

## OECD Nuclear Energy Agency Sixth International Nuclear Emergency Exercise (INEX-6)

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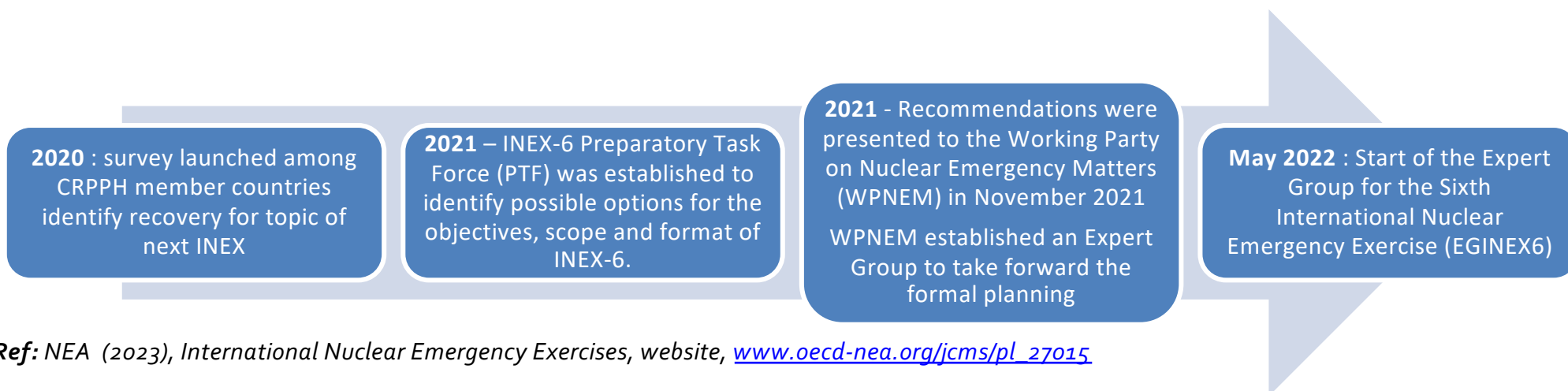
## Background – History of the INEX series

Since 1993, the OECD-NEA develops, organises, evaluates and analyses the International Nuclear Emergency Exercise (INEX) series to address best practices and identify areas for improvement in nuclear/radiological emergency management systems.



*Ref: NEA (2023), International Nuclear Emergency Exercises, website, [www.oecd-nea.org/jcms/pl\\_27015](http://www.oecd-nea.org/jcms/pl_27015)*

## INEX-6 Development



Ref: NEA (2023), International Nuclear Emergency Exercises, website, [www.oecd-nea.org/jcms/pl\\_27015](http://www.oecd-nea.org/jcms/pl_27015)



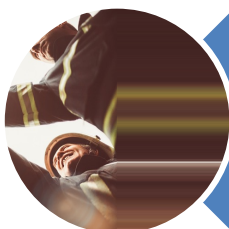
## INEX-6 Objectives



Test preparedness for recovery, including organisational structures, roles and responsibilities, stakeholder engagement, as well as mechanisms for international cooperation to assess the adequacy of current arrangements and identify potential gaps against the [EGRM's Framework for Recovery Preparedness](#);



