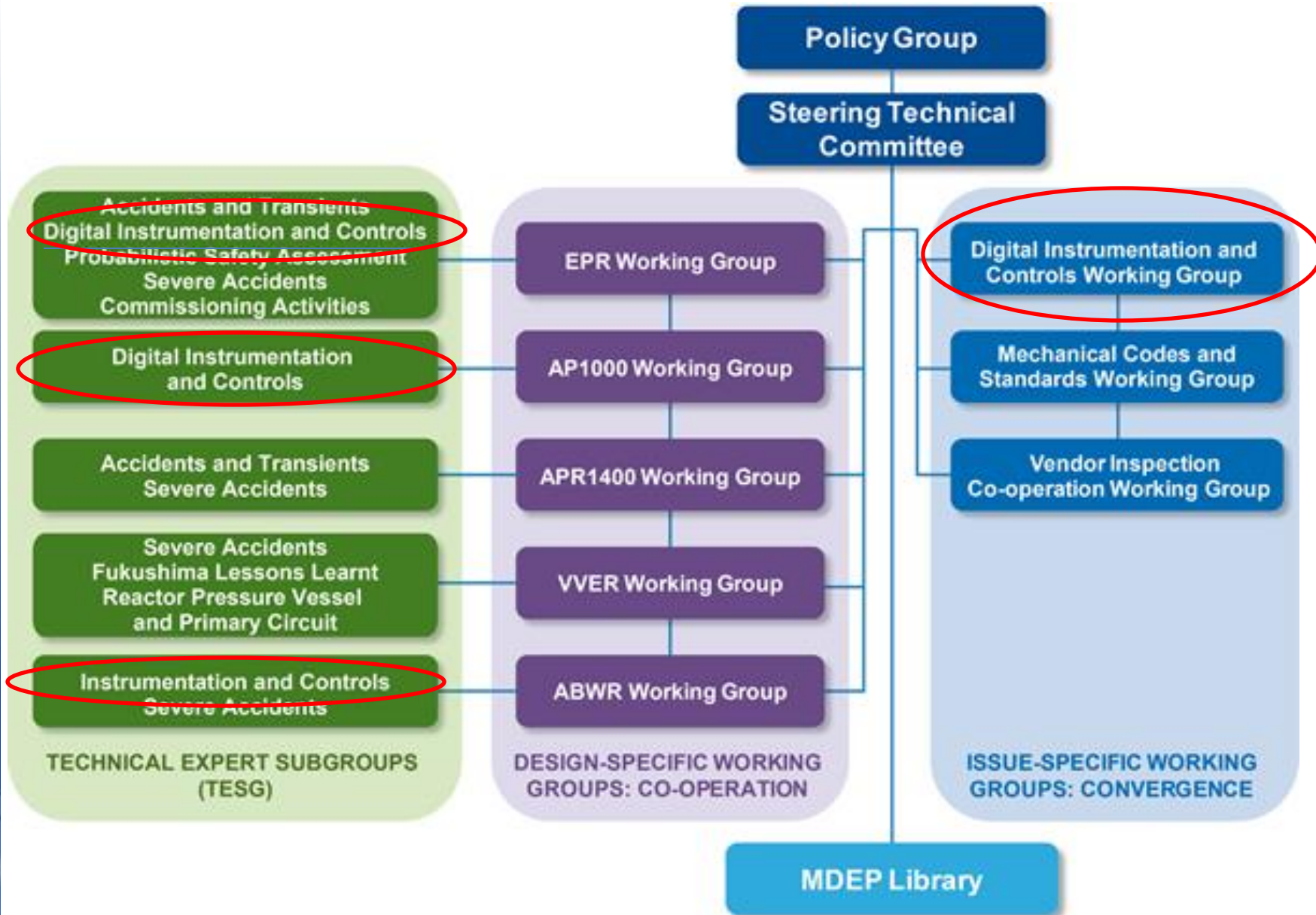


Multinational Design Evaluation Programme (MDEP)

4th conference

Digital Instrumentation & Control Activities & Challenges

**By Ismael L. Garcia, Chair
September 12, 2017**



DICWG Activities

- Continue development of generic CPs in accordance with publicly available programme plan
- Continue timely sharing of information and cooperation among members including frequent interactions with other MDEP working groups, and STC
- Continue coordination with standards organizations and other stakeholders to promote convergence and harmonization of standards
- Transition to a permanent organization within the NEA

EPR DI&C TESG Activities

- Developing an interim technical report on the EPR I&C system designs
 - ❑ Aim for public release after completion of its review by member regulators
- Focused on several issues including spurious actuations due to software failures
 - ❑ Updating the EPR I&C CP based on completion of the DICWG work in this area
- Also focused on equipment qualification
- Construction lessons learnt report will be launched by 2018

DI&C TESG Activities

- **AP1000** - Planning for a joint MDEP DICWG meeting during the fall 2017 in China
- **ABWR** - No ongoing activities as the DI&C TESG was disbanded in late 2016

Challenges

- The continual evolution in digital I&C technology which results in DICWG-related activities such as
 - ❑ Development of guidance on the qualification process of the hardware and software of I&C platforms for systems important-to-safety at nuclear power plants
 - ❑ Updates to existing CPs based on latest technical guidance in areas such as communications independence
 - ❑ Potential development of guidance for performing DI&C system or equipment inspections during the early phases of its life cycle activities

Challenges (Cont.)

- Differences in areas such as regulations, regulatory practices, and standards
- Reaching agreement on common terminology

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