

How can COEs contribute to the international efforts?

Yosuke Naoi



*Deputy Director, Integrated Support Center for
Nuclear Nonproliferation and Nuclear Security*

Japan Atomic Energy Agency



Panel Discussion 1
**The International Forum on Peaceful Use of Nuclear
Energy, Nuclear Non-Proliferation and Security**
29 November 2016

Overview of

□ NSSC and its Network

NSSC : Nuclear Security Training Support Center

□ INSEN

INSEN: International Nuclear Security Education Network

□ ISCN, one of COE for nuclear nonproliferation and Nuclear Security

COE : Center of Excellence

NSSC Concept

The Concept emerged in the IAEA Nuclear Security Plan 2010-2013

Primary objectives of the Centers:

- ❑ Developing human resources through the implementation of a tailored training program
- ❑ Developing a network of experts
- ❑ Provide technical support for lifecycle equipment management and scientific support for the prevention and detection of and the response to nuclear security events

NSSC Network

- ❑ Established in 2012
- ❑ Currently: 56 NSSC member states, 66 institutions as of October 2016
- ❑ Three Working Groups
 - ✓ WG-A: Coordination & Collaboration
 - ✓ WG-B: Best Practices
 - ✓ WG-C: Promotion of Nuclear Security Training

NSSC Achievements

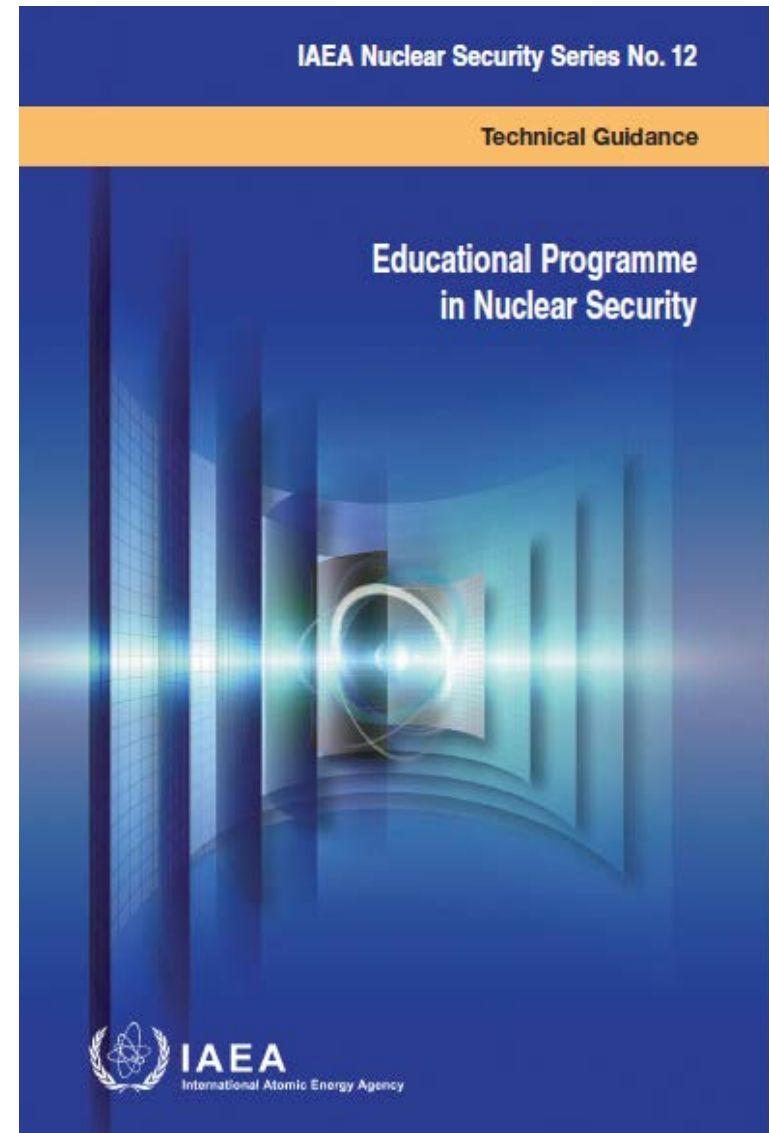
- ❑ Establishment of NSSC or COE ~30 centers
- ❑ Raising awareness of the NSSC concept
- ❑ Development of case studies for sharing good practice
- ❑ Technical exchange visit
- ❑ Increasing interaction with INSEN
- ❑ Improving information exchange and coordination at the regional level (establishment of Asia Regional Network among Japan, ROK and China)
- ❑ Annual meeting at Pakistan 2016 with technical visit to Pakistan's COE and training facility

