NEA Activities of interest for EPReSC

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OECD Nuclear Energy Agency (NEA)

Fifth Meeting of the Emergency Preparedness and Response Standards Committee (EPReSC)
IAEA, Vienna, Austria, 7-9 November 2017
Overview

- International Workshop on the INEX 5 Exercises
- Collaboration between NEA Committees in the field of SAM
- Towards an all-hazards approach in emergency management
- WPNEM Programme of Work 2018-2020
- NEA Post-Accident Food Management Framework
Since 1993, the OECD-NEA develops, organises, evaluates and analyses the International Nuclear Emergency Exercise (INEX) series exercises to address best practices and identify areas for improvement in nuclear/radiological emergency management systems.
INEX 5 Overview

Table-top exercise addressing EM aspects of **Notification, Communication & Interfaces (NC&Is)** related to Catastrophic Events involving Radiation or Radiological Materials

- **NOT** a real-time exercise,
- **NOT** intended nor designed to test any international conventions
22 participants in INEX 5

**NEA countries participating in INEX-5:**

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**NEA countries NOT participating in INEX-5:**

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<td>United Kingdom</td>
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<td>Finland</td>
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**Non-NEA participants:**

- Chinese Taipei
- Croatia

**Cross-border issues testing**

**INEX-5 Regional Playing**

2 Groups

**Regional players – Group 1:**

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**Regional players – Group 2:**

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<td>Germany</td>
<td>Netherlands</td>
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INEX-5 Cross-border coordination testing

• Two cases where alignment of recommendations was exercised but with very different results

Case A
in the early phase of a nuclear accident the Dutch authorities in principle will adopt the decided by the accident country. EPZ flexibility to align is a key factor

Case B
Alignment of Croatia with the decision by Slovenia to sheltering under EPZ. But EPZ are different: sheltering in 10 Km Croatia: sheltering in 25 Km
NEA committed to improve cross-border coordination

Lesson from INEX 5:
New approaches for improving cross-border coordination exist,
i.e. HERCA-WENRA Approach,
But further work is needed for successful practical implementation

→ Cross-border coordination:
Topical session during INEX 5 International Workshop
INEX 5 International Workshop

Background

• Twenty-two countries have conducted the INEX 5 exercise: 22 evaluation questionnaires received
• Topical session on INEX 5 during the WPNEM-41\textsuperscript{st} meeting held in January 2017:
  – key results and lessons learnt during conduct of the INEX 5 exercises presented by eighteen countries.
  – preliminary analysis of the questionnaires presented the Secretariat.
  – several lessons and issues which would benefit from further analysis and exchange → focus during the INEX 5 International workshop

INEX-5 International Workshop, 24-25 October 2017
Programme

- Workshop Opening
- **Summary of the INEX 5 evaluation analysis**
- **Session 1.**- Communication and information sharing with other countries and international partners. Focus on real-time communication platforms
- **Session 2.**- Cross-border and international coordination of protective measures
- **Session 3.**- Long-term aspects: how to integrate them in exercises
- **Session 4.**- Connection to the work of other international organisations, platforms, networks
- **Session 5.**- Key issues in international coordination and communications, and ways forward
- Workshop Closing

- Two full-days.
- Interactive experience for participants
- Two distinct session formats: Plenary & Breakout Sessions
- Moderated by an experienced facilitator.
- Working language: English.

Page of the workshop: [www.oecd-nea.org/rp/workshops/inex5/](http://www.oecd-nea.org/rp/workshops/inex5/)

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Collaboration between NEA Committees in the field of accident management

CNRA/CSNI/CRPPH: Forum on Decision Making Associated with Severe Accidents - 31 May 2017

• Effective decision making for severe accidents, both in pre-accident planning and in post-accident response, requires collaboration between a variety of different organisations, including plant operators, regulators, technical support organisations, emergency response organisations and stakeholders.

• Different speakers with different backgrounds and experience provided presentations on their perspectives.

