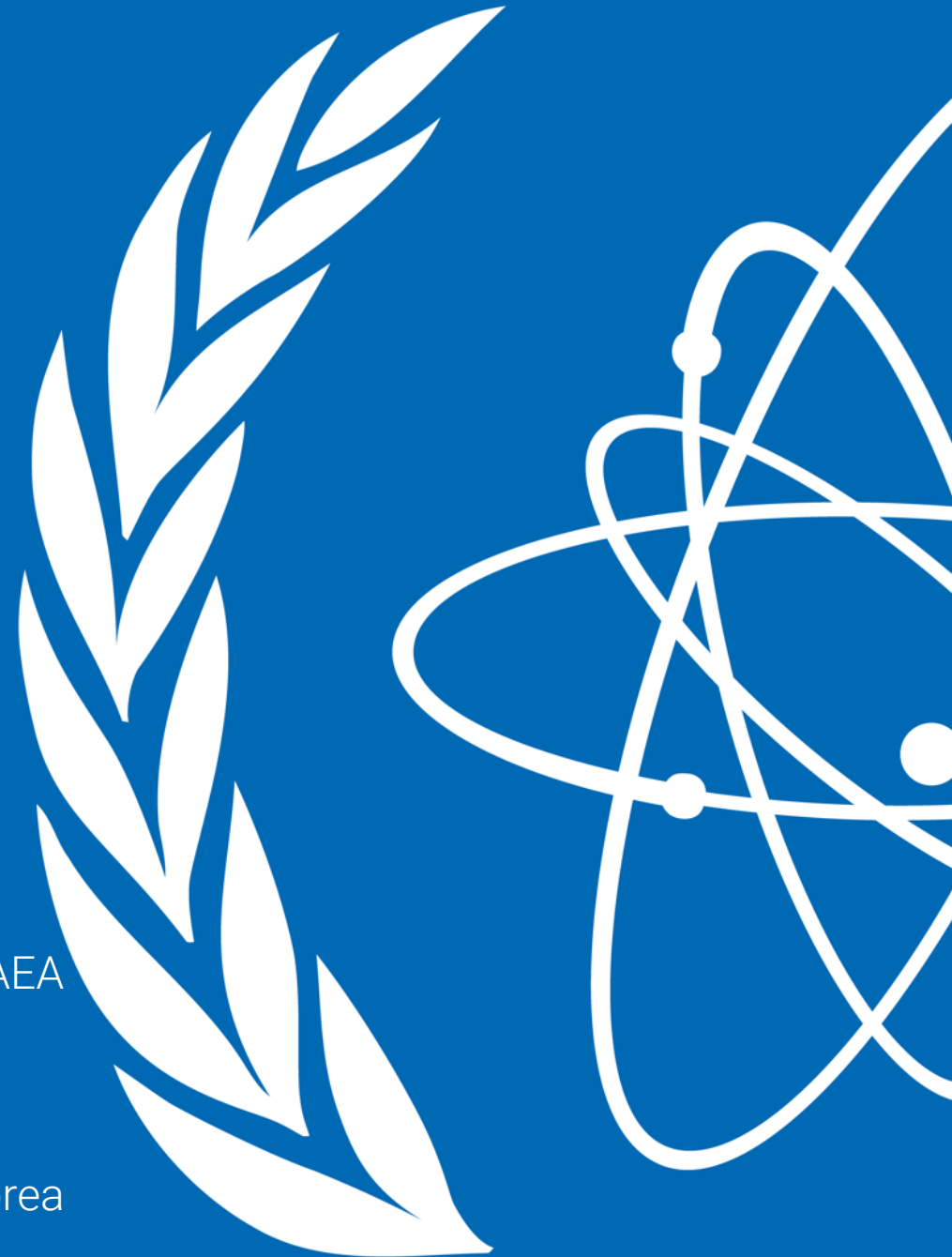


IAEA's Support for Knowledge Networking

How the regional safety networks can support the technical needs of the its member states

Insuk Jang, ANSN project manager, NSOC/IAEA

IAEA ANSN Workshop on SMR, 31 March -4 April 2025, Daejeon Korea



Contents

- | IAEA's Perspective on Capacity Building

- | Global Nuclear Safety and Security Network (GNSSN)

