

International Conference on Physical
Protection of Nuclear Material and
Nuclear Facilities
13-17 November, 2017
Vienna

Japan's Commitment to the Universalization of CPPNM and Its Amendment

Nobumasa Akiyama
Permanent Mission of Japan

Points

- ▶ **Japan's experiences in joining the amendment**
 - ▶ Harmonization of domestic regulatory and legal systems with international legal and non-legally binding instruments
 - ▶ Awareness of all stakeholders regarding new threats=nuclear security culture

- ▶ **Japan's contribution to the universalization of the CPPNM and its Amendment**
 - ▶ Providing capacity building opportunities to regional partners
 - ▶ Strengthening the network among Centers of Excellence

Japan's experiences in joining the amendment

Three levels of the implementation of the Nuclear Security Regime

International instruments and frameworks

- Conventions (CPPNM and its Amendment, International Convention for the Suppression of Acts of Nuclear Terrorism, etc)
- Various multilateral initiatives (Global Initiative for Countering Nuclear Terrorism, Nuclear Security Summit, Proliferation Security Initiative, etc)
- IAEA Nuclear Security Series Documents (including INFCIRC/225/Rev.5), Codes of Conduct

National laws and administrative orders

- Meeting the requirements of international instruments and compliance

Implementation (operation and application)

- Capacity of both regulators and the regulated in implementation/enforcement
- Importance of commitments by all stakeholders including industry

Major factors to shape Japan's approach to strengthening nuclear security

Fulfillment of international commitments

Harmonization of national laws and administrative orders with international instruments (A/CPPNM, INFCIRC/225/Rev.5)

Commitments at G7 and NSS

Lessons from Fukushima

Increased awareness of attractiveness of nuclear facilities as targets for terrorists and criminals

Safety-security interface

Similar consequence caused by terrorist attacks

New threat perceptions

Insider Threat

Terrorist activities

Cyber and other emerging technology

Measures for strengthening nuclear security

- Revise of national laws to harmonize with A/CPPNM
- Introduction of strengthened PP measures based on INFCIRC/225/Rev.5

Harmoni-
zation of
legal
frameworks

Responses
to new
threats

- Introduction of trustworthiness program
- Establishment of cyber security unit in Nuclear Regulatory Authority

