Fostering Nuclear Security
Leadership and Innovation

Lessons Learned from 10 Years of Global Dialogue
on Nuclear Security Priorities

December 2023
About the Global Dialogue on Nuclear Security Priorities

In spring 2009, President Barack Obama stood before tens of thousands of people in Prague and issued a call for a world without nuclear weapons. It was the first major foreign policy speech of his presidency, and in it, he announced that he would gather world leaders to discuss the pressing issue of nuclear security. The nuclear security summit process that emerged marked a high point for multilateral cooperation to reduce the risk of nuclear sabotage and theft by increasing security at nuclear facilities. Between 2010 and 2016, more than 50 heads of state and leaders from key international organizations gathered for four biennial summits to pledge new action to strengthen nuclear security and report on progress made.

Despite increased attention to nuclear security, it became clear that the summit process would benefit from an integrated conversation to further efforts to strengthen the global nuclear security system. The Nuclear Threat Initiative (NTI) saw an opportunity to inject creativity and innovation by offering an informal setting for government officials to explore and develop new security concepts before introducing them into the official meetings. Thus, in 2012, NTI brought together nuclear security leaders from around the world for the first Global Dialogue on Nuclear Security Priorities (Global Dialogue).

This Dialogue had a mutually reinforcing relationship with a separate initiative: the NTI Nuclear Security Index, the first-of-its-kind assessment of nuclear and radiological security across 175 countries and Taiwan, first issued by NTI in 2012 and now in its sixth edition. A dynamic relationship evolved, as the Index tracked complex global and national nuclear security systems and created benchmarks and impetus for action by Global Dialogue participants. Together, they delivered results in the form of continued progress on security, evolving best practices and priorities, and identifying emerging risks and challenges.

Since 2012, the Global Dialogue has held 16 full meetings, in-person and virtually, and today the Global Dialogue continues to be a unique forum that convenes senior government officials, representatives from international organizations, leading non-government experts, and nuclear industry professionals from around the world for open, discreet, and frank conversations focused on strengthening the international nuclear security architecture. The process allows participants to identify and prioritize the most serious nuclear security challenges and develop tangible steps to address them. During the last 10 years, the Global Dialogue has brought together more than 200 nuclear security leaders from dozens of countries across five continents.

In its first phase, from 2012–2016, the Global Dialogue focused on informing and strengthening the nuclear security summit process. From 2016–2020, recognizing the evolving threat of nuclear and radiological terrorism, NTI and Global Dialogue participants decided to continue the forum, encouraging ongoing high-level attention on nuclear security with the summit process over. Due to COVID-19 travel restrictions, the Global Dialogue shifted to a virtual format from 2020–2022. This period was used to educate Global Dialogue participants on nuclear security progress and gaps, sustain political attention on nuclear security, and prepare for major upcoming multilateral meetings, such as the review of the Amended Convention on the Physical Protection of Nuclear Material (CPPNM) and the Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons.
Today, the Global Dialogue helps countries support the international institutions, legal frameworks, and national practices that provide the basis for the international nuclear security architecture. Throughout that time, the Global Dialogue has seeded, shaped, and driven support for crucial progress in nuclear security worldwide.

**During the past 10 years, a powerful set of lessons emerged from the Global Dialogue to guide governments, civil society, and international organizations in ongoing efforts to strengthen nuclear security:**

- Consistent leadership is necessary
- Sustained vigilance is needed between major multilateral meetings
- Inclusive cooperation leads to results
- Forward-leaning and unique approaches are key
- Civil society plays a critical role

### Consistent Leadership Is Necessary

During the nuclear security summit process, the impact of strong national leadership led to fewer countries with weapons-usable nuclear material, stronger international institutions, greater support for nuclear security treaties, and improved nuclear security regulations in dozens of countries. The Global Dialogue was central to that progress.

Early in the summit process, NTI recognized that providing opportunities for the community of nuclear security leaders to openly discuss pressing and challenging issues was critical for developing innovative ideas to address them. By bringing together key officials from the summits, including summit hosts and experts actively engaged in nuclear security, the Global Dialogue provided a forum for discussing ways to promote leadership at the national level. It also served as a training ground for the next generation of leaders by providing young experts the opportunity to present new ideas.