• Their presentations and the plenary discussion following the break-out discussions gave the participants an overview of some challenges and cross-cutting issues to ensure the decision making process integrates technical information, stakeholder concerns (local, national and international), regulatory viewpoints and governmental responsibilities.

Follow-up planned!
Towards and all-hazards approach in emergency management

- Emergency management is not an area specific only to the nuclear field
- The OECD and the IAEA have recognised the importance of a strong and unified response and have urged the inclusion of nuclear and radiological emergency preparedness into the more comprehensive domain of “all-hazards emergency planning”.
- A first step in the all-hazards approach is provided by the development of the interaction and collaboration between EPR experts from different sectors addressing different types of hazards – either natural or man-made – to share experiences, learnt lessons and identify good practices.

NEA is well placed to bring the nuclear perspectives in the all hazard approach and related interactions with concerned organisations.

- NEA efforts have led to a report contributing to build and all-hazards approach in emergency management
Towards and all-hazards approach in emergency management

• The report is the result of a collaboration with:
  – The OECD Working Group on Chemical Accidents (WGCA),
  – the High-Level Risk Forum of the OECD Public Governance and Territorial Development Directorate
  – and the European Commission’s Joint Research Centre (JRC), which operates the Major Accident Reporting System (eMARS) database.

• The report consist of a set of various contributions illustrating the multidisciplinary nature of EPR systems, including among other a chapter on public health lessons or two case-studies showing comprehensive disaster management systems related to non-nuclear events.

• The NEA has ensured the overall co-ordination of the report, while respecting the different approaches, styles and terminology of the authors, as part of the enriching process of interacting with experts in other fields.

  Flagship Report to be published soon!
WPNEM Programme of Work 2018-2020

- Review of existing real time-Platforms in NEA member countries to facilitate cross-border and regional information exchange and coordination of countermeasures
- Non-radiological Public Health Aspects of Radiation Emergency Planning and Response including Psycho-Social and societal impacts of Evacuation, Sheltering and Relocation (Collaboration with WHO)
- Recommendations for building nationally adapted recovery frameworks in NEA countries
- Sharing dose projection code outputs based on same (or very similar accident) inputs
- Update WPNEM member country Protective Measures Handbook
- Joint workshop (OECD/ENV, OECD/GOV, NEA, JRC, others) on EPR in the nuclear and non-nuclear fields. Timeframe from 2019
- …
NEA Post-Accident Food Management Framework

Dr. Ted Lazo
Post-Accident Food Management Framework

Framework Assumptions
• Accidents are rare and are unique
• Affected food products will be accident specific
• Limited number of export food products from affected area
• Criteria are national choice and will evolve with circumstances

Emergency Food Actions
• Food consumption, distribution and export banned / restricted rapidly
• Food consumption, distribution and export will be resumed only after:
  – the accident is under control
  – affected areas have been radiologically characterised
  – national criteria have been established, and
  – a measurement / certification process has been established
Post-Accident Food-Management Framework

- National consumption criteria will be easily measurable quantities:
  - Activity concentration (Bq/kg)
  - Assumed annual food consumption (kg/a)
  - Exposure from eating affected food < specified level (mSv/a)
- Codex Alimentarius levels should be used as a ceiling
- Generally difficult to use different criteria for those living in the affected area and those living in unaffected areas
- Similarly, difficult to use different criteria domestically and for export
- Importing countries should use the accident country’s export criteria as their import criteria

The Framework thus uses the same consumption criteria for the local, national and international management of food from post-accident affected areas
Support Domestic and International Trust

International Validation of Post-Accident Food Management

By involving relevant international organisations:

- A small team of internationally recognised internal-exposure experts to review the science and process used to develop food activity criteria, and their evolution in the first 2-years of the accident

- A small team of internationally recognised radio-assay experts to review the science, process and technology used to certify that food meets regulatory standards
Thank you for your attention

• All NEA publications and institutional documentation available at www.oecd-nea.org