

Funding Analysis of FY09 International WMD Security Programs

Michelle Marchesano

With Contributions from Kenneth N. Luongo and Raphael Della Ratta

The signing of the Consolidated Appropriations Act of 2009 by President Obama on March 11, 2009 completes action on the bills funding Weapons of Mass Destruction (WMD) security programs for fiscal year 2009 (FY09) for the National Nuclear Security Administration (NNSA), Department of Defense (DOD), Department of State, and Department of Homeland Security (DHS). The FY09 budget request was the last one proposed by President Bush, and it provided \$133 million less than the FY08 appropriated level. Congress provided about \$120.0 million more than the Bush request, with the most significant increase directed to NNSA's Global Threat Reduction Initiative. This is a welcome plus up, but it does not compensate for overall funding stagnation and reductions made to other program areas, particularly International Nuclear Material Protection and Cooperation, which like GTRI is a centerpiece in the fight against nuclear terrorism. In aggregate, this budget provides an adequate foundation to pursue the Obama administration's ambitious goal of securing "all nuclear weapons and material at vulnerable sites within four years."¹ However, to reach this and other high priority nuclear and biological security goals will require a significant increase in funding and a frontloading of the budget in FY10.

National Nuclear Security Administration

- An increase of \$175.4 million for the [Global Threat Reduction Initiative \(GTRI\)](#) program over the request. This more than doubles its FY08 appropriation. Emphasis within this \$395.0 million budget is on nuclear and radiological material removal efforts.
- A cut of \$29.7 million for the [International Nuclear Material Protection & Cooperation \(INMPC\)](#) program on top of a \$194.8 million cut from the FY08 level in the Bush request.
- An increase of \$9.5 million for [Nonproliferation and International Security \(NIS\)](#) over the budget request to \$150.0 million, despite the elimination of all Global Nuclear Energy Partnership (GNEP) related funding.

Department of Defense

- A \$20.0 million increase for [Cooperative Threat Reduction \(CTR\)](#) over the FY09 request for new programs outside the former Soviet Union (FSU), WMD proliferation prevention in the FSU, and Russian chemical weapon destruction.

Department of Homeland Security

- A reduction of approximately \$50.0 million for the [Domestic Nuclear Detection Office \(DNDO\)](#) from the \$563.8 million FY09 request, but still a \$29.4 million increase over the FY08 enacted funding.

Department of State

- A reduction of a few million dollars below the request, including for the [Global Threat Reduction \(GTR\) programs](#), which are funded at \$61.0 million for FY09. However, because of a reorganization of this set of programs there could be a net reduction in international biosecurity funding, which is already underfunded.



FY09 International WMD Security Programs
All amounts in \$ millions

Program	FY08 Approp.	FY09 Budget Request	FY09 Approp.
National Nuclear Security Administration			
Nonproliferation and International Security	150.0	140.5	150.0
International Nuclear Materials Protection and Cooperation	624.5	429.7	400.0
Elimination of Weapons-Grade Plutonium Production	179.9	141.3	141.3
Fissile Materials Disposition	66.2	41.8	41.8
Global Threat Reduction Initiative	193.2	219.6	395.0
International Nuclear Fuel Bank Program	49.5	--	--
Congressionally Directed Projects	7.4	--	1.9
Other/Admin. Support	--	--	--
Subtotal, NNSA	\$1,270.7	\$972.9	\$1,130.0
Department of Defense			
Cooperative Threat Reduction Programs	425.6	414.1	434.1
Subtotal, DOD	\$425.6	\$414.1	\$434.1
Department of Homeland Security			
Domestic Nuclear Detection Office	484.8	563.8	514.2
Science and Technology Directorate	311.8	347.3	362.3
Office of Health Affairs	90.6	146.6	119.6
Customs and Border Protection	158.1	149.5	149.5
Federal Emergency Management Agency	--	0.0	6.0
Subtotal, DHS	\$1,045.3	\$1,207.2	\$1,151.6
Department of State			
Nonproliferation and Disarmament Fund	33.7	40.0	41.0
Export Control and Related Border Security Assistance	45.6	41.3	44.0
Global Threat Reduction	56.9	64.0	61.0
Weapons of Mass Destruction Terrorism	--	5.0	2.0
U.S. Civilian Research & Development Foundation	~5.0	~5.0	~3.8
Subtotal, State	\$141.2	\$155.3	\$151.8
TOTAL	\$2,882.8	\$2,749.5	\$2,867.5

See [Annex](#) for detailed agency funding charts.

• **Funding Reductions for Key International WMD Security Programs**

Total FY09 appropriated funding for international WMD security programs is \$2.8675 billion, \$15.3 million less than the \$2.8828 billion appropriated in FY08. However, total FY09 funding is \$118.0 million more than requested for the year. Notably, the following key programs received appropriations below their FY09 request or FY08 levels:

- International Nuclear Materials Protection & Cooperation (NNSA)
- Elimination of Weapons-Grade Plutonium Production (NNSA)
- Fissile Materials Disposition (NNSA)
- Customs and Border Protection International Cargo Screening (DHS)
- Domestic Nuclear Detection Office (DHS)
- Global Threat Reduction (State)

Detailed Funding Analysis of FY09 International WMD Security Programs

FY09 WMD Security Program Funding Bills:

- [Consolidated Appropriations Act](#)
- [National Defense Authorization Act](#)
- [Consolidated Security, Disaster Assistance, and Continuing Appropriations Act](#)

On March 11, 2009, the Consolidated Appropriations Act of 2009 (P.L. 111-008) was signed into law, finalizing FY09 appropriations for several agencies, including the Departments of Energy's (DOE) NNSA and the Department of State. Prior to its passage, FY09 appropriations for DOD and DHS were approved under a continuing resolution (Public Law 110-329) that was signed by the President on September 30, 2008. On October 14, 2008, the National Defense Authorization Act (Public Law 110-417) which authorizes funding for DOE and DOD was signed by the President. Authorization bills for State and DHS were not passed by Congress. The numbers in this analysis reflect those contained in the final authorization (where applicable) and appropriation acts.