**National Commitments.** The Global Dialogue focused significant early attention on supporting the development of national and collective commitments for stronger nuclear security. From 2014–2016, the Dialogue provided a venue to develop collective commitments for the nuclear security summit process, called “gift baskets,” focused on minimizing and managing weapons-usable nuclear materials (highly enriched uranium (HEU) and plutonium). For example, as a result of this process, Norway, a Global Dialogue participant country, sponsored a gift basket on HEU minimization, which was joined by 20 other countries at the 2016 Nuclear Security Summit submitted to the International Atomic Energy Agency (IAEA) as Information Circular/912.\(^2\)

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1 The CPPNM requires states to apply physical protection measures to civilian nuclear material in international transport, criminalizes nuclear theft and terrorism-related offenses, and establishes processes for cooperation on securing international transports, responding to incidents, and extraditing suspects. Its amendment improves the convention by requiring protection of nuclear material located in peaceful domestic use and storage and to sabotage of nuclear facilities. The amendment also requires a conference five years after entry into force to review implementation. A majority of states parties can request additional conferences at intervals of no less than five years thereafter.

2 See “Gift Basket on Minimizing and Eliminating the Use of Highly Enriched Uranium in Civilian Applications,” (Washington, DC: Nuclear Security Summit, 2016), [https://static1.squarespace.com/static/568be3650f8e2a8023adf7f7/t/56febac0b654f939134d97d1/14595](https://static1.squarespace.com/static/568be3650f8e2a8023adf7f7/t/56febac0b654f939134d97d1/14595)
Progress on plutonium management proved to be more difficult. In 2015, Global Dialogue participants discussed proposals for near-term steps to minimize stocks of separated plutonium and mitigate their associated security risks. Global Dialogue participants agreed to support a gift basket focused on plutonium management at the 2016 summit, but momentum stalled in formal negotiations, and this gift basket ultimately did not make it onto the 2016 Nuclear Security Summit agenda. Materials minimization has been discussed in relation to other issues within the Global Dialogue since then, and, given the growing plutonium stocks around the world, remains a topic that requires attention.

**Sustaining Focus Post-Summit Process.** The Global Dialogue also has been pivotal in fostering leadership within governments to continue nuclear security discussions after the summits ended. When the United States announced that the final nuclear security summit would be held in 2016, Global Dialogue participants focused on how to sustain the high-level attention the summits had created. Participants suggested forming a small core group of countries to drive ambition and continue the momentum. And by the January 2016 Global Dialogue, the concept of a core group had matured into a “contact group” that would lead a post-summit process to track the implementation of summit commitments, hold states accountable, and provide opportunities for new commitments to strengthen the global nuclear security system. This entity became the Nuclear Security Contact Group, formally enshrined in a joint statement at the 2016 summit and communicated to the IAEA as Information Circular/899. The Nuclear Security Contact Group met in-person regularly after 2016 until disrupted by the COVID-19 pandemic.

During this period when senior-level government attention was moving away from nuclear security summits, the Global Dialogue shifted its focus toward other conferences already on the diplomatic calendar as important opportunities to promote high-level nuclear security engagement. Among them was the IAEA’s International Conference on Nuclear Security (ICONS), an event launched in 2013 when governments participating in the summits recognized that regular global meetings on nuclear security would be useful. ICONS was repeated in 2016, and its ministerial component offered a prime opportunity to encourage further engagement in the absence of summits. In 2019, NTI began providing analytical support to those engaged in negotiations around the 2020 ICONS Ministerial Declaration—a consensus statement agreed upon by all participating governments—leading to the development of a menu of options and a chart comparing language from previous statements. Several key ideas presented by the Global Dialogue were reflected in the final Ministerial Declaration. This included reintroducing substantive language from the 2013 Ministerial Declaration, which was omitted in the 2016 declaration, as well as significant new language linking nuclear security with sustainable development and peaceful uses of nuclear energy.

