

National and Regional Effort on Fostering Nuclear Safety and Security



SIEW Roundtable on Nuclear
Safety and Security Culture
in East Asia
27.10.2017 Singapore



Dr. Phiphat Phruksarojanakun
Head of International Cooperation
Office of Atoms for Peace

Safety – Security – Safeguards

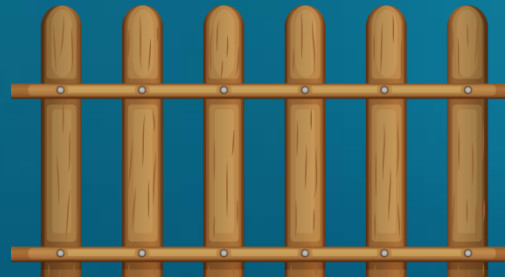
1 Safety

The achievement of proper **operating conditions**, prevention of accidents or mitigation of **accident** consequences, resulting in **protection** of workers, the public and the environment from undue **radiation** hazards.



2 Security

The prevention and detection of, and response to, theft, **sabotage**, unauthorized access, illegal transfer or other malicious acts involving **nuclear material**, other **radioactive substances** or their associated **facilities**.



3 Safeguards

Measures to inspect and verify that countries **comply** with their **international obligations** not to use nuclear materials for nuclear explosives.



IAEA

International Atomic Energy Agency

Development of Nuclear Regulatory Framework



Atomic Energy For Peace Act 1961



Strengths

Enacted in 1961 to establish a commission to both **promote** and **regulate** the use of nuclear energy and byproduct materials (radioactive materials) as well as nuclear materials.

Establish **"The Office of Atomic Energy for Peace"**

Amended in 1965 to include **X-rays** in the definition of "Atomic Energy"



Weakness

Difficulty of convening a commissioning meeting with the **Prime Minister** as the Chairperson

Lack of **security** and **safeguards** principles

No binding clauses for major **international conventions** and **treaties** related to nuclear energy

No **exemption** on radioactive materials





Nuclear Energy For Peace Act 2015

BASIS

Based on IAEA Nuclear Law Handbooks and regulatory laws of Thailand and other countries





Nuclear Energy For Peace Act 2015

International Compliance



- 1 Convention on Nuclear Safety (CNS)
- 2 Joint Convention on Spent Fuel Management and of the Safety of Radioactive Waste Management (Joint Convention)
- 3 Convention of Physical Protection of Nuclear Materials and its Amendment (CPPNM)
- 4 Comprehensive Test Ban Treaty (CTBT)
- 5 Protocol Additional to Comprehensive Safeguards Agreement (AP)



