

Nuclear Safety: First priority for OECD/NEA

Luis E. Echávarri
Director-General

Nuclear Safety in Europe: First Regulatory Conference
Brussels, Belgium
28 June 2011

Overview of Presentation

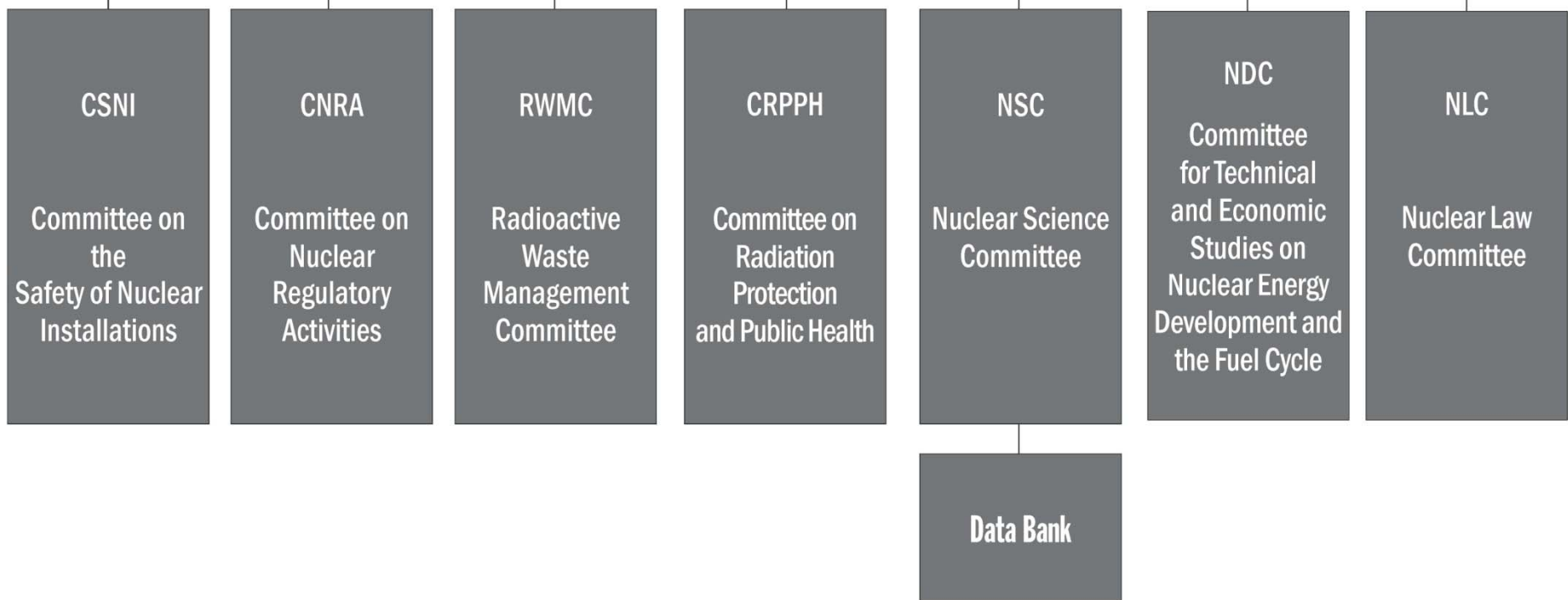
- NEA Framework
- Nuclear Safety and Regulation
- MDEP
- Fukushima Follow-up Activities
- Conclusions

NEA Strengths

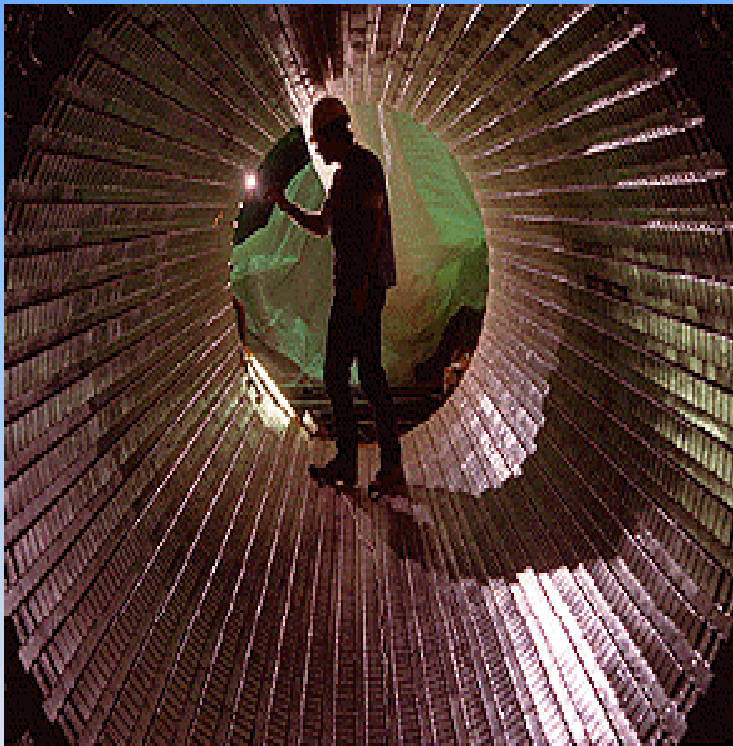
- ◆ Small size and budget
(80 staff members; budget of 14 million euros, + voluntary contributions and projects)
- ◆ Large representation (85% of the world's nuclear power capacity)
- ◆ Non-political forum; climate of mutual trust
- ◆ Tries to pool world's best nuclear expertise among developed countries
- ◆ Narrow focus: in-depth scientific, technical, legal work
- ◆ Interaction among Europe, North America and Asia

