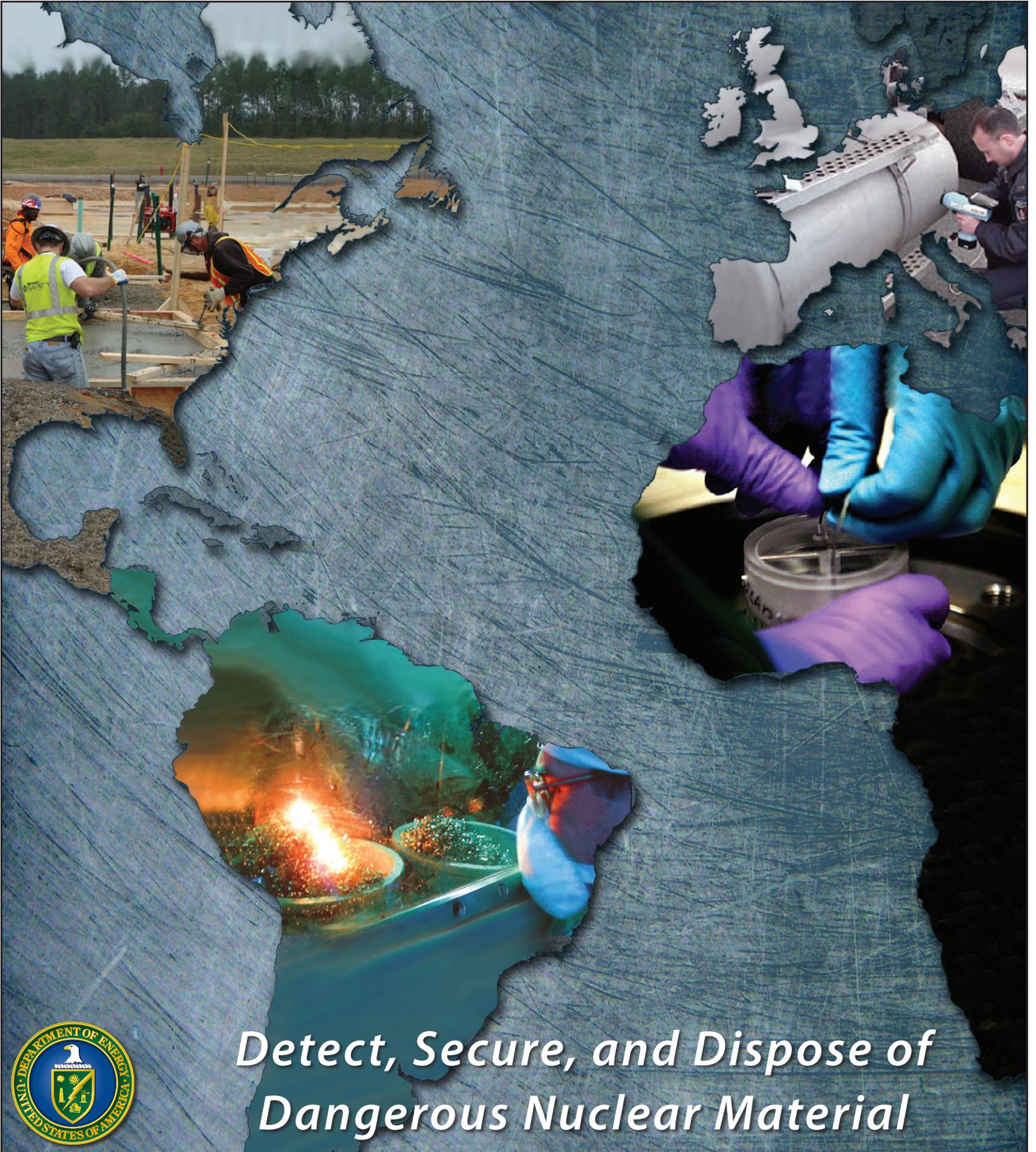




National Nuclear Security Administration Office of Defense Nuclear Nonproliferation