Department of Energy National Nuclear Security Administration

The Consolidated Appropriations Act provided \$1.13 billion for NNSA's international WMD security programs, approximately \$2.0 million less than then the National Defense Authorization Act and \$157.1 million more than NNSA's FY09 budget request. Though subprogram line item totals were not included in the appropriations act or its explanatory statement, committee staffers have said that it is presumed that line item increases and cuts will be allocated by NNSA officials in the same percentages as in the FY09 budget request. This analysis applies this percentage allocation formula to programmatic funding levels to determine line item totals.

- **GTRI Doubles**

The final appropriation provided \$395.0 million for GTRI, an increase of \$175.4 million over the \$219.6 million budget request and \$201.8 million over the \$193.2 million FY08 appropriated level. The authorization act provided only \$339.6 million for GTRI, a \$120.0 million increase above the budget request, but \$55.4 million less than the final appropriation. The authorization's joint explanatory statement provided no details regarding the distribution of its increase within GTRI.

Funding for GTRI's Nuclear and Radiological Removal program could swell to \$209.7 million (from just \$67.8 million in FY08), based on the percentage allocation formula mentioned above, but it will receive at least \$60.0 million, as directed by the appropriation act's explanatory statement. Funding for HEU Reactor Conversion and Nuclear and Radiological Material Protection also rose significantly. The Reactor Conversion program is expected to receive \$88.7 million, an increase of \$39.4 million over the \$49.3 million FY09 budget request and \$54.9 million over the \$33.8 million FY08 appropriation. The allocation for the Material Protection program is estimated to be \$96.6 million, an increase of \$42.9 million over the \$53.7 million FY09 budget request and \$5.0 million above the \$91.6 million FY08 appropriation.

- **INMPC Shrinking**

INMPC's \$400.0 million FY09 appropriation is \$29.7 million less than its budget request and \$224.5 million less than the FY08 appropriated level of \$624.5 million. This dramatic decrease



from FY08 levels can largely be attributed to the completion of projects in Russia; however, the FY09 budget request of \$429.7 million had already been adjusted to reflect this reality. Straying from the percentage allocation formula described above, conversations with administration officials have indicated that the \$29.7 million cut to INMPC will mostly be applied to the Second Line of Defense (SLD) programs, resulting in delayed deployment of nuclear material detectors to Central Asia, Russia, and the Caucasus region and the inability to implement recently signed agreements.

While the exact percentage cuts to each INMPC subprogram are unknown at this time, based on the percentage allocation formula, the SLD programs could collectively be cut by at least \$14.7 million from the budget request and \$68.9 million from their FY08 appropriated levels. This figure is likely to grow if NNSA officials shift additional funds out of SLD to meet other commitments. SLD's Core program is estimated to be allocated \$73.2 million, a decrease of \$5.4 million from the \$78.6 million budget request and \$62.9 million less than its FY08 appropriated level. The SLD Megaports program is estimated to be funded at \$124.8 million, a decrease of \$9.3 million from the \$134.1 million sought in the budget request and \$6.0 million under its FY08 appropriated level. The authorization act increased the INMPC budget by \$22.0 million over the request though it provided no allocation details. Notably, this bill also allows the Secretary of Energy to accept international contributions to INMPC.

Assuming that projected cuts were made to every line item within INMPC, the suite of Russia-focused programs could be collectively funded at \$202.1 million for FY09. Though INMPC's budget requests had been tailored to reflect the completion of many of these Russia programs, their total appropriated level could still be \$14.9 million below the request. However, as mentioned above, additional funding cuts will likely be made to SLD programs in lieu of cuts to these programs.

- **GNEP Goes Unfunded**

Though the authorization act only provided \$134.7 million for NIS, the FY09 appropriation restored its funding to the FY08 appropriated level of \$150.0 million, a \$9.5 million increase above the \$140.5 million request. The authorization cut \$5.0 million from the Global Initiatives for Proliferation Prevention (GIPP) and called for a review of the program and its funding. The authorization also cuts \$0.8 million from across NIS as a reduction for GNEP activities, limits DOE nonproliferation funding for GNEP to no more than \$3.0 million for proliferation risk assessments and related work, and requires a detailed report for any GNEP-related work. However, all funding for GNEP was zeroed out by the appropriation act, as it undermines U.S. nuclear nonproliferation policy, according to a press release by the House Committee on Appropriations. Additionally, according to the authorization act's explanatory statement, within NIS funds "not more than \$20,000,000 is to support the Next Generation Safeguards Initiative and \$5,000,000 is for the Integrated University Program Cooperative Grants." The DOE Office of Nuclear Energy and the Nuclear Regulatory Commission have also been provided \$5.0 million each in FY09 for this new university program. This program's activities will support multiyear research projects that do not align with programmatic missions but are critical to maintaining the discipline of nuclear science and engineering.

