State of the Academy: 2025–2026 Strategic Update

Advancing regional nuclear science and technology education through the International Nuclear Science and Technology Academy (INSTA).



Irman Abdul Rahman
Chair, Steering Committee

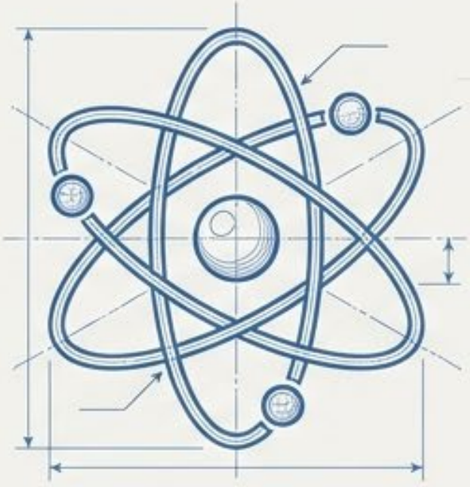
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The Catalyst – Nov 2019



Experts from 7 Member States convened to address a critical regional gap: the lack of robust nuclear science and technology (NST) education at the secondary and tertiary levels.

The Resolution

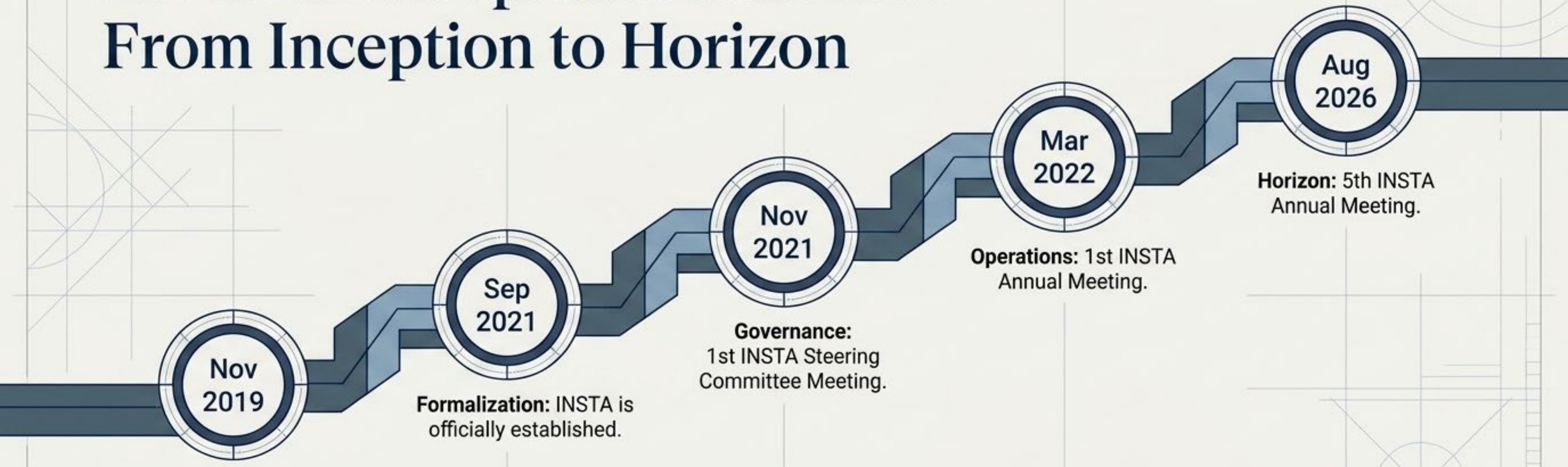


The establishment of the International Nuclear Science and Technology Academy (INSTA), an IAEA-supported regional initiative.

Core Strategy: Creating a collaborative forum among universities, training centers, regulators, and research organizations to accelerate the dissemination, awareness, and utilization of NST applications.

