

National Progress Report: Thailand

March 31, 2016

Since the 2014 Nuclear Security Summit, Thailand has strengthened nuclear security implementation and built up the global nuclear security architecture by:

1. Strengthening Nuclear and Other Radioactive Material Security

- **Human resources development:** Training courses for national security officers has been conducted annually, since 2005. Each year there are approximately 60 participants from various agencies, such as Customs Department, Border Patrol Police, Port Authority of Thailand, Central Institute of Forensic Science, and National Intelligence Agency. The purpose is to enhance capabilities of the authorities concerned in their implementation of the UNSC Resolution 1540 as well as other relevant measures or standards in order to strengthen national nuclear and radioactive security infrastructure.
- The Office of Atoms for Peace, as the national coordinating agency for all nuclear-related matters, as well as other competent agencies, including the Ministry of Agriculture and Cooperatives, and the Ministry of Public Health, in collaboration with IAEA under technical cooperation projects, have been, for over 20 years, organizing regional workshops and seminars on various issues related to peaceful application of nuclear technology, for participants from Thailand and other countries in the region. Government officials from relevant agencies have also attended international workshops and seminars on various topics related to nuclear security. Thailand has also established a Master's degree program on nuclear security education -- the only one in the ASEAN region -- and receives on a regular basis, students from the region and beyond. All these efforts contribute to building up capacity of Thailand and beyond.
- **Capacity building and drill exercise:** Thailand attaches importance to awareness raising and capacity building among government officials and the general public on the potential risks of nuclear incidents and response measures. Training and drill exercises have been organized annually, since 2009, for frontline officers working with nuclear and radioactive materials or who may be faced with related incidents, as well as local officers and people who live in the surrounding areas of nuclear facilities in case of emergency situations. The relevant authorities in nuclear technology also conducted national emergency exercises (Nuclear, Biological, Chemical: NBC) since 2010 in compliance with the National Nuclear and Radiological Emergency Plan.

- **Rules and Regulations:** Thailand continues to strengthen the national infrastructure for regulating the security of nuclear and radioactive materials. In early 2016, the revised regulation on Physical Protection of Nuclear Material and Nuclear Facilities, as well as the draft Act on the Suppression of Acts of Nuclear Terrorism, in line with the IAEA's INFCIRC 225/Revision 5 - Nuclear Security Series No. 13, have been submitted to the Atomic Energy for Peace Commission for consideration. Once approved, they will become national guidelines for relevant agencies to further enhance nuclear security.
- **Environmental impact:** Thailand is also committed to improving the national environmental radiation monitoring capabilities by expanding the Early Warning Environmental Stations to 17 ambient and 3 underwater Gamma Radiation Monitoring Stations.
- **Regional cooperation:** Thailand hosted the second formal meeting of ASEANTOM [1] during 25-27 August 2014 in Chiang Mai, Thailand. The meeting reviewed the activities conducted during the past year, since its establishment in 2013, and discussed further activities under the work plan for 2015-2016. These activities include a number of regional workshops and training courses on emergency preparedness and response, as well as on nuclear security culture and management. In addition, ASEANTOM has also been working to set up an environmental radiation monitoring network in order to provide a platform for sharing environmental radiation monitoring activities and data. To complement such effort, the Office of Atoms for Peace organised a Technical Meeting for ASEANTOM on Environmental Radiation Network during 25-27 August 2015 in Phuket.
- **International cooperation:** Thailand is committed to continuously enhancing the capacity of relevant agencies in nuclear safety and security, including through international cooperation. The Global Threat Reduction Programme (DNN RSP), supported by the United States Department of Energy's National Nuclear Security Administrations (NNSA), has been implemented since 2008 and is still ongoing today. The Programme has upgraded the Physical Protection System (PPS) at the nuclear facilities under the control of Thailand Institute of Nuclear Technology, including Co-60 Irradiators and waste storage facility. Thailand Institute of Nuclear Technology is also working with Canada's Nuclear and Radiological Security Department (NRS) under the Department of Foreign Affairs, Trade and Development (DFATD) and Pacific Northwest National Laboratory (PNNL), on the upgrading of the PPS of the Thai Research Reactor and the waste storage facility under G-8

Global Partnership Programme against the spread of weapons and materials of mass destruction. The upgrading is due to start in 2016.