- **U.S. Fissile Material Disposition Maintained**

While the authorization act sought to increase funding for U.S. Surplus Fissile Material Disposition activities by nearly \$20.0 million, the final appropriation supported the budget request of \$40.8 million. In FY08, \$66.2 million had been appropriated for these efforts. Both

acts supported the \$1.0 million request for Russian Surplus Fissile Material Disposition which had received no funding in FY08. Notably, the authorization act allows the Secretary to accept international contributions to the Russian Plutonium Disposition program.

- **EWGPP Preserved**

Both the authorization and appropriation acts supported the \$141.3 million budget request for the Elimination of Weapons-Grade Plutonium Production (EWGPP). They provide \$139.3 million for Zhelenogorsk activities and \$2.0 million for crosscutting and technical support activities.

Department of Defense Cooperative Threat Reduction

Division C of the Continuing Resolution (CR) provided \$434.1 million for DOD CTR programs, an increase of \$8.5 million over the FY08 appropriation. Total CTR funding in the CR is identical to that of the FY09 authorization and \$20.0 million above the FY09 request. However, the individual program amounts were not specified. Therefore, this analysis assumes that the appropriation matches the authorized programmatic levels.

- **CTR Funds Beyond the FSU**

Within the \$434.1 million authorized for CTR, a \$10.0 million increase was provided for new initiatives including activities in countries outside of the former Soviet states.

- **Increases for WMD Proliferation Prevention and Russian CW Destruction**

The other half of the \$20.0 million boost for CTR is made up of a \$9.0 million increase for WMD proliferation prevention activities in former Soviet states and \$1.0 million for expenses associated with Russian chemical weapons destruction activities. With its \$9.0 million increase, total program funding for the WMD proliferation prevention program, which focuses on border security enhancements, is elevated to \$59.3 million.

- **Biological Threat Reduction Program Preserved**

The \$184.5 million FY09 request for Biological Threat Reduction was preserved in the final authorization and appropriation. This program now comprises over 40 percent of the CTR budget and is mostly focused on the former Soviet states outside of Russia. Within the Biological Threat Reduction program, \$160.1 million is directed to Biosafety and Biosecurity and Threat Agent Detection and Response activities and \$24.4 million to the Cooperative Biological Research program, according to the CTR detailed budget justification.

Department of Homeland Security

Division D of the CR provided approximately \$1.15 billion for DHS international threat reduction programs, an increase of \$106.3 million over the FY08 appropriated amount but \$55.6 million less than the FY09 request. The Department of Homeland Security Authorization Act of 2008 and 2009 (S.3623) was introduced in the Senate and referred to committee on September 26, 2008, but no further action was taken.

- **Net Growth for DNDO**

The CR provided \$514.2 million for the Domestic Nuclear Detection Office (DNDO), a \$49.6 million reduction from the FY09 request, but a \$29.4 million increase over the FY08 enacted level. The Radiation Portal Monitor program, funded at \$120.5 million, was cut by

\$37.2 million, the largest funding reduction within DNDO from the FY09 request. However, its FY09 funding level is a net gain of \$30.5 million for the program which was funded at \$90.0 million in FY08. For DNDO Research, Development, and Operations, its funding level of \$323.2 million was \$11.0 million less than the FY09 request and \$0.3 million less than the FY08 enacted amount. Additionally, \$1.4 million was cut from DNDO Management and Administration's FY09 request, and no funding for new positions was provided since nearly 20 percent of previously approved positions remain vacant. Nonetheless, total funding for Management and Administration grew to \$37.5 million, \$6.0 million over its FY08 enacted level.

- **Advanced Spectroscopic Portal Monitor Effectiveness Questioned**

Within the \$120.5 million FY09 CR appropriation for the DNDO Radiation Portal Monitor program, full funding was provided to procure and deploy polyvinyl toluene (PVT) monitors; however, a reduction was made to the advanced spectroscopic portal (ASP) monitor program due to further delays in technology development. The CR directs that none of the funds appropriated be obligated for full-scale procurement of ASP monitors until the Secretary of Homeland Security submits a report to the relevant committees certifying a significant increase in their operational effectiveness. The Secretary must submit separate reports that address the unique requirements for primary and secondary deployments prior to procurement and consult with the National Academy of Sciences (NAS) prior to making any certifications. None of the appropriated funds may be used for concurrent development and production of mutually dependent software and hardware. If the Secretary is unable to certify the ASP monitors, DNDO is directed to use its FY09 funding to acquire additional PVT radiation portal monitors.

- **Research, Development, and Operations Reduced**

From within DNDO's Research, Development, and Operations \$323.2 million appropriation, \$10.0 million was cut from the FY09 request for Transformational Research and Development and \$1.0 million from the National Technical Nuclear Forensics Center. However, both programs have been funded above their FY08 appropriated levels of \$96.0 million and \$15.0 million, respectively. The CR provided \$103.3 million for Transformation Research and Development, preserving funding for ongoing initiatives such as standoff detection and intelligent personal radiation locators but reducing funding for new initiatives. DNDO is directed to undertake aggressive efforts within Transformational Research and Development to fund and analyze technologies that can detect shielded highly-enriched uranium. Within the \$16.9 million appropriated for the National Technical Nuclear Forensics Center, \$1.0 million is provided for a new fellowship program which may grow based on performance. Additionally, \$10.0 million of the \$30.0 million provided for DNDO's Securing the Cities pilot program is drawn from Research, Development, and Operations. The remaining \$20.0 million is provided in Systems Acquisitions.