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INSTA Development Timeline: From Inception to Horizon

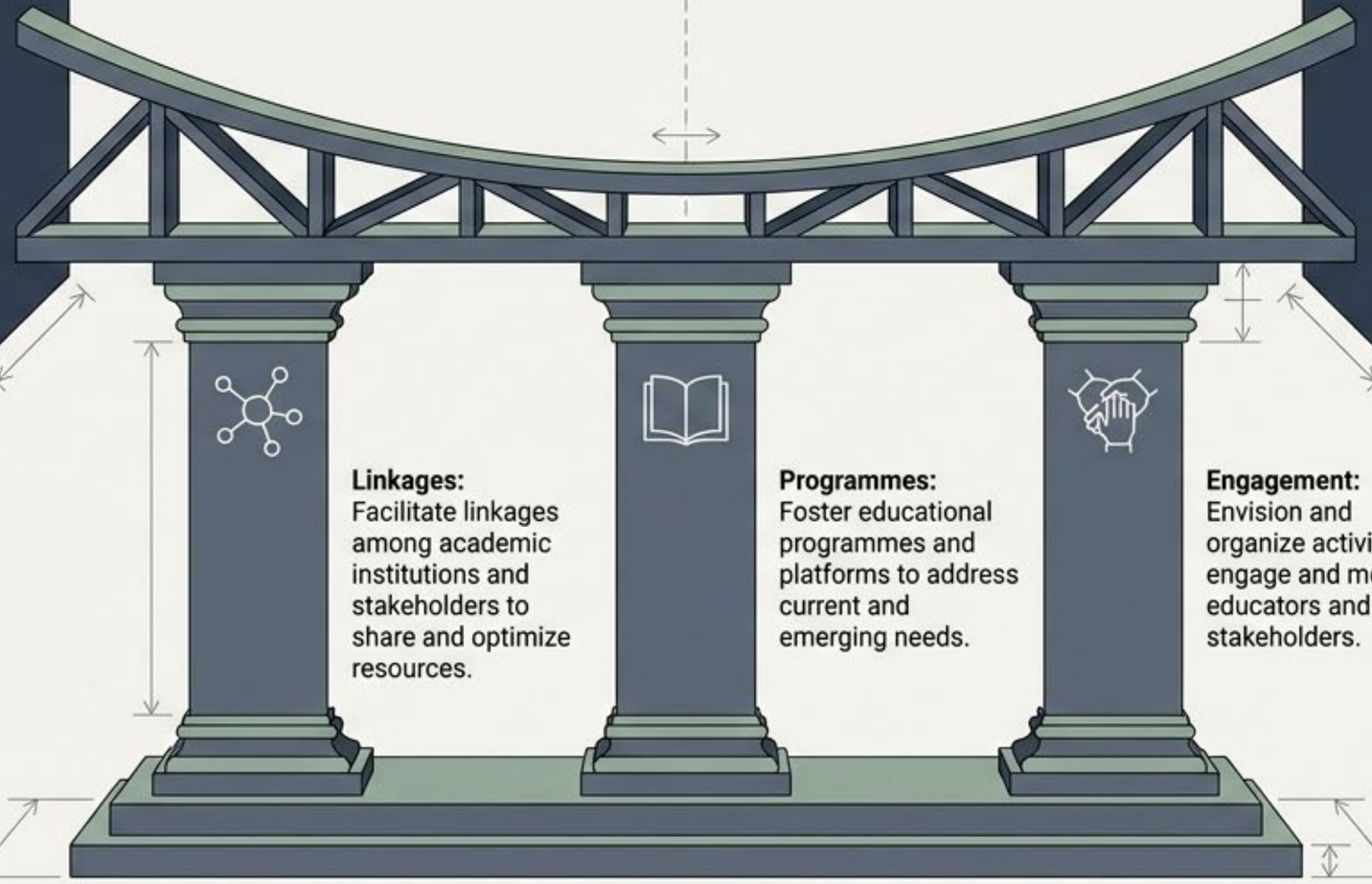


The regional mandate: Accelerate the dissemination, awareness, and utilization of safe nuclear science and technology applications to meet the UN Sustainable Development Goals.

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Tertiary Nuclear S&T Education

To strengthen and sustain tertiary nuclear science and technology (S&T) education.



Linkages: Facilitate linkages among academic institutions and stakeholders to share and optimize resources.

Programmes: Foster educational programmes and platforms to address current and emerging needs.

Engagement: Envision and organize activities to engage and motivate educators and stakeholders.

