



Summary report of the 7th ENSREG conference

The 7th European Nuclear Safety Conference, organised by the European Nuclear Safety Regulators Group (ENSREG) and the European Commission, took place on 24-25 June 2024 in Brussels. The event was chaired by the Slovenian Nuclear Safety Administration (SNSA) and moderated by Ms Ann MacLachlan. The theme of this year's edition was “**Responding to the growing interest in nuclear energy**”. The event gathered approximately 200 participants onsite and online, with 31 speakers. Four different, yet intertwined, topics were discussed in five separate sessions.

In the **opening session**, the conference heard from high-ranking representatives of several international organisations who addressed the current priorities of their organisations. Conference President Mr Igor Sirc, Director of the SNSA, welcomed the participants and outlined the coming sessions. Keynote speaker European Commissioner for Energy, Ms Kadri Simson, in a video message stressed the significance of ENSREG and of strong, independent regulators to ensure safe use and development of nuclear energy. Guest Speaker Director General of the OECD Nuclear Energy Agency Mr William D. Magwood underlined the importance of strong leadership and resources in timely preparation for the new context. ENSREG chair Mr Juan Carlos Lentijo, WENRA chair Mr Mark Foy, and for the first time, HERCA chair Mr Jean-Luc Lachaume, presented their work and plans for the coming years, noting the importance of coordination and common positions.

In the **1st topical session on ‘Adapting nuclear regulation to the new context’**, Mr Massimo Garribba, EC Deputy Director-General for Energy, highlighted the growing interest in nuclear in the EU and globally, the recognition of the role of nuclear in decarbonisation by recent European initiatives, and the role of nuclear regulators. In this context, he stressed the need for continued priority to be given to nuclear safety. Mr Oleh Korikov, Head of Ukraine's nuclear regulatory authority SNRIU, presented the current situation of nuclear safety and challenges in Ukraine, including the continuing difficult situation at the Zaporizhzhia Nuclear Power Plant. Ms Stéphanie Guénot Bresson (ASN, France), suggested that the level of safety and security culture of new players is key to ensuring a correct safety level, saying regulators must always be able to anticipate new developments and to ask questions. In light of the new vendors' inexperience, regulators will also need to be flexible with a more goal-oriented, technology-neutral and less prescriptive approach. Mr Mark Foy, (ONR, UK), presented the UK context characterized by a dynamic environment, including for nuclear fusion, and said regulators have a role in enabling nuclear power to play its part in energy security and net zero. Ms. Dana Drabova (SUJB, CZ), stressed the need for a new mindset among regulators to respond to the new context. Mr Xavier Ursat (Electricité de France, FR), expressed expectations to move from prescriptive to goal-setting regulations, to foster cooperation and exchanges between regulators to contribute to standardisation of the same design in EU countries, and promote efficient data processing

technologies (block chain, IA, etc.). Mr Ossi Lang (STUK, FI), chair of the NEA Expert Group on Public Communication) presented the [NEA Booklet on Characteristics of a Trusted Nuclear Regulator](#), issued in May 2024. Mr Jan Haverkamp (Greenpeace, NL) stressed that regulators need to be resistant against ideology and pressure from politics and industry. The following open discussion also addressed the need for a fusion regulation in the EU as it is already the case in other countries, such as the U.S.

During the **2nd topical session on 'Capacity and skills'**, Mr Andrzej Glowacki (PAA, PL) presented Poland's ambitious plans to introduce nuclear power. In addressing the issue of regulatory readiness, he recommended to start early, identify priorities, cooperate with others, and create an attractive workplace to attract new talent. He stressed the key prerequisite of financial resources of the regulator. Ms Ulla Engelmann, JRC Director, reported on the European Human Resources Observatory for the Nuclear Sector (EHRO-N), launched in 2010, and shared best practices for National Nuclear Workforce assessments. For the next 10 years, the sector estimates it will need to fill between 125 000 and 225 000 jobs. Ms Annemiek van Bolhuis (ANVS, NL) presented how her organisation is rising to the challenge of a doubling of its workforce between 2021 and 2030, saying that diversity and inclusion promote safety culture within the workforce. Mr Michael Knochenhauer (SSM, SE) said his staff is expected to grow by 25% in the coming years and shared efforts to increase outreach, to adapt training and improve external support. Mr Alexandru Tatomir (BGE, DE; EU joint programme on radioactive waste management (EURAD)), presented the EURAD work (first phase, 2019-24) on building capabilities and sharing knowledge. Ms Maria Naydenova (IAEA) presented two IAEA initiatives for attracting more women in the nuclear field and building capabilities: the Marie Skłodowska Curie programme launched in 2020 and the Lise Meitner initiative launched in 2023.