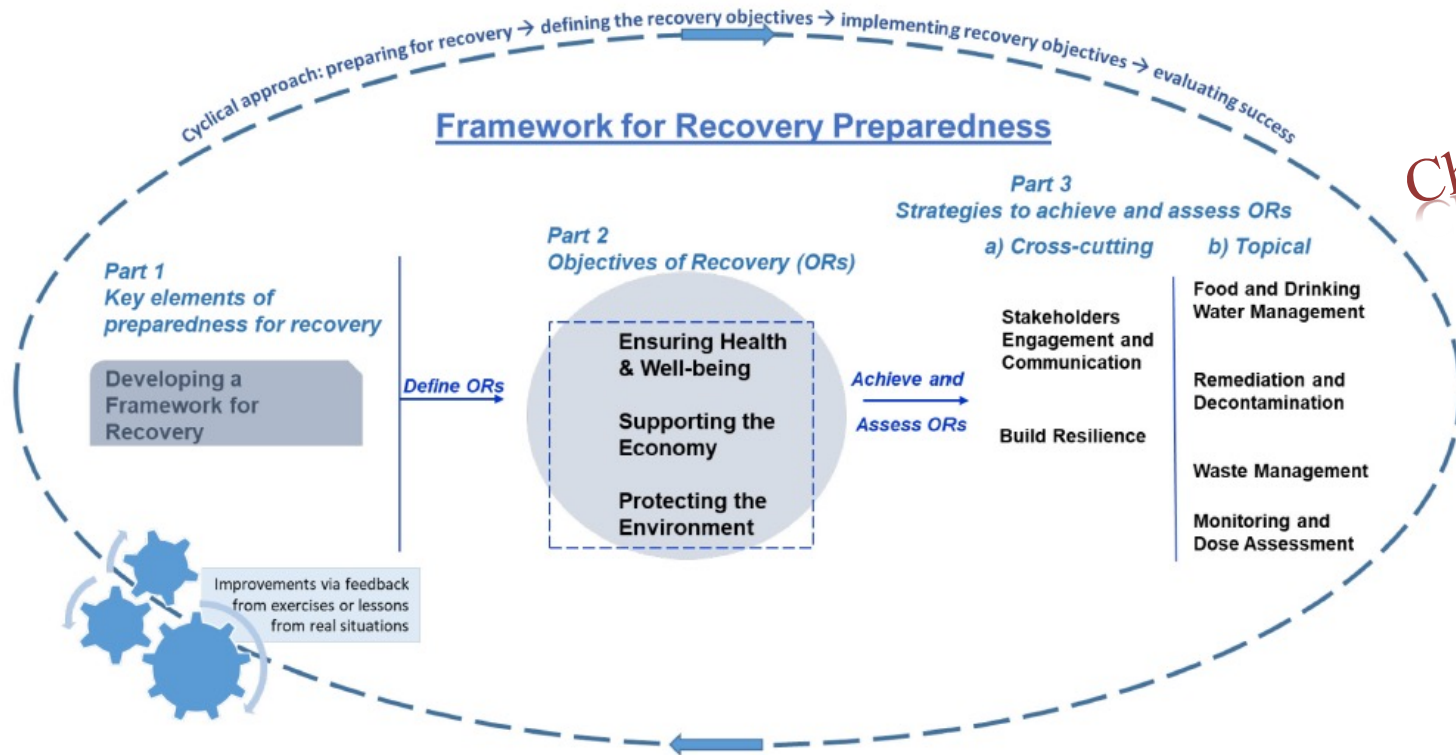
Test the decision-making process for the implementation of longer-term protective actions, including the justification and optimisation of such actions considering both radiological and non-radiological issues;



Test the adoption of an all-hazards approach to recovery management, utilising skills, knowledge and capabilities from outside of the nuclear field.

## INEX-6 Objectives

- EGRM's Framework for Recovery Preparedness;



Challenging phase  
Complexity  
Long period

Complex to exercise!

- Number of issues
- Timeline

## INEX-6 Scope (1/2)

*The Sixth International Nuclear Emergency Exercise (INEX-6) will:*

- be delivered individually by participating countries as Table-Top Exercises using the same exercise scenario in order to draw comparisons between countries;
- involve a series of 'modules' focusing on key topical issues associated with long-term recovery management;
- be prepared as a package that enables countries to re-use the exercise materials after completion of INEX-6, including a methodology that allows for additional long-term recovery modules to be added at a later stage following the same format (NB: further INEX-6 exercises could be held in later years to test additional long-term recovery issues);
- involve a scenario that begins after termination of a radiological or nuclear emergency, i.e., an existing exposure situation.

## INEX-6 Scope (2/2)

*Continued – The Sixth International Nuclear Emergency Exercise (INEX-6) will:*

- be open for all countries to participate regardless of their current level of preparedness for recovery;
- maintain a direct link with the NEA publication ‘Building a Framework for Post-Nuclear Accident Recovery Preparedness’ to test implementation of the guidance;
- build on experience from previous INEX exercises.

