

Nuclear Energy Agency Activities

John Nakoski

Nuclear Safety Analyst

OECD Nuclear Energy Agency

17 – 18 November 2011

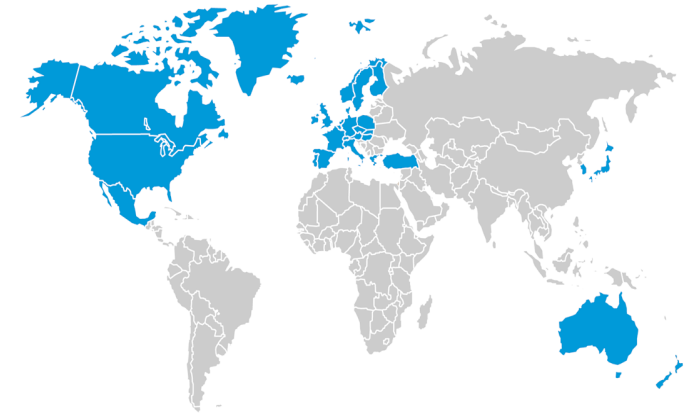
Overview of the Presentation

- **OECD Nuclear Energy Agency (NEA)**
- **Nuclear Safety after the accident at Fukushima Dai-ichi**
 - NEA Forum on Fukushima Dai-ichi
 - Fukushima Senior Task Group
 - NEA Technical Exchange Activities
 - Public Website:
<http://www.oecd-nea.org/nsd/fukushima/>

OECD/NEA Membership

(30 NEA Member Countries)

- Australia
- Austria
- Belgium
- Canada
- Chile
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Iceland
- Ireland
- Israel
- Italy
- Japan
- Korea
- Luxembourg
- Mexico
- Netherlands
- New Zealand
- Norway
- Poland
- Portugal
- Slovak Republic
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- United Kingdom
- United States