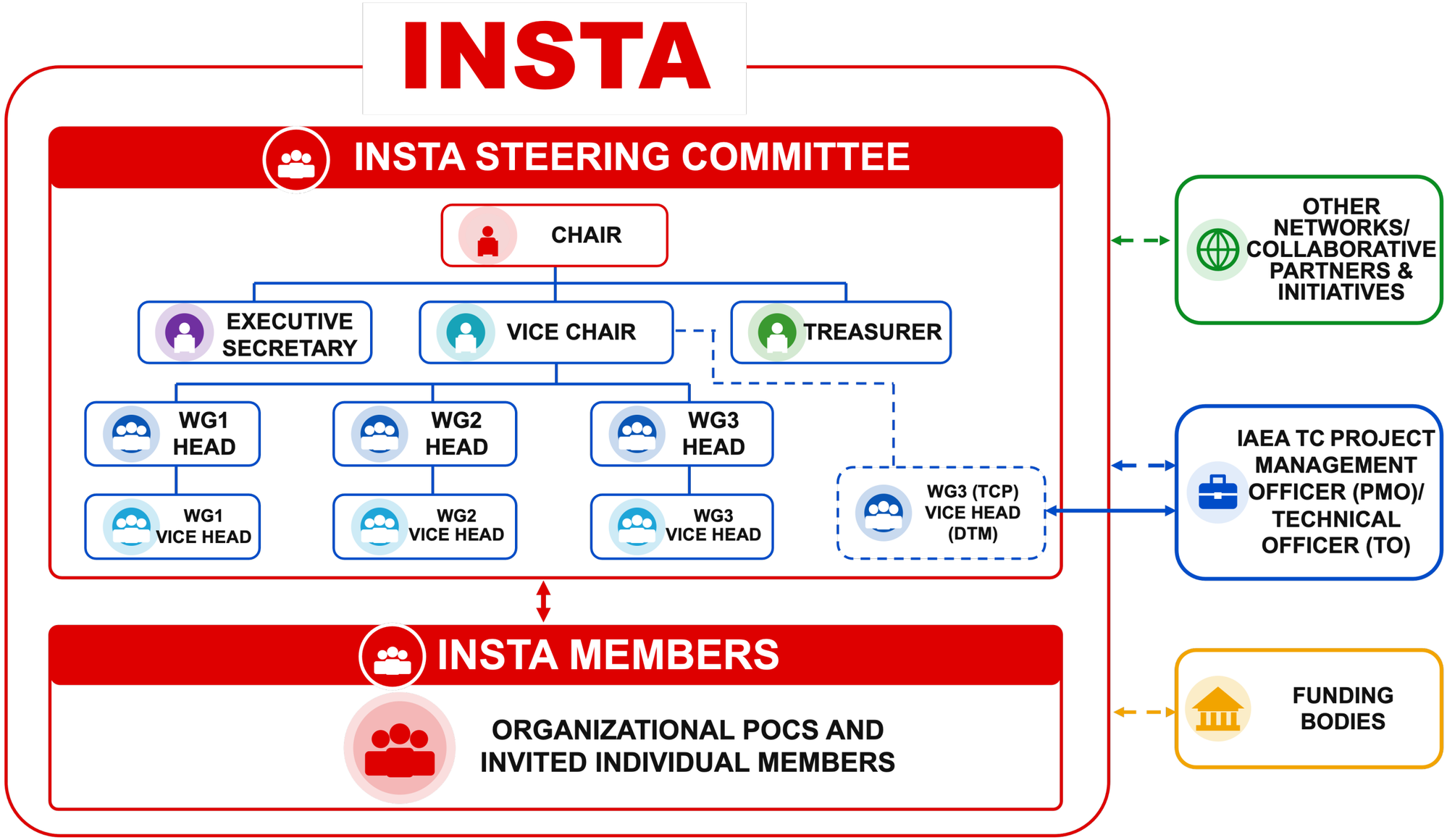
UN Sustainable Development Goals (SDGs)

Enhancing the utilization of nuclear applications across IAEA Member States in the Asia-Pacific region.

Takeaway: A robust collaborative infrastructure is required to sustain tertiary education and enhance the utilization of nuclear applications across the Asia-Pacific region.