*The Sixth International Nuclear Emergency Exercise (INEX-6) will not:*

- test all elements associated with long-term recovery;
- be built upon a very technically detailed accident scenario description, but rather on a more narrative or semi-quantitative one;
- be based on an accident in a specific geographic location.

## Modules

Each module = ½ day, 1 slidepack furnished by EGINEX6



### 1. Health Impacts

(covering issues such as Mental Health and Psychosocial (MHPSS) issues, medical follow-up, medical surveillance)



### 2. Food Safety

(covering issues such as food monitoring, food restrictions, international and domestic food trade)



### 3. Remediation and Decontamination

(covering issues such as remediation of natural and built environment, contaminated land, access control)



### 4. Waste Management

(covering issues such as storage, treatment, characterisation, transport, disposal)

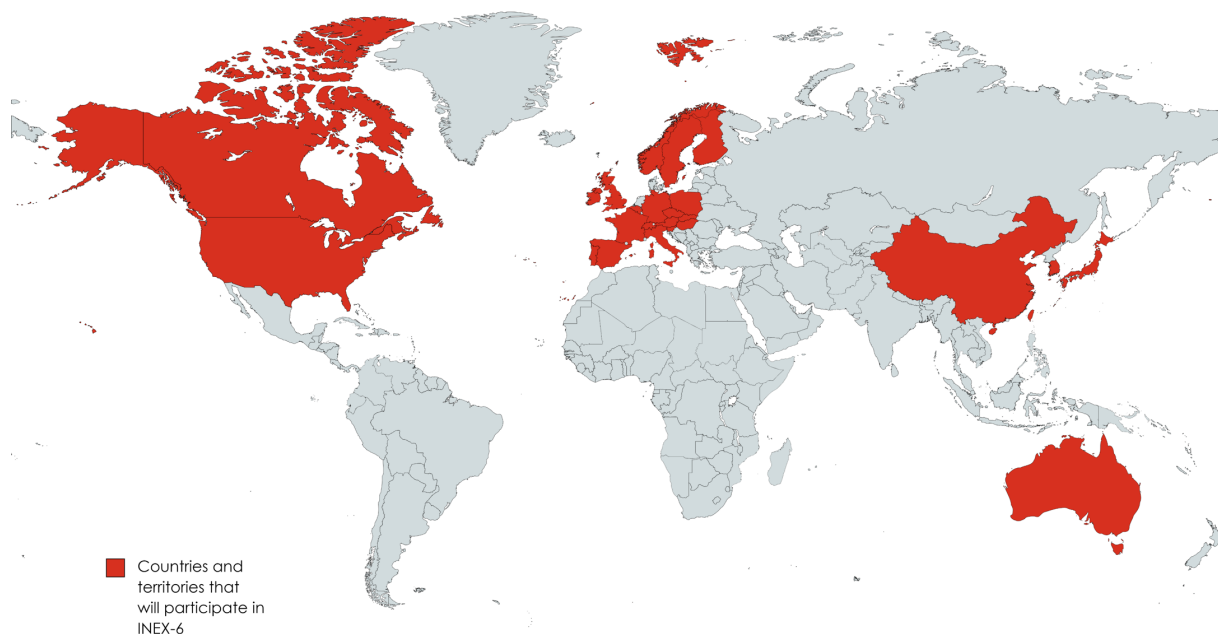
Cross-Cutting Issues: Stakeholder Engagement, Communications, International Cooperation, Socio-Economics



