ANSN
Asian Nuclear Safety Network

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Annual Report 2024

IAEA

GNSSN
Global Nuclear
Safety and Security
Network

1. Introduction

The year 2024 marked a pivotal milestone for the Asian Nuclear Safety Network (ANSN), as the first step of comprehensive transformation of the network was successfully completed. Building on two decades of achievements, the ANSN underwent a thorough review of its missions, objectives, technical scopes, and operational mechanisms.

Guided by the collaborative efforts of the Steering Committee (SC) and the Task Force Team (TFT), with tasks assigned by the SC, the newly established framework* is expected to pave the way for greater efficiency, enhanced collaboration, and a forward-looking approach to emerging challenges in the region.

* The new ANSN Terms of Reference (ToR) has been in effect since October 2024.

In 2024, while laying the groundwork for the transformation, the ANSN continued to support the capacity building efforts of Member States by offering training courses and workshops on the prioritized topics. Additionally, the ANSN overhauled its website, reestablishing it on the GNSSN platform to provide an improved user interface and better information management.

2. Membership

[~ October 2024]

ANSN has 11 Member Countries[1)], 4 Supporting Countries[2)], and 1 Associated Country[3)].

1) Bangladesh, China, Indonesia, Japan, Kazakhstan (not active), Republic of Korea, Malaysia, Philippines, Singapore, Thailand, and Viet Nam
2) France, Germany, U.S.A, and Australia (not active currently)
3) Pakistan

[Current, as of the end of 2024]

ANSN is open to organizations involved in nuclear and radiation safety and nuclear security in the East and South Asian region. This includes the following countries:

Bangladesh, Brunei, Cambodia, China, Indonesia, Japan, Republic of Korea, Laos, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Sri Lanka, Thailand, Viet Nam

* Previous Supporting Countries are invited to participate as observers in the Steering Committee.

3. Operation Mechanism

Steering Committee:

The Steering Committee (SC) serves as the governing body of ANSN and is responsible for making major decisions to ensure that ANSN fulfils its objectives. According to the ANSN ToR (2024), the countries with ANSN member organizations (hereafter Member Countries) nominate one SC members. The nomination should be from a regulatory authority or a technical and a scientific supporting organization (TSO) within the country to represent it.

Under the new ToR, the Steering Committee will be established for 2025-2027, and the current members for 2022-2024 are as following:

[ANSN SC members (2022-2024), as of the end of 2024]

Country	Name	Organization	Note
Bangladesh	Mr Ashoke Kumar Paul	Bangladesh Atomic Energy Commission	
China	-	-	
France	Mr Sylvain Petit	Institute de Radioprotection et de Surete Nucleaire - IRSN	
Germany	Mr Marcus Moshoevel	Ministry for the Environment, Nature Conservation and Nuclear Safety	
Indonesia	Mr Haendra Subekti	Nuclear Energy Regulatory Agency of Indonesia (BAPETEN)	
Indonesia	Mr Totti Tjiptosumirat	National Agency for Research and Innovation (BRIN)	
Japan	Mr Michio Kubota	Nuclear Regulation Authority (NRA)	Chairperson
Kazakhstan	-	-	
Republic of Korea	Mr Jae Woong Chung	Korea Institute of Nuclear Safety	
Republic of Korea	Ms Juhyeon Kim	Nuclear Safety and Security Commission	
Malaysia	Ms Ibrahim Muhamad	Atomic Energy Licensing Board (AELB)	
Philippines	Mr Alan M Borras	Philippines Nuclear Research Institute (PNRI)	Vice Chairperson
Singapore	Mr Kok Kiat Ang	National Environment Agency	
Thailand	Ms Pennapa Kanchana	Office of Atoms for Peace (OAP)	
Thailand	Ms Phiriyatorn Suwanmala	Thailand Institute of Nuclear Technology (TINT)	
USA	Ms Luana Cool	Nuclear Regulatory Commission	
Viet Nam	Mr Nguyen An Trung	Vietnam Atomic Energy Institute (VINATOM)	
Viet Nam	Ms Thi Thuy Anh Bui	Vietnam Agency for Radiation and Nuclear Safety (VARANS)	

Working Groups:

To implement the newly introduced activity, *Knowledge Networking Projects*, the ANSN initiated the establishment of respective working groups for each project. The initial three projects, decided during the 34th SC meeting, are as follows.:

- Safety Infrastructure for Advanced Nuclear Reactor
- Environmental Radiation Monitoring Network
- Program Development on Integrated Management System
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Each group comprises relevant professionals recommended by the participating countries and organizations.

