



สำนักงานปรมาณูเพื่อสันติ

Office of Atoms for Peace

SMART OAP

Update on Regional Cooperation in Nuclear Energy



Harinate Mungpayaban

Office of Atoms for Peace, Thailand

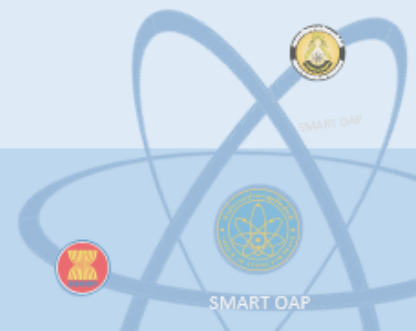
11th ASEAN Regional Forum Inter-Sessional Meeting on Non-Proliferation and Disarmament
8 – 9 April 2019
Bali, Indonesia





Outline

- Overview and Establishment of ASEANTOM
- Objective
- Action plan and activity
- Future work





International Conference on Safety, Security and Safeguards in Nuclear Energy

- **OAP** hosted the International Conference on Safety, Security and Safeguards in Nuclear Energy during **1 - 2 September 2011** in Bangkok, Thailand on an occasion of 50th years anniversary of OAP.
- **Objectives of conference** are to exchange information on nuclear 3S for regulatory bodies, enhance harmonization of regulatory activities, and to establish a network for nuclear 3S in Southeast Asian countries.
- In addition, a network of **ASEANTOM** has been initiated during the conference. To promote collaborations amongst nuclear regulatory bodies and relevant authorities in South East Asian countries.



1ST INTERNATIONAL CONFERENCE
ON **S**AFETY, **S**ECURITY AND **S**AFEGUARDS
IN NUCLEAR ENERGY
SEPTEMBER 1-2, 2011
OFFICE OF ATOMS FOR PEACE, THAILAND





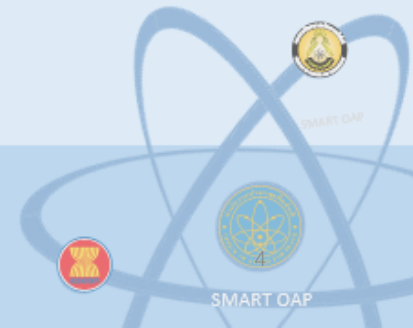
Overview of ASEANTOM

ASEAN Network of Regulatory Bodies on Atomic Energy

10 ASEAN member states:

Regulatory bodies or relevant authorities of 10 Member states of ASEAN

- ▶ Brunei Darussalam,
- ▶ Cambodia,
- ▶ Indonesia,
- ▶ Lao PDR,
- ▶ Malaysia,
- ▶ Myanmar,
- ▶ Philippines,
- ▶ Singapore,
- ▶ Thailand,
- ▶ Viet Nam





Objective

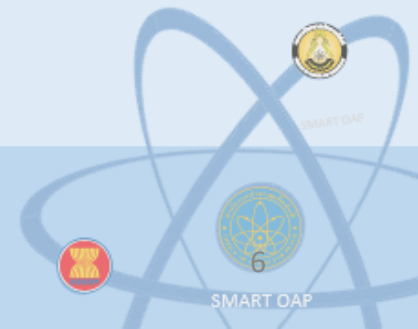
- To enhance regulatory activities and further strengthen nuclear safety, security and safeguards within the **ASEAN Community**, by enhancing cooperation and complementing the work of existing mechanisms at the national, bilateral, regional and international levels. ASEANTOM, herein after called the Network, is intended to serve as a framework for cooperation amongst nuclear regulatory bodies or relevant authorities within ASEAN in order to enhance regional nuclear safety, security and safeguards, based on implementation of relevant commitments to the IAEA's standards and guidelines and other multilateral agreements to which AMS are party.





ASEANTOM meeting

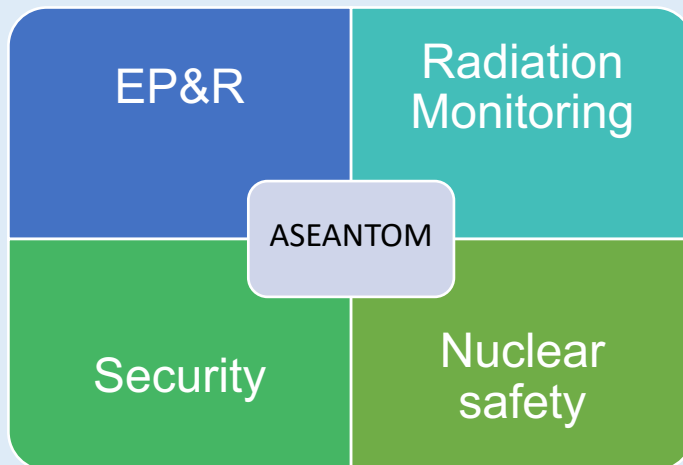
- **2012** Proposed a concept paper in the 20th ASEAN Summit
- **2013 1st** meeting of ASEANTOM was held in Bangkok, Thailand to finalize Term of Reference received consensus from all ASEAN Member State
- **2014 2nd** meeting of ASEANTOM was held in Chiang Mai, Thailand
- **2015 3rd** meeting of ASEANTOM was held in Alor Setar, Kedah, Malaysia
- **2017 4th** meeting of ASEANTOM was held in the Philippines
- **2018 5th** meeting of ASEANTOM was held in Singapore
- **2019 6th** meeting of ASEANTOM will held in Thailand