- **Laboratory Facility Funding Increases**

In the Science and Technology (S&T) directorate, the CR boosted funding for the Laboratory Facilities line item to \$161.9 million, an increase of \$15.0 million over the FY09 request and \$58.1 million over the FY08 enacted level. Within the total appropriation, \$25.0 million is provided for construction obligations at the Physical Science Facility and refurbishment of building 325 at Pacific Northwest National Laboratories in support of a memorandum of understanding among DHS, DOE, and NNSA, according to the bill's explanatory statement.



- **No Funding for NBAF Prior to Risk Assessment**

Also within the S&T directorate, no funds within the \$161.9 million Laboratory Facilities budget may be obligated for the construction of a National Bio and Agro-Defense Facility (NBAF) located on the U.S. mainland until the Secretary completes a GAO reviewed risk assessment of whether foot-and-mouth disease work can be done there safely. The act directs that GAO's review should occur within six months of the completion of the Department's risk assessment.

- **BioWatch Funding Reduced**

The CR appropriated \$111.6 million to the Office of Health Affairs (OHA) BioWatch program, \$27.0 million below the amended FY09 request¹ but \$34.5 million above the FY08 enacted level. The program seeks to enhance U.S. capability for early detection and warning against biological attacks by deploying biological pathogen detectors in urban areas. The reduction here is due to concerns about its management, including uncertainty about the relationship of generation 2.5 and 3.0 systems, a lack of clarity about how OHA measures the efficiency and effectiveness of the systems, and questions about how BioWatch fits with other surveillance efforts. OHA is directed to utilize the results of an ongoing NAS evaluation of the BioWatch program in its future planning. Within funds made available, \$34.5 million is included for field testing systems beyond generation 2.0 that can be deployed within 12 months. The act directs that field tests should be conducted in high risk urban areas and initiated incrementally to ensure that lessons learned and performance data is utilized in subsequent pilot deployments. Prior to commencing field tests, OHA must work with the S&T directorate to determine evaluation metrics. Further, OHA must submit to the relevant committees an expenditure plan on the BioWatch base and field testing programs and notify the committees within five days of any deviation from the expenditure plan.

- **FEMA Funding for Nuclear Preparedness**

An un-requested \$6.0 million was provided to the Federal Emergency Management Agency (FEMA) for a nuclear preparedness effort. Addressing a shortfall in nuclear preparedness, Congress previously provided an un-requested \$5.5 million to OHA in the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act of 2007 (Public Law 110-28) to begin modeling the effects of a potential nuclear attack and planning ways to mitigate its effects, including development of pre- and post-event communication strategies. No funding was sought in the FY09 budget request to continue these efforts. FEMA is directed to build upon the modeling efforts begun by OHA and work with state and local officials and relevant federal agencies on planning efforts. FEMA should also collaborate with OHA and the Department of Health and Human Services on health aspects of a nuclear event.

Department of State

The Consolidated Appropriations Act provided \$151.8 million for State's WMD security programs, a slight reduction of \$3.5 million from the \$155.3 million FY09 request but an increase of \$10.6 million over the \$141.2 million FY08 appropriation. No authorization bill was passed.

¹ The FY09 budget request for BioWatch was amended on August 1, 2008 from \$111.6 million to \$138.6 million. The \$27.0 million increase was requested for the purchase and deployment of 150 BioWatch sensors. Reductions elsewhere in the DHS budget were proposed to offset this increase.



- **GTR Reorganized**

The Global Threat Reduction (GTR) program is responsible for a suite of programs relating to WMD scientist engagement and WMD security training and cooperation. The Consolidated Appropriations Act specified \$61.0 million for GTR, \$3.0 million below the \$64.0 million request and \$4.1 million above the \$56.9 million FY08 appropriated level. Within GTR's FY09 funding, the Global Biosecurity program is directed to receive \$27.0 million for global biological security activities. No other sub-program allocations are stipulated.

In recent months, the Department of State has undertaken a reorganization of the programs under GTR so that they are focused on regional priorities and specific WMD threat areas. This has resulted in the establishment of the Global Biosecurity program (which encompasses the work of the Biosecurity Engagement Program (BEP) and Bio-Industry Initiative (BII)), the Chemical Security Engagement Program, the Nuclear Security Assistance Program, and the Preventing Nuclear Smuggling Program. The Science Center line item and support for Iraqi and Libyan scientist engagement line items remain in place.

Since the Department of State's final allocations for FY08 now use the new program titles, PGS has used these and their final FY08 allocations to establish percentages of how total FY09 subprogrammatic allocations are likely to be distributed.

