>
<td><strong>6,107</strong></td>
<td><strong>110</strong></td>
<td><strong>10</strong></td>
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<tr>
<td>913 Purchased Utilities (Non-Fund)</td>
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<tr>
<td>914 Purchased Communications (Non-Fund)</td>
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<td>0</td>
<td>2,700</td>
<td>2,700</td>
<td>49</td>
<td>851</td>
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<tr>
<td>920 Supplies &amp; Materials (Non-Fund)</td>
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<td>-7,514</td>
<td>2,102</td>
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<tr>
<td>923 Facilities Sust, Rest, &amp; Mod by Contract</td>
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<td>116</td>
<td>-6,915</td>
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<tr>
<td>925 Equipment Purchases (Non-Fund)</td>
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<td>292</td>
<td>-16,986</td>
<td>500</td>
<td>9</td>
<td>-9</td>
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<tr>
<td>932 Mgt Prof Support Svcs</td>
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<td>172</td>
<td>20,076</td>
<td>30,360</td>
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<td>593</td>
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<tr>
<td>933 Studies, Analysis &amp; Eval</td>
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<td>957 Other Costs (Land and Structures)</td>
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<td>988 Grants</td>
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<td>989 Other Services</td>
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<td>103,654</td>
<td>110,589</td>
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<td>990 IT Contract Support Services</td>
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<td>5,300</td>
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<td>-595</td>
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<tr>
<td><strong>999 Total Other Purchases</strong></td>
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<td><strong>Total</strong></td>
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<td><strong>5,524</strong></td>
<td><strong>-6,528</strong></td>
<td><strong>324,600</strong></td>
<td><strong>5,546</strong></td>
<td><strong>5,094</strong></td>
</tr>
</tbody>
</table>

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