NEA Committees

Steering Committee for Nuclear Energy

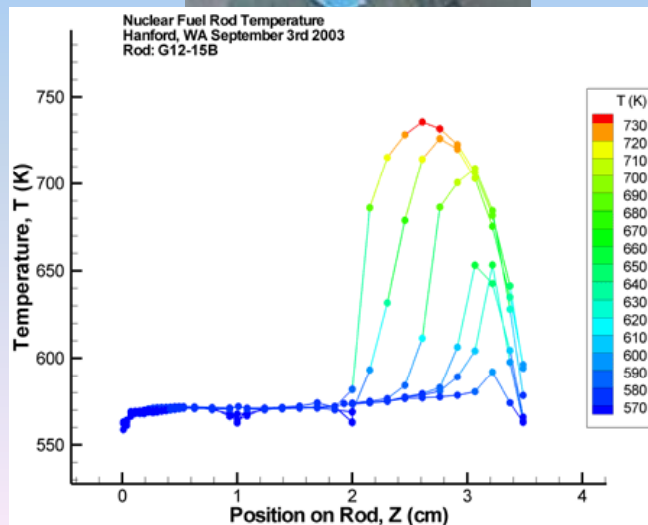


Committee on Nuclear Regulatory Activities



- ✓ Inspection practices
- ✓ Operating Experience Feedback
- ✓ Incident Reporting System (IRS)
- ✓ Public communication of nuclear regulatory organisations.
- ✓ Regulation of new reactors
- ✓ Senior Task Group on Fukushima follow-up activities

Committee on the Safety of Nuclear Installations



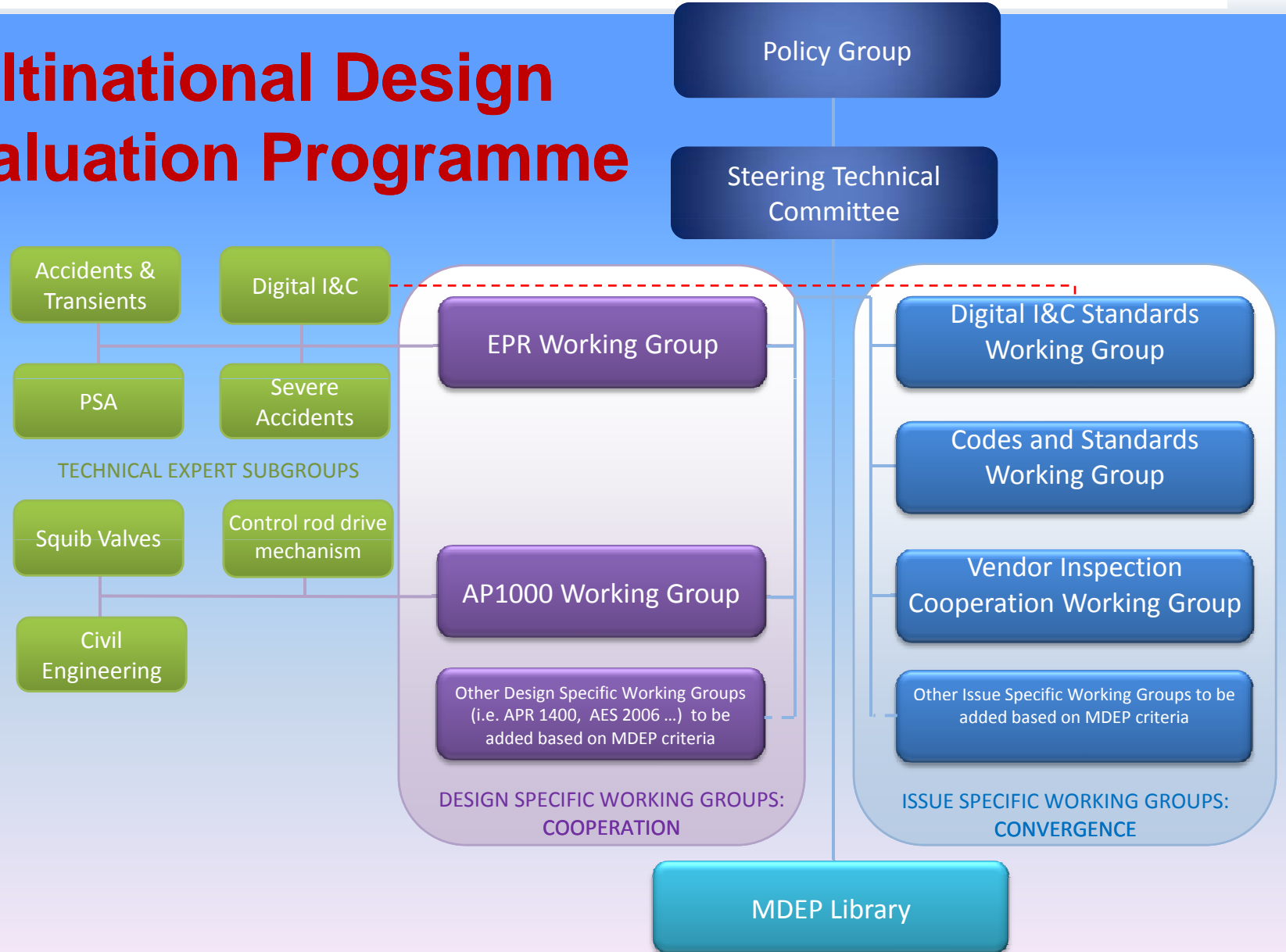
- ✓ Risk assessment
- ✓ Analysis and management of accidents
- ✓ Integrity of components and structures
 - ✓ Integrity of metal components and structures
 - ✓ Ageing of concrete structures
 - ✓ Seismic behaviour of components and structures
- ✓ Human and organisational factors
- ✓ Fuel safety
- ✓ Fuel cycle safety
- ✓ Safety Research projects