- **Iraq and Libya Engagement Grows**

Based on FY08 final allocations, there have been significant increases to program funding in support of Iraq and Libya scientist engagement over recent years. PGS estimates the FY09 appropriation for this engagement program to be \$11.5 million, a slight increase over the FY08 allocation of \$11.0 million (\$7.0 million in Iraq and \$4.0 million in Libya in FY08), with \$7.3 million directed toward Iraqi scientist engagement and \$4.2 million directed toward similar activities in Libya and the establishment of a nuclear medicine center in that country.

- **Global Biosecurity Squeezed**

While the explanatory statement accompanying the act stipulates that \$27.0 million is to be provided for Global Biosecurity, discussions with knowledgeable officials indicate that this amount must now support both the activities of global BEP and the Russia/FSU-focused BII as a result of the GTR reorganization. In FY08, PGS estimated BEP was funded at \$26.0 million and BII at \$7.2 million. With total GTR funding relatively static, the creation of new chemical and nuclear security program initiatives, and increases expected for WMD security efforts in South Asia (according to State Department officials), the GTR office's biosecurity efforts in Russia and other former Soviet states will decline, with an estimated \$4.0 million allocated to Russia/FSU bio-engagement in FY09. Still, even with this reduction in BII, the BEP program will have to make due with less than its FY08 funding even as its global agenda grows.

- **Nuclear Smuggling Slips**

The line item for Preventing Nuclear Smuggling was reduced slightly to \$3.6 million, a reduction of \$0.2 million from the estimated FY09 request but \$0.6 million above the FY08 allocation.

- **Science Centers Steady, but Decrease Expected**

Though PGS' percentage allocation formula indicates that funding for Science Centers will increase to \$12.8 million in FY09, which is slightly higher than its \$12.0 million FY08



allocation, conversations with State Department officials have indicated that a decrease for the Science Centers line item is more likely. State Department officials report that funding for Science Center projects will decrease at a rate of 25 percent per year through 2012, the anticipated close out date for Science Center support. Funding for the centers has decreased each year since FY05 when they received over \$30.0 million.

- **NDF Climbs, EXBS and WMD Terrorism Dip**

The Nonproliferation Disarmament Fund (NDF) was appropriated at \$41.0 million, an increase of \$1.0 million above the FY09 request and \$7.3 million over the FY08 appropriation. Though Export Control and Related Border Security Assistance (EXBS) was also funded above the FY09 request (by \$2.7 million), the \$44.0 million provided for EXBS in FY09 is a reduction of \$1.6 million from its FY08 appropriated level. Additionally, a new FY09 initiative on Weapons of Mass Destruction Terrorism, which sought \$5.0 million in the request, was reduced to \$2.0 million in the final appropriation.

About the Authors

Michelle Marchesano is a Research Analyst at the Partnership for Global Security.

Kenneth N. Luongo is President of the Partnership for Global Security.

Raphael Della Ratta is a Project Manager at the Partnership for Global Security.



Annex:
FY09 Funding Charts

[NNSA](#), [DOD](#), [DHS](#), and [State](#)

FY09 Budget, National Nuclear Security Administration
Selected WMD Security Programs
All amounts in \$ millions

Program	FY08 Approp. ²	FY09 Budget Request ³	Defense Authorization P.L. 110-417 10/14/2008	Consolidated Approp. ⁴ P.L. 111-008 3/11/2009
Nonproliferation and International Security				
Dismantlement and Transparency	45.7	42.0	41.8	44.8
Global Security Engagement and Cooperation	50.9	47.4	42.2	50.6
International Regimes and Agreements	44.4	35.3	35.1	37.7
Treaties and Agreements	3.9	15.8	15.6	16.9
International Emergency Management and Cooperation	5.1	0.0	0.0	0.0
<i>Subtotal, NIS</i>	<i>\$150.0</i>	<i>\$140.5</i>	<i>\$134.7⁵</i>	<i>\$150.0⁶</i>
International Nuclear Materials Protection and Cooperation				
Navy Complex	13.3	16.4	?	15.3
Strategic Rocket Forces	121.9	53.6	?	49.9
Rosatom Weapons Complex	79.1	32.3	?	30.1
Civilian Nuclear Sites	54.2	34.5	?	32.1
Material Consolidation and Conversion	19.5	20.9	?	19.5
National Programs and Sustainability	69.6	59.3	?	55.2
Second Line of Defense Core Program	136.1	78.6	?	73.2
Second Line of Defense Megaports Program	130.8	134.1	?	124.8
<i>Subtotal, INMPC</i>	<i>\$624.5</i>	<i>\$429.7</i>	<i>\$451.7⁷</i>	<i>\$400.0⁸</i>
Elimination of Weapons-Grade Plutonium Production				
Seversk activities	19.4	0.0	0.0	0.0
Zheleznogorsk activities	159.1	139.3	139.3	139.3
Crosscutting and Technical Support Activities	1.4	2.0	2.0	2.0
<i>Subtotal, EWGPP</i>	<i>\$179.9</i>	<i>\$141.3</i>	<i>\$141.3⁹</i>	<i>\$141.3¹⁰</i>
Fissile Materials Disposition				
U.S. Surplus Fissile Materials Disposition	66.2	40.8	60.0	40.8
Russian Surplus Fissile Materials Disposition	0.0	1.0	1.0	1.0
<i>Subtotal, Fissile Materials Disposition</i>	<i>\$66.2</i>	<i>\$41.8</i>	<i>\$61.0¹¹</i>	<i>\$41.8¹²</i>
Global Threat Reduction Initiative				
HEU Reactor Conversion	33.8	49.3	?	88.7
Nuclear and Radiological Material Removal	67.8	116.6	?	209.7
Nuclear and Radiological Material Protection	91.6	53.7	?	96.6
<i>Subtotal, GTRI</i>	<i>\$193.2</i>	<i>\$219.6</i>	<i>\$339.6¹³</i>	<i>\$395.0¹⁴</i>
International Nuclear Fuel Bank Program	49.5 ¹⁵	--	--	--
Congressionally Directed Projects	7.4 ¹⁶	--	--	1.9 ¹⁷
Other/Admin. Support	--	--	--	--
TOTAL	\$1,270.7	\$972.9	\$1,128.3	\$1,130.0

