

Reflections on regional training efforts in support of nuclear forensic capability development in South-East Asia

Many countries in South-East Asia are seeking to develop capabilities in nuclear forensics. This is part of an overall strengthening of nuclear security architectures in response to increased use of nuclear and other radioactive materials regionally and globally. As a result, there is substantial demand in the region for training and other capability development support. With over two decades of experience in nuclear forensics, Australia is well placed and frequently sought to provide some of this support. Australia has endeavoured to deliver on these requests; in addition to a desire to enhance security in partner nations, Australia recognises that regional nuclear security promotes national security.

On behalf of Australia ANSTO has provided a range of tailored multi- and bi-lateral training programs to regional partners both independently and in partnership with international bodies such as the International Atomic Energy Agency (IAEA). These programs have utilised a range of training modalities including classroom instruction and practical activities such as table-top exercises and hands-on laboratory and field drills. Nuclear forensics training offered by ANSTO emphasises the importance of leveraging existing capabilities within a nation for the development of a robust and sustainable national nuclear forensic capability.

This paradigm of leveraging existing capabilities is also applied to the delivery of training. Whilst activities are led by a team of dedicated nuclear forensic staff, subject matter experts from across ANSTO who provide technical expertise to the national nuclear forensic capability play a key role in delivering training. Utilising enabling functions within ANSTO such as security, safety, international relations and event management is also critical to the success of these training activities. Further, ANSTO seeks to work with external domestic partners, such as the Australian Federal Police (AFP), to provide the highest quality of activities as well as demonstrate the importance of such partnerships in national nuclear forensic capability development. The Australian Government Department of Foreign Affairs and Trade were the funding body for some training activities.

A comprehensive process of continuous review and improvement is a hallmark of ANSTO's training activities. Detailed feedback is sought from both participants and trainers, which is incorporated into after-action reports which seek to identify trends and articulate opportunities for improvement in future activities. In repeat implementations of some activities, such as the IAEA's Regional Training Course on Practical Introduction to Nuclear Forensics, the value of these reports has been clearly evident in the improved quality of both the training delivered and the experience for trainers.

The development, delivery and review of training is a valuable career development opportunity for many ANSTO staff, particularly for the early career scientists who are part of ANSTO's nuclear forensics team. In addition to developing new skills sets in training, these activities provide a valuable opportunity for scientists to reflect upon and enhance technical capabilities. International training activities also build networks for scientists.

ANSTO is far from the only provider of nuclear forensic capability development activities globally or, indeed, in South-East Asia. International organisations such as the IAEA, INTERPOL, the Global Initiative to Combat Nuclear Terrorism (GICNT) and the Nuclear Forensics International Technical Working Group (ITWG) all have important capability development roles, as do national or regional bodies such as the United States' National Nuclear Security Administration and the European Union's Joint Research Centre –and this list is not exhaustive. Key challenges moving forward will continue to be ensuring the most efficient deployment of these many, but ultimately finite, efforts and achieving consistency in content and messaging whilst still respecting the unique contexts, perspectives and relationships of the various providers and participants.

State

Australia

Gender

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