



# International ISOE Workshop

Direction Forward for the Finalization of the **EG-SAM** Report

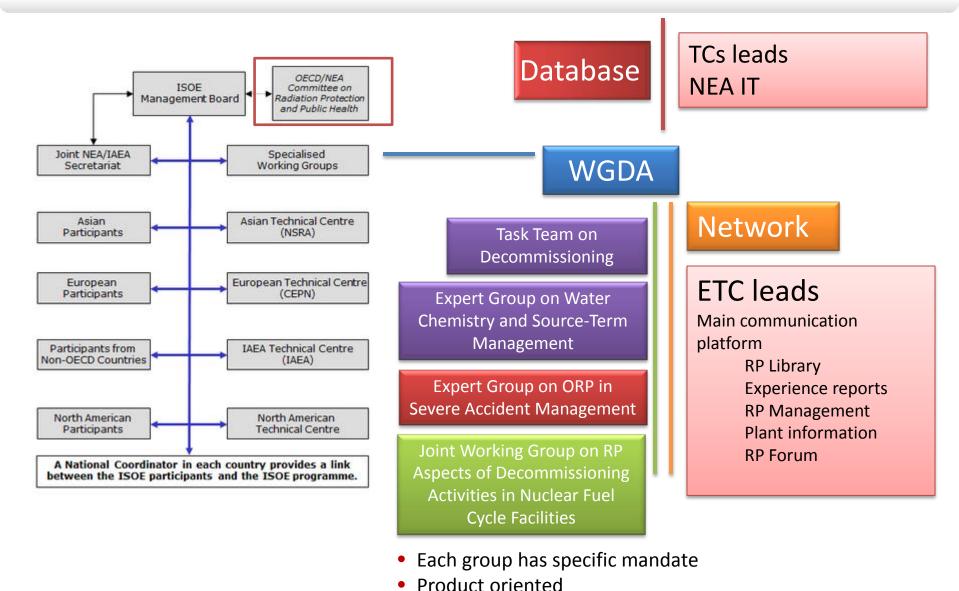


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Time limited





# **EG-SAM-** Background & Mandate

- Long run since May 2011 April 2012 (1st meeting)
  - 45 members from 19 ISOE Countries
    - Mandate : To develop a report
    - Contribute to occupational exposure management by providing a view on management of high radiation area worker doses;
    - Develop a state-of-the-art ISOE report on best radiation protection management practices for proper radiation protection job coverage during severe accident initial response and recovery phase; and
    - Identify RP lessons learned from previous reactor accidents
    - Finalization of **interim** report by November 2013 (general issues)
  - Approved by the WGDA and MB in Nov 2013
  - Organization of International Workshop to address the national experiences/
     approaches to be incorporated to the report
  - Final to be submitted to the ISOE Management Board approval in November
     2014









ISOE Chair: 2006 – 2008

EGWM Chair: 2007-2009

EGSAM Chair: 2011-2013





# **EG-SAM** Interim report topics

- RP Management and Organisation
- RP Training and Exercises related to Severe Accident Management
- Facility Configuration and Readiness
- Overall Approach for Worker Protection
- Monitoring and Managing the Radioactive Releases and Contamination
- Key Lessons Learned from Past Accidents
- Conclusions

Workshop Drivers





# **Workshop Objectives**

- identify best occupational radiation protection approaches in strategies, practices, as well as limitations for developing effective management;
- identify national experiences to be incorporated to the final version of ISOE EG-SAM report.





# **Participation & Program**

66 participants from 17 countries

Scientific Program (created by the PC)

- 4 plenary session + 5 break-out sessions (by taking into account the chapter structure of IR)
  - Global view: ICRP, IAEA , CNSC & USNRC
  - Introduction of interim report with 6 presentations by Sub-Committee Chairs
  - Utility Perspective- 5 invited speakers (Japan, Belgium, France, US, Canada)
  - RA Perspective- 5 invited speakers (Canada, France, US, Republic of Korea and Finland)
  - 5 Break-out session by 10 rapporteurs for chapters of the IR
  - Session chairs





#### **Global views**

- ICRP
  - Update of 109 & 111 (plan for a single document) Focus on emergency responders, definition / classification, emergency reference levels (selection, ALARA), optimization
- IAEA
  - GS-R-2 revision (common goals to be achieved and the common concepts and approaches to be taken for an adequate preparedness, latest updates and developments with regard to emergency workers, designation of emergency workers, protecting helpers on the part of the public willing to contribute to the emergency response
  - Road map for publication





