Challenges for the Future of Nuclear Non-Proliferation and Nuclear Security

Masato Hori

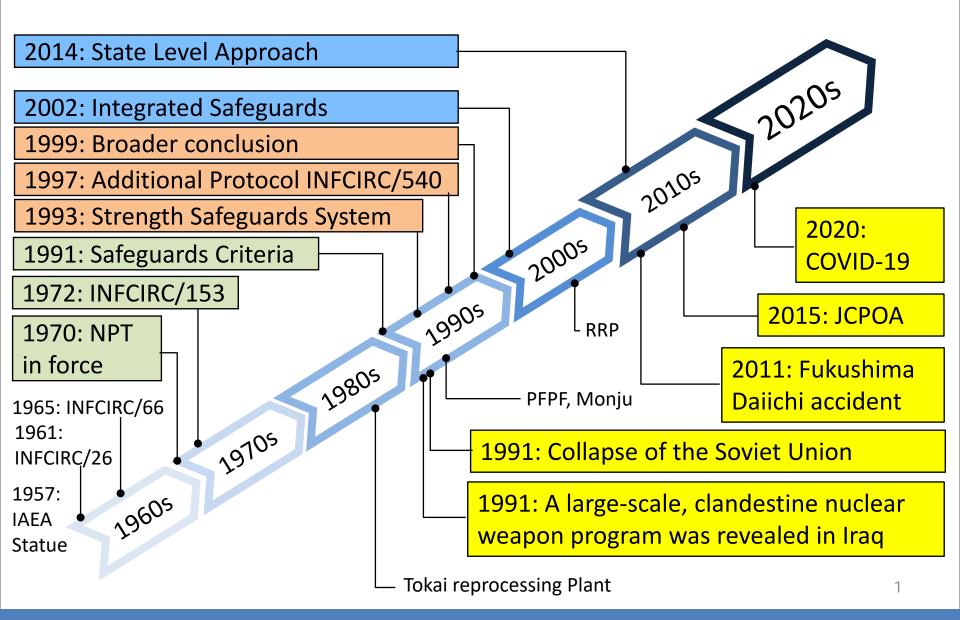
Integrated Support Center for Nuclear

Japan Atomic Energy Agency



International Forum on Peaceful Use of Nuclear Energy, Nuclear Nonproliferation and Nuclear Security December 9, 2020 Tokyo Japan, Online

Historical Developments on Nuclear Safeguards



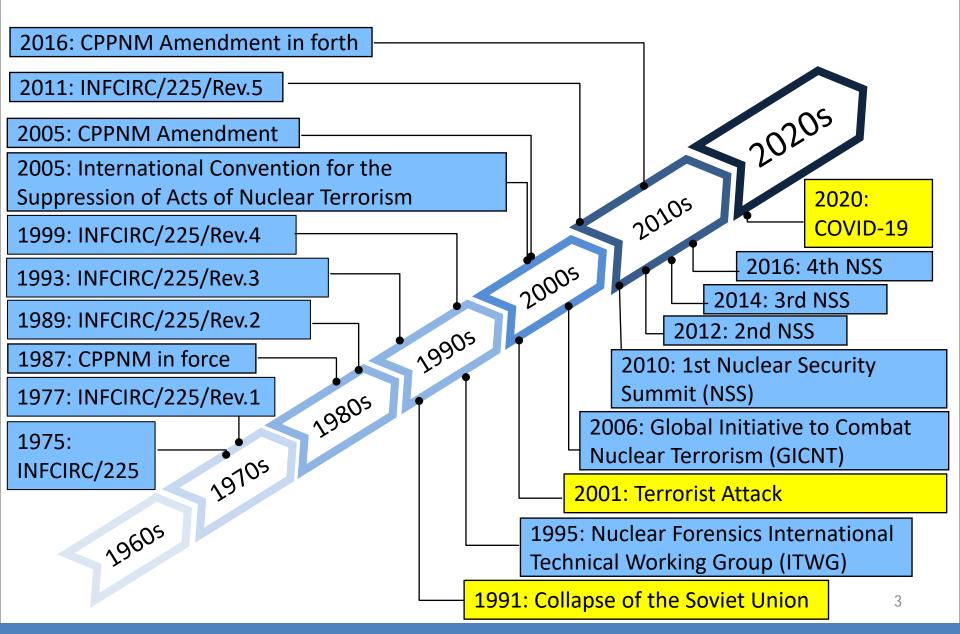
Research and Development Plan of Department of Safeguards, IAEA

Top priority R&D needs

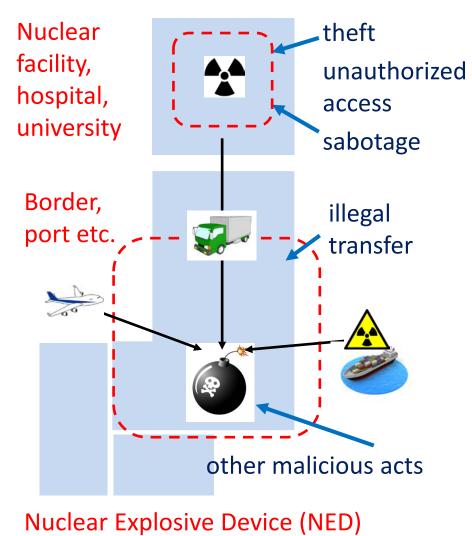
- Strengthen information collection and analysis
- Strengthen instrumentation capabilities for verification
- Enhance sensitivity, reliability and timeliness in sample analysis
- Manage safeguards technology assets strategically
- Reform human resource management
- Ensure information security
- Maintain readiness for other verification tasks
- Prepare for new types of facilities and decommissioning

"Research and Development Plan - Enhancing Capabilities for Nuclear Verification", STR-385, January 2018 IAEA

Historical Developments on Nuclear Security



Nuclear Security Challenges



Radiological Dispersion Device (RDD)

- Protecting against the full range of threats
- Insider threat
- Cyber security
- Transportation security
- Detection of illegal transfer
- Nuclear forensic
- Nuclear security for major public events
- COVID-19

Historical Developments on Strengthening Nuclear Nonproliferation

