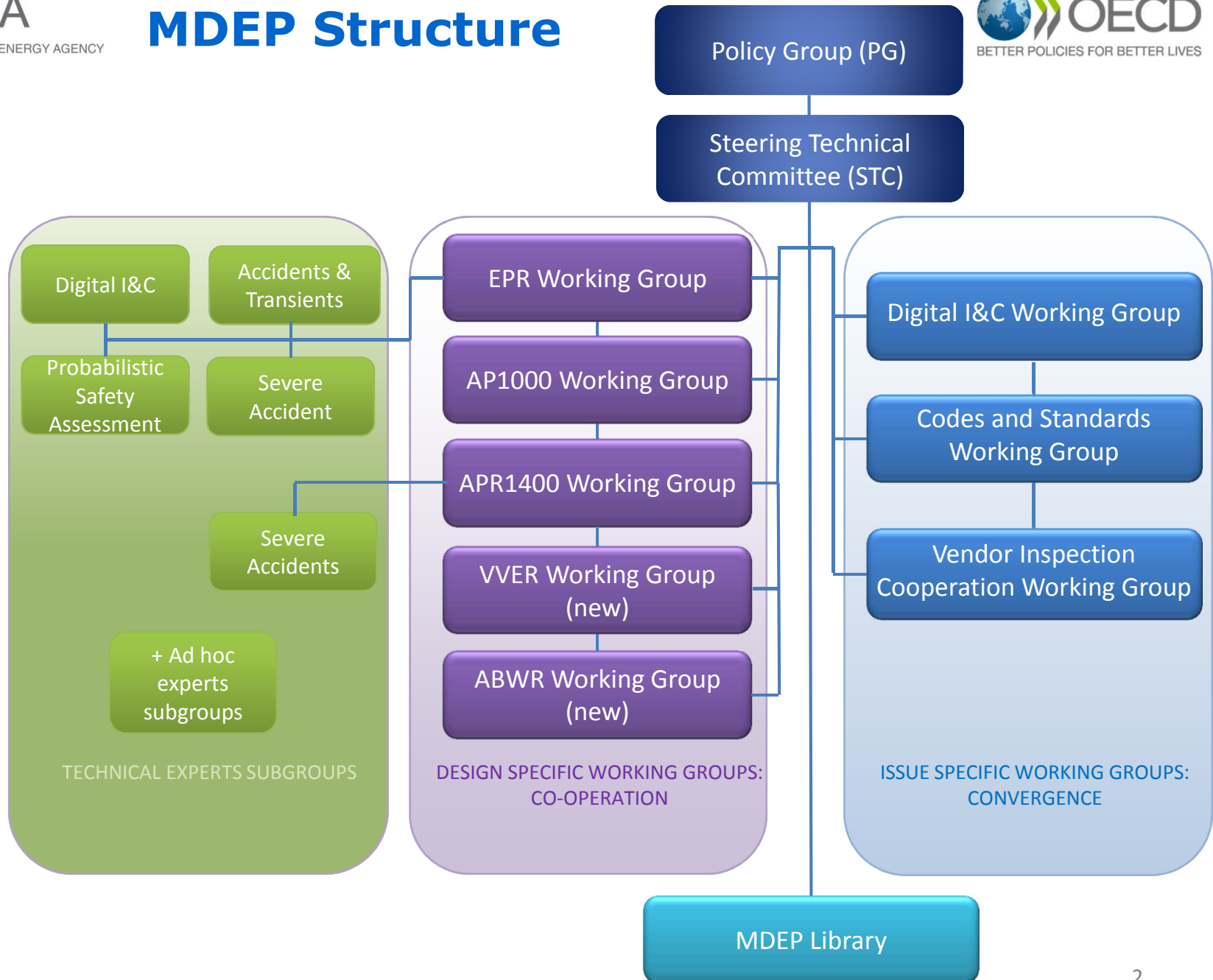


MDEP DESIGN SPECIFIC WORKING GROUPS

3rd MDEP Conference
14 – 15 May 2014, Bethesda, MD
Lawrence Burkhart, U.S. NRC
Chair, AP1000WG

