Passive Systems Performance and Reliability Workshop

Register for the event

Workshop objectives

The OECD Nuclear Energy Agency (NEA), in collaboration with the European project **EASI-SMR**, is pleased to announce the **International Workshop on Passive Systems Performance and Reliability**, to be held in **Paris**, **France**, from **30 March to 1 April 2026**.

This workshop is organised under the auspices of the NEA Committee on the Safety of Nuclear Installations (CSNI), by its Working Group on Risk Assessment (WGRISK) and Working Group on Analysis and Management of Accidents (WGAMA), in collaboration with the IAEA and EASI-SMR project, co-funded by the Euratom Research and Training Programme.

The workshop aims to:

- Facilitate multidisciplinary exchange among experimentalists, code developers, and safety analysts;
- Address modelling challenges and acceptance criteria for passive systems; and,
- Identify knowledge and data gaps from both thermal-hydraulic and probabilistic perspectives.

Passive safety systems are central to the safety concepts of many advanced reactor designs, including **Small modular reactors (SMRs)** and micro-reactors. Despite their widespread use, consensus is lacking regarding modelling approaches, reliability assessment, and crediting methods in safety analyses.

This workshop builds on the 2024 NEA Status Report on Reliability of Thermal-Hydraulic Passive Systems and supports the goals of the Ensuring Assessment of Safety Innovations for SMR (EASI-SMR project), which addresses key safety challenges in light-water SMRs through a structured R&D framework.

Key dates

Milestone	Date
Abstract Submission Deadline	17 November 2025
Notification to Authors	12 December 2025
Registration Deadline	30 January 2026
Presentation Submission Deadline	7 March 2026
Workshop Dates	30 March – 1 April 2026

Suggested topics for contributions

Participants are invited to submit contributions on:

- Modelling and analysis experiences
- Uncertainty treatment in passive systems reliability
- Experimental data and knowledge gaps
- Crediting methods in deterministic/probabilistic safety cases
- Acceptance criteria and regulatory perspectives
- Code-specific challenges and good practices
- Insights from safety analyses and their implications

Additional information can be found in the downloads section

Workshop format

The workshop will include:

- Day 1: Industry and regulatory perspectives
- Day 2: Technical sessions and breakout discussions
- Day 3: Wrap-up, gap analysis, and roadmap development A technical visit is also planned (TBC).

Participate information and logistics

Who should attend: Experts from industry, regulators, technical support organisations (TSOs), research institutes, and consultants involved in safety assessment and decision-making.

Registration: Free of charge. Participants must register by **30 January 2026**

Abstract Submission: Submit 300 500 word abstracts by 17 November 2025. Accepted authors will be notified by 26 November 2025.

Language: English only (no interpretation provided).

Venue:

Paris Japan Cultural Center (101 bis Quai Jacques Chirac, 75015 Paris)

Workshop Proceedings

A **report** will be published summarising the workshop's findings, including recommendations for future R&D. Proceedings will also be published by the **EASI-SMR project**.

Organizing Committee

Ahmed Bentaib (ASNR, France), Petr Bizek (UJV, Czech Republic), Vinh Dang (PSI, Switzerland), Latonia Enos-Sylla & Matthew Humberstone (NRC, USA), Mikhail Lankin (IAEA), Shahen Poghosyan (IAEA), Fulvio Mascari (ENEA, Italy), Franck Morin (CEA, France), Hideo Nakamura (JAEA, Japan), Kateryna Piliuhina (ENEN, EU), Pierre Ruyer (ASNR, France), Nicolas Sobecki (EDF, France)

When?

30 March 2026 - 1 April 2026Paris, France (Japanese Cultural Centre)

Contact

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Tags

Accident management Probabilistic risk assessment Safety Safety assessment Safety research

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