Nuclear Energy For Peace Act 2015



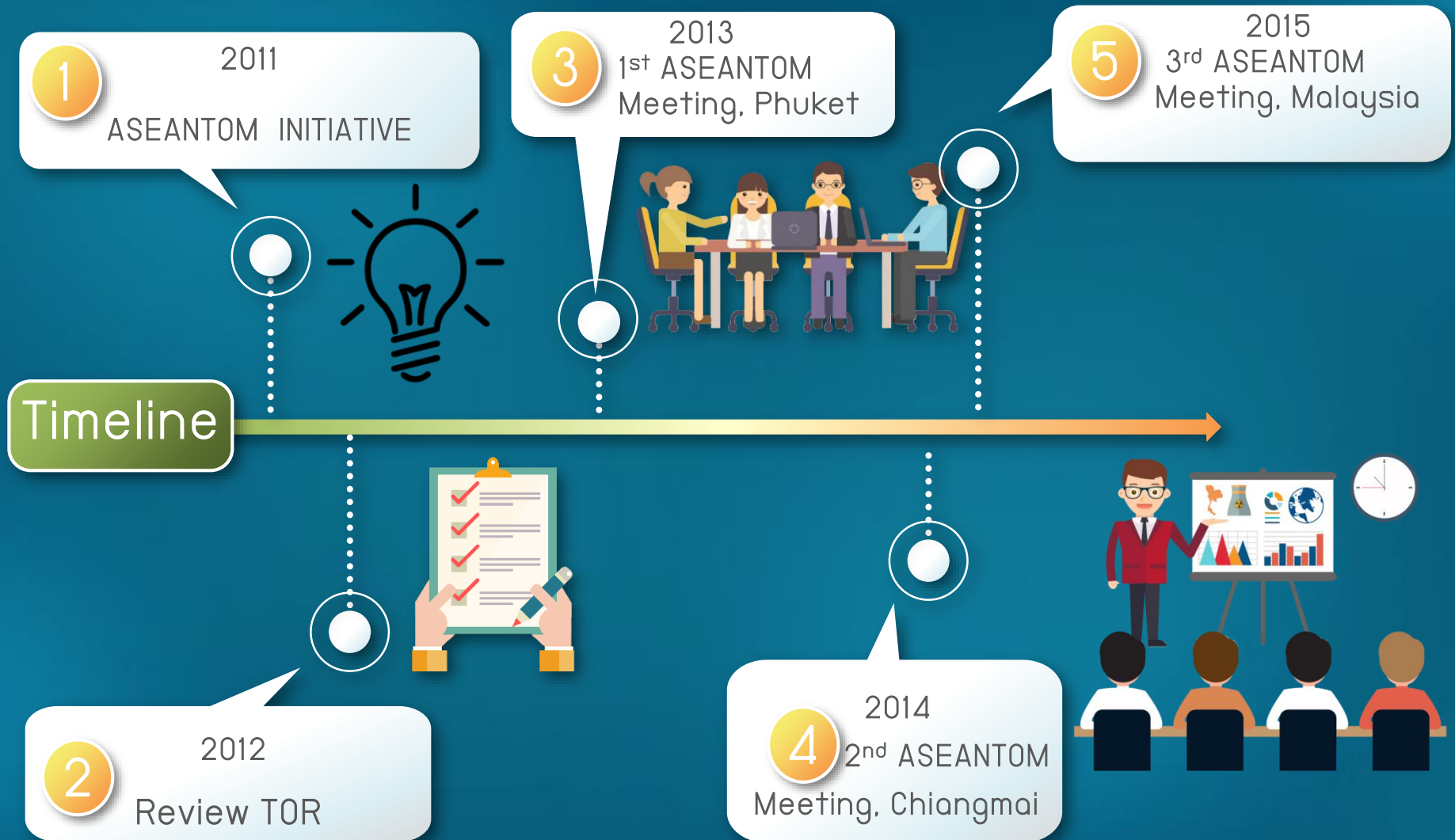
ASEANTOM

ASEAN Network of Regulatory Bodies on Atomic Energy

Strengthen nuclear safety, security, and safeguards within the ASEAN community by enhancing cooperation and complementing the work among MS with the existing mechanisms at the national, regional, and international levels



ASEANTOM



Chairman's Statement of the 25th ASEAN Summit: Nay Pyi Taw, 12 November 2014



MYANMAR 2014

“We welcomed the outcomes of the 2nd Meeting of the ASEAN Network of Regulatory Bodies on Atomic Energy (ASEANTOM) held in Chiang Mai, Thailand, from 25 to 27 August 2014 and its decision on the ASEANTOM as an ASEAN body under the APSC Pillar in the Annex 1 of the ASEAN Charter”

Technical Meeting / Workshop

The 1st Meeting on Technical Meeting on Environmental Radiation Monitoring Network in ASEAN, Chiang Mai, Thailand (2014)

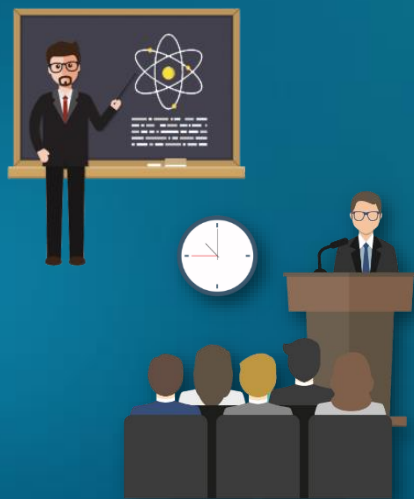
The 2nd Technical Meeting on the ASEAN Environmental Radiation Monitoring Network, Phuket, Thailand (2015)

The 1st Regional Workshop on Introduction to Nuclear Forensics and Biological Dosimetry, Bangkok, Thailand (2016)