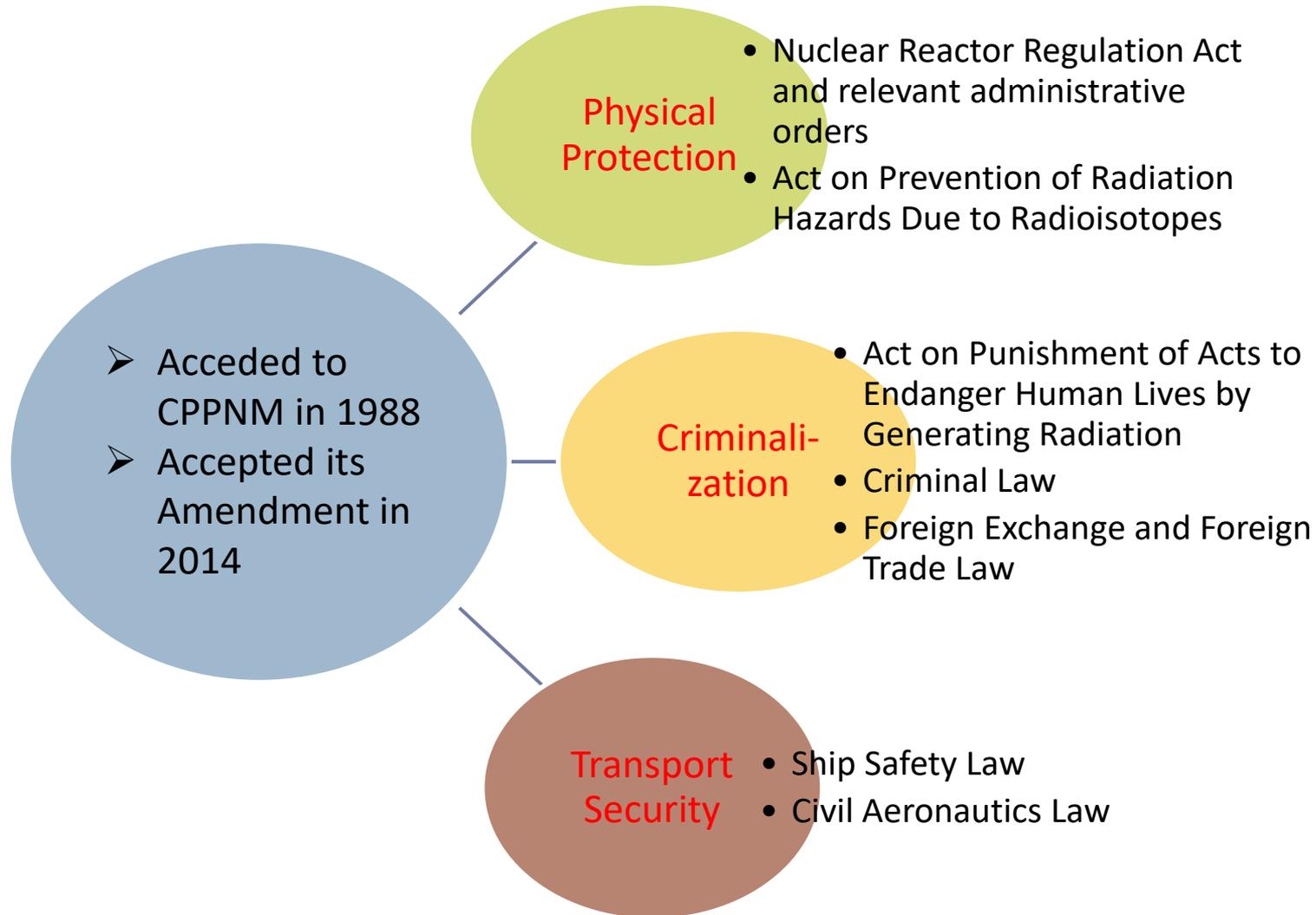
Risk
mitigation

- Hosted IPPAS mission in 2015, and plan to host the follow-up mission in 2018

Continuous
improvement
(Hosting peer
review
missions)

- Removal of HEU and Pu fuels from FCA of JAEA
- Conversion of HEU fuel of Kyoto University's Critical Assembly to LEU

National legal framework for the implementation of CPPNM and its Amendment



Harmonization of national law with the Amendment

Amendment to CPPNM

Art. 7.1(d) an act which constitutes the carrying, sending, or moving of nuclear material into or out of a State without lawful authority

Art. 7.1(e) an act directed against a nuclear facility, or an act interfering with the operation of a nuclear facility, which is likely to cause, death or serious injury to any person or substantial damage to property or to the environment by exposure to radiation or release of radioactive substances,

Codifies 12 Fundamental Principles

Revise of Act on Punishment of Acts to Endanger Human Lives by Generating Radiation

Punishes act or attempt to export/import specified nuclear fuel material without lawful authority