- **Awareness raising and outreach activities:** As radioactive materials have many peaceful applications in our daily lives, the Office of Atoms for Peace, as national focal point, has been conducting several awareness raising and outreach activities for the general public through various means, such as radiation security manual, TV programmes and You Tube, radio and printed materials, social media, and news briefing and other public forums.

Ministry of Foreign Affairs of Thailand also targeted young audience by organizing Youth Public Speaking Contest on the occasion of International Day for the Total Elimination of Nuclear Weapons on 10 September 2014, in collaboration with the Embassies of Mexico and Cuba in Bangkok. The contest was well received and many university students participated. They were well prepared and educated on the issue and delivered impressive speeches with great ideas.

2. Minimising Nuclear and Other Radioactive Materials

N/A

3. Countering Nuclear Smuggling

- **National mechanism:** In order to strengthen efforts in countering nuclear smuggling, Thailand has improved coordination among relevant agencies working on matters relating to non-proliferation, in line with the UNSC Resolution 1540 and other international frameworks such as the Proliferation Security Initiative (PSI). In 2013, the National Security Council of Thailand, as the focal point on this issue, established a Sub-Committee on Coordinating for Prevention and Solution of Proliferation of Weapons of Mass Destruction as national coordinating mechanism. This body has conducted several outreach and awareness-raising activities among relevant agencies by organising site visits to border checkpoints around Thailand. Briefing sessions have also been provided to local government officials to inform them of Thailand's obligations and commitments as well as to enhance coordination and cooperation among relevant local offices in implementation of such obligations. The Sub-Committee also visited ports and points of entry to assess preparedness and understanding about non-proliferation among working officials on the ground. The

whole-of-government Standard Operating Procedures (SOP) is being drafted to ensure efficient implementation and smooth coordination for cases of interdiction in various WMD-related scenarios. It is expected that this SOP will become operational by the end of this year.

- **Rules and regulations on export controls:** As part of the obligations under the UNSC Resolution 1540, Thailand's amended Customs Act has entered into force in March 2015, establishing principles for transit and transshipment in line with international standards. The amended law also empowers Customs officials to inspect, search and confiscate suspected merchandise in transit or transshipment without requiring a warrant. At the same time, Thailand's dual-use items (DUI) regime has also been revitalised and strengthened. In October 2015, the Ministry of Commerce issued a ministerial announcement on Export Control for Dual-Use Goods requiring permissions for export of items under the updated DUI list, which is similar to the one being used by the European Union. Thailand has also put in place more effective tracking and management of dual-use items with the application of an IT system, known as the e-TMD system.
- **Capacity building:** The Ministry of Foreign Affairs of Thailand invited experts from relevant Sanctions Committees to speak at a workshop held in Bangkok during 25-26 August 2014. The purpose was to enhance understanding of Thai agencies concerned on the obligations under the UNSC resolutions related to non-proliferation of WMD and how to ensure full and effective implementation of diverse measures. Officials and experts from agencies concerned also participated in various exercises hosted by other states and international organisations.

4. Supporting Multilateral Instruments

- **Rules and regulations:** The Royal Thai Government is moving ahead with amendments of domestic laws so as to provide appropriate legal basis to fulfill our international obligations. The amendment of the Nuclear Energy Act has been approved by the Cabinet and is now under consideration of the National Legislative Assembly. Once it is enacted, it will enable Thailand to accede to the Comprehensive Nuclear Test Ban Treaty (CTBT), the Convention for the Physical Protection of Nuclear Materials (CPPNM) and its 2005 Amendment, as well as the International Convention on the Suppression of Acts of Nuclear Terrorism (ICSANT). Thailand is also in the process of considering accession to the Convention for the

Suppression of Unlawful Acts against the Safety of Maritime Navigation 1988 as well as the 2005 SUA Protocols.