INSEN

- ❑ A partnership between the IAEA and universities, research institutions and other stakeholders to enhance global nuclear security by developing, sharing and promoting excellence in nuclear security education
- ❑ Established in 2010
- ❑ 151 institutions from 54 member states as of October 2016
 - ✓ WG1: Develop education materials
 - ✓ WG2: Promote faculty development and cooperation among members
 - ✓ Promote nuclear security education

IAEA Educational Programme in Nuclear Security

- IAEA Nuclear Security Series No. 12
- “Educational Programme in Nuclear Security”
published in April 2010
 - ✓ Master of Science Programme
 - ✓ Certificate Programme



INSEN Objectives

- ❑ Develop textbooks, computer based teaching tools
- ❑ Faculty assignment and development
- ❑ Joint research and development
- ❑ Student exchange programs
- ❑ Exchange of information
- ❑ QMS for consistency with IAEA documents
- ❑ Performance of surveys on the effectiveness of nuclear security education and faculty

INSEN Achievements

- ❑ Development of education materials based on NSS 12 (three modules to be released soon)
- ❑ Handbook published by King's College London
- ❑ Development of various professional development course(PDC) for faculty members and offering the PDCs worldwide
- ❑ Master programme (MP)
 - ✓ The first European MP in nuclear security (2013-2014)
 - ✓ The international MP at University of National and World Economy-Bulgaria (2016)
- ❑ Support for the IAEA international school on NS (two weeks course at Trieste, Jakarta 2014, Cairo 2016)

Future Collaboration between NSSC Network and INSEN

Specific collaboration topics through
ad hoc group

1. Human resource development
2. Professional development course
(PDC)
3. Nuclear security culture
4. Coordinated research project

Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN)



- Established in December 2010, under the Japan Atomic Energy Agency (JAEA)
- ISCN is the regional Center of Excellence (CoE) for human capacity building in the field of nuclear non-proliferation and nuclear security

Main Activities

- ① **Human capacity building support**
- ② Technology development on nuclear nonproliferation and nuclear security
- ③ Policy research on nuclear nonproliferation
- ④ Contribution to CTBT global verification regime
- ⑤ Support for nuclear material transport and management of research materials
- ⑥ Public relations

Establishment of ISCN

Japan's National Statement at 2010 Nuclear Security Summit

Establishment of an integrated support center for nuclear nonproliferation and nuclear security in JAEA to contribute to strengthening nuclear security in Asia and other regions and development of technology related to measurement and detection of nuclear material and nuclear forensics based on international cooperation



Establishment of ISCN in JAEA: December 27, 2010

Conduct of the first nuclear security training course: October 2011

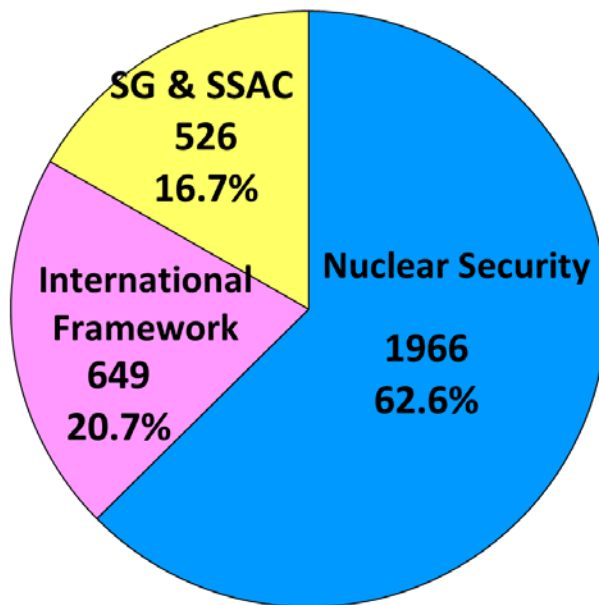
A tangible asset of the Nuclear Security Summit process

