Significance of International Nuclear Nonproliferation and Security Academy (INSA)'s Participation in the International Atomic Energy Agency's International Network for Nuclear Security Support Centres (NSSC Network)

EunBee PARK

Korea Institute of Nuclear Nonproliferation and Control ebpark@kinac.re.kr

*Keywords: nuclear nonproliferation and security, education and training, international cooperation

1. Introduction

The International Network for Nuclear Security Training and Support Centres (NSSC Network) was established by the International Atomic Energy Agency in 2012. The Network aims to facilitate cooperation and provide a platform for the NSSCs and states interested in developing one to identify best practices and share information. The Republic of Korea's International Nuclear Nonproliferation and Security Academy (INSA), inaugurated in 2014, joined the NSSC Network's activities even before its inauguration. As more than a decade has passed since INSA participated in the NSSC Network, this paper aims to study the significance of INSA's participation in the NSSC Network.

2. Operation of the NSSC Network

Its Terms of Reference (TOR) was adopted in 2015 to define the Network's mission, objectives, structure, and function. [1]

2.1 Vision, Mission, and Objectives

The NSSC's vision is "sustainable nuclear security worldwide," and its mission is "to contribute to global efforts to enhance and sustain nuclear security through an effective and collaborative network of nuclear security training and support centres." The objectives are to "encourage cooperation and support joint activities among NSSCs," "identify and document best practices for NSSCs," and "strengthen information sharing among NSSCs."

2.2 Membership

As of August 2024, the NSSC Network is comprised of 83 institutions and ten observers, 71 members in total. Any IAEA Member State can join the Network Membership by sending formal correspondence to the IAEA Secretariat through the state's official channels. Observers are the organizations that do not represent a member state, such as regional and international

organizations like the European Commission and United Nations Office for Disarmament Affairs or think tanks like the Center for Strategic and International Studies.

2.3 Network Bureau

The Network Bureau is comprised of the Network Chair, Vice Chair, and Chair and Vice Chair of each Working Group. The Bureau functions as the leadership organization; it holds the Leadership Meeting to coordinate the operation of the Network and Working Groups.

2.4 Working Groups

The Network's three Working Groups are responsible for different areas of work. Each Working Group is led by a Chair and Vice Chair. Every representative of the Network's Members is expected to participate in one of the Working Group's activities, but members can flexibly change to participate in another Working Group.

Table I: NSSC Network Working Groups' Roles and Activities

Group	WG A	WG B	WG C
Role	Encourage cooperation and support joint activities among NSSCs	Identify and document best practices	Strengthen information sharing among NSSCs and help raise awareness of Network Member training courses and other activities
Activities	- Build and develop cooperation among NSSCs, including through regional and subregional networks - Facilitate the optimization of efforts and sharing of resources among NSSCs - Organize joint activities in human resource development, technical support, and scientific support - Facilitate technical and scientific exchanges among NSSCs, including sharing of materials and experience - Support NSSCs in taking a systematic approach to programme development based on a structured assessment of national nuclear security regime needs	- Characteristics basic to or common among most NSSCS - The process states have used to determine the need for and feasibility of establishing a national NSSC - Establishment and operation of various institutional models of NSSCs, taking into account LAEA and other relevant guidance - Effective coordination among NSSC stakeholders - Taking a systematic approach to programme development based on a structured assessment of national nuclear security regime needs - Implementing programmes in human resource development.	- Maintaining and enhancing a database of all NSSC Network Members, to include search functions, key statistics, and a map of NSSCs by operational status, capabilities, and technical specialization - Facilitating the sharing, promotion, collation and dissemination of information related to nuclear security training and other activities carried out by NSSC Network - Members through a NSSC Network events calendar - Monitoring use of and improvements needed for the NSSC User Group - Carrying out regular analysis of data contained in the NSSC

- Coordinate with other relevant international networks and initiatives	technical support across all nuclear security areas and themes - Continuous improvement, quality management, and sustainable operational practices for NSSCs - Self assessment and evaluation of NSSC programmes and services.	Network events calendar and database and sharing a summary of this analysis at the Annual Meeting and Leadership Meeting - Coordinating development of each edition of the NSSC Network Newsletter and other outreach materials, working in close cooperation with the IAEA Secretariat
---	---	--

3. INSA's Participation in the NSSC Network

As one of the first members of the NSSC Network, INSA has been actively participating in its activities.