**FY09 Budget, Department of Defense
CTR Programs
All amounts in \$ millions**

Program	FY08 Appropriation¹⁸	FY09 Budget Request¹⁹	Defense Authorization P.L. 110-417 10/14/2008	Continuing Resolution P.L. 110-329 9/30/2008
Strategic Offensive Arms Elimination – Russia	90.6	79.9	79.9	79.9
Strategic Nuclear Arms Elimination – Ukraine	2.2	6.4	6.4	6.4
Nuclear Weapons Storage Security – Russia	45.5	24.1	24.1	24.1
Nuclear Weapons Transportation Security – Russia	37.7	40.8	40.8	40.8
WMD Proliferation Prevention – FSU	47.9	50.3	59.3	59.3
WMD Proliferation Prevention – non-FSU/New Initiatives	10.0	--	--	--
Biological Threat Reduction – FSU	158.4	184.5	184.5	184.5
CW Destruction Facility – Russia	1.0	--	1.0	1.0
CW Elimination – Albania	--	--	--	--
CW Elimination – Libya	5.0	--	--	--
Defense and Military Contacts	8.0	8.0	8.0	8.0
Other/Admin. Support	19.3	20.1	20.1	20.1
New Programs Outside the FSU	--	--	10.0	10.0
TOTAL	\$425.6	\$414.1	\$434.1²⁰	\$434.1²¹



**FY09 Budget, Department of Homeland Security
Selected International Threat Reduction Programs
All amounts in \$ millions**

Program	FY08 Appropriation ²²	FY09 Budget Request ²³	Continuing Resolution ²⁴ P.L. 110-329 9/30/2008
Domestic Nuclear Detection Office			
Management and Administration	31.5	38.9	37.5
Research, Development, & Operations	323.5	334.2	323.2 ²⁵
Systems Acquisitions			
<i>Radiation Portal Monitor Program</i>	90.0	157.7	120.5
<i>Securing the Cities</i>	30.0	20.0	20.0
<i>Human Portal Radiation Detection Systems Program</i>	9.8	13.0	13.0
Subtotal, Systems Acquisition	129.8	190.7	153.5
Subtotal, DNDO	\$484.8	\$563.8	\$514.2
Science and Technology Directorate			
Chemical and Biological	208.0	200.4	200.4
Laboratory Facilities	103.8	146.9	161.9
Subtotal, S&T	\$311.8	\$347.3	\$362.3
Office of Health Affairs			
BioWatch	77.1	138.6 ²⁶	111.6
National Biosurveillance Integration System	8.0	8.0	8.0
Nuclear Preparedness Effort	5.5 ²⁷	0.0	--
Subtotal, OHA	\$90.6	\$146.6	\$119.6
Customs and Border Protection International Cargo Screening			
Container Security Initiative	158.1	149.5	149.5
Federal Emergency Management Agency			
Nuclear Preparedness Effort	--	--	6.0 ²⁸
TOTAL	\$1,045.3	\$1,207.2	\$1,151.6



FY09 Budget, Department of State
Selected Global Threat Reduction Programs
All amounts in \$ millions

Program	FY08 Appropriation ²⁹	FY09 Budget Request ³⁰	Consolidated Appropriation ³¹ P.L. 111-008 3/11/2009
Nonproliferation and Disarmament Fund (NDF)	33.7	40.0	41.0
Export Control and Related Border Security Assistance (EXBS)	45.6	41.3	44.0
Global Threat Reduction			
<i>Science Centers</i>	12.0	13.4	12.8 ³²
<i>Global Biosecurity³³</i>	26.0 ³⁴	26.0	27.0
<i>Chemical Security Engagement</i>	2.5	2.5	2.6
<i>Iraq Scientist Engagement</i>	7.0	7.6	7.3
<i>Libya Scientist Engagement</i>	4.0	4.4	4.2
<i>Nuclear Security Assistance</i>	0.5	0.6	0.6
<i>Preventing Nuclear Smuggling</i>	3.0	3.8	3.6
<i>Administrative Support</i>	1.9	2.5	2.4
Subtotal, GTR Program	\$56.9	\$64.0	\$61.0³⁵
Weapons of Mass Destruction Terrorism	--	5.0	2.0
U.S. Civilian Research and Development Foundation (CRDF)	~5.0	~5.0	~3.8
TOTAL	\$141.2	\$155.3	\$151.8

¹ Barack Obama, “The War We Need to Win,” *Organizing for America*, Washington, D.C., August 1, 2007, <http://www.barackobama.com/2007/08/01/remarks_of_senator_obama_the_w_1.php> (March 2009).