5. Collaborating with International Organisations

- **International Atomic Energy Agency (IAEA):** In February 2016, the Office of Atoms for Peace, as national coordinator on atomic energy, in collaboration with IAEA, organised a regional workshop on Nuclear Forensics and Bio-dosimeter, aimed at building national capacities of ASEANTOM Member States and strengthening regional cooperation in these fields.

Through ASEANTOM, Thailand will work with IAEA under the Technical Cooperation (TC) project on “Regional Cooperation Project Concept in South East Asia to Support Regional Environmental Radioactivity Database and Nuclear Emergency Preparedness and Response”, with funding support from IAEA. The objectives are to develop and implement emergency preparedness and response arrangements, both at the national and regional levels, in order to protect the people and the environment, in case of a severe nuclear and radiological incident. The project duration is four years, commencing in 2016.

- **Global Initiative to Combat Nuclear Terrorism (GICNT):** The Office of Atoms for Peace participates in Joint Working Group Meeting and Mid-Year Implementation and Assessment Group Meeting annually since 2011.
- **European Union:** The Office of Atoms for Peace has been working with the European Commission Joint Research Centre (EC JRC), in collaboration with IAEA and the United States Department of Energy and National Nuclear Security Administration under the Project on Border Monitoring Activities in Thailand. The Project is aimed at strengthening national capability in countering illicit trafficking of nuclear and other radioactive materials, through capacity building of personnel and provision of equipment to the Thai authorities concerned, including Customs Department, Port Authority of Thailand, Airport Authority of Thailand, Thailand Post, Royal Thai Police, and Bureau of Immigration. The Office of Atoms for Peace, together with Thailand Institute of Nuclear Technology, have also continued its collaboration efforts with EU CBRN projects, including the integrated national security system for nuclear and radioactive materials, Network of Excellence for Nuclear Forensics in Southeast Asia, and a course on Regional Human Resource Development for

Nuclear Safety, Security and Safeguards Management under Chulalongkorn University's Masters Programme on nuclear non-proliferation.

- **Australia Group:** Apart from nuclear safety and security, Thailand is committed to her obligations under the BWC and the CWC, as these bacteriological (biological) agents and toxins as well as chemical agents should also be secured in order to prevent them from falling into the wrong hands. Therefore, Thailand has also worked with other partners, such as the Australia Group, to strengthen the implementation in this regard. On 23 November 2015, the Ministry of Foreign Affairs of Thailand and the Australian Group organised a briefing for relevant government agencies on the harmonization of national export licensing measures and developments in the Australia Group, including updates on the control lists.

6. Partnering with External Stakeholders

- **Regional and international cooperation:** The Ministry of Foreign Affairs of Thailand, in collaboration with Norway's International Law and Policy Institute (ILPI), organised "9th Regional Roundtable on the Humanitarian Impact of Nuclear Weapons and the Prospects for a Ban Treaty" during 26-27 March 2015 in Bangkok. This forum brought together key individuals from the Asia-Pacific region, including government officials, academic and civil society actors, in order to share thoughts and ideas on how the humanitarian initiative could be taken forward. The forum was aimed at raising awareness of humanitarian consequences of nuclear weapons, as well as seeking appropriate measures to promote transparency and reduce risks associated with nuclear weapons. Thailand is of the view that efforts on nuclear disarmament and non-proliferation, including enhancing nuclear security, are mutually reinforcing and therefore, aims to contribute to all efforts in a comprehensive manner.

[1] The ASEAN Network of Regulatory Bodies on Atomic Energy, or ASEANTOM, was established in 2013 at the initiation of Thailand. ASEANTOM has been designated as an Annex-1 sectoral body under the ASEAN Political-Security Community. ASEANTOM provides an official framework to facilitate cooperation among the nuclear regulatory bodies of ASEAN Member States in order to promote nuclear safety, security and safeguard in the region, as well as serves as the key point of contact with IAEA to promote cooperation in these areas, including capacity building for the benefits of all member states.