

MDEP Conference on New Reactor Design Activities

Paris, 15-16 September 2011

**André-Claude Lacoste
Chair, MDEP Policy Group**

General Information

MDEP Activities

Major Changes Since 2009

Perspectives and Challenges

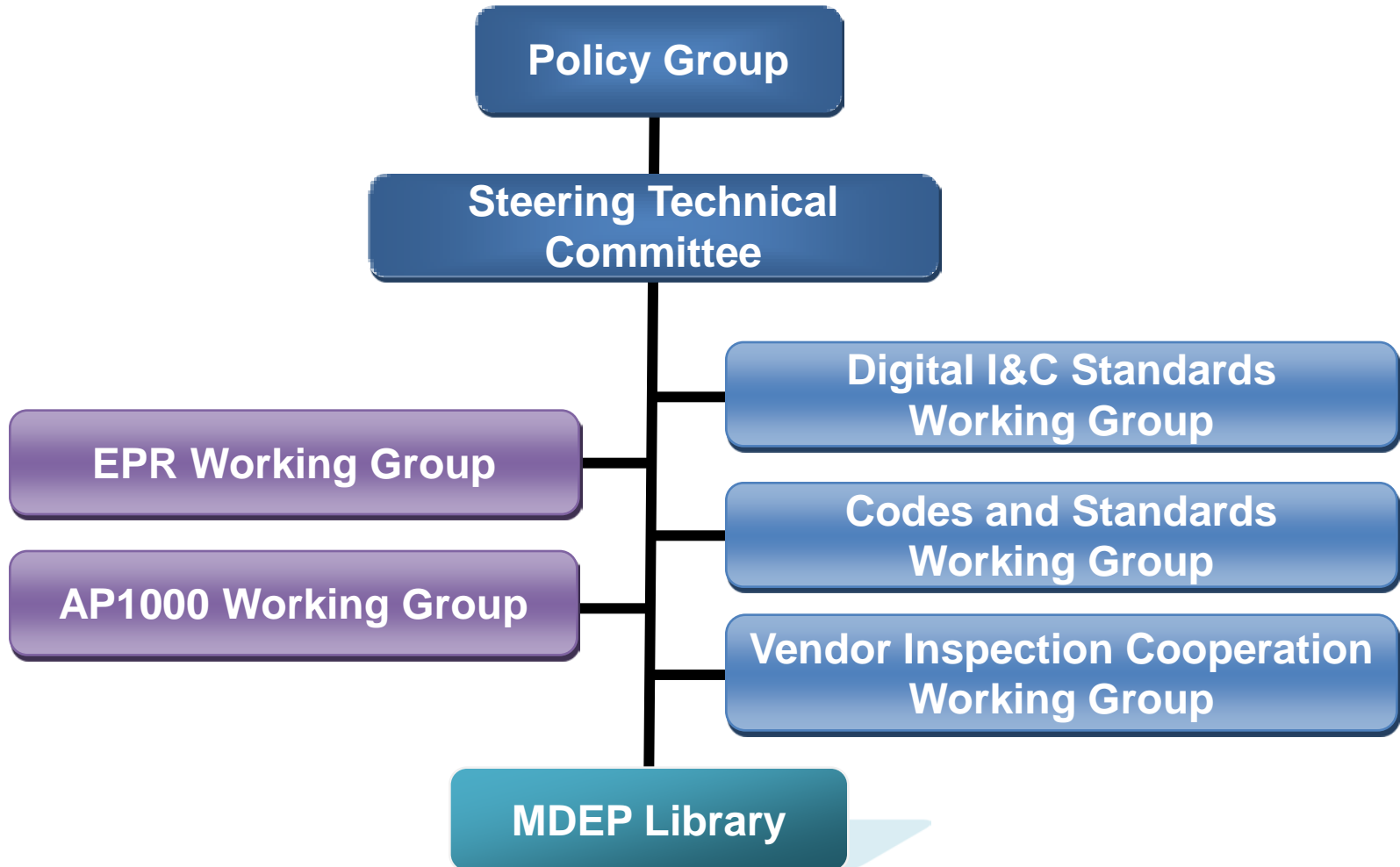
MDEP Membership

- **Current MDEP members:** Canada, China, Finland, France, Japan, Republic of Korea, Russian Federation, South Africa, the United Kingdom, and the United States
- **Terms of Reference** revised in Jan 2011 to define new categories for membership for potential MDEP expansion
 - MDEP Members
 - MDEP Associate Members
 - MDEP Candidates
 - Potential expansion of membership in discussion
- **NEA chosen to ensure the MDEP Secretariat**
- **IAEA takes part in the generic work of MDEP**