The previous system of 11 topical working groups* was discontinued following a decision of the 34th Steering Committee meeting. This change was to better respond to changing environment and policies in the region, as well as to reflect the ANSN's focus shift toward encouraging collaboration among its members. This decision was incorporated into the new ANSN Terms of Reference.

* Self-Assessment Coordination Group (SACG), Information Technology Support Group (ITSG), Regulatory Infrastructure Topical Group (RITG), Education and Training Topical Group (ETTG), Siting Topical Group (STG), Safety Assessment Topical Group (SATG), Radioactive Waste Management Topical Group (RWMTG), Emergency Preparedness and Response Topical Group (EPRTG), Safety Management of Research Reactor Topical Group (SMRRTG), Communication and Consultation Topical Group (CTG) , Radiation Protection and Transport Safety Topical Group (RTTG)

Secretariat:

The IAEA Department of Nuclear Safety and Security (Network Management and Partnership Section, NSOC) serves as the Secretariat for ANSN and supports its activities. The Program Management Officer (PMO) coordinates the ANSN support project* with the support of IAEA Technical Officers designated for respective Topical Groups.

** The project is funded by voluntary contribution from Japan (NRA) and Republic of Korea (NSSC, KINS)*

4. Achievement in 2024

In 2024, the ANSN successfully completed the transformation process by overhaul its operational system and by expanding the technical scope and membership. The new frame was reflected in the consolidated ANSN Terms of Reference which has gone in effect.

The network also successfully completed a total of 4 workshops/training courses to support the capacity building effort of its member countries in specific technical areas. Information of event including the presentation materials used by the experts and presented by the participants, is available on the ANSN website.

[Part I: Management of ANSN]

1) The ANSN Transformation Task Force Team (November 2023 – February 2024)

- 9 Members nominated from Japan, Korea, Malaysia, and Viet Nam
- 3 virtual meetings (November 2, 2023 / December 12, 2023 / January 10, 2024)
  1 in-person meeting (February 27-29, 2024, Tokyo, Japan)
- Outcome: Draft of revision of ANSN Terms of Reference, ANSN Activity Concept Note, Work Plan for 2025-2027

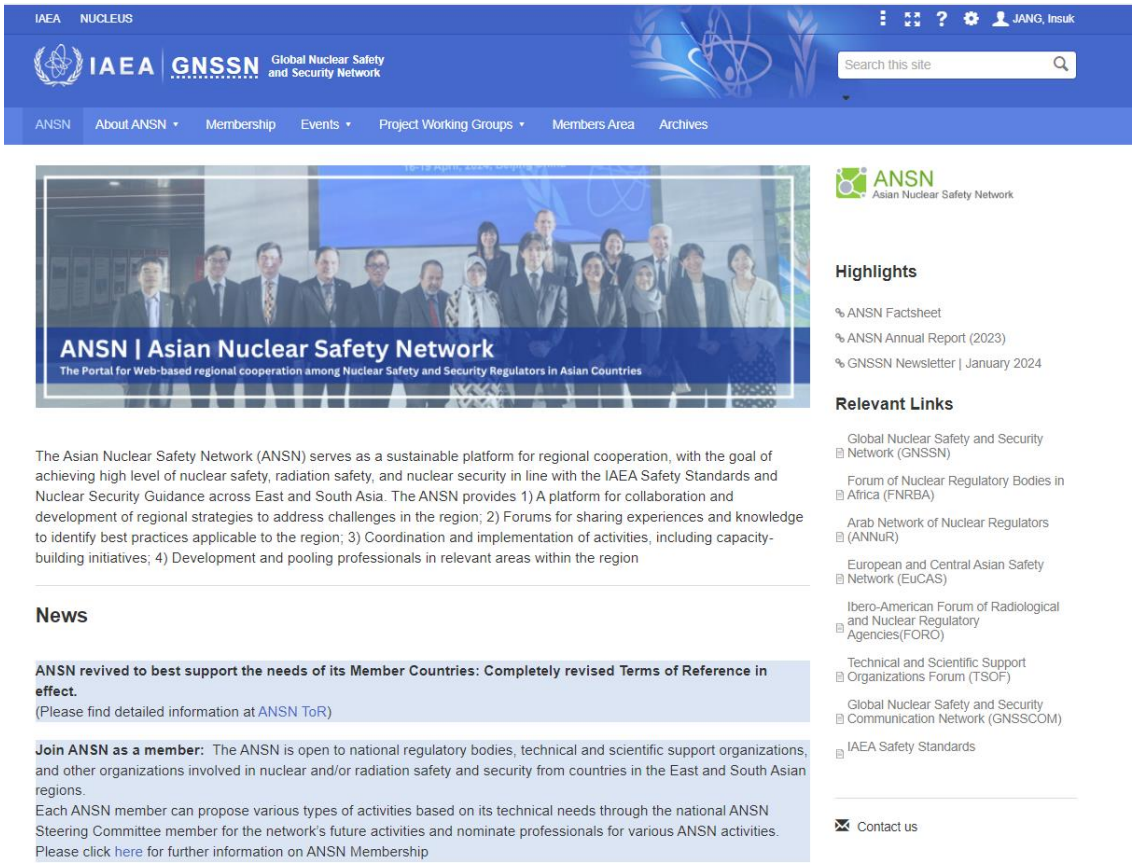
2) The 34th ANSN Steering Committee Meeting (April 16-19, 2024, Beijing, China)