- | Overview of Asian Nuclear Safety Network (ANSN)

- | How ANSN benefits Member States

- | Future Opportunities

- | Post-Workshop Information sharing

IAEA's View on Capacity Building

- **Nuclear Safety and Security : National Responsibility**

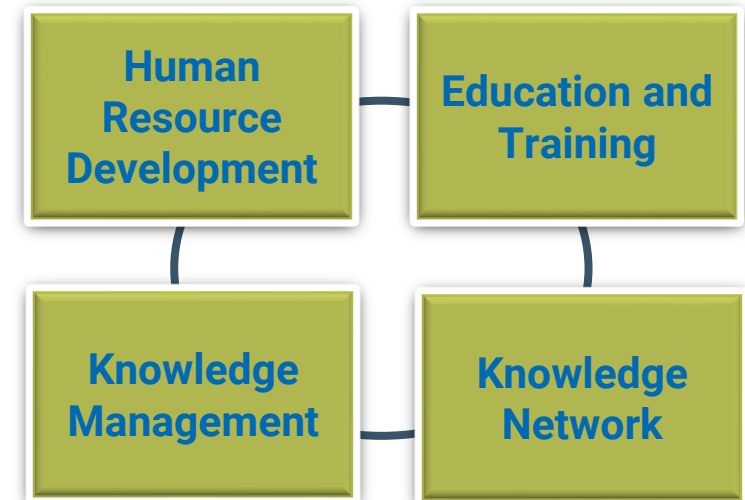
*Government, Regulators, Operators, TSOs, Educational institutions.....

➔ **Capacity Building:** Continuous effort to achieve and maintain the level of safety and security

Sustainable supply of competent human resources,

Appropriate legal and regulatory system in place,

Building and maintain necessary infrastructures, etc.



Peer Review and Advisory Service

Supporting in assessing application of IAEA standards and finding guidance to improve the level of nuclear safety and security

<https://www.iaea.org/services/review-missions>

Education and Training

Providing knowledge through Workshops, Training Courses, Online learning, Fellowship, Schools on specific topics

<https://www.iaea.org/services/education-and-training>

Fostering Knowledge Networking system

Establishing platforms for sharing knowledge and experience, supporting network activities among member states and organizations

GNSSN: Global Nuclear Safety and Security Network



Overview of Asian Nuclear Safety Network (ANSN)

- Vision -

Sustainable **Regional Cooperation Platform** to achieve a high levels of **Nuclear Safety, Radiation Safety, and Nuclear Security** in the East and South Asian region

- Objectives -

- Serve as platform for collaboration & strategies addressing the region's challenges
- Provide forums for experience and knowledge sharing, identifying best practices
- Coordinate and implementing activities for capacity building of members
- Develop and pool relevant professionals in the region

- **(Membership)** Open to **organizations*** involved in nuclear and radiation safety and nuclear security in the East and South Asian region (member countries), such as:

- *National regulators*
- *Technical support organizations (TSOs)*
- *Research institutes (safety/security related part)*
- *Facility/Activity operators (safety/security related part)*