MDEP Expected Outcomes and Background Information

- To set up for an enhanced cooperation among regulators
- Proposed in 2005
- Initial two-year programme approved in 2007
- Converted into a long term programme in 2009 with a five-year planning window (2013) and expected interim results

MDEP Organization



Issue and Design Specific Working Groups

■ Issue Specific Working Groups



To benefit from other regulators' experiences and to encourage harmonization in regulatory practices and requirements and in industry codes and standards

■ Design Specific Working Groups



To share and cooperate on specific design evaluations and construction feedback regarding design-related issues

General Information

MDEP Activities

Major Changes Since 2009

Perspectives and Challenges

MDEP Working Group Activities

- **MDEP remains an effective and efficient expert network from different regulators**
 - ✘ Members' efforts maintained
- **Definition of comprehensive programmes of work for each WG**
 - ✘ Composed of short / medium / long term results
- **Increased interactions with industry stakeholders**

Design Specific Working Groups

■ EPR Working Group

Members: Finland , France,
Canada, China,
U.K., U.S.

■ AP1000 Working Group

Members: U.S., China,
Canada, U.K.

Accomplishments

- Developed Common Positions (EPR Digital I&C design, AP1000 squib valves)
- Shared issues identified, questions to applicant, and drafts of evaluations
- Identified differences among various country designs
- Identified additional questions for applicants based on MDEP interactions

Issue Specific Working Group

Vendor Inspection Cooperation (VICWG)

- Performed approximately 30 witnessed and 1 joint inspections
- Developed Inspection Protocol for conducting inspections
- Compared quality assurance requirements used in the oversight of vendors

Digital Instrumentation and Control (DICWG)

- Developed DI&C common positions
- Obtained agreement from IEC and IEEE to increase cooperation and consider MDEP common positions

Codes and Standards (CSWG)

- Completed comparison of pressure boundary for Class 1 pressure vessels, piping, pumps, and valves in coordination with standards development organizations (SDOs)
- Obtained commitments in principle from SDOs to work together to minimize further divergence of code requirements

General Information

MDEP Activities

Major Changes Since 2009

Perspectives and Challenges

MDEP Products

Common Positions

■ **Design Specific Common Positions** → **Design Specific WGs**

Each regulator responds independently to its applicant, taking the same position.

■ **Generic Common Positions** → **Issue Specific WGs**

Constitute best practices, recommended by MDEP members to IAEA and standards organizations.



- ✘ There is no obligation for any regulatory body to follow them.
- ✘ If a regulatory body chooses to adopt a Generic Common Position, it is through that country's normal processes.
- ✘ The responsibility for regulatory decisions continues to be with the national regulator.

MDEP Interactions

Efforts to communicate MDEP activities to key stakeholders

■ Non-MDEP Regulators

- ✘ NEA Committees : CNRA and CSNI
- ✘ WENRA

■ International organizations

- ✘ IAEA (attends MDEP STC/PG and issue-specific working group meetings), GIF, EC

■ Industry

- ✘ Vendors, licensees, standards development organizations (ASME, JSME, AFCEN, CSA, NIKIET, KEA, IEEE, IEC, etc.), WNA and other industry organizations

■ Public

- ✘ Greater information displayed on MDEP public website www.oecd-nea.org/mdep

General Information

MDEP Activities

Major Changes Since 2009

Perspectives and Challenges

Fukushima

- **Issue discussed at the latest MDEP Policy Group and Steering Technical Committee meetings**
 - ✘ Programme of work to be defined as soon as first results from national safety assessments available
 - ✘ Interactions with other international organisations to be considered
 - ✘ High expectations from nuclear industry stakeholders

MDEP Enlargement

■ Membership

- ✘ New regulators asked for MDEP membership
- ✘ ToR modified in advance in 2011 to manage their integration

■ Reactor Design

- ✘ Three regulators are needed for the creation of DSWG
- ✘ Depending on regulators attending for membership, the creation of new DSWG should be discussed and anticipated by MDEP

Expectations from Industry Stakeholders

■ To achieve its goals MDEP needs :

- ✘ The active involvement of all stakeholders in MDEP activities : Regulators, Vendors and Operators
- ✘ The industry stakeholder commitment for an enhanced international cooperation