## INEX-6 Participants

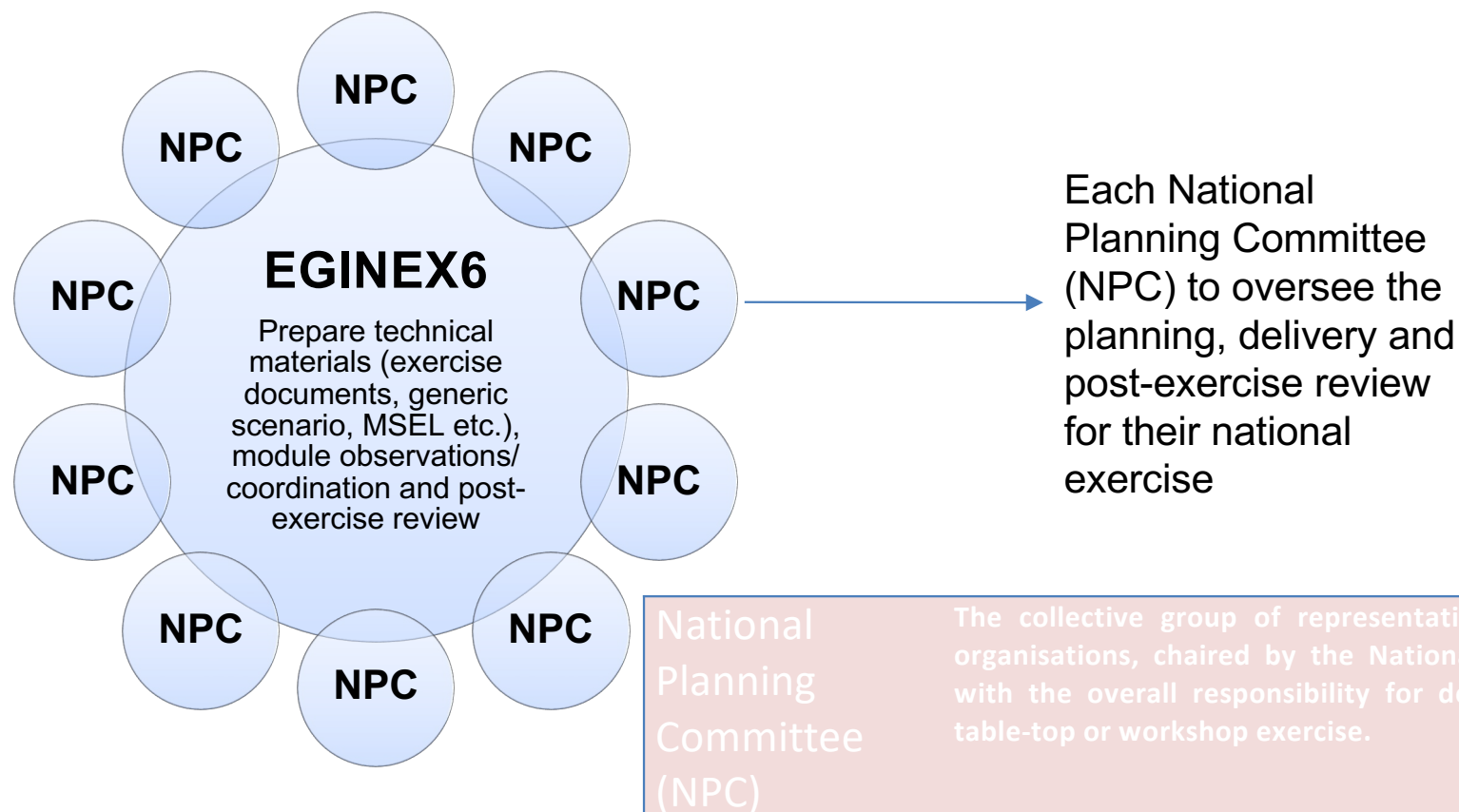
<27 Participants>

Australia, Austria, Belgium, Canada, China, Czech Republic, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Norway, Poland, Portugal, Republic of Korea, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States, Chinese-Taipei, **European Commission, IAEA**