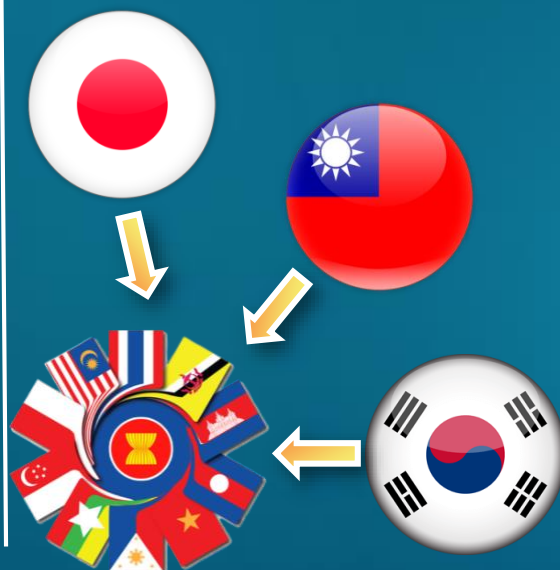
Technical Meeting / Workshop

The 2nd Regional Workshop on Capacity Building and Strengthening the Nuclear and Radiation Safety and Security Network in the ASEAN Region,
6-9 March 2017, Bangkok, Thailand

130 Participants,
Lecturers, Speakers



12 COUNTRIES



Nuclear Forensics



Radiation
Biodosimetry



Radiation Metrology



Environmental Radioactivity
Measurement & Emergency
Preparedness and Response



Technical Meeting / Workshop

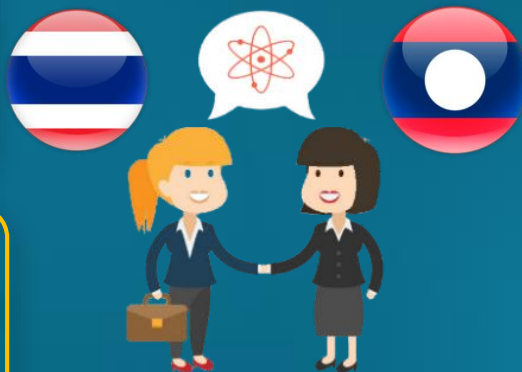
Lao PDR-Thai Technical Cooperation Workshop on Strengthening Capacity Building on Radiation Safety and Radioactive Measurement and Monitoring in the environment

Kick Off Meeting
August 7 - 8, 2017
Vientiane, LAO PDR

On-Site Training for
Three LAO PDR staff
August 21 - 31, 2017

Expert Mission
September 11 - 15 2017

Necessary equipments,
Software



Technical Meeting / Workshop

IAEA Technical Cooperation Project – RAS9077
Supporting Regional Nuclear Emergency Preparedness
and Response in the Member States of ASEAN Region

Duration – 4 Years (2016 – 2019)

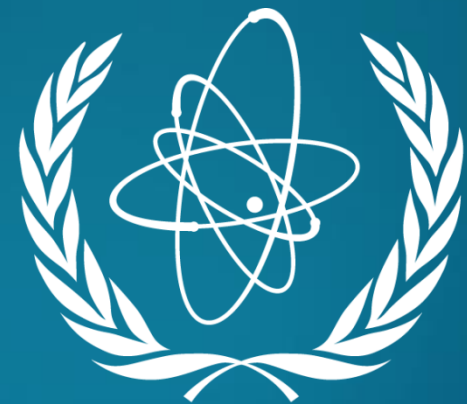


Budget – EUR605,500



Activities

- Workshop
- Training Course
- Meeting
- Expert Missions
- Scientific Visit



IAEA

International Atomic Energy Agency

Technical Meeting / Workshop



Project Ref: REG3.01/16
Enhancing Emergency Preparedness
and Response in ASEAN: Technical
Support for Decision Making



4th ASEANTOM MEETING

Where – The Philippines

When – December 7 – 8, 2017

Issues

- Review the activities conducted in 2016 – 2017
- Discuss the ASEANTOM chairmanship for 2018
- Set up an Action Plan for 2018
- Include the IAEA Technical Session on Nuclear Security

Singapore and Thailand

- Request to ASEAN to host ASEANTOM website
- Attempt to initiate a formality between IAEA and ASEAN (ASEANTOM)
- Collaborate on Nuclear Forensics Laboratory



Challenges

Varying degrees of knowledge and expertise



Lack of financial support for implementation



Lack of well-trained staff and infrastructure



Strong commitment needed



Thank You

Pictures from freepik.com and other online resources