

The logo for ENSREG (European Nuclear Safety Regulators Group) is displayed in white text on a dark blue background. The letters 'ENSREG' are in a large, bold, sans-serif font.

European Nuclear Safety Regulators Group



**8<sup>th</sup> European Nuclear Safety Conference:**  
**Regulating nuclear safety in a rapidly changing and challenging environment**  
**6Q2 Jozsef Antall building Rue Wiertz 60, Brussels**  
***16 and 17 June 2026***

The Steering Committee's proposals for the umbrella topic and sessions is to shape a 2026 ENSREG Conference that helps concerned parties to reflect on the current challenging nuclear context and explore the best ways whereby they can respond to various expectations and demands.

The main SC objective is to build a Conference programme that favors an updated overview of new industrial, social and technological expectations and an exchange of ways regulators can meet them, while keeping safety at the forefront of their decisions, making robust decisions and preserving their independence and credibility in rigorous, transparent, and forward-looking approaches.

**Umbrella topic:**

**Regulating nuclear safety in a rapidly changing and challenging environment**

The current nuclear context poses unprecedented challenges for the various parties involved in nuclear energy: climate issues, geopolitical context, energy independence, new nuclear projects, new uses of nuclear energy, new technologies and innovation, management of new waste streams, new players etc.

In this context, nuclear safety authorities, as public service providers, are subject to a wide range of expectations: those of politicians, industry, society, and their counterparts.

What are society's expectations today, and how can they be taken into account? What exactly are the expectations and constraints of the various parties involved? How, in this context, can regulatory bodies be responsible, resilient, robust, responsive and maintain

their competences, independence and credibility? How can they manage the right balance between rigorous and sound decisions with the ability to take industrial challenges into account? How can regulators meet the challenges posed by new technologies, new designs, new types of fuel and management of new waste streams? Can artificial intelligence help improve efficiency and operation of organisations?

In this current complex environment, collaboration between all concerned parties is even more important to ensure an effective and harmonized approach to safety.

The conference, which takes place in this landscape of challenges and opportunities, aims to promote exchanges between the different parties, compare expectations, share views on the different ways of addressing current common challenges and explore potential new collaboration and dialogue schemes.

Unlike other specialised technical forums, it aims to bring together a wide range of stakeholders: regulatory bodies, industry representatives, policymakers, waste management organisations, researchers, academia and civil society. This diversity is expected to offer a unique opportunity to highlight the role of nuclear regulators as independent and responsible institutions, grounded in scientific and technical knowledge and serving the public interest.

### **Session 1:**

#### **Performance and nuclear safety in the new nuclear context**

Regulators play a key role in the nuclear safety ecosystem. In the current context, regulation and nuclear safety are often perceived as barriers to innovation, generating additional costs and causing delays in industrial projects. Regulators are also expected to enable the development of nuclear energy while maintaining high safety standards, by establishing an effective regulatory framework and issuing authorizations as efficiently as possible.

This session aims at providing an overview of this context, exploring the relationship between safety, including in the long term, and industrial performance. This can cover various aspects:

- How can regulators enable the development of nuclear energy while maintaining high safety standards and preserving safety through all stages in the lifecycles of facilities, as a common good?
- To what extent should regulators adapt their processes and regulation to meet evolving expectations from industry?

- Can safety and industrial performance be considered mutually reinforcing and beneficial to each other?
- How to reinforce the safety culture at each level of any organisation to support the safe development of the nuclear programmes?
- How to develop a collective approach that does not conflict with safety and efficiency and that enables all concerned parties to achieve overall performance, while ensuring safety, manufacturing quality, and process simplification by manufacturers?
- How can regulators strengthen their ability to prioritise challenges and issues, and implement an explicit graded approach while maintaining high safety standards?
- Are regulators too demanding when it comes to safety? What would be an acceptable and sufficient level of safety?
- How can the dynamic perception of safety be accommodated as an evolving construct subject to continuous improvement?

## **Session 2:**

### **The role of research, innovation and technical assessment for continuous improvements in safety**

Research plays a vital role in nuclear safety. In particular, it enables regulators to anticipate the emergence of new technologies and address emerging challenges (LTO, AI, new designs, new fuels, new strategies and technologies to address decommissioning operations, management of new waste streams...). It contributes also to consolidate the necessary scientific knowledge to any regulatory decision. Research findings and demonstrations are crucial to support licensing applications—especially for new technologies—while independent research conducted by regulators can greatly enhance the quality of regulatory decisions.

Furthermore, in order to make sound regulatory decisions, it is necessary that regulators can rely on sound technical assessment conducted by a competent expertise.

At a time when experts opinion may be questioned and regulatory decisions challenged, this session will explore how regulators can develop and maintain a technically and scientifically sound basis for decision-making.

National and European approaches and ways of cooperation in this area to favor joint safety assessments and preserve knowledge and technical competences, as well as independence and credibility of the regulators, will be discussed also.

### **Session 3:**

#### **How to respond collectively to risks to nuclear safety posed by armed conflicts**

Armed conflicts and tensions of all kinds can profoundly and permanently change the way regulators carry out their missions and international cooperation, including their cooperation, and the ways nuclear safety can be maintained. They also raise new challenges regarding what an acceptable level of safety should be to maintain plants in operation.

This session can cover various aspects, such as:

- How can “regular” duties be carried out in the event of armed conflict?
- How can the need to maintain energy supplies be reconciled with the need to preserve safety?
- If the usual level of safety cannot be maintained, what would be an acceptable level of safety?
- How can the nuclear sector and the energy system be made resilient?
- What lessons can be learned from current crises in terms of legislation, regulation, and the functioning of the relevant bodies?
- How to address, in an integrated and effective manner, the various aspects and requirements related to nuclear safety, radiation protection, security and emergency preparedness in such circumstances?
- How to enhance cooperation between concerned parties to respond in an appropriate manner?

The session, which will draw in particular on lessons learned from the situation in Ukraine, explore how the organizations concerned should or could adapt, and reflect on the way international legal instruments should or could evolve. The importance of the role of the European commission and international organisations in this area will be highlighted.

## **Session 4:**

### **Preserving and enhancing public confidence in nuclear safety**

The current context may call into question the credibility and independence of regulators' decisions, given the high expectations they face in terms of efficiency and speed. It also raises challenges related to new expectations from civil society.

The session will be an opportunity to discuss actions implemented by the concerned parties to preserve and enhance their credibility and public confidence at a time when these may be called into question: public participation, public consultation and stakeholder involvement in regulatory processes and decisions. This in particular when considering the full life-cycle perspective of facilities, including decommissioning and management of radioactive waste until disposal.

It will explore in particular the levers that a responsible and trusted regulator can use to maintain stakeholder confidence in its decisions and ensure that the expectations of the public and society as a whole are taken into account in its decisions.

Ways to better understand society's current expectations in order to respond to them appropriately will also be examined.

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