OECD-NEA Safety Research Projects



- | | | |
|-------------|-------------------------------------------------|----------------|
| ➤ HALDEN | Fuel & Materials, I&C, HOF | Norway |
| ➤ CIP | Fuel in RIA transients in Cabri | France |
| ➤ SCIP-2 | Fuel integrity | Sweden |
| ➤ SFP | Fuel hydraulics/ignition phenomena | USA |
| ➤ LOFC | Loss of Forced Coolant with HTTR | Japan |
| ➤ PRISME | Fire safety | France |
| ➤ ROSA-2 | System TH | Japan |
| ➤ PKL-2 | PWR SG Heat Transfer | Germany |
| ➤ SETH-2 | Containment TH (CFD) | Swit/Fra |
| ➤ THAI-2 | Containment (HTGR , H2, FP) | Germany |
| ➤ BIP | Iodine chemistry | Canada |
| ➤ MCCI-2 | Severe Accident (Ex-Vessel) | USA |
| ➤ SERENA | Steam explosion | Korea & France |
| ➤ Databases | 1. FIRE 2. ICDE 3. CODAP
4. COMPSIS 5. CADAK | |

Multinational Design Evaluation Programme



Committee on Radiation Protection and Public Health

- Revision of the International Basic Safety Standards (BSS)
- Radiation Protection Issues for Nuclear New Build
- Nuclear Emergency Management (Fukushima follow-up)
- ISOE

Radioactive Waste Management Committee

- Waste Management Strategies
- Development of Geologic Disposal
- Stakeholder Confidence

NEA Forum on Fukushima Daiichi

- Combined with Ministerial Seminar on Nuclear Safety. 200 participants. June 8th OECD Conference Centre.
- Four sessions:
 - 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. Selected industry participation
- Input/feedback to IAEA Ministerial meeting

NEA Fukushima Follow-up Activities

- CNRA established a Senior Task Group to coordinate the response of member countries activities, including exchange of information on national activities and assessing generic implications of the accident.
- All countries with NPPs in operation
 - Identify areas where in-depth evaluation would benefit on an international level
 - Work could be undertaken by existing CNRA or CSNI groups or new groups with specific tasks
 - Identify short-term versus long-term activities
- First meeting 4 – 6 May 2011

NEA Fukushima Follow-up Activities

- CRPPH Emergency Management Group Meeting (3 - 4 May)
 - Topical Session: Fukushima Nuclear Accident
 - New activities (International co-ordination of national decisions; Urgent counter-measures)
- CRPPH 2011 Annual Meeting (17 - 19 May)
 - Topical Session: The Radiological Consequence and Emergency Management Aspects of the Fukushima Nuclear Accident
 - New activities (Impact on national recovery planning; Stakeholders and sustainable recovery)

Concluding Remarks

- First priority for NEA is nuclear safety
- NEA provides the *unique* opportunity of integrating practices and approaches by regulatory authorities from Europe, North America and Asia
- The regulatory authorities of NEA are committed to continuing to work together internationally and to seek ways for progressing on harmonization of regulatory practices
- The current situation after Fukushima is a unique opportunity to enhance regulatory programmes and requirements for existing and new designs, and to enhance the basis for regulatory decision making