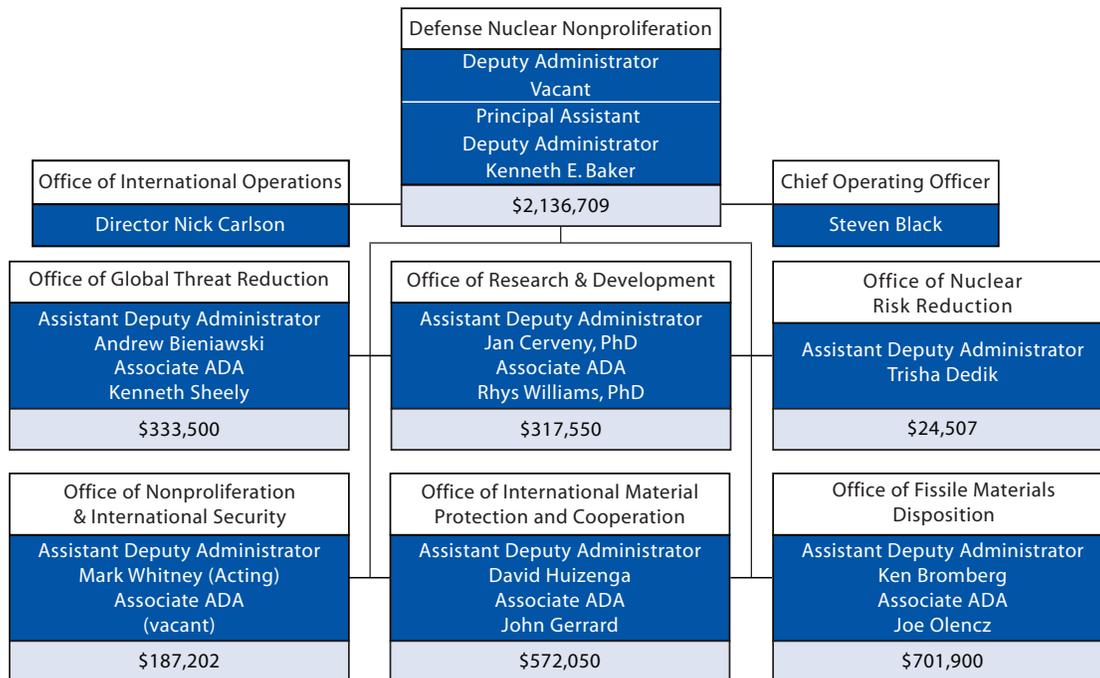


*Detect, Secure, and Dispose of
Dangerous Nuclear Material*



Scope of Commitment

- Over \$2 billion budget in FY10.
- Engaging over 100 countries, the International Atomic Energy Agency (IAEA), and the European Atomic Energy Community (EURATOM).
- Over \$59 million in international contributions from seven countries.
- Three Service to America Award winners.



Budget figures in the \$1,000s - FY10 Appropriation

Detecting and Deterring Illicit International Nuclear Transfers

- Equipped 221 Russian border crossings with radiation detection equipment with Russia equipping an approximately equal number.
- Outside of Russia, deployed radiation detection equipment systems at 87 sites (land borders, airports, and feeder airports) in 15 former Soviet states, Eastern Europe, South Asia and other key countries.
- Completed installation of radiation detection equipment at 28 Megaports with work underway at 16 additional Megaports worldwide.
- Provided training and sustainability support for approximately 250 sites and 27 Megaports, in various stages of transition to full Host Country Partner responsibility.
- Provided mobile radiation detection equipment and training to law enforcement authorities at checkpoints and other internal border areas.
- Provided WMD-related Commodity Identification Training (CIT) to frontline inspectors in more than 50 countries, with over half adopting national CIT training plans enabling thousands of inspectors per year to detect potential illicit commodity transfers.
- Reviewed 7,380 export licenses/requests for proliferation risk in 2008 resulting in denial of 197; in 2009, reviewed 6,543 requests, resulting in 189 denials.
- Worked with major national manufacturers of WMD-related "dual-use" commodities to ensure robust export control compliance outreach to industry to detect and prevent inadvertent commodity transfers.
- Advanced UNSCR 1540 implementation internationally through first-ever regional workshop on combating illicit trafficking networks.