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INSTA Governance Structure



Scopes

WG1
Technical cooperation

WG2
Program & platform development

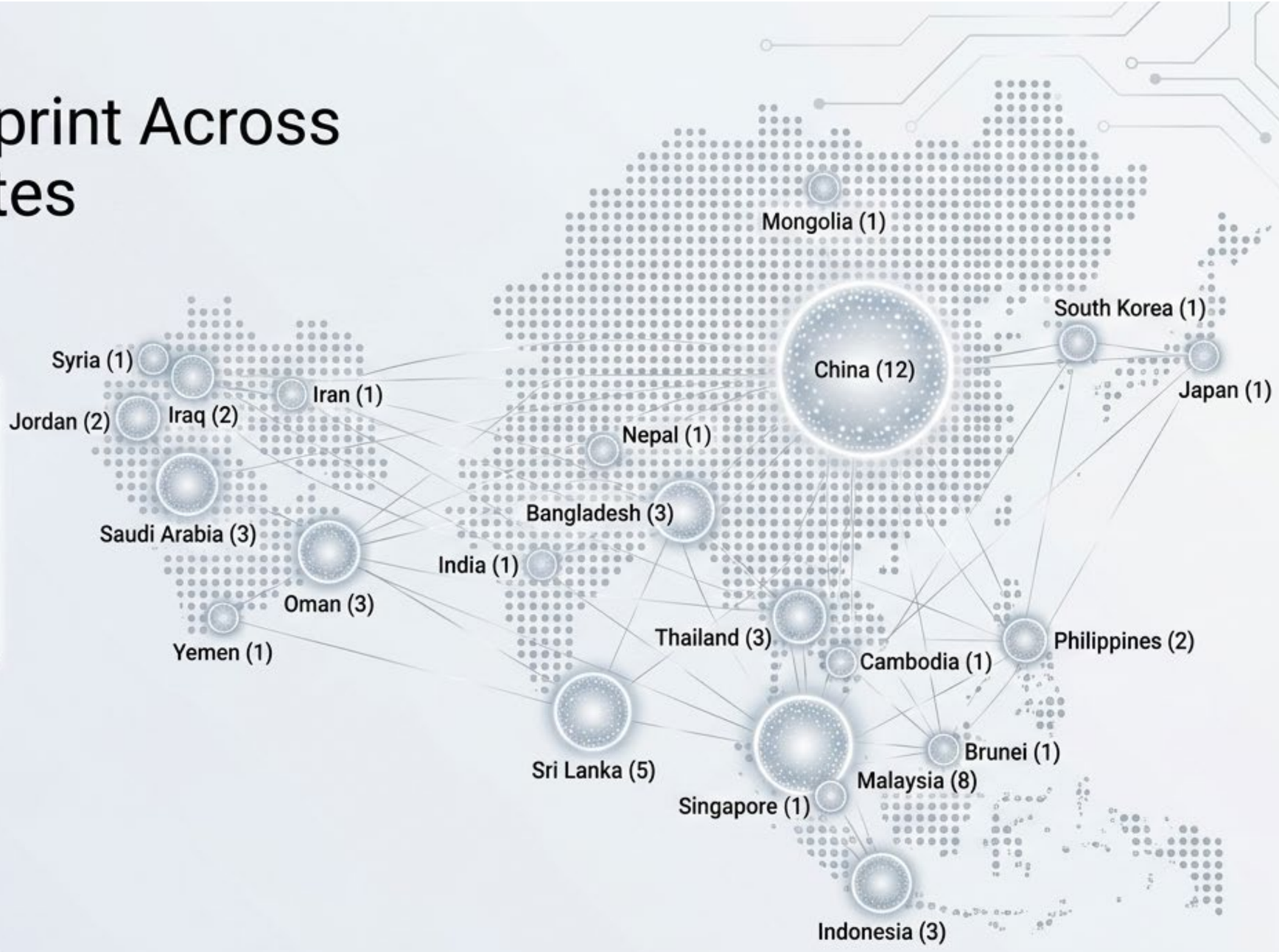
WG3
Special Projects

WG3 (DTM)
Technical Cooperation project

A Growing Footprint Across 22 Member States

Synthesis Insight

A highly distributed network requiring robust digital coordination to bridge the geographical gaps between large academic hubs and emerging national programs.



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WG1 Digital Presence & Outreach

Building visibility and opening channels for engagement with members and the wider community.

X (Twitter)

Status: Account established.

LinkedIn

Status: Account established.

YouTube

Status: Account established.

The Growth Pipeline (Under Development)



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Home - INSTA
Ask Gemini
insta-network.org
School
ewarga Gmail Calendar CIMB Clicks myTNB myBSN UOB Bayar@MARAeps Facebook myASNB WhatsApp UKMFolio MP3Juices SAINS



INTERNATIONAL NUCLEAR SCIENCE AND TECHNOLOGY ACADEMY

Empowering the Future with Nuclear Science and Innovation.

