

The March 2016 Nuclear Security Summit

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In an April 2009 [speech](#), President Obama said that nuclear terrorism is the "most immediate and extreme threat to global security." To mobilize world leaders to prevent terrorist acquisition of nuclear materials, the President hosted the first [Nuclear Security Summit](#) (NSS) in Washington, DC, in April 2010. A second summit was held in South Korea in March 2012 and a third in the Netherlands in March 2014. A fourth summit is to be held in Washington, DC, on March 31 and April 1, 2016. Two official side events are to be held during the summit: an [industry-led conference](#) and a [non-governmental experts conference](#).

The goal of the NSS was to focus global attention at the highest level of government on the threat of nuclear terrorism. Terrorists could potentially build an improvised nuclear device (IND) from highly enriched uranium or plutonium. Because the production of fissile material is costly and equipment relatively difficult to obtain, many believe that terrorist groups would not be able to produce weapon-usable nuclear material and would therefore need to [steal or purchase](#) the material or weapon from a state. The United States has made it a policy priority to secure nuclear material where it is housed or remove the material from sites around the world. Terrorists could also use radioactive material to construct a [radioactive dispersal device](#) or "dirty bomb." Not all countries viewed this threat as realistic or urgent, and the Obama Administration decided to host a summit to inform world leaders about this threat and inspire their governments to take action to prevent an attack.

Leaders of over 50 countries and four international organizations (European Union, International Atomic Energy Agency [IAEA], Interpol, and United Nations) are to attend the 2016 summit. Invitees represent a wide geographic range of states. Three states not party to the Nuclear Nonproliferation Treaty (NPT)—India, Israel and Pakistan—participate in the Nuclear Security Summits. The majority of states in possession of [weapons-usable nuclear material](#) have participated in Nuclear Security Summits, with the prominent exceptions of North Korea, Iran, and Belarus. The Russian Federation has decided [not to attend](#) the 2016 summit but has attended in the past.

President Obama has called the 2016 summit a "Transition Summit." Summit participants are to discuss how to strengthen international efforts, review new national commitments, and take stock of how past pledges have been implemented. Recent news of attempts of terrorists related to the [Islamic State](#) to gain access to radiological materials is also to be discussed. Deliverables for this summit will likely include action plans for the five international organizations and arrangements that make up the "global nuclear security architecture": the United Nations, the IAEA, Interpol, the Global Initiative to Combat Nuclear Terrorism, and the Global Partnership Against the Spread of Weapons and

Materials of Mass Destruction. Once the summit process ends this year, future nuclear security work is planned through these mechanisms, principally the IAEA. A [December 2016 IAEA ministerial meeting](#) on nuclear security may be the first test of this transition.

In the past, countries have presented the summit hosts with either individual pledges ("house gifts") or pledges by groups of countries ("gift baskets") addressing specific challenges. For example, individual states have promised to remove all weapons-usable nuclear material from their territory, and like-minded states have signed joint statements on nuclear forensics cooperation or maritime security measures.

Nuclear security measures refer to a range of actions to prevent theft or diversion of nuclear material or sabotage at an installation or in transit. A broader understanding of nuclear security also includes measures to prevent and detect illicit trafficking—cargo inspections, border security, and interdiction measures. "Nuclear security culture" describes personnel attitudes toward the importance of nuclear security practices in their daily work, efforts that are to prevent an insider threat of theft or diversion.

The summit process has given attention to a wide range of nuclear and radiological source security measures, such as training for those handling the materials, detection of smuggled material, the threat of diversion by insiders, nuclear forensics, emergency response, and cyber-security at nuclear facilities.

The U.S. government has worked both domestically and in partnership with other countries to address this problem through programs at the Departments of Defense, Energy, Homeland Security, and State. The IAEA has also played a lead role in these efforts, particularly since the 9/11 terrorist attacks.

Removing weapons-usable nuclear materials from more countries has been a major area of focus since the first summit. Twenty-eight countries plus Taiwan [are free](#) of highly enriched uranium (HEU). At the summit in 2014, the United States announced it would remove HEU and plutonium from several civilian sites in Germany, Kazakhstan, Switzerland, and Japan before the next summit. These shipments are [under way or completed](#).

The summits have also prompted many states to pursue a policy of "HEU minimization," which can include converting research reactors from highly enriched to low-enriched uranium fuel, and removing the HEU fuel. Highly enriched uranium continues to be used in the civilian fuel cycle for medical isotope production or research reactors, posing a risk of diversion. Some states are pursuing regional HEU-free zones. Others propose stricter international guidelines for HEU management.

Some outside experts suggest that [significant gaps](#) in the nuclear security legal framework still exist, and while the summits have provided useful stimuli for securing and removing material in the easy cases, many challenges remain. Others have called for a legally binding [nuclear security convention](#) that would toughen standards. There is also [doubt](#) about whether the existing institutions such as the IAEA can achieve the same level of accomplishments (at the same pace) as heads-of-state level meetings, which tend to be a forcing factor for concrete results. A September 2015 [GAO report](#) said that while there was progress to date in removing and disposing of HEU and plutonium, a lack of political will in the most difficult cases as well as continuing technical challenges (such as developing non-HEU fuel for certain research reactors) remain ongoing challenges.