The meeting reviewed the network's achievement since its inception in 2002, from the viewpoint of the Secretariat as well as of each participating member countries. The challenges and emerging needs in the region were identified through the participants' discussion with the emphasis of structured coordination with the IAEA TC projects. The meeting finally approved the draft of the revision of ANSN ToR, new activity format, and work plan for 2025-2027.

3) The kick-off meeting for Asian Expert DB project (November 27-29, 2024, Vienna, Austria)

As one of the new initiatives under the revised ToR, the ANSN launched a project to establish an Expert Database at the ANSN website by holding the first Consultancy Meeting. Participants from KINS Korea and NRA provided with their idea on application of the DB and feature of the system. KINS also shared their technical categorization system.

4) Launch new website for ANSN at GNSSN platform (October 2024)



[Part II: ANSN Capacity Building Activities]

1) IAEA-Fukui Workshop on the Integrated Risk Informed Decision-Making Framework and Current Practices (February 19-23, 2024, Fukui, Japan)

   The purpose of the event was to discuss and share information on the integrated risk informed decision making (IRIDM) framework, as well as its advantages and potential safety benefits. The event served as a platform for experts to share and discuss the implementation of the IRIDM process, practical insights, potential limitations, and methodologies for incorporating relevant safety considerations into the IRIDM process.

   32 participants from 13 Member States (This event was open to IAEA Member States as well as ANSN members.)

2) National Workshop on the Development of Nuclear Safety Knowledge Management Program (July 29 – August 2, 2024, Selangor, Malaysia)

   The workshop intended to deliver advanced information on specific aspects of nuclear safety knowledge management; to identify achievements, gaps and good practices of Malaysia's nuclear safety knowledge management programmes; and to develop country-specific action plans to improve such programmes.

3) IAEA-KINS Basic Professional Training Course on Nuclear Safety (October 21 – November 1, 2024, Daejeon, Republic of Korea)

The training is designed to provide the participants with a basic knowledge of the principles of nuclear safety, including its legal and regulatory framework. The two-week course provides a broad overview of all the safety concepts and their application to nuclear power plants and research reactors. Its nature and scope are primarily oriented to junior professionals in nuclear safety-related activities, but also appropriate for the trainers who want to teach their staff and the specialized professionals who want to expand their view on nuclear safety.

18 participants from 14 Member States (This event was open to IAEA Member States as well as ANSN members.)

4) Training Course on Safety Aspects of Small Modular Reactors and Other Innovative Reactor Technologies (November 4-8, 20254, Fukui, Japan)

The purpose of the training course was to train participants in key safety aspects of small modular reactors (SMRs) and other innovative reactor technology types, namely water cooled SMRs, high temperature gas cooled reactors, sodium cooled fast reactors, lead cooled fast reactors and molten salt reactors. Through the five-day program, the participants received lectures from the IAEA and other international experts, as well as the participated in discussions and in-class group sessions.

32 participants from 20 Member States (This event was open to IAEA Member States as well as ANSN members.)