Phase-Shifts

Concept Development
Connecting the INSTA community

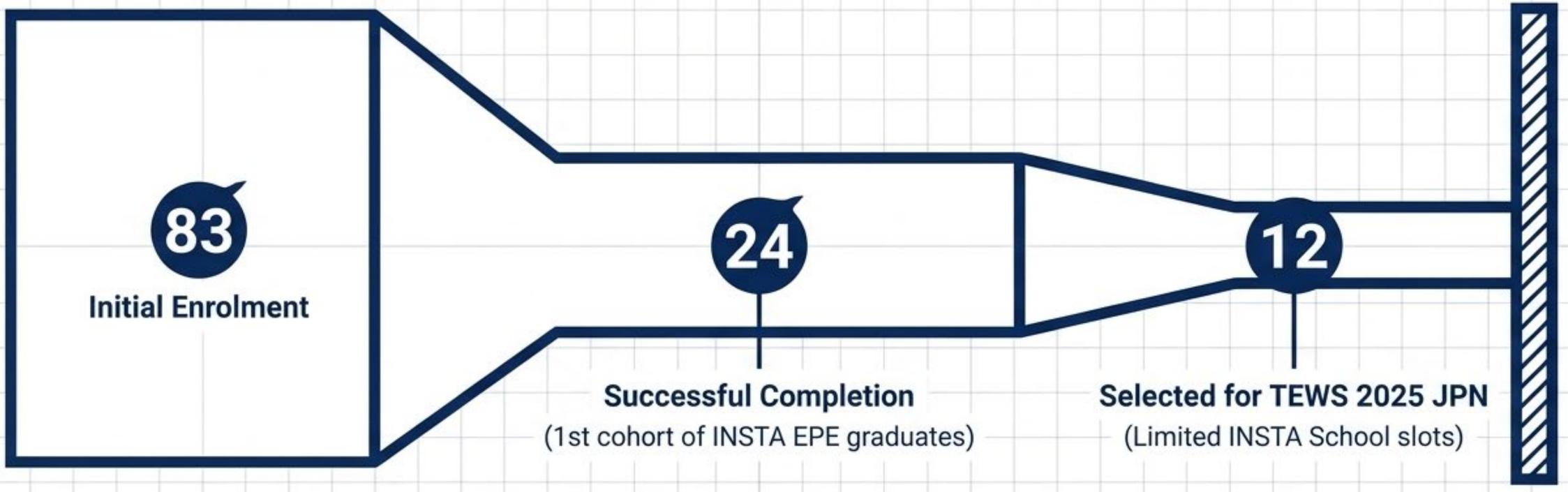
Member Input
Enabling the INSTA community to work together

Member Collaboration Mechanism Core Capabilities

- Connecting members with common interests
- Initiating joint projects and activities
- Sharing expertise, opportunities and resources
- Forming focused teams across institutions and countries

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INSTA EPE Throughput Constraint



Key Insight: 50% of 1st cohort graduates remain ‘unrewarded’ due to strict slot limitations. This challenge will be further exaggerated with the addition of the 2nd cohort.

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Strategic Alignment: EPE Challenges vs. Alternate Pathways

The Throughput Challenges

1. Strict slot limitations leaving 50% of graduates unrewarded.
2. Thematic mismatch between planned INSTA School areas and specific graduate interests.

The Proposed IAEA Alternative Off-Ramps

Reward INSTA EPE graduates with integration into established IAEA schools.

- School on Nuclear and Radiological Leadership for Safety
- School of Nuclear Energy Management
- Nuclear Stakeholder Engagement School
- School of Nuclear Knowledge Management
- School of Radiation Emergency Management
- INPRO School on Strategic Planning for Sustainable Nuclear Energy
- Joint ICTP-IAEA International School on Nuclear Security

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Working Group 3: Continuous Throughput

Roadmap Goal: One Webinar per Quarter (INSTA ANENT INSO target).

2025 → 2026

Q4 2025 (Nov 20)

The Best Practices through Secondary Education

Resource Persons: Kuit, Dagasdas, Tan

Q4 2025 (Dec 18)

The International Nuclear Science Olympiad (INSO)

Resource Persons: Al Azri, Sulaiman, Wang, Mishar, Zhivitskaya

Q1 2026 (Mar 25)

The E-Learning Programme For Educators (EPE)

Resource Persons: Rahman, Wijesooriya, Chansawan, Chung, Hasan

Q3 2026 (Jul 23)

Implementing Nuclear Law: International Treaties to National Practice

Resource Persons: Raja, Fazli

Q4 2026 (Oct 15)

Protecting Air, Water and Land: Nuclear Law for Environmental Protection

Resource Person: Prof. Akiko Okamatsu

Q4 2026 (Nov 19)

Enhancing Tertiary Education in Nuclear Science

Speakers TBD

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Let’s build the future of nuclear S&T education together.

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