Bangladesh



Laos



Viet Nam



Brunei



Malaysia



Sri Lanka



Cambodia



Mongolia



China



Myanmar



Australia



Indonesia



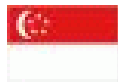
Philippines



France



Japan



Singapore



Germany



Republic of Korea



Thailand

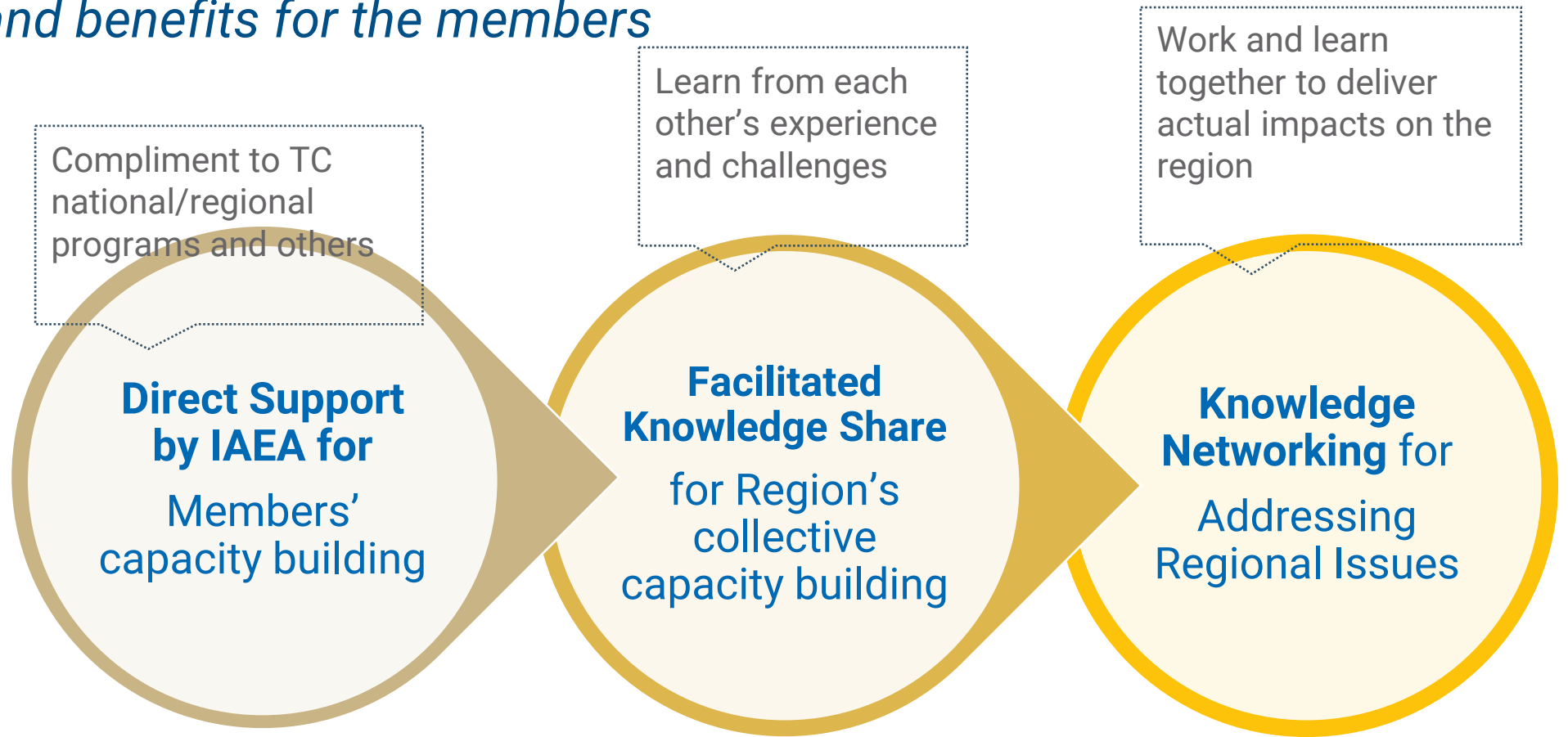


U.S.A.

Supporting
Countries

How ANSN benefit Member States

Opportunities and benefits for the members



Regional Expert Pool for Nuclear and Radiation Safety, and Security



Training Course on safety aspects of Small Modular Reactors (SMRs) and other innovative reactor technologies

Hosted by the
Government of Japan

through the
Wakasa Wan Energy Research Center (WERC)

Fukui, Japan

4-8 November 2024

Ref. No.: EVT230410

Information Sheet

Introduction

To meet the growing demand for energy and to mitigate global climate change challenges, the interest in advanced reactor technologies, including small modular reactors (SMRs), for electric and non-electric applications is growing.

While advances in technologies continue to evolve worldwide, new opportunities and challenges emerge

Proposals from several ANSN member countries

**year-round open to the ANSN Secretariat*



ANSN Steering Committee discussion/prioritization

**Decides it as one of the 2024 ANSN activities (Aug. 2023)*



Internal Discussion and Planning of the Course

**Secretariat coordinate with technical division, host organization (~Feb.2024)*



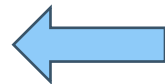
Publish the event at InTouch+ system (June 2024)

**Request ANSN and other MSs to nominate participants*



Evaluations and Invitation (August 2024)

**Secretariat select participants and provide financial support for travel*





Asian Nuclear Safety Network (ANSN)

Regional Workshop on Safety Benefits and Challenges in the Development of the Adoption of Small Modular Reactors