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## Planning and Delivery



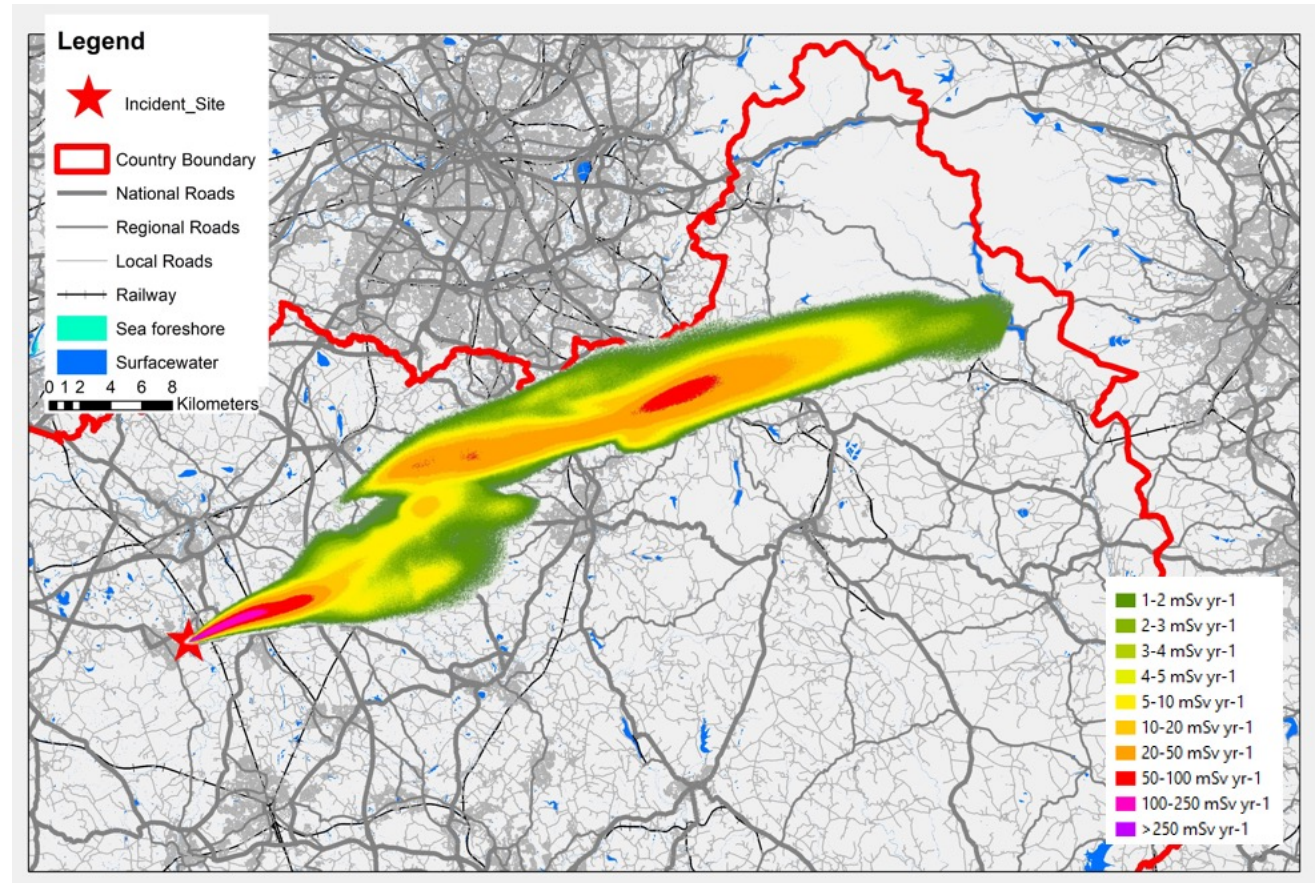
## Scenario Overview (1/2)

- Based on a single scenario prepared by EGINEX6
- All participating countries use the same scenario
- Each participating country will act as the 'accident country', i.e., the incident occurred on its territory
- Fictitious incident scenario (the cause of the incident not stated and cannot be defined by the data provided)
- Source term focused on long-lived radionuclides
- Cross-border impacts, plume extends to neighbouring country with very low-level deposition
- Neighbouring countries consist of a mix of nuclear and non-nuclear states
- Scenario describes situation ~12 months after the initial incident

## Scenario Overview (2/2)

### Plume captures:

- A National Border (at the furthest point)
- Major Interstate / Autobahn / Motorway
- Major Rail routes
- Several water courses, including reservoirs
- City, towns, villages, hamlets, containing;
  - Residential
  - Commercial
  - Manufacturing
  - Farming
  - National Infrastructure
  - Hospitals
  - Etc.