MDEP Structure



Design-Specific Working Groups (DSWG)

- Terms of Reference
 - Share information and cooperate on reactor design reviews and construction and commissioning oversight
 - Participants are MDEP members who are actively reviewing specific designs or plan to engage in safety reviews
 - Formed when 3 or more members agree to cooperate on design reviews
 - Important that the regulatory authority has agreements and/or procedures in place to allow sharing and protection of vendor's proprietary information on the design to allow free exchange of information among the DSWG members
- Each DSWG has a Programme Plan detailing
 - Goals, work plan, outputs/products, key stakeholders
 - Fukushima lessons-learned to be considered in all DSWGs
- Key message: Each regulator retains its sovereign authority and responsibility for licensing new reactors in its respective country
- Goal is to make each regulator's reviews of specific designs more safety-focused

Design-Specific Working Groups (DSWG)

EPRWG (efforts started prior to formation of MDEP)

- National regulatory authorities from
 - Canada, China, Finland, France, India, U.K., U.S.A
 - Technical expert subgroups on DI&C, Severe Accident, Accidents and Transients, and PSA
 - Other issues addressed: Fukushima insights, commissioning/ITP, radiation protection, etc.
- Produced common position on Fukushima related issues
- Drafting common position on commissioning (First Plant Only Test crediting)
- Technical experts subgroups progress
 - PSA comparison in initiating events
 - Digital I&C report
 - CHRS/SAHRS report and pH control report from Severe Accidents TESH
 - Survey on accidents and transients

Design-Specific Working Groups

AP1000WG (started with MDEP activities)

- National regulatory authorities from
 - Canada, China, Sweden, U.K., U.S.A
 - Issues addressed/being addressed; Squib valves, CRDMs, shield building, DI&C, vendor issues
 - Other issues addressed: Fukushima insights, commissioning/ITP
- Discussions and cooperation on pre-operational testing/initial test program activities
- Exchanges on technical topics (RCPs, Squib valves, etc.)
- Sharing of specific information among members (NRC-CNSC for CSNSC phase 2 review of the design, NRC and NNSA to exchanges, support to UK GDA)
- Fukushima lessons learned: draft common position
- Coordination with VICWG on vendor inspections/AP1000 design implementation

Design-Specific Working Groups

APR1400WG (started in 2013)

- National regulatory authorities from
 - Finland, South Korea, United Arab Emirates, U.S.A.
- Discussion of design differences in each country
- Other issues: Fukushima lessons learned, CSFI issues
- Technical topics to set up expert subgroups: GSI 191 (Accidents and Transients), Severe Accident
- Framework to exchange proprietary information

VVERWG (started in 2014)

- National regulatory authorities from
 - Finland, India, Russian Federation, Turkey
- Technical discussions on VVER designs (AES 92/VVER-1000)
- Topics to be addressed: Severe accidents, Reactor vessel and primary circuit specificities in VVER designs, Safety Systems
- To tackle Fukushima lessons learned

Design-Specific Working Groups

ABWRWG (started in 2014)

- National regulatory authorities from
 - Finland, Japan, Sweden, U.K., U.S.A
- Discussions on design differences (different vendors)
- Identified topics of interest for technical experts discussions
 - I&C
 - Severe accidents (prevention & mitigation)
- To prepare a common position paper on “Fukushima lessons learned”
- Set up a clear framework for exchange of proprietary information

- Interactions with Stakeholders
- Visits to construction sites
- Exchange of safety review insights on a real time basis
- Discussion of important technical issues in depth
- Technical reviewer to reviewer connections/close relationships
- Addressing the same issues in each country to an adequate level of safety consistent with national laws
- Issuance of Common Positions
- Feed input to STC and issue specific working groups

THANK YOU!

 www.oecd-nea.org/mdep