Hosted by the
Government of the Republic of Korea

through the
Korea Hydro & Nuclear Power Co. and Ltd
Korea Institute of Nuclear Safety (KINS)

Daejeon, Republic of Korea

31 March–4 April 2025

Ref. No.: EVT2404165

Information Sheet

Introduction

Proposal for SMR experience sharing opportunities

**interest in on-going projects in Asian region (Feb. 2024)*



ANSN Steering Committee discussion/prioritization

**Decides it as one of the 2024 ANSN activities (April. 2024)*



Internal Discussion and Planning of the Course

**Secretariat reached out to organizations in the region and discussed with technical division (~Oct. 2024)*



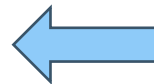
Publish the event at InTouch+ system (Dec. 2024)

**Request ANSN member countries to nominate participants*



Evaluations and Invitation (Feb. 2025)

**Secretariat select participants and provide financial support for travel*





<https://gnssn.iaea.org/main/ansn/Pages/Advanced-Nuclear-Reactor-SMR.aspx>

Future Opportunities

1. Stay tune on the eligible activities the Agency provides

 IAEA

InTouch+

Home

Profile

My Eligible Events

My Applications

My Eligible Events

Search

Event Number

Event Start Date

Project Number

Event Type

Event End Date

Event Location

Event Title

Designation Deadline

Event Country

Apply	Project Number	Designation Deadline	Event Number	Event Type	Event Title	Event Location	Event Start Date	Event End Date
	1000155	2025-03-13	EVT2404361	Technical Meeting	Technical Meeting on Specific Infrastructure Considerations for...	Vienna, Austria	2025-04-23	2025-04-25
		2025-03-14	EVT2404705	Technical Meeting	International Workshop of the Regulatory Forum for Safety of ...	Bangkok, Thailand	2025-05-19	2025-05-24
	1000047	2025-03-14	EVT2304715	Technical Meeting	Workshop on Climate Scenarios to Assess and Manage Global ...	Vienna, Austria	2025-04-14	2025-04-17
	1000166	2025-03-15	EVT2303983	Technical Meeting	Technical Meeting on Advancements and New Developments i...	Vienna, Austria	2025-05-06	2025-05-09
	3000009	2025-03-15	EVT2304696	Technical Meeting	Technical Meeting on Public Communication in Emergencies: T...	Vienna, Austria	2025-06-23	2025-06-27

2. Provide your input to your respective regional safety network

ANSN: Member organizations eligible to propose activities directly to IAEA Secretariat or through their ANSN SC member

<https://gnssn.iaea.org/main/ansn/Pages/Membership.aspx>

 TWG3 – Nuclear Safety Infrastructure					
This has been the most active TWG in the Forum. This TWG has developed its TOR and Action Plan. The Group has held three training events: in Abuja, Nigeria and in Cape Town South Africa both in 2010 and Mombasa, Kenya in July 2011. The support of the United Nations Nuclear Regulatory Commission is highly appreciated. You will recall that over twenty African Member States have made political commitment to embark on Nuclear Power Programme. The challenges of inadequate manpower and training institutions, weak industrial and financial infrastructure are still with us. This becomes very crucial as the world very sensitive with the disaster wrecked on the Fukushima Daiichi Nuclear Reactors by forces of nature: Earthquake and Tsunami. This is an area we believe the Agency can do more and in which the Forum needs more partners and in a structured manner. The African countries embarking on NPP will need to be reminded of the responsibility for safety which "cannot be outsourced". Furthermore, responsibility for nuclear safety is no longer a national business, it is a regional business and indeed it is a global business. Since "an accident anywhere is an accident everywhere".					
Member Details					
Email all TWG3 members					
Country Flag	Country	Full Name	Position	Email	View Details
	Burkina Faso	Mr. HIE Karim		hk.karim.hie@gmail.com	View
	Burkina Faso	Mr. OUEDRAGO Joachim		ouedragojoachim2015@yahoo.fr	View
	Burkina Faso	Mr. BANGOU Christian		bangouchristian@yahoo.fr	View
	Cote d'Ivoire	Mr. Foundéré Coulibaly		foundere@yahoo.fr	View
	Cote d'Ivoire	Mr. Pr KOUA Aka Antonin		antoninkoua@yahoo.fr	View
	Democratic Republic of Congo	Mr. Ngwangoy Eddy Bosanga		eddybosanga@yahoo.fr	View
	Egypt	Mr. Hassan Hamdy		hamdy.hassan@enrra.org	View
	Ethiopia	Mr. MOHAMMED Surur Kider		sururkider@gmail.com; sururkm@erpa.gov.et	View
	Ghana	Mr. Abrefah Rex Gyeabour		r.gyeabour@gnrra.org.gh; adibola2001@yahoo.com	View
	Kenya	Mr. Otieno Atogo Michael		mikeatogo5@gmail.com; m.atogo@knrra.co.ke	View
	Morocco	Mr. Taib Marfak		t.marfak@amssnur.org.ma	View
	Niger	Mr. DJIBO Ali		djiboali2000@yahoo.fr	View
	Nigeria	Mr. Okoya Olatunji Olatunpekun	Co-ordinator	OLATUNJI.OKOYA@NNRA.GOV.NG; okoyatj@yahoo.com	View
	Senegal	Mr. Dath Bamba		bambadath@yahoo.fr	View