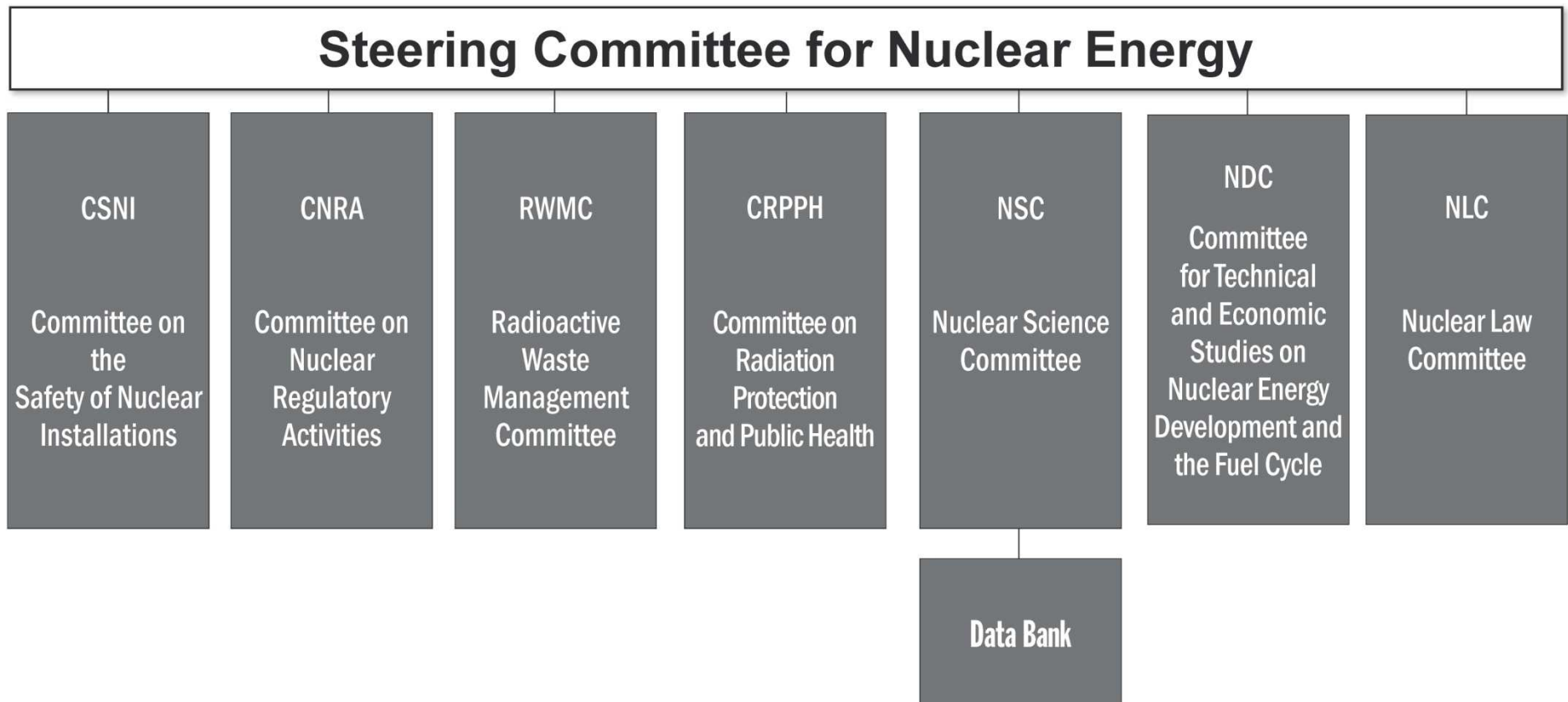


Not member of NEA

The NEA Mission

- ◆ To assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes.
- ◆ To provide authoritative assessments and to forge common understandings on key issues, as input to government decisions on nuclear energy policy, and to broader OECD policy analyses in areas such as energy and sustainable development.

NEA Committees



NEA Forum on Fukushima Dai-ichi

- 7 June Ministerial Seminar on Nuclear Safety
- 8 June Regulatory Forum (200 participants)
 - Opening
 - Session on Insights: What are we learning?
 - Session on Approaches: What are we doing?
 - Closing: Moving Forward and International Cooperation
- Top regulators from NEA and associated countries, with selected industry participation
- Presented as feedback at the opening of the IAEA Ministerial meeting in June 2011

NEA Forum on Fukushima Dai-ichi

- The NEA Forum is an important piece of the international effort to ***learn from***, to ***share*** and to ***implement the lessons learned*** as a result of the Fukushima Dai-ichi accident

- **Key Concluding Messages**
 - In terms of collective learning
 - In terms of sharing of insights and approaches
 - In terms of the implementation of lessons learned

NEA Forum on Fukushima Dai-ichi

- **Collective Learning**
 - Indepth Analyses of Plant Safety
 - Continuing to Improve Existing and New Reactor Safety
 - Continuing to Learn from the Accident
 - Sharing Experiences and Practices
 - Transparency of Communication
 - Focus on Safety Culture

NEA Forum on Fukushima Dai-ichi

- **Sharing Insights and Approaches**

- Priorities

- Understanding extreme external hazards
- Safety system response to severe accidents
- Emergency response and management
- Crisis communication (INES Scale)
- Site recovery

- Safety Assessments for continuous improvement in nuclear safety

- Working Together for Continued Safe Operation

NEA Forum on Fukushima Dai-ichi

- **Implementation of lessons learned**
 - Harmonize national approaches
 - Periodic meetings of Regulators
 - National and regional input to programme of work within international organisations
 - Early response for accident management
 - Coordination and Consistency of international efforts
 - Nuclear operators have the prime responsibility
 - Nuclear safety is a main international priority

CNRA – Fukushima Senior Task Group

Coordinate NEA Member Activities

- Exchange of information on national activities
- Assess the generic implications of the accident
- Identify areas for in-depth evaluation within the mandate of the NEA
- Identify near-term versus long-term activities

CNRA – Fukushima Senior Task Group

Recommendations to CNRA:

- Exchange of national review results and insights
- Re-assess approaches to identify Design Basis and Beyond Design Basis events
- Thoroughly review accident management strategies including decision-making
- Enhance crisis communication (national & international)
- Assess and improve off-site emergency preparedness
- Gain a thorough understanding of the accident progression
- Assess the implications on regulatory programmes
- Look at the implications for existing and new NPPs

NEA Technical Exchange Activities

NEA Coordinating activities that include:

- Technical Exchange on National Assessments
 - Technical Experts' meeting
- Technical Exchange on decontamination and cleanup of the Environment
 - International Symposium on Decontamination
- Technical Exchange on Regulatory Infrastructure

Technical Exchange on National Assessments

- ❖ All Countries with Operating Nuclear Power Plants are conducting national assessments or stress tests
 - Initial safety assessment completed
 - Safety was assured or operations suspended
 - Enhancements made for safety improvements
 - More thorough evaluations being conducted
 - Licensees conducting detailed safety evaluations
 - Regulators reviewing licensees' evaluations

Technical Exchange on National Assessments

- ❖ Similar Criteria used for assessing safety
 - ❑ Extreme external conditions individually or combined
 - ❑ Long term loss of electrical power
 - ❑ Long term loss of the ultimate heat sink
 - ❑ Consequential loss of defence-in-depth barriers
 - ❑ Identify weak points in plant response and preventive measures
 - ❑ Assess adequacy of accident management measures
 - ❑ Identify enhancements - technical and organisational

Technical Exchange on National Assessments

- ❖ Issues identified during evaluations
 - ❑ To be developed at the technical experts' meeting
 - ❑

- ❖ Implementation challenges for Regulators
 - ❑ To be developed at the technical experts' meeting
 - ❑

- ❖ Commendable Practices being implemented
 - ❑ To be developed at the technical experts' meeting
 - ❑

The OECD Nuclear Energy Agency
<http://www.oecd-nea.org/>

Thank you for your attention