Nonproliferation Research and Development

- Developed new radiation detection methods and technologies in support of U.S. and international arms control verification requirements.
- Developed new methods for fissile material production and movement detection.
- Developed several new techniques and technologies that support international nuclear safeguards.
- Designed and built the nation's operational sensors that monitor the Earth's surface, atmosphere, and space environment for nuclear tests.
- Established the Gulf Seismic Forum, a self-sustaining regional body for joint analysis and data-sharing that advances regional seismic monitoring cooperation and transparency.

Securing Nuclear and Radiological Materials Worldwide

- Completed Material Protection, Control & Accounting upgrades at 93% of Russian nuclear material and warhead sites of concern.
- Converted 60 reactors in 32 countries from highly-enriched uranium (HEU) to low-enriched uranium (LEU) (an additional 7 shut down).
- Returned 1,102 kilograms of Russian-origin HEU; 1,219 kilograms of U.S.-origin HEU; and 187 kilograms of other HEU and plutonium from vulnerable sites around the world.
- Secured more than 700 vulnerable buildings overseas and domestically with high-priority nuclear and radiological materials; recovered over 23,000 unwanted or excess high-priority radiological sources domestically.
- Engaging in ongoing reciprocal nuclear security best-practices dialogues with both Russia and China.
- Repacked and removed 550 metric tons (MT) of uranium dioxide and 4,000 curies of radiological sources from the Tuwaitha Nuclear Research Complex in Iraq.
- Trained over 250 foreign officials every year since the 9/11 terrorist attacks on how to physically protect nuclear material and facilities.

Strengthening International Nonproliferation Efforts And Regimes

- Implementing the Next Generation Safeguards Initiative to strengthen nuclear safeguards applied by the IAEA; strengthening Nuclear Suppliers Group export control guidelines and control lists.
- Leading the USG effort to update and enhance the IAEA's recommendations for the Physical Protection of Nuclear Material and Nuclear Facilities found in INFCIRC/225.
- Completed "123 Agreements" for peaceful nuclear cooperation with India, Turkey, and the UAE.
- Worked to dismantle Libya's WMD program.
- Developed 13 national security technologies through scientist engagement partnerships with Russia.
- Engaged more than 16,000 personnel (60% with WMD experience or expertise) at over 180 facilities in the FSU, Libya and Iraq, redirecting them to the civilian sector, impeding the flow of WMD know-how.
- Cooperated with 13 countries in the Middle East, North Africa, and South East Asia, through bilateral arrangements and regional workshops, on the development of safeguards infrastructures, including implementation of the Additional Protocol.
- Conducting 85 ongoing nuclear safeguards projects in 19 countries.
- Trained nearly 7,200 domestic export enforcement officials in WMD awareness and trained more than 1,300 foreign technical personnel on nuclear safeguards and nuclear infrastructure development.
- Contributed nearly \$50 million to the IAEA to facilitate the creation of an international nuclear fuel bank to support the peaceful uses of nuclear energy.
- Pledged \$3 million and assigned a senior analyst to support the World Institute for Nuclear Security (WINS).