Safety Management of Nuclear Installations (Research and Power Reactors)		
Objectives		Mr. Hany Sallam h.sallam@enrra.org
Members	Egypt	
Recent Events		Mr. Ahmed Salih afsalih@gmail.com
	Iraq	
Collaboration Space		Mr. Muhannad Abuhamdeh Muhannad.Abuhamdeh@emrc.gov.jo
	Jordan	
		Mr. Rony Bitar Ronybitar5@hotmail.com
	Lebanon	
		Mr. Amal Hasan Elgahwaji walam_02@yahoo.com
	Libya	
		Ms. Jihane Mabtoul j.elmabtoul@amssnur.org.ma
	Morocco Coordinator	
		Mr. Mosfir Abdallah Aldiriss malqahtani@nnrc.gov.sa
	Saudi Arabia	
		Mr. Abdelgadire Altayeb abdelgadireltayeb@gmail.com
	Sudan	
		Mr. Tahar Hamida Tahar.hamida@gmail.com
	Tunisia	
		Mr. Naji Alamah alamahnaji@gmail.com

3. Join the WG for Advanced Reactor Project (ANSN)

Advanced Nuclear Reactor (SMR including FNPP)

Project Title: Advanced Nuclear Reactor Safety Infrastructure

Duration: 3 years

Background:

Global interest in advanced nuclear reactors such as Small Modular Reactor (SMR) and Floating Nuclear Power Plant (FNPP), is increasing due to their flexibility in meeting the needs of a wider range of users and applications as well as their potential to replace aging fossil fuel-fired power plants. Many ANSN member countries, including those who have not previously pursued conventional NPP programs, are now expressing a keen interest in integrating this technology into their energy grid.

However, to implement these new types of reactors, it is essential that the states have the necessary infrastructure in place, such as properly adjusted regulatory systems, enhanced knowledge of the safety feature related to design and siting, operational experience, and radioactive waste management.

Introduction of project:

On one hand, this project aims to identify the common technical needs of ANSN member countries regarding regulatory aspect of safety and security when considering, planning, and deploying the advanced nuclear reactors. It will also address these needs through capacity building activities. On the other hand, the project will provide a platform for relevant organizations/professionals to exchange experiences and lessons learned.

The potential topics covered by this project include:

- Regulatory Framework and Requirements for Safety
- Safety Analysis and Assessment
- Licensing and Regulatory Oversights (including in manufacturing and construction)
- Siting, Design, Construction and Decommissioning
- Commissioning and Operation, Maintenance, Management of Radioactive Waste and Spent Fuel
- Emergency Preparedness and Responses for both land-based and mobile reactors
- SMR Supply chain

Potential Activities and Deliverables of the project:

- Conduct a comprehensive needs assessment to identify priority areas where the ANSN member countries' status regarding advanced nuclear reactor technology and programs
- Based on the assessment, identify priority technical areas for training courses with IAEA support

Current Members from:

Indonesia, Japan, Korea,
Malaysia, Philippines, Viet Nam

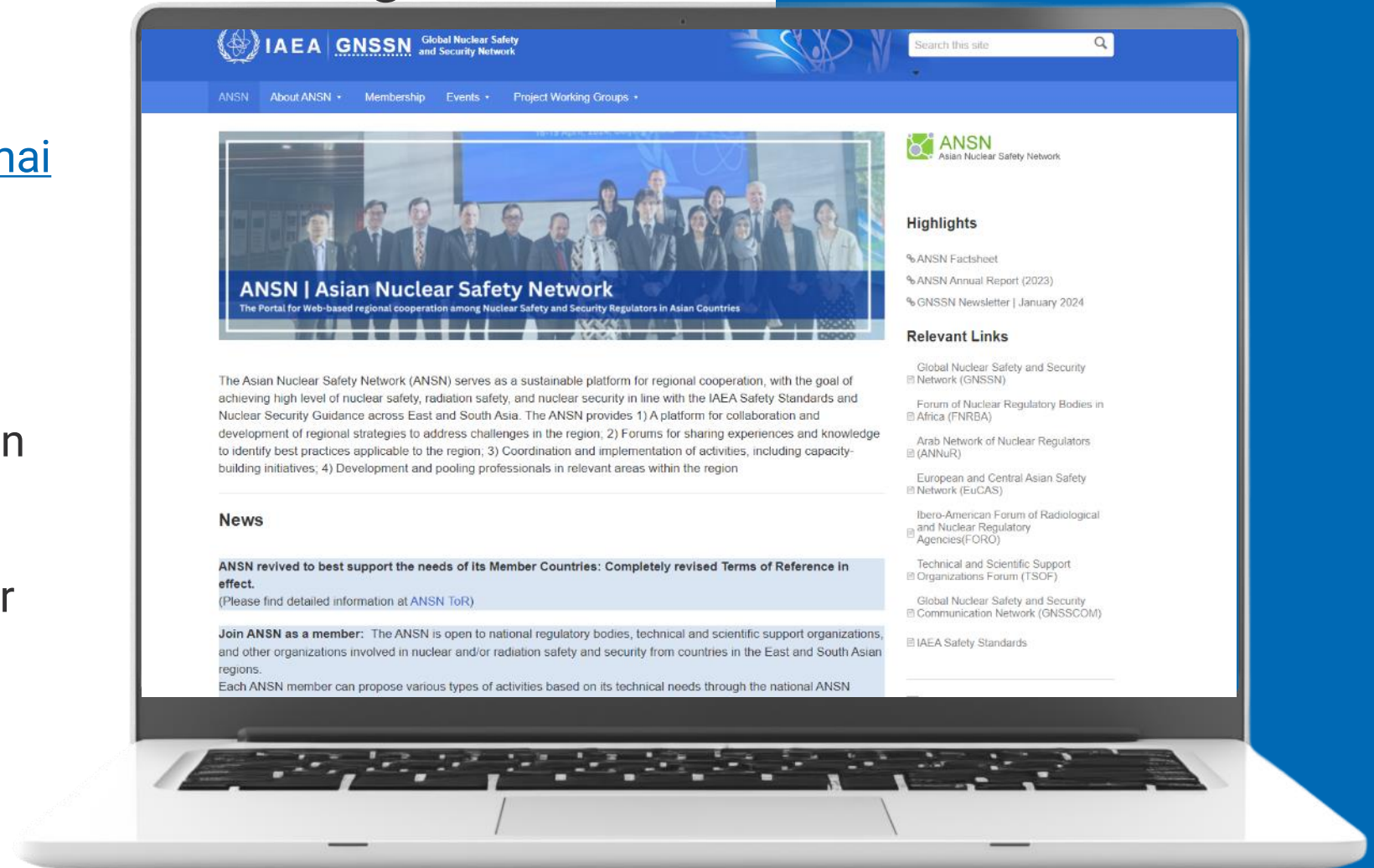
Kick-off Meeting

7-9 July 2025, Vienna

*to define its scope of work,
establish a schedule, and clarify the
final outcomes and deliverables.*

Post-Workshop Information Sharing

- <https://gnssn.iaea.org/main/ansn/Pages/Past-Events.aspx>
- The prime repository for ANSN related information
- Meeting materials and outcomes uploaded after each event
- Collaboration space for each WG hosted





Thank you!

ANSN.Contact-Point@iaea.org