² FY08 appropriations for NIS, INMPC, EWGPP, Fissile Materials Disposition, and GTRI are derived from the DOE FY2009 Congressional Budget Request. Funding levels can also be found in PGS’ March 2008 [Analysis of the Department of Energy’s Fiscal Year 2009 International Nonproliferation Budget Request](#).

³ The FY09 request for NIS, INMPC, EWGPP, Fissile Materials Disposition, and GTRI are derived from the DOE FY2009 Congressional Budget Request. Funding levels can also be found in PGS’ March 2008 [Analysis of the Department of Energy’s Fiscal Year 2009 International Nonproliferation Budget Request](#).

⁴ Subtotal funding for NIS, INMPC, EWGPP, Fissile Materials Disposition, and GTRI are derived from the appropriation act’s explanatory statement. Based on conversations with knowledgeable committee staff, increases and cuts to subprogram line items are assumed to be allocated in the same percentages as in the FY09 budget request. Though these numbers do not appear in the act or explanatory statement, PGS has calculated the allocated totals and included them in this analysis based on this information. They are subject to change.

⁵ Total authorized funding for NIS (\$134.7 million) is specified in the funding chart found in the authorization act’s joint explanatory statement. Line item totals have been estimated by PGS due to insufficient information on the distribution of the GNEP funding cut within NIS. According to language in the authorization act’s joint explanatory statement, \$5.0 million was cut from GIPP (in the Global Security Engagement and Cooperation line item) and \$0.8 million was cut across NIS as a reduction for GNEP activities. These reductions are reflected in this analysis’ line item totals.

⁶ Total funding for NIS (\$150.0 million) is specified in the appropriation act’s explanatory statement and funding chart. According to the explanatory statement, within NIS funds, “not more than \$20,000,000 is to support the Next Generation Safeguards Initiative and \$5,000,000 is for the Integrated University Program Cooperative Grants.” NIS line item totals have been estimated based on the formula described in endnote three. They are subject to change.

⁷ Total INMPC program funding (\$451.7 million) is specified in the funding chart found in the authorization act’s joint explanatory statement. However, no details regarding the distribution of INMPC’s \$22.0 million increase were provided in the authorization act or joint explanatory statement.

⁸ Total INMPC program funding (\$400.0 million) is specified in the appropriation act’s joint explanatory statement and funding chart; however line items do not add precisely to this figure in this analysis due to rounding. INMPC line item totals reflect the percentage allocation formula noted in endnote three. However, conversations with NNSA officials indicate that most of the \$29.7 million reduction to INMPC’s budget will be applied to the Second Line of Defense Core and Megaports programs, so these funding estimates could change.

⁹ Total EWGPP program funding (\$141.3 million) is specified in the funding chart found in the authorization act’s joint explanatory statement; this total matches the FY09 budget request and final appropriation. Line item totals have been carried forward from the FY09 budget request.

¹⁰ Total EWGPP program funding (\$141.3 million) is specified in the funding chart found in the appropriation act’s joint explanatory statement; this total matches the FY09 budget request and final authorization. Line item totals have been carried forward from the FY09 budget request.

¹¹ Total Fissile Material Disposition program funding was authorized at \$528.8 million. Of this total, the authorization act’s joint explanatory statement funding chart directed \$467.8 million for construction of the mixed oxide fuel fabrication facility at Savannah River in South Carolina, \$60.0 million for U.S. Surplus Fissile Materials Disposition operations and maintenance, and \$1.0 million for Russia Surplus Materials Disposition. For the purpose of this analysis, only funding for the U.S. Surplus Fissile Materials Disposition and Russia Surplus Materials Disposition are covered.

¹² Total Fissile Material Disposition program funding (\$41.8 million) as well as line item totals for U.S. Surplus Fissile Materials Disposition (\$40.8 million) and Russian Surplus Fissile Materials Disposition (\$1.0 million) are specified in the appropriation act’s explanatory statement funding chart.

¹³ Total authorized funding for GTRI (\$339.6 million) is specified in the funding chart found in the authorization act’s joint explanatory statement. However, no details regarding the distribution of GTRI’s \$120.0 million increase were provided in the authorization act or joint explanatory statement.



¹⁴ Total GTRI program funding (\$395.0 million) is specified in the appropriation act's explanatory statement and funding chart. The explanatory statement states that "the bill provides not less than \$60,000,000 to accelerate the removal of proliferation-sensitive materials from around the world." Consistent with this Congressional direction, this analysis uses the percentage allocation formula noted in endnote three and projects that \$209.7 million will be provided to Material Removal activities. Line item totals for Material Protection (\$96.6 million) and HEU Reactor Conversion (\$88.7 million) are also based on the percentage allocation formula detailed in endnote three. These estimates are subject to change.

¹⁵ This allocation from the FY08 Consolidated Appropriations Act for the International Nuclear Fuel Bank reflects a one-time commitment in FY08.

¹⁶ This allocation from the FY08 Consolidated Appropriations Act reflects four Congressionally Directed Projects at the George Mason Center for Biodefense and Infectious Disease Research (VA), the Texas A&M Nuclear Security Science and Policy Institute (TX), the Offshore Detection Integrated System (OH), and the New England Research in White River Junction, Vermont for the Caucasus Seismic Network (VT).