## Exercise Evaluation

### Exercise evaluation to be conducted in 2-parts:

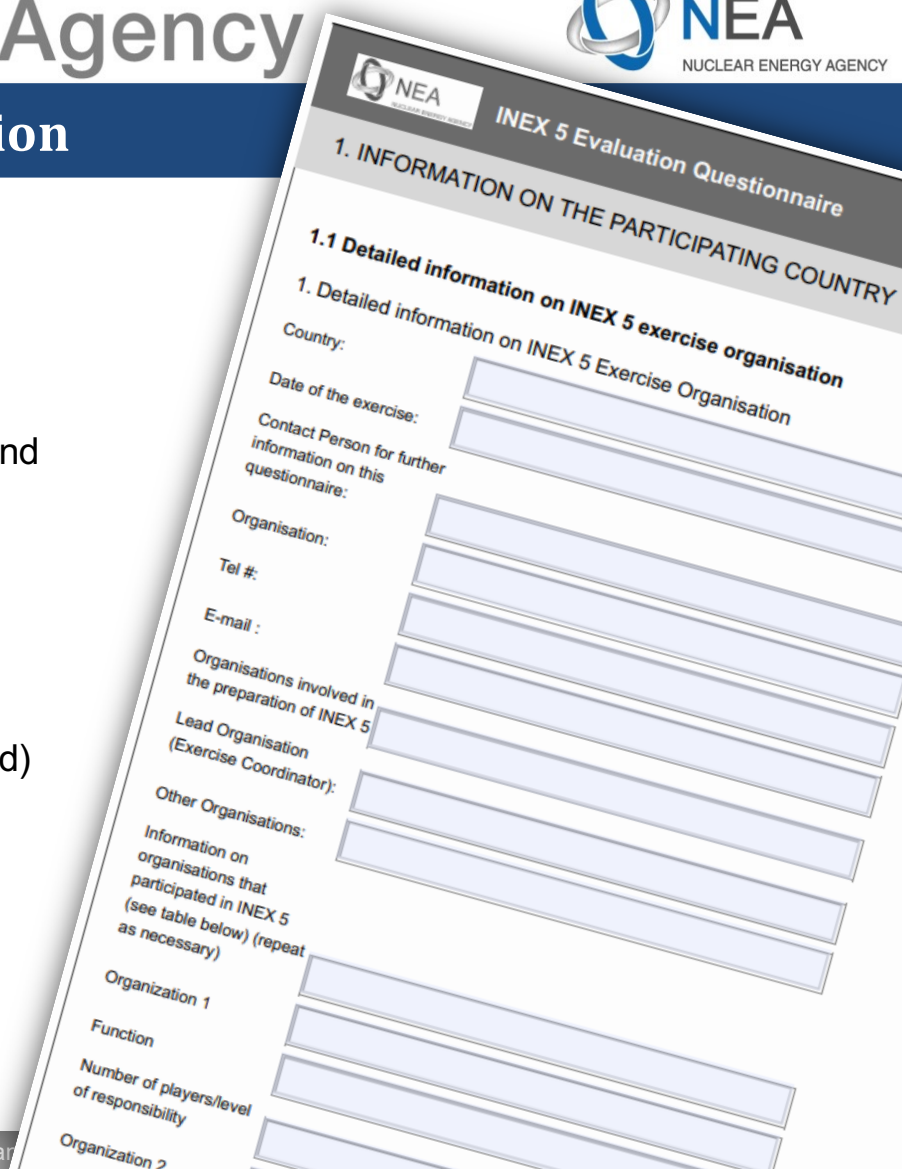
- **INEX-6 Evaluation Questionnaire**

- Completed by the Exercise Evaluator
- Based on the approach taken in INEX-5
- Evaluator to observe and record discussions and decisions, and seek feedback from players on successes/areas for improvement
- Findings to be recorded in the (online) INEX-6 Evaluation Questionnaire by 31<sup>st</sup> May 2024