#### **Global views**

- CNSC
  - Response to Fukushima and Enhancements (ORP), Task Force Report and Action Plan, SAMG, RPRs (Emergencies-additional clarification on dose control requirements, provision of information)
- USNRC
  - NRC Action Plan, plant's RP program (competencies) with respect to their impact on ORP during emergencies

- New policy documents
- Recommendations / requirements at international level





# Interim report

- RP Management and Organization
- RP Training and Exercises related to Severe Accident Management
- Facility Configuration and Readiness
- Overall Approach for Worker Protection
- Monitoring and Managing the Radioactive Releases and Contamination
- Key Lessons Learned from Past Accidents
  - Bottom line: Content /structure, Key topics & Discussion points, How to improve by taking into account the national practices
  - Is it good enough to represent the ISOE perspective (mainly driven by utilities)?, consensus document
  - Different way to improve (!)
  - Balance with on-site and off-site (training, communication interface, planning)
  - Any regulatory burden? (in the future)
  - Practices & Experiences to share

Drivers sessions





# **Utility Perspectives**

- Japan,
  - Difficulties of monitoring, dose management and RP of workerslessons learned (reinforcing monitoring posts, preparation of RP equipment, emergency access control, E&T)
- Belgium
  - Major improvements (earthquake, flooding, electric power, water supply, SAM), EPP (organisation, communication means, logistics, infrastructure), RP (additional guidance, modelling, contamination fixation, treatment of contaminated effluents), monitoring & additional PPE (validity)
  - Organization (RP guidance, training, ...)
  - "Hardware" (dispersion code, RP equipment, ...)
  - Studies (contamination fixation, effluent treatment)





# **Utility Perspectives**

- France,
  - Fast Action Force in Case of Nuclear Accident (FANR), EDF + public authorities, consequence management, organization/ emergency RP equipment, human resource management/ training, environmental monitoring, future plans
- US
  - Dose info on TMI & Fukushima (known available), type of reactors,
     plant damage issues and worker dose outcomes.
- Canada
  - Ontario Power Generation (OPG), the first North American full scale nuclear emergency response exercise, ExUR (regional, provincial, federal bodies and the utility)
  - to test and enhance the preparedness of the OPG, government and non-government agencies and communities to respond to a nuclear emergency
  - Instrumentation, mobile facilities (arrangements)





# **Regulatory Authority Perspectives**

#### Canada

 Emergency Operations Center & Technical Assessment Section (toolspredictive source term and dispersion calculation for both the diagnosis and the prognosis), future improvement plans (tools, codes, dispersion mapping, etc.)

#### France

Workers & intervention personnel (different status: levels, training), transition, termination of emergency(!), accident / post-accident situations (existing exposure), future developments (transposition of Council Directive 2013/59/EURATOM of 5 December 2013), emergency situation and the transition from emergency phase to the recovery phase

#### US

 Perspectives on regulation of SA Mitigation., Severe Accident Management Guidelines (SAMGs)- symptom based, portable equipment & flexible strategies, training (most probable), technical basis





# **Regulatory Authority Perspectives**

- Republic of Korea
  - Fukushima follow-up , special inspections (RP & EM), expansion of zones, public concerns /awareness
- Finland
  - Co-operation, "Security Strategy for Society" (governmental doc), crisis management, logistical improvements, emergency preparedness forum, cross-cutting issue for decision making, external rescue plans, arrangements for training





# **Break-out sessions (except C6)**

- Suggestions for improvement
- Additions to broad the view
- Key issues; multi unit configuration, more emphasis on off-site facilities, interaction with off-site facilities, terminology, records,
- Primary focus- early phase; post-accident recovery?

Bottom line\_ possible to incorporate the report (with EG-SAM agreement)





# **Next step**

- Wrap-up meeting on 19 June 2014
- All break-out session rapporteurs invited
- Open to workshop participants
  - Venue: NEI
  - Timing: 08:00 15:00
- Final meeting of the EG-SAM before the submission of report for approval
  - Objective: Finalization of the EG-SAM report with workshop inputs – guidance to the Secretariat
  - Roundtable discussions





### **Final words**

- OECD Nuclear Energy Agency
- Information System on Occupational Exposure
- Thanks for your valuable inputs to the work of the ISOE EG-SAM

#### **NEXT ISOE Meetings**

- 3-6 November 2014, Paris / France
  - <a href="http://www.isoe-network.net/">http://www.isoe-network.net/</a>
  - http://www.oecd-nea.org/jointproj/isoe.html