**Emerging Leaders.** With the passage of time since the end of the nuclear security summits, fewer opportunities have surfaced for cultivating nuclear security leadership globally. Many experts

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previously focused on nuclear security have moved to other issues. To counter this concerning trend, the Global Dialogue held a first-of-its-kind Emerging Nuclear Security Leaders session. In 2023, five emerging leaders from around the world were nominated by long-standing Global Dialogue participants and participated in a half-day workshop. The session focused on using storytelling to convey important lessons and featured a “Nuclear Security Braintrust,” where leaders presented and received feedback on policy concepts from their peers and select Global Dialogue participants. These emerging leaders have already begun applying their newfound knowledge by delivering speeches, participating in meetings, and authoring articles to promote nuclear security.

**Sustained Vigilance Is Needed between Major Multilateral Meetings**

Effective international cooperation to strengthen nuclear security requires continuous attention. Governments and civil society must remain vigilant to emerging threats, vulnerabilities, and opportunities to improve security. One of the Global Dialogue’s most important achievements has been its work to help sustain focus on key nuclear security issues during the periods between major multilateral summits and conferences. Participants researched a range of nuclear security issues and identified and debated potentially controversial topics that could not be discussed through official channels, and the ideas developed through this ongoing process were then reflected in major multilateral conferences.

During the course of the first three Global Dialogue meetings from 2012–2014, for example, participants built consensus around the principles of a strengthened global nuclear security system. That consensus was reflected in the 2014 summit when the Communiqué acknowledged the need for a “strengthened and comprehensive international nuclear security architecture, consisting of legal instruments, international organizations and initiatives, international accepted guidance and good practices.”

From 2014–2016, Global Dialogue participants considered ways to sustain momentum on nuclear security beyond the end of the nuclear security summits, and the ideas generated were further developed within the official summit process and incorporated into the final results of the 2016 summit in Washington, DC. One key outcome was the articulation of intent and specific means for sustaining momentum and high-level political attention on nuclear security after the summits through strengthening existing international institutions through the 2016 Nuclear Security Summit Actions Plans; providing a way to track implementation of commitments through a Nuclear Security Contact Group; and seeking a long-term institutional mechanism for dialogue through the Amended CPPNM.

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5 These action plans consisted of commitments that nuclear security summit states made to strengthen and engage with key international institutions supporting nuclear security, including 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: [http://www.nss2016.org/2016-action-plans](http://www.nss2016.org/2016-action-plans).
After the final nuclear security summit in 2016, the Global Dialogue quickly identified the upcoming review of the Amended CPPNM as a key moment to strengthen the global nuclear security architecture and dedicated several years to preparing for that conference.

From 2016–2021, preparations for the review of the Amended CPPNM were addressed at each Global Dialogue meeting. Analytical work and discussion papers developed for the Global Dialogue provided the basis for forward-leaning discussion, and this early work to imagine a successful outcome for the review of the Amended CPPNM laid a solid foundation for action. As the formal diplomatic process got underway in 2018, the Global Dialogue continued to address key aspects of the review, including meeting participation, conference outcomes, and future review conferences, and by the end of the review, a diverse set of delegates reached consensus on the outcome document, and most parties requested another review conference. Because the Global Dialogue had been forward leaning in developing proposals for the Amended CPPNM early in the process, it helped build a strong, effective, and sustainable CPPNM regime.

**Inclusive Cooperation Leads to Results**

Ongoing, inclusive discourse between a wide range of nuclear security stakeholders is necessary to support access to and deployment of technology for peaceful uses. Global Dialogue participants have examined ways to broaden engagement, listen to and share different perspectives, and build a more positive narrative that assuages national concerns that nuclear security is a tool for limiting access to nuclear technology. This work has focused on three dimensions: engaging with diverse communities, involving Global South countries, and working regionally.

*Supporting Diverse Communities*. During the last 10 years, recognizing that building global support for nuclear security necessitated more diverse messengers, the Global Dialogue has engaged with various communities and worked to diversify the demographics of nuclear security advocates. This includes diversity in all its forms, including gender, age, ethnicity, geography, and different lived experiences and the recognition that diversity should be a priority for all member states when forming delegations for major meetings. In 2020, the Global Dialogue’s work in this area was reinforced when the ICONS Ministerial Declaration included a reference to gender equality and diversity.