- **INEX-6 Post-Exercise Review Workshop**

- To be held late 2024/early 2025 (date and venue to be decided)
- All members from NPCs invited to participate
- Opportunity to collectively agree on successes and areas for improvement

*Findings to be covered in the INEX-6 Post-Exercise Report – focus on international comparisons not country specific*



NEA  
NUCLEAR ENERGY AGENCY

### INEX 5 Evaluation Questionnaire

#### 1. INFORMATION ON THE PARTICIPATING COUNTRY

##### 1.1 Detailed information on INEX 5 exercise organisation

1. Detailed information on INEX 5 Exercise Organisation

Country:

Date of the exercise:

Contact Person for further information on this questionnaire:

Organisation:

Tel #:

E-mail:

Organisations involved in the preparation of INEX 5

Lead Organisation (Exercise Coordinator):

Other Organisations:

Information on organisations that participated in INEX 5 (see table below) (repeat as necessary)

Organization	Function	Number of players/level of responsibility
Organization 1	<input type="text"/>	<input type="text"/>
Organization 2	<input type="text"/>	<input type="text"/>

**Thank you for your attention.**



[www.oecd-nea.org/rp](http://www.oecd-nea.org/rp)

## Development of the INEX series

INEX Series	Exercise Objectives	Style	Year	Participating countries, territories & IOs
INEX-1	Early phase; Communication; Decision making process in national responses; Food safety; Emergency assistance	Table Top	1993	16
INEX-2	Decision making in uncertain conditions; Real time communication; Public and media interactions	Command Centre (Switzerland)	1996	30
		Command Centre (Finland)	1997	27
		Command Centre (Hungary)	1998	33
		Command Centre (Canada)	1999	31
INEX 2000	Monitoring and data management strategies for nuclear emergencies; International coordination; Aspects of the Convention on Third Party Liability	Command Centre	2001	55

## Development of the INEX series

INEX Series	Exercise Objectives	Style	Year	Participating countries, territories & IOs
INEX-3	Consequence management; Long-term issues; Decision making in the medium- and longer-term	Table Top	2005	15
INEX-4	Post-crisis emergency management; Response to widespread radiological contamination of the urban environment	Table Top	2010	17
INEX-5	Notification and communication aspects; Transboundary aspects; Interfaces; Identifying and obtaining resources	National and Regional Table Top	2016	22
<b>INEX-6</b>	<b>Long-term recovery phase</b>	<b>Modular Table Top</b>	<b>2024</b>	<b>27</b>

### <INEX-6 Participants>

Australia, Austria, Belgium, Canada, China, Czech Republic, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Norway, Poland, Portugal, Republic of Korea, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States, Chinese-Taipei, European Commission, IAEA



## National Level Planning

### Roles to be Assigned:

<b>National Exercise Organiser (NEO)</b>	The individual or organisation who “owns” the exercise and has overall responsibility for ensuring efficient exercise delivery and that all participating organisations are involved from the beginning of the exercise development process.
<b>National Planning Committee (NPC)</b>	The collective group of representatives from responsible organisations, chaired by the National Exercise Organiser, with the overall responsibility for delivering the national table-top or workshop exercise.
<b>Exercise Players</b>	Participants in the exercise that are required to respond to the exercise scenario in accordance with existing policies, protocols, and emergency preparedness and response plans/procedures.
<b>Exercise Moderator</b>	The individual(s) with responsibility for maintaining the efficient conduct of a national INEX6 exercise. The Exercise Moderator is responsible for ensuring that the exercise play and discussions progress smoothly according to the exercise framework, and that Exercise Players are provided with all necessary technical materials and driving inputs according to the exercise timeline.
<b>Exercise Evaluator/Recorder</b>	The individual(s) with the responsibility for ensuring that exercise activities in support of exercise objectives are effectively recorded to support the completion of the INEX6 Exercise Evaluation Questionnaire and any other exercise reporting.
<b>Exercise Observer</b>	Individuals invited to observe the exercise with no responsibility to contribute to exercise play or the organisation