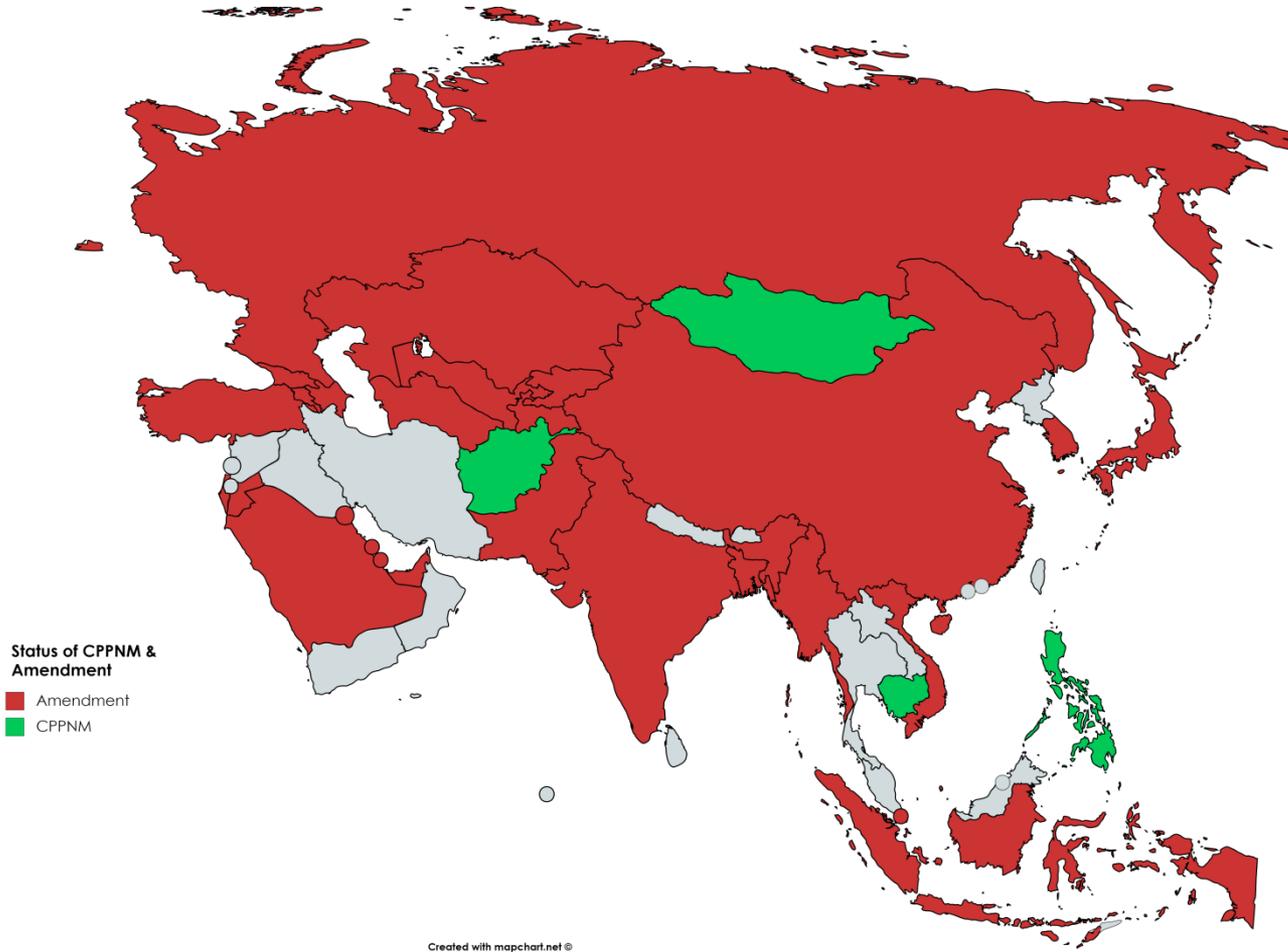
Punishes theft or robbery of specified nuclear material, or act or against a nuclear facility to cause damage to persons, to property or to the environment, or threat of such acts

Importance of nuclear security culture

- ▶ As a lesson from Fukushima, effort to foster nuclear security culture has become a requirement for operators.
 - ▶ Organizational policy for nuclear security culture
 - ▶ Awareness and education, and training of the staff
 - ▶ Information sharing
- ▶ The regulator (NRA) supports such efforts.
 - ▶ Visual aid for nuclear security culture (2014): Enable operators to use the tool for educating personnel
 - ▶ Introductory <http://youtu.be/sgh2kLC0E1k>
 - ▶ For staff members http://youtu.be/w3vSsdnK_VI
 - ▶ For managers <http://youtu.be/mgVlqWBfG9Q>
 - ▶ Developed “Code of Conduct on Nuclear Security Culture” for NRA personnel (2015)
 - ▶ Awareness of threats
 - ▶ Initiatives by senior management
 - ▶ Education and self improvement, etc.
 - ▶ NRA commissioners hold dialogues with top management of operators