Inclusion in the declaration was an achievement, but Global Dialogue participants recognized that although the Ministerial Declaration offered a more inclusive vision than ever, words still needed to become actions. In 2023, NTI commissioned a paper, *Converging Goals: Examining the Intersection between Diversity, Equity, and Inclusion and Nuclear Security Implementation*, which explored how diversity, equity, and inclusion impact nuclear security implementation. The organization then convened a Global Dialogue discussion session on the topic and encouraged participants to make the issue a priority at the IAEA’s ICONS 2024.6

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The Global Dialogue also has worked to involve stakeholders representing different perspectives, including those from governments, civil society, and the nuclear industry. Although government officials and staff were the primary actors at the nuclear security summits, the importance of the nuclear industry in security implementation was recognized as early as the 2010 Summit Communiqué. This engagement with industry culminated in a Nuclear Industry Summit in 2016 that paralleled the diplomatic summit. Within the Global Dialogue, industry engagement has been part of the model since the start. As early as 2013, Global Dialogue meetings addressed how the nuclear industry can define and implement international assurances on nuclear security.

**Engaging with the Global South.** An ongoing challenge for strong nuclear security is uneven prioritization and implementation at the national level. The nuclear security summit process focused on the nearly 50 countries that have the greatest responsibility for securing nuclear materials. However, every country has a role to play in preventing nuclear terrorism and needs to prioritize this mission.

At early Global Dialogue meetings, participants recognized the need to build a constructive, more inclusive narrative around nuclear security. In the leadup to the 2014 Nuclear Security Summit, a speaker at the Global Dialogue acknowledged that “a key challenge is to ensure that countries understand that preventing nuclear terrorism is a global issue in their interest, not just the interest of a narrow set of countries.” Once the summits concluded, Global Dialogue participants focused on how to work with more countries, including through expanding participation in the Nuclear Security Contact Group to non-nuclear security summit participants.

In conversations and policy meetings at the IAEA, some developing countries expressed concerns that nuclear security would hamper their use of peaceful applications of nuclear technology. There was a perception that nuclear security was being imposed on the world by a small number of developed countries. Starting in 2019, the Global Dialogue focused on identifying narratives and messages to address these concerns across various fora. This approach paid dividends during the 2022 Review Conference for the NPT, when nuclear security was discussed during Main Committee III (Peaceful Uses) debates, which has been historically uncommon. Global Dialogue participants also recognized that nuclear security messages need to be tailored to regions, matching both the needs and capacities within each region.

Efforts by the Global Dialogue to broaden the narrative on nuclear security also fed into negotiations on language in successive ICONS Ministerial Declarations. In 2013, the Ministerial Declaration included a call to ensure that measures to strengthen nuclear security do not hamper peaceful nuclear activities, while recognizing that nuclear security and safety have a common aim of protecting human health, society, and the environment. In 2016, the Ministerial Declaration recognized that nuclear security contributes to international peace and security, while still calling on states to ensure that measures to strengthen nuclear security do not hamper peaceful nuclear activities. 2020 saw further progress when a new paragraph in the Declaration acknowledged that nuclear security measures may enhance public confidence in the peaceful use of nuclear applications and contribute to sustainable development. The warning not to hamper international cooperation in

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peaceful applications remained, but the addition of the new language provides a more balanced view of the contribution of nuclear security.

**Engaging Regionally.** Regional engagement emerged as an idea within the Global Dialogue following the final Nuclear Security Summit in 2016 and significantly began to accelerate in 2020, thanks to remote meetings during the COVID-19 pandemic. Video teleconferences made it possible to bring together a broader number of stakeholders and the absence of travel constraints enabled the organization of virtual meetings in different regions in quick succession.

In the first half of 2021, NTI organized six regional meetings focused on strengthening preparations for the review of the Amended CPPNM. These included one meeting each for participants in the Asia-Pacific region and the Middle East/Central Asia region and two each in the African and Latin American regions. One of the key topics of discussion was how global security developments and technological advancements would impact national assessments of the convention’s adequacy and implementation. Participants at each of the regional meetings noted that although changes in nuclear security conditions around the world should not require another amendment, the language of the convention should be interpreted in such a way as to allow it to become a living document.