Eliminating Weapons-Usable Material

- Monitored downblending of more than 380 MT of former Soviet weapons-origin HEU for use in U.S. power plants, providing 10% of U.S. electricity.
- Downblended 11.7 MT of non-weapons Russian HEU to LEU.
- Downblended or delivered for downblending more than 128 MT (enough for approximately 2,900 nuclear weapons) of surplus U.S. HEU into LEU for use as nuclear reactor fuel.
- Downblending 17.4 MT of HEU for the Reliable Fuel Supply Initiative, which will serve as an incentive for other countries to forgo indigenous enrichment and reprocessing capabilities.
- Working to dispose of a total of at least 68 MT of U.S. and Russian weapons-grade plutonium by converting it into mixed-oxide (MOX) fuel for subsequent irradiation in nuclear reactors.
- Shut down 2 of the last 3 weapons-grade plutonium production reactors in Russia ahead of schedule; the last is slated to shut-down in 2010.
- Monitoring safe storage of more than 9 MT of Russian weapons-grade plutonium (nearly 1,125 warheads) to ensure its non-military use.

December 2009

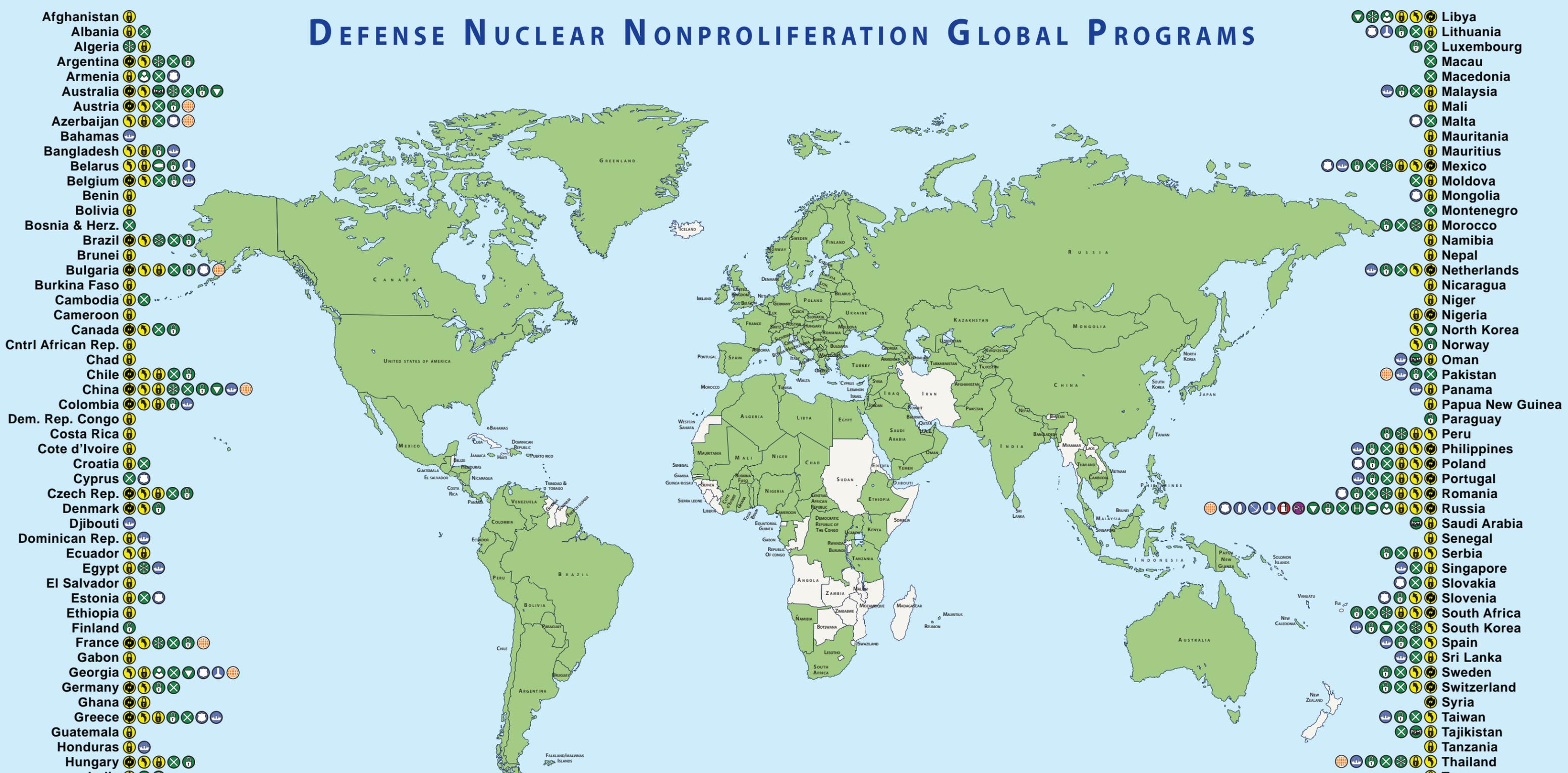
Contact Information



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http://nnsa.energy.gov/nuclear_nonproliferation

DEFENSE NUCLEAR NONPROLIFERATION GLOBAL PROGRAMS



Afghanistan	Libya
Albania	Lithuania
Algeria	Luxembourg
Argentina	Macau
Armenia	Macedonia
Australia	Malaysia
Austria	Mali
Azerbaijan	Malta
Bahamas	Mauritania
Bangladesh	Mauritius
Belarus	Mexico
Belgium	Moldova
Benin	Mongolia
Bolivia	Montenegro
Bosnia & Herz.	Morocco
Brazil	Namibia
Brunei	Nepal
Bulgaria	Netherlands
Burkina Faso	Nicaragua
Cambodia	Niger
Cameroon	Nigeria