¹⁷ This allocation is only for the Nuclear Security Science and Policy Institute (TX).

¹⁸ Total program and line item funding levels are specified in the February 2008 Defense Threat Reduction Agency document, [Fiscal Year \(FY\) 2009 Budget Estimates Former Soviet Union Threat Reduction Cooperative Threat Reduction Program](#), and can also be found in PGS' March 2008 [Preliminary Analysis of the U.S. Department of Defense's Fiscal Year 2009 Cooperative Threat Reduction Budget Request](#).

¹⁹ Ibid.

²⁰ Total CTR funding (\$434.1 million) is specified in the authorization act's joint explanatory statement. This statement also specifies that following increases for these programs: \$10.0 million for new initiatives including activities in states outside of the FSU, \$1.0 million for additional expenses associated with Russian chemical weapons destruction activities, and \$9.0 million for weapons of mass destruction proliferation prevention in the former Soviet Union. These increases are reflected in their respective line item totals in this analysis. All other line item totals have been carried over from the FY09 budget request.

²¹ Within the \$434.1 million CTR appropriation, \$12.0 million is directed to support the dismantling and disposal of nuclear submarines, submarine reactor components, and security enhancements for transport and storage of nuclear warheads in the Russian Far East. No further CTR program allocation details are provided; however, total CTR funding in the CR is identical to that of the FY09 Defense Authorization Act. Therefore, this analysis assumes that the appropriated funding for the CTR subprograms is the same as in the Defense Authorization Act.

²² Total program and line item funding levels for DNDO, S&T, OHA, CBP, and FEMA are based on DHS FY09 budget request documents, funding charts within DHS' FY09 appropriation explanatory statement, and PGS' May 2008 [Analysis of the Department of Homeland Security's Fiscal Year 2009 Budget Request for Nuclear and Biological Security Activities](#).

²³ Ibid.

²⁴ All program and line item totals are based on language and funding charts found in the explanatory statement of DHS' FY09 appropriation act.

²⁵ According to language in the appropriation act's explanatory statement, \$30.0 million is provided for the Securing the Cities pilot project, of which, \$10.0 million is provided under Research, Development and Operations and \$20.0 million from Systems Acquisition.

²⁶ On August 1, 2008, the President amended his FY09 budget request for BioWatch from \$111.6 million to \$138.6 million. The \$27.0 million increase was requested for the purchase and deployment of 150 automated BioWatch sensors for BioWatch cities and offset by a proposed reduction elsewhere in the DHS budget.

²⁷ According to the appropriation act's explanatory statement, Congress provided an un-requested \$5.5 million to OHA in the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act of 2007 (Public Law 110-28) to begin modeling the effects of a potential nuclear attack and planning ways to mitigate its effects, including development of effective communications. No funds were requested in FY09 to continue these efforts. However, Division D of the CR provided \$6.0 million to FEMA to build on nuclear preparedness efforts begun by OHA.

²⁸ Ibid.



²⁹ Total program funding for NDF, EXBS, and GTR are specified in the FY09 State [budget request](#) and PGS' April 2008 [Analysis of the U.S. State Department's Fiscal Year 2009 Budget Request for Global WMD Threat Reduction Programs](#). Subprogrammatic line item funding totals for GTR are based on information from State Department officials after the publication of PGS' April 2008 analysis. CRDF funding information was provided to PGS by CRDF officials.

³⁰ Total program funding for NDF, EXBS, GTR, and WMD Terrorism are specified in the FY09 State [budget request](#) and PGS' April 2008 [Analysis of the U.S. State Department's Fiscal Year 2009 Budget Request for Global WMD Threat Reduction Programs](#). GTR subprogrammatic line item funding was not detailed in the budget request. In this analysis, it has been estimated by PGS using the percentage of total program funding allocated to each line item in FY08 to determine likely allocations in the FY09 request. CRDF funding information was provided to PGS by CRDF officials.

³¹ Total FY09 program funding for NDF, EXBS, GTR, and WMD Terrorism are stipulated in the appropriation act's explanatory statement. GTR subprogrammatic line item funding was not detailed in either the budget request or appropriation act's explanatory statement. In this analysis, they have been estimated by PGS using the percentage of total program funding allocated to each line item in FY08 to determine likely FY09 allocations. The only exception to this formula is for the Global Biosecurity line item, which was directed in the appropriation act's joint explanatory statement to receive \$27.0 million. CRDF funding information was provided to PGS by CRDF officials.

³² PGS' percentage allocation formula calculates Science Center funding will increase slightly over FY08 levels. However, State Department officials have indicated this line item will likely decrease in the coming years.

³³ Information obtained from State Department and knowledgeable officials label States' FY08 and FY09 biosecurity activities as "Global Biosecurity." This line item fuses the activities of the Biosecurity Engagement Program and Bio-Industry Initiative. FY09 legislation directs \$27.0 million to this program.

³⁴ In its previous analyses, PGS estimated that BEP received \$26.0 million and BII received \$7.2 million in FY08. However, information from conversations with knowledgeable officials indicated that in FY08 Global Biosecurity—which now encompasses the activities of BEP and BII—only received \$26.0 million; this figure is reflected in the chart.

³⁵ According to the appropriation act's explanatory statement, \$61.0 million has been appropriated to GTR. However, line item totals do not add precisely to this figure in this analysis due to rounding.