At the review of the Amended CPPNM, the discussion was robust and substantive, a reflection of the goals laid out in the Global Dialogue. Statements in both the general debate and the topical sessions addressed key nuclear security issues specifically, providing important information sharing. Participating countries arrived prepared to engage in meaningful ways on subjects related to the review, aided by the regional conversations organized through the Global Dialogue.

**Forward-Leaning and Unique Approaches Are Key**

A major impetus for creating the Global Dialogue was recognizing that a strengthened global nuclear security system could not be built only through formal negotiations. An informal forum where government officials could workshop ideas, identify potential solutions, and assess their viability was needed. As the only multilateral Track 1.5 effort focused on nuclear security, the Global Dialogue has provided such a forum.

The need to develop an effective international nuclear security architecture—one where facilities are consistently protected at a high level and are resilient and responsive to environments where nuclear security threats and risks can rapidly change—was not fully recognized in 2010, and the Global Dialogue played a key role in envisioning its development.

From the beginning, NTI worked through the Global Dialogue to articulate what a strengthened global nuclear security system would look like. For example, NTI identified the following necessary elements at the first meeting:

- The system should be comprehensive; it should cover all nuclear materials and facilities in which they might be present, at all times.
- The system should employ best practices, consistently and globally.
- At a national level, each state’s system should have internal assurances and accountability mechanisms.
- Globally, the system should facilitate a state’s ability to provide international assurances that all nuclear materials and facilities are secure.
• The system should work to reduce risk through minimizing, or where feasible, eliminating weapons-useable material stocks and the number of locations where they are found.

Working from these principles, the Global Dialogue focused on some key areas, including assurances and mutual accountability, as well as military materials.

Assurances and Mutual Accountability. The Global Dialogue established a vision for strengthened nuclear security, advocating for a system that should facilitate a state’s ability to provide international assurances that all nuclear materials and facilities are secure. Participants debated what was meant by the term “assurances” but reached widespread agreement about the value of developing a range of voluntary individual, bilateral, or multilateral assurances where states could demonstrate their nuclear security implementation. One tool that received important attention was peer review, whether between states or facilitated by an international organization, such as through the IAEA’s International Physical Protection Advisory Service.

As the summits progressed, recognition grew among states that although any country with nuclear materials has a sovereign responsibility to secure them, they also have a shared responsibility for nuclear security. Although the term “assurance” did not persist beyond the summit process, the idea that nuclear security is a collective responsibility and endeavor has taken root.

The impact of this shift was seen several years after the final nuclear security summit. Following the conclusion of the Global Dialogue’s 2018 meeting, NTI noted a shift in the participants’ acceptance of the principle of mutual accountability. At the start of the Global Dialogue process in 2012, government representatives still viewed nuclear security largely as a sovereign responsibility, harboring considerable skepticism about the benefits of increased transparency and mutual assurance-building. By the 2018 London meeting, it was clear that many of the government representatives had "bought in" to the idea of mutual accountability. They began to identify meaningful assurances for achieving this objective while finding new ways of sustaining high-level attention and broadening the community of champions for nuclear security.

Military Materials. More than 80 percent of the world’s stocks of nuclear weapons-useable materials exist in military programs. Yet, these materials are largely excluded from the existing nuclear security framework. This gap in the international nuclear security architecture was a major concern to Global Dialogue participants, who discussed methods to increase transparency around the security of military nuclear materials.

Throughout the 2014 Global Dialogue meetings, participants broadly agreed that addressing the security of military materials would be unlikely to occur through summits, existing international organizations, or by consensus. Participants noted that a gift basket or national progress reports would be the most likely vehicles to address military materials at the 2016 Summit. Given the lack of an institutional driver for progress in this area, NTI agreed to form a study group. The group started to explore what security measures matter most to strengthen the security of military materials and, as a secondary matter, what types of actions might then build confidence in the security of the materials without revealing sensitive information.