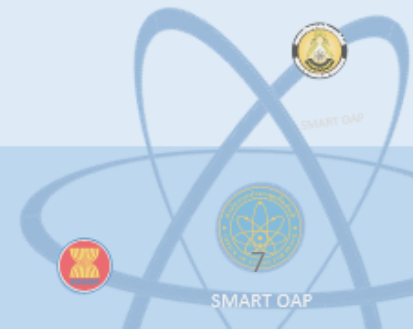
Action plan and activity

- Mutual interests of ASEAN Member States;



- Two outcome projects;

1. “Supporting Regional Nuclear Emergency Preparedness and Response in the Member States of ASEAN Region” IAEA RAS9077
2. “Enhancing Emergency Preparedness and Response in ASEAN : Technical Support for Decision Making” EU REG 3.01/ 16





Action plan and activity

- . **“Supporting Regional Nuclear Emergency Preparedness and Response in the Member States of ASEAN Region” IAEA RAS/9/077 (2016 – 2019)**

Overall Objective:

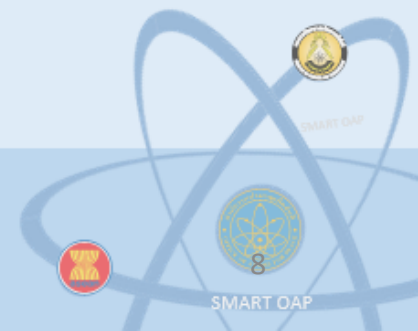
To develop and implement emergency preparedness and response arrangements at both national and regional levels to protect the people and the environment in case of a severe nuclear and radiological incident.

Outcome:

To enable MSs in the region to share and exchange information in timely manner so as to better prepare, plan and respond effectively to potential nuclear and radiological emergencies

Activities:

- Training Courses/ Workshops/ Meetings
- Expert Missions
- Home-based Assignments
- Scientific Visits





Action plan and activity

- **“Enhancing Emergency Preparedness and Response in ASEAN : Technical Support for Decision Making” EU REG 3.01/ 16 (2018 – 2020)**

7 proposal tasks

1. Project preparation
2. Initial installation of JRODOS and ARGOS with training
3. Customization and installation of tools in emergency centers in 6 ASEAN MSs
4. Capacity building in the use of the tools in responding to an emergency
5. Installation of the tools in other ASEAN MSs
6. Meetings to enhance and sustain regional cooperation within ASEAN on EP&R
7. Project finalization and dissemination





Activities



Year	Activity	Hosted Country
2014	Regional WS on Radiation Detection Architecture (security purpose)	Malaysia
2015	IAEA Regional WS on Security Management and Security Plan on Radioactive Materials and Associated Facilities	Malaysia
	IAEA Regional Workshop on Strategy to Establish Inventory for the Security of Radioactive Sources	Myanmar
	IAEA Regional Training Course on Nuclear Security Culture	Vietnam
	International Workshop on Regional Cooperation on EP&R in South East Asia Region under EU-FS	Thailand
2016	The 1 st Regional Workshop on Introduction to Nuclear Forensics and Biological Dosimetry	Thailand
	Preparation meeting for Thailand – Malaysia Nuclear Security Border Exercise	Malaysia-Thailand borders
	ASEAN Regional Workshop on Communication with the Public in a Nuclear or Radiological Emergency (RAS9077)	Singapore
2017	The 2 nd Regional Workshop on Capacity Building and Strengthening the Nuclear and Radiation Safety and Security Network in the ASEAN Region.	Thailand

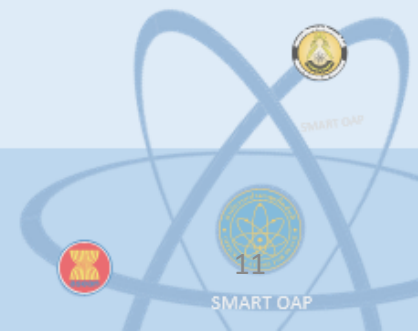


Activities in 2018 - 2019

Regional Training Workshop on Radiological Source Security Management

30 Oct – 2 Nov 2018, Office of Atoms for Peace, Thailand

- Organized by World Institute of Nuclear Security (WINS) and NZE in collaboration with OAP
- Opening for a group for 5 Thai and 10 regional (KAM, LAO, MYA) participants
- Computer-based exam on 2 Nov 2018
- Target audience : regulatory body, transporters, who responsible for
 - enforcing regulations governing the security of radioactive sources;
 - implementing regulations and developing radioactive source security policies, programs and plans;
 - responding to radiological emergency;
 - maintaining devices containing radioactive sources