Canada	North Korea
Cntrl African Rep.	Norway
Chad	Oman
Chile	Pakistan
China	Panama
Colombia	Papua New Guinea
Dem. Rep. Congo	Paraguay
Costa Rica	Peru
Cote d'Ivoire	Philippines
Croatia	Poland
Cyprus	Portugal
Czech Rep.	Romania
Denmark	Russia
Djibouti	Saudi Arabia
Dominican Rep.	Senegal
Ecuador	Serbia
Egypt	Singapore
El Salvador	Slovakia
Estonia	Slovenia
Ethiopia	South Africa
Finland	South Korea
France	Spain
Gabon	Sri Lanka
Georgia	Sweden
Germany	Switzerland
Ghana	Syria
Greece	Taiwan
Guatemala	Tajikistan
Honduras	Tanzania
Hungary	Thailand
India	Togo
Indonesia	Trinidad & Tobago
Iraq	Tunisia
Ireland	Turkey
Israel	Turkmenistan
Italy	Uganda
Jamaica	Ukraine
Japan	UAE(Dubai)
Jordan	United Kingdom
Kazakhstan	United States
Kenya	Uruguay
Kuwait	Uzbekistan
Kyrgyzstan	Venezuela
Laos	Vietnam
Latvia	Yemen
Lebanon	

Plutonium Producing Reactor Shutdown (1)	Convert HEU Fueled Research Reactors (41)
Global Initiatives for Proliferation Prevention (8)	Protect Nuclear/Radiological Materials (94)
Confidence Building Measures Program (12)	Remove Nuclear/Radiological Materials (57)
Warhead Dismantlement and Transparency (5)	Second Line of Defense-Core Program (23)
Highly Enriched Uranium Purchase Agreement (1)	Second Line of Defense-Megaports Initiative (32)
International Nuclear Safeguards and Engagement Program (18)	Civilian Site Security (8)
International Nonproliferation Export Control Program (70)	Russian Ministry of Defense Site Security (1)
Physical Protection (56)	Rosatom Nuclear Materials Security (1)
Nuclear Noncompliance Verification (9)	Plutonium Disposition (2)
Cooperative Border Security Program (2)	International Operations (13)

(#) = number of partners

= partners