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Sustainable Capacity Building for Secure Transport of Radioactive Sources in the Southeast Asia Region

The secure transport of radioactive sources requires a capable workforce that understands not only their own job role and responsibilities, but also the interfaces with other parties involved in a transport. The World Institute for Nuclear Security (WINS), in partnership with Thailand's Office of Atoms for Peace (OAP) and with the generous support of Global Affairs Canada's Weapons Threat Reduction Program, developed a two-part train-the-trainer curriculum to teach the technical skills required to support security in the transport of radioactive source and the instructional skills needed to facilitate other professionals to develop those technical skills.

Both courses were designed to be appropriate for all of the various professionals involved with the transportation of radioactive sources, from licensees and carriers to regulators and law enforcement. The representatives of different organisations were brought together in interactive, practical exercises designed to mutually build each other's understanding of the different roles and their perspectives throughout the transport process. The activities were also designed to guide the participants to understand the importance of security measures, the implications of the safety-security interface, and some of the dimensions of a transport security plan through the constructivist approach.

Supporting the instructional skills of regional professionals in tandem with the technical skills provides a sustainable model that multiplies the impact of the original training. The training materials were designed with a focus on the principles of andragogy and a participatory framework. This approach also provided the opportunity to exchange insights on customising training materials and exercises for further/future capacity building in line with the specific needs of each organisation. Participants completed increasingly complex exercises designed to scaffold the development of their instructional skills, presenting increasingly complex and tailored material.

Six months after the train-the-trainer event, WINS and OAP held an ASEAN regional technical training with the support of participants from the original course. The technical course also focused on active learning with small groups of participants from different backgrounds (both national and professional) working together on projects to apply the skills taught in the course. These exercises were also designed to help them develop appropriate attitudes toward the secure transport of radioactive sources through real-world case studies demonstrating that the threat is real and the real impact that security planning and preparation can have in preventing, detecting and responding to incidents.

The training also incorporated regional guidelines and practices, contributing to a deeper understanding of regional transport security challenges, promoting harmonisation of standards and practices within Southeast Asia and highlighting the importance of a robust security culture. Facilitating this exchange provided an excellent opportunity for sharing the country status of the transport security framework and practical experience within the region.

Both the train-the-trainer and technical courses saw strong results on the intended learning outcomes based on the gains immediately before and after the training. WINS and OAP are following up six months after the initial trainings to measure how well the participants have retained and are implementing the intended outcomes. Their self-assessments will be enhanced with qualitative responses from colleagues positioned to observe the knowledge, skills and attitudes of the participants in their workplaces. To measure the continuing impact of the training, participants are asked how they are sharing the content of the training courses more widely. Additional analysis by gender offers insight into the impact of training on women in the nuclear/radioactive source security field.

This approach to innovative capacity building and regional collaboration in the ASEAN region can provide a model for promoting a sustainable approach to competence and capacity in order to meet the challenges of evolving threats and risks both within this region and beyond.

Country or International Organization

Instructions

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