Japan's Contribution to the Universalization of the CPPNM/A

Status of CPPNM and Its Amendment in Asia

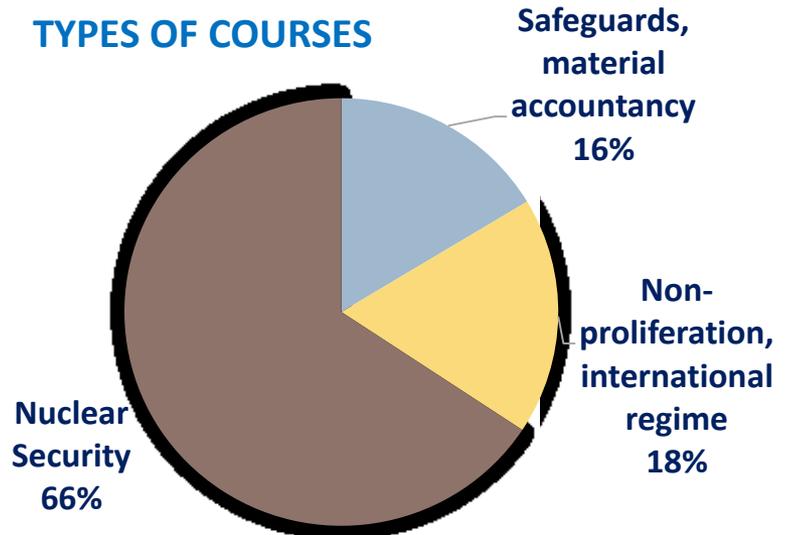


- Some major countries in the region have not joined the CPPNM and its Amendment.
- Needs for more outreach for awareness and support for acquisition of technical expertise

Continued efforts to provide capacity building opportunities

- ▶ Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN) of Japan Atomic Energy Agency serves as a Center of Excellence.
 - ▶ Has provided 135 training courses, and
 - ▶ Has hosted more than 3,600 Japanese and international participants. (63% are international.)

Types of Course	# of programs	# of attendees
Safeguards, material accountancy	27	592
Non-proliferation, international regime	14	649
Nuclear Security	94	2377
Total		3618



Networking and cooperation among COEs

- ▶ **Strengthening cooperation among regional COEs**
 - ▶ Deepening trilateral cooperation among Japan(ISCN), China(SNSTC) and South Korea(INSA)
 - ▶ ISCN will host annual meeting of NSSC in 2018.
- ▶ **Cooperation with IAEA**
 - ▶ Hosting several IAEA training courses at ISCN annually to enhance nuclear security capacity of Asian countries
 - ▶ Dispatching ISCN instructors to IAEA training courses
- ▶ **Supporting regional partners**
 - ▶ Organizing joint seminars or workshops with Bangladesh, Kazakhstan, Mongolia, Malaysia, Vietnam, Jordan, Turkey, Saudi Arabia and other countries
 - ▶ Organized regional seminars with ASEAN ACE

Cooperation with IAEA

- ▶ Planning to Finance IAEA's capacity building programs in Asia through Nuclear Security Fund
- ▶ Cooperation with IAEA in nuclear security at Tokyo 2020 Olympic and Paralympic Games
 - ▶ Nuclear security at major public events has become a more important agenda, and requires international and regional approach to counter nuclear terrorism.

Conclusion

- ▶ **Harmonization** of national laws with international instruments requires extensive national efforts
- ▶ **Importance of Nuclear Security Culture** for engaging stakeholders including regulators and industry
- ▶ Some important states in Asia have not accepted the CPPNM Amendment.
- ▶ **Raising awareness** on threats, usefulness of **international frameworks**, and **capacity building** for the implementation of international commitments are effective approaches to the universalization.
- ▶ **Learning lessons** from experiences (including those by others) and **sharing good practice** are useful ways of raising awareness and recognizing and taking necessary measures to strengthen nuclear security.



Thank you very much.