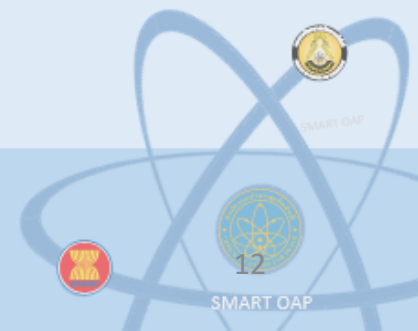
Activities in 2018 - 2019

Regional Training Workshop on Radiological Source Security Management

30 Oct – 2 Nov 2018, Office of Atoms for Peace, Thailand

Objective : To understand the following topics;

- Threats to radioactive sources and potential consequences
- International efforts on source security
- State and licenses responsibilities
- Defense-in-depth and graded approach
- Security systems and related technologies
- Categorizations accordingly to risks
- Security plan and security program
- Organizational culture, communication, and incident response





Future work



Kick-off Meeting of Exercise Development Training Series (EDTS) together with United States Department of Energy (U.S. DOE)

2-4 April, 2019, Pattaya, Chonburi , Thailand.



The invited representatives from ASEANTOM member states discussed their security development plans with a team of experts from the National Nuclear Security Administration (NNSA). The aim is to identify strengths and weaknesses in their national security regimes for arrangement of the suitable training series that meet each individual country and region needs.





6th Annual Meeting of the ASEAN Network of Regulatory Bodies on Atomic Energy (ASEANTOM) and Technical Session on Nuclear Security in ASEAN organized in cooperation with the International Atomic Energy Agency

1-4 July, 2019, Krabi, Thailand.

- IAEA Regional Project RAS/9/077 “Supporting Regional Nuclear Emergency Preparedness and Response in the Member States of ASEAN Region”
- ASEANTOM-IAEA Regional Project “Strengthening Regulatory Capacities for Licensing, Inspection and Enforcement for the Security of Radioactive Materials and Associated Facilities in Southeast Asia”
- EC-ASEAN Regional Project on Enhancing Emergency Preparedness and Response (EPR) in ASEAN: Technical Support for Decision Making (DSS)
- EC-ASEANTOM Regional Project on Radiological and Nuclear Emergency Preparedness and Response: ASEAN Early Warning Radiation Monitoring Network (EWRMN)





6th Annual Meeting of the ASEAN Network of Regulatory Bodies on Atomic Energy (ASEANTOM) and Technical Session on Nuclear Security in ASEAN organized in cooperation with the International Atomic Energy Agency

1-4 July, 2019, Krabi, Thailand.

- ASEANTOM-U.S. DOE/NNSA on Exercise Development Training Series (EDTS) and details of the proposed workshop
- Project proposal on cooperation between RCA Regional Office and ASEANTOM on Rapid Radiation Measurement and Individual Dose Assessment following Nuclear and Radiological Emergency
- Collaboration between ASEANTOM and The ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management
- Program of Asian Nuclear Safety Network and possible future cooperation between ANSN and ASEANTOM





PRACTICAL ARRANGEMENTS BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY AND OFFICE OF ATOMS FOR PEACE ON COOPERATION IN THE AREA OF NUCLEAR FORENSIC SCIENCE

1-4 July, 2019, Krabi, Thailand.

- Coordination and cooperation between the Parties to include sharing of technical information.
- Utilization of OAP experts in pertinent nuclear forensic science research and development activities, including IAEA Coordinated Research Projects.
- Participation of OAP experts in IAEA national, regional and international training courses on nuclear forensics as well as other related events.
- Use of already available scientific and technical resources at the OAP to promote the development and implementation of novel techniques and methods for nuclear forensic science;
- Involvement of OAP in IAEA international outreach to share experience in and promote nuclear forensics state of practice.

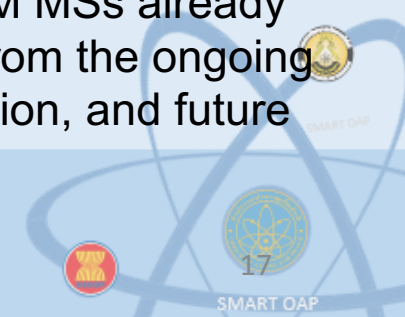




The Regional Training Course on Rapid Radiation Measurement and Individual Dose Assessment following Nuclear & Radiological Emergency, *7-11 October, 2019, Bangkok, Thailand.*

Purpose:

- to build advanced theoretical and practical capacity for participating countries to enhance rapid radiation measurement and dose assessment after nuclear and radiological emergency,
- to provide training in methods & software used for radiological assessment on the environment and the public involved,
- to provide recommendations on protecting the environment and the general public from adverse effects of radiation exposure,
- to further strengthen the EPR arrangement already developed in ASEANTOM MSs both at the national and regional levels, and
- to complement the EPR capacities and capabilities in ASEANTOM MSs already acquired through the previous RCA projects and to be acquired from the ongoing technical cooperation projects with IAEA and European Commission, and future RCA projects





Thank you for your attention

**SAFETY
SECURITY
SAFEGUARDS**

