



Nuclear and Radiation Regulatory Updates since the last Conference



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Background

- This is the 5th conference on Effective Nuclear Regulatory Systems, following
 - Moscow (2006)
 - Cape Town (2009)
 - Ottawa (2013)
 - Vienna (2016)
- The conferences
 - To review: regulatory activities in the past
 - To renew: continuous improvement
- Key elements for regulatory effectiveness
 - Independence, staffing and resources, management system, technical support, leadership, safety culture, international cooperation, etc.

2016 Vienna Conference (1)

- Marking 5th anniversary of the Fukushima accident, conference observations:
 - Still confident in nuclear
 - Multiple actions taken
 - The IAEA Safety Requirements strengthened
 - Regulatory bodies shall play a further vital role
- Fruitful discussions
 - five topical sessions
 - one keynote panel
 - one special panel

2016 Vienna Conference (2)

- Proposing issues for considerations at 3 levels:
 - International cooperation (IAEA): 5 Issues
 - Governments: 7 Issues
 - Regulatory bodies: 8 Issues
- Developing actions in response and reporting progress
- A step forward to build a follow-up mechanism

Issues for International Cooperation (1)

1. Improve the interface between nuclear safety and nuclear security.

- The Regulatory Infrastructure Development Project (RIDP) developed in 2019
- Technical Meeting on the Safety and Security Interface — Approaches and National Experiences held in 2018
- Joint publication on safety– security interfaces by the Advisory Group on Nuclear Security (AdSec) and the International Nuclear Safety Group (INSAG)
- 7 nuclear safety standards and security guidance reviewed by the Interface Group

Issues for International Cooperation (2)

2. Encourage MS that are not Contracting Parties to CNS or Joint Convention to join those instruments; encourage MS that have joined but not yet ratified to do so; and encourage those MS that are Contracting Parties to fully comply with their obligations.

- Compared to that in 2016, CPs to the CNS increased by 9 to a total of 88
- CPs to the Joint Convention increased by 10 to a total of 82
- Several CNS educational and promotional workshops organized
- Measures encouraged to increase participation in the Joint Convention since the 2018 Review Meeting

Issues for International Cooperation (3)

3. Since all IAEA Member States use radiation sources, organizing a conference devoted to their regulation would be beneficial.

- Increasing significance given to effective regulation of radiation sources by member states
- New title “Effective Nuclear and Radiation Regulatory Systems”

Issues for International Cooperation (4)

4. Explore the feasibility of developing a legally binding instrument covering radioactive sources

- A legally binding instrument for effective regulation of radioactive sources helpful
- Member states exploring on basis of the Code of Conduct on the Safety and Security of Radioactive Sources

Issues for International Cooperation (5)

5. Consider strengthening peer reviews such that they challenge the host more and focus on weak points, implementation of recommendations and follow-up.

- Peer Review and Advisory Services Committee (PRASC) created
- Critical elements with significant impact on effective implementation highlighted
- 37 IRRS missions carried out since 2016

Issues for consideration by Governments and Regulatory Bodies

Issues for consideration by Governments

- Separate the regulatory body from agencies which promote nuclear (Independence)
- Provide the regulatory body with adequate authority, resources and staff
- Develop national policy for disposition of high-level radioactive waste
- Give equivalent consideration and priority to nuclear safety as nuclear security
- Continue engagement with international legal instruments
- Strengthen the control of safety and security of radioactive sources
- Strengthen cross-border harmonization for protective actions to protect the public after nuclear or radiological events

Issues for Consideration by Regulatory Bodies

- Harmonize national requirements with IAEA Safety Standards
- Host peer review missions, respond to recommendations, hold follow-up missions; encourage operating organizations to also host peer reviews
- Encourage research into ageing mechanisms and share results with the international community
- Promote, assess and improve safety culture within operators and regulators
- Learn from operating experience, so as to anticipate and avoid future accidents
- Build further capacity and improve knowledge management
- Improve transparency and communication with the public and other stakeholders to build the trust
- Encourage regulatory bodies to interact among themselves

Actions by Governments and Regulatory Bodies

- Member states' actions and progress:
 - Regulatory bodies' independence, authority and resources strengthened
 - Transparency and communication with the public enhanced
 - Progress is made in some MS on national policy on high level radioactive waste management or disposal
 - Interaction of regulatory bodies improved
 - Cross-border harmonization of actions strengthened with 40 exercises organized
 - Safety reports published and researches carried out on ageing management
- All participants are encouraged to talk more about the actions and progress made by their own governments or regulatory bodies

Actions by China

- Up to date, 47 operating NPP units, 13 constructing NPP units
- Advocating building a fair, collaborative and mutually beneficial international nuclear safety system, and following a rational, coordinated and balanced nuclear safety strategy
- Issued and implemented the Nuclear Safety Law
- Implemented of the 13th Five-year Plan for Nuclear Safety and Radioactive Pollution Prevention and Control
- Developed Integrated Management System for NNSA
- Added two separate divisions on experience feedback and nuclear safety coordination
- Completed radioactive sources management database and radiation monitoring network
- Released the first White Paper on Nuclear Safety in China

Expectations

- The past three years witness an increasingly improving record of global nuclear safety
 - More actively complying with nuclear safety conventions
 - More valuable summary and more effective actions to strengthen safety from Fukushima accident lessons learnt
 - More extensive multi-lateral, bilateral and regional cooperation
 - More in-depth peer reviews
- Report more on issues proposed at last Conference, actions and progress
- Further consider a follow-up mechanism
- Work together to enhance cooperation

Thank you!