

Cultivating Peer-to-Peer Technical Exchange Partnerships to Advance Radiological Security

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Abstract:

Over the last two years, NNSA's Office of Radiological Security (ORS) has focused on technical exchange relationships with peers in Europe and Asia. Bilaterally, these relationships offer mutually beneficial expertise, shared resources, and the opportunity to align radiological security priorities and improvements more broadly. These relationships can also be leveraged to improve radiological security regionally and even globally in countries with burgeoning radiological security programs. One case study demonstrating the potential of these exchanges is ORS collaboration with Japan. ORS has been partnering with Japan on regional training since 2020, when Japan invited ORS to support a radiological security workshop in Laos. Since then, Japan has become a regional resource for ORS training courses and has leveraged ORS curriculum for their own training programs. The partnership has created a multiplier effect in Southeast Asia, allowing both Japan and ORS to expand their reach and advance radiological security regionally.

Discussion:

The Office of Radiological Security (ORS)¹ provides support to countries to help reduce radiological risks through improved physical protection, transition to alternative technologies, removal of disused sources, and capacity building. Through this support, ORS has built relationships globally with countries seeking assistance to improve radiological security.

ORS is not the only organization engaged in supporting international radiological security. Several other countries also offer assistance, training, technology transfer, and technical exchange, and many are regional leaders.

ORS seeks partners.

Prior to 2020, ORS partnerships were primarily with countries seeking assistance and not with peers who provide it. Strategic cultivation of peer-to-peer relationships, mutually focused on advancing the radiological security environment, grew out of the notion that peer partnership offers an opportunity to improve radiological security not just bilaterally, but regionally and globally. This can be achieved through best practice and technical exchange, as well as through coordinated assistance efforts. By broadening its view of how support could be provided and who is able to provide it, ORS realized there was an opportunity for improved efficiency.

By collaborating with peer countries who are engaging in similar, or complementary, activities, both parties can multiply their effectiveness. This is also a benefit to the assistance-seeking country, as a greater amount of resources, expertise, and engagement is available when working with two partners that are collaborating.

This can be a particularly effective model, when one country providing assistance has especially strong bilateral or regional relationships that can be leveraged, or a particular expertise relevant to the assistance-seeking country. In summary, the ability to blend expertise, existing relationships, resources, and complementary scope, can magnify impact opportunities, while

¹ Formerly Global Threat Reduction Initiative (GTRI).

maintaining the potential to both reduce the burden on assistance-providing countries and improve the outcomes and opportunities for meaningful engagement for assistance-seeking countries.

Peer Partners

Since 2020, ORS has also been building partnerships with Japan, Spain, France, and the European Commission. The Integrated Support Center for Nuclear Nonproliferation and Nuclear Security of Japan Atomic Energy Agency (ISCN/JAEA) has proved to be an excellent partner for regional training and capacity building events in Southeast Asia.

In Spain, ORS is engaging across several focus areas, including promotion of machine-based irradiation technologies, mobile source security and regulation, and radiological security response integration and capacity building. ORS' work with Spain has the potential to not only impact Spain and the United States through the exchange of best practices and technologies, but also regionally in Europe, where Spain engages at a high level in organizations that guide radiological security policy. There is also future potential for ripple impact in Latin America, where Spain's sphere of influence and partnership extends, particularly in regulatory fora.

With France, ORS has engaged in a series of virtual technical exchanges on insider threat mitigation, affirming mutual commitment to radiological security while sharing best practices based on unique national perspectives. It is hoped that this will lead to additional bilateral exchanges and collaboration on other areas of mutual interest; regulatory best practices and promotion of alternative technology, end-of-life management, and transportation security to name a few. Additionally, France is a major international donor with influence in the radiological security space and has established effective relationships in many countries where ORS is seeking to strengthen partnerships. There are significant opportunities for ORS and France to collaborate multilaterally and with assistance-seeking partners to share costs, leverage combined expertise, and promote international best practices.

And lastly, ORS' partnership with the European Commission's Directorate General for Migration and Home Affairs, one of the more unique peer engagements ORS has engaged in thus far, has focused on leveraging complementary competences to build capacity and share best practices across member states. A best practice workshop in 2022 laid the foundation for sub-regional security tabletop exercises that are taking place this year and next across Europe.

Japan-US collaboration Case Study

As the regional training center on nuclear security, ISCN/JAEA has been supporting regional partners to build or strengthen nuclear security capabilities.

ISCN/JAEA was established in 2010 to support countries mainly in Asia in the area of nuclear non-proliferation and nuclear security. Since then, ISCN/JAEA has provided 222 courses to more than 5,600 participants in the region.

The characteristics of ISCN/JAEA capacity building support is its needs-oriented approach, tailoring the curriculum and materials based on the needs of the partner countries. For identifying the needs of a partner, ISCN/JAEA organizes a seminar in the partner country to invite relevant stakeholders, introduce international frameworks of nuclear security, share Japanese experiences in strengthening nuclear security, and discuss potential areas of cooperation between

ISCN/JAEA and the partner country. Since its establishment, ISCN/JAEA has organized such seminar in 11 countries in Asia; the most recent seminar was in Lao PDR, in 2018. During that seminar, ISCN/JAEA identified that Laos had a strong interest in building capacity in security of radioactive materials.

After the 2018 Seminar in Laos, Laos sent a detailed request to ISCN/JAEA regarding capacity building support on radiological security. Since JAEA had a formal arrangement for cooperation with DOE/NNSA, it reached out to ORS and requested that ORS provide some lectures and exercises. ISCN/JAEA also invited IAEA to introduce the Code of Conduct and international guidelines. It also invited an instructor from the Office of Atoms for Peace (OAP), Thailand, to add the regional experience in radiological security capacity building. Together with those partners, ISCN/JAEA conducted a radiological training course in Laos in 2020.

After this event, ORS continued to work with ISCN/JAEA to explore joint training activities. The 2020 training aimed at awareness raising and focused on the national regulatory framework on radiological security. Then Laos requested more focused and practical training, and in 2022, ORS and ISCN/JAEA jointly delivered a virtual International Response Training (IRT) Course, and in 2023 ISCN/JAEA supported the instruction of a joint Search and Secure training course in Laos.

ORS' ongoing partnership with Japan demonstrates the potential impact stronger peer relationships can have on radiological security – bilaterally, regionally, and perhaps even globally. The relationship has forged a path for other peer-to-peer engagements, providing signposts for effective multilateral engagement with assistance-seeking countries and bilateral best practice exchange.

Continuing to Cultivate Peer-to-Peer Relationships

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In peer-to-peer engagement, both parties must be transparent about their core strengths, fields of expertise, areas of excellence, and interests. Armed with this understanding, opportunities to magnify each other's efforts and augment expertise will be easier to identify, and areas of mutual interest and effort overlap will present themselves. Japan and ORS' combined efforts on training in Laos has magnified both countries efforts to provide assistance and expertise, which has led to improved training request outcomes for Laos.

As ORS continues to cultivate peer-to-peer relationships to magnify efforts and expand impact, the relationship with Japan provides both a compelling proof of concept and a template for successful peer engagements.