In the **3rd topical session on 'Addressing the challenge of climate change'**, speakers gave an overview of how climate change can affect nuclear installations, what operators are doing to prepare, and how regulators can approach the issue. Ms Helga Kromp-Kolb (BOKU University, AT) discussed climate threats posed to NPPs (such as sea level rise at coastal sites, extreme temperatures, grid failures and other events that can lead to social chaos); she stressed in particular the need for nuclear installations to undergo climate stress tests and for plans to adapt to climate change. Ms Véronique Rouyer (OECD/NEA) presented the NEA's assessment of climate change impact on nuclear installations. Mr Julien Collet (ASN, France) noted that upgrades of safety measures of existing installations are implemented thanks to decennial periodic safety reviews, but for new builds, climate change impact must be considered on a more distant time horizon. ASN is thus requiring sufficient safety margin to be explicitly built into future periodic safety reviews. Mr David Ogle from ENISS, representing European nuclear power plant operators, confirmed that they are committed to understand and manage climate risks but consider that their installations are sufficiently robust to handle anticipated risks.

The **4th topical session on ‘Regulatory approaches for licensing of SMRs: Industrial organization and safety issues’** was opened by Mr Jan Panek, DG ENER Director, who set the scene for discussion by presenting the numerous challenges associated with the development of SMRs (new technologies, supply chain, financing, skills, safety, waste management, public engagement, etc.). He introduced the European Industrial Alliance on SMRs which is just getting under way.

Mr Yves Desbazeille, DG of nucleareurope, indicated that more than 300 applications have been received for this alliance from a variety of entities (SMR designers, supply chain, SMEs, research organisations, training and education, EU MS ministries, NGOs, industry associations, etc.). On 29-30 May, the 1st General Assembly of the alliance brought together most of the 277 entities which have been already accepted as members. Mr Karel Deknopper (NUWARD, FR) presented the Joint Early Review (JER) of the NUWARD SMR that was designed to foster exchanges between three European nuclear safety regulators on the NUWARD design. Mr Stéphane Calpena (newcleo) called for reform of regulation, allowing non-nuclear construction onsite to begin early in order to reduce construction duration and help attract private investment. Finally, Mr Christoph Pistner (Öko-Institut e.V., DE) stressed the need to discuss safety targets for SMRs/AMRs.

During the open discussion, the panellists analysed the importance of pre-licencing, reduced procedural timeline, the importance of placing SMRs in the overall energy context, and creating a level playing field for nuclear energy.

The **5th topical session on ‘Regulatory approaches for licensing of SMRs: Regulatory collaboration going forward’** gave the floor to nuclear safety regulators. Mr Petteri Tiippana (STUK, FI) reflected on the importance of regulatory collaboration, calling for regulators to agree on a high-level common goal for SMR safety and a mandate and resources to work towards this goal. He indicated that STUK would include a pre-licensing step (plant concept evaluation) in its safety evaluation and said that was the appropriate step for collaboration. Ms Sylvie Cadet Mercier (ASN, FR) said initiatives on SMR licensing, in particular the European SMR pre-partnership, had demonstrated that harmonisation of licensing processes between EU countries is unrealistic in this decade, as is mutual design certification acceptance, but that cooperation in SMR design reviews is very beneficial and a concrete mean to compare and share approaches and positions. Mr Marco Brugmans (ANVS, NL and ENSREG) mentioned the importance of competence building through cooperation with regulators that are reviewing or have reviewed a specific design in the pre-licensing phase and the need of early engagement between industry and regulators. Mr Mohamed Shams (NRC, US) indicated that NRC is updating its regulatory framework to make it more risk informed for SMRs/AMRs, and stressed the importance of international collaboration. During the open discussion, the panellists expressed diverse views on the need for higher safety levels for SMRs, as they will be built closer to people, what is safe enough for Generation IV AMRs, and how to sufficiently involve the public in the decision-making process. There was also a discussion about ENSREG’s role as an observer in the European



Industrial Alliance on SMR. Some speakers argued that regulators should interact more with industry, in a sense of early engagement: not to be influenced by industry, but to better understand and to be prepared for future challenges on both sides at an early enough stage.

The conference was concluded by Mr Igor Sirc who thanked the panellists and the audience for contributing to a lively debate.