Distribution of Course Participants

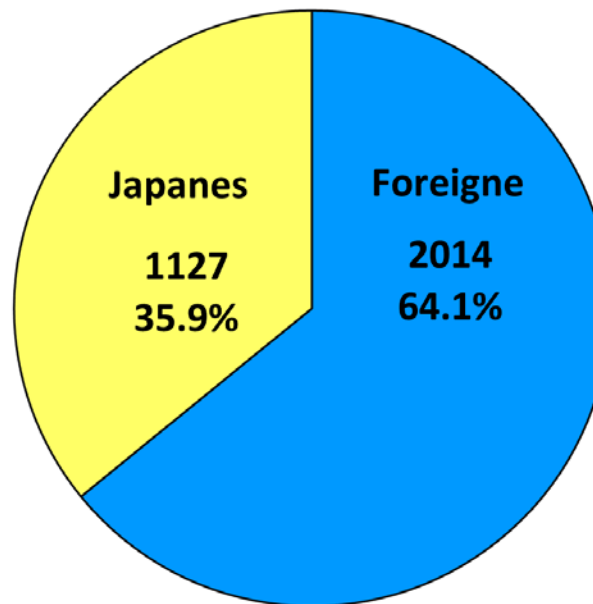
Activity Results of 2011- Oct 2016

Total 3,141 participants in 114 courses
(74 countries, 3 international organizations)

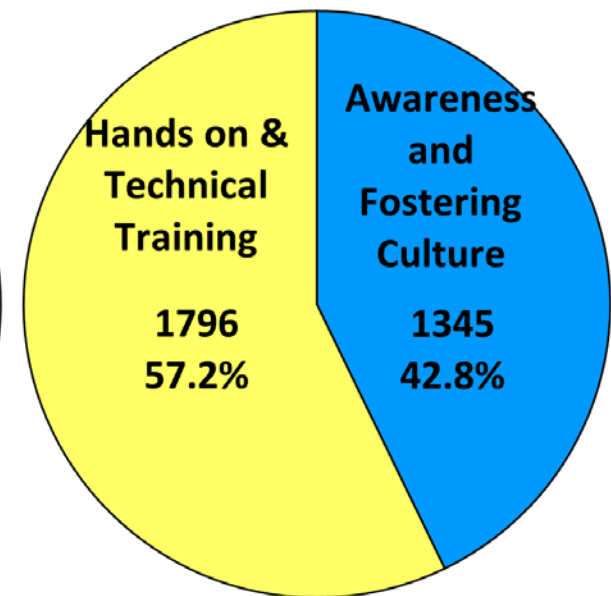
Course Topic



Nationality



Course Style



Achievements of COE (ISCN)

- ❑ ISCN assists IAEA for providing nuclear security training to the Member States.
- ❑ Accumulating expertise attracts regional and domestic experts to ISCN.
- ❑ ISCN training works as a platform for good practice sharing.
- ❑ ISCN plays a key role in promoting nuclear security culture in Japan.
- ❑ ISCN contributes to enhance and strengthen nuclear security domestically and regionally.

Challenge : to maintain the momentum



How can COEs contribute to the international efforts?

- ❑ To further raise awareness and enhance nuclear security culture
- ❑ To facilitate networking among stakeholders
- ❑ To strengthen international and regional collaboration
- ❑ To ensure the competence of personnel in the field of nuclear security

Thank you for your attention