In 2015, Global Dialogue participants considered draft recommendations developed by the NTI Military Materials Security Study Group. Participants generally supported the idea of a gift basket in 2016 that would offer a “tailored” approach for countries with military materials to declare confidence-building measures consistent with their national activities and interests. In the run-up to
the 2016 summit, questions persisted about how to address military materials security, including within the Global Dialogues. Although consensus was reached on the need for a comprehensive global nuclear security system that includes both civilian and military materials, participants diverged on how to achieve this.

Notably, the 2016 Nuclear Security Summit consensus document emphasized that states had the fundamental responsibility “to maintain at all times effective security of all nuclear and other radioactive material, including nuclear materials used in nuclear weapons,” but no gift basket on military materials emerged.8 Despite a lack of opportunities for governments to discuss this issue in recent years, it is a topic that would have received little attention without the impetus provided by the Global Dialogue.

**Civil Society Plays a Critical Role**

The Global Dialogue is a unique mix of civil society—led by a non-governmental organization, with expert participation from academia, think tanks, and other independent experts—and government participants. The two groups worked together developing a rapport, trust, understanding, and products illustrating the value of the Global Dialogue’s work.

The history of NTI’s leadership within the Global Dialogue demonstrates the critical role that civil society organizations play in strengthening international nuclear security architecture. These organizations conduct research and develop innovative ideas, encourage governments to act, track and celebrate progress, and educate government officials about pressing nuclear security issues and threats. Yet, for many years, governments often did not acknowledge these contributions.

When the Global Dialogue was first conceived, civil society organizations were not part of formal multilateral nuclear security proceedings. Many governments viewed these groups as troublemakers rather than as partners in strengthening nuclear security. During the nuclear security summit process, for example, civil society organizations were relegated to holding their own summit on the margins of the government-attended summits.

In part due to the NTI’s contributions and approach of seeking to collaborate with officials, governments’ perceptions of civil society organizations have shifted during the past decade. For example, in the run-up to the review of the Amended CPPNM, Global Dialogue participants worked together to encourage countries to fulfill their obligations under Article 14 of the A/CPPNM to submit their nuclear security laws and regulations to the IAEA, which contributed to a significant increase in submissions and improved global transparency.9 During that time, a growing number of government

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9 The number of states-parties to the amended CPPNM that have submitted their nuclear security laws and regulations to the IAEA has nearly doubled since the end of 2019: six of the countries that have joined since then have nuclear facilities. There are now 73 fulfilling this legal obligation, including six with nuclear facilities. See Nuclear Threat Initiative and Economist Intelligence Unit, *NTI Nuclear Security Index: Theft/Sabotage/Radiological: Falling Short in a Dangerous World* (Washington, DC: NTI, 2023), https://www.ntiindex.org/wp-content/uploads/2023/07/2023_NTI-Index_Report.pdf, 50.
and international organization officials from across the globe recognized the Global Dialogue for the role it plays in supporting international nuclear security architecture. An important indicator of the Global Dialogue’s utility is that it has outlived other initiatives designed to foster international collaboration on nuclear security, and participants from dozens of countries remain committed to continuing to push for ambitious solutions.

A high point of this recognition was during the review of the Amended CPPNM when more than a dozen non-governmental organizations, almost all of which had been Global Dialogue participants at some point, were invited to participate. Representatives from several of these organizations were even invited to provide formal remarks to delegates. Commemorating the vital role non-governmental organizations played in the proceedings, the review’s consensus outcome document “welcomed the contribution of non-governmental organizations to promoting universalization of the Convention and its Amendment.” This was the first time a consensus document negotiated by governments recognized the importance of non-government organizations in strengthening international nuclear security architecture.

**Conclusion**

The Global Dialogue has been an important venue for leadership, innovation, and tangible outcomes that have strengthened nuclear security globally during the last decade. Conceived to support the nuclear security summit process, the Global Dialogue has played a pivotal role in developing and sustaining key mechanisms for international nuclear security cooperation. As attention to this issue has waned in recent years, the Global Dialogue’s role of reminding and informing officials about the importance of nuclear security has become even more important. NTI looks forward to building on the progress made so far and fostering continuous improvement in nuclear security globally.

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11 See *[NTI Nuclear Security Index]*.