3.1 Annual Meeting and Working Group

The NSSC Network holds Annual Meeting and Working Group Meeting. Except for 2020, when the meetings were postponed due to the COVID-19 Pandemic, the 2022 Annual Meeting in Vienna, and the 2023 Annual Meeting in Pattaya, INSA attended most of the NSSC Meetings since INSA's preestablishment stage. INSA has been participating in the Working Group A since 2013 and served as Vice Chair in 2013 and as Chair in 2014 and 2015.

Table II: Attendance of INSA to the NSSC Network Annual and Working Group Meetings

Year, Place	Meeting	Representative
2012, Vienna	Working Group Meeting	Choe, Kwan-Kyoo
2013, Vienna	Annual Meeting	Choe, Kwan-Kyoo
2014, Vienna	Annual Meeting	Kim, Hyun Cheol
2014, Vienna	Working Group Meeting	Choe, Kwan-Kyoo
2015, Vienna	Annual Meeting	Choe, Kwan-Kyoo
2016, Islamabad	Annual Meeting	Kim, Jong Sook
2016, Vienna	Working Group Meeting	Kim, Jong Sook
2017, Vienna	Annual Meeting	Kim, Hyun Cheol
2018, Mito	Annual Meeting	Kim, Hyun Cheol
2019, Beijing	Annual Meeting	Han, Jae-Jun
2021, Virtual	Annual Meeting	Shin, Dong Hoon
2024, Vienna	Annual Meeting	Han, Jae-Jun

3.2 Asia Regional Network

The NSSC Network encourages to organize regional networks. The Asia Regional Network (ARN) is the first regional Network of the NSSC Network. It was established in 2013, and the Republic of Korea's INSA, Japan's Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN), China's State Nuclear Security Technology Center (SNSTC) and China Customs Radiation Detection Training Centre (RDTC) are the members. The members have been holding the ARN meeting together with the IAEA Secretariat. From 2013 to 2017, the meeting was held in conjunction with the NSSC Network Annual Meetings, and since 2017, the members of the ARN have taken turns to host the meeting.

Table III: History of ARN Meetings

Year, Place	Host
2013~2017, Vienna	IAEA
2017, Beijing	SNSTC
2018, Daejeon	INSA
2019, Tokai	ISCN
2020, Virtual	ISCN
2021, Virtual	INSA
2023, Beijing	SNSTC
2024, Daejeon/Seoul	INSA

INSA hosted the most recent ARN Meeting, the IAEA Technical Meeting, along with the INSA's 10-Year Anniversary Conference. The ARN members and the IAEA Secretariat visited INSA for two days of meetings and facility tours and held a round table at the conference held in Seoul to discuss cooperation for regional capacity building.

3.3 Junior Professional Programme

At the NSSC Network Annual Meeting 2024, the NSSC Network Junior Professional Programme (JPP) was launched. The programme aims to inspire Junior Professionals (JP) to develop their career in nuclear capacity building through participating in the NSSC Network, as well as establishing a network among them. A researcher from INSA was selected along with 17 other Junior Professionals. The JPs are divided into three Working Groups, as the NSSC Network does, to design a project to be executed for the next two years and presented at the end of their term in 2026.

4. Conclusion

INSA participated in the NSSC Network Annual Meeting in person after five years and presented its decade-long experience establishing the institution and planning, designing, and operating various education and training courses. The interest that NSSC Network members showed in INSA's activities proved that INSA has the capability to inspire other Centres of Excellence with similar visions and missions. Hence, in terms of securing the Republic of Korea's position as the global pivotal state, this paper recommends that INSA take leading roles within the NSSC Network Bureau, participate in decision-making and document revising processes of the Network, dedicate resources to compiling INSA's achievements into informative documents and securing and training young human resources to represent at the next cycle of the JPP.

REFERENCES

- [1] IAEA, Terms of Reference International Network for Nuclear Security Training and Support Centres (NSSC Network), 2018
- [2] KINAC, Report for the IAEA NSSC Network Annual Meeting, 2024