

Fourth ENSREG Conference on Nuclear Safety

The European Nuclear Safety Regulators Group (ENSREG) held its fourth conference in Brussels on 28 and 29 June 2017.

The event brought together more than **270 delegates from 32 countries** including national regulators, nuclear operators, NGOs, industry (including from the aerospace field), academics, as well as representatives from European Union institutions and national competent authorities.

ENSREG's **first conference in 2011** had mainly dealt with the work done by the regulators' group, its achievements and perspectives. The **second conference in 2013** had focused largely on the Fukushima accident and the lessons learned from it. **In 2015**, the conference focused on the legal framework for nuclear safety and Europe's proactive role in the improvement of nuclear safety.

This year's event was built on topics related to the **EU directives** (2011 on radioactive waste management and 2014 revised directive on nuclear safety) and issues such as **long-term operation, licensing or supply chain control**.

The conference, chaired by Mr Petteri Tiippana (director-general of Finnish regulator STUK), was opened by Mr Maroš Šefčovič, vice-president of the European Commission. He stressed the priority of the European Commission in terms of nuclear energy, which is to ensure that nuclear energy is used only with the highest standards of safety, and praised the advice provided by ENSREG over the recent years as well as its active role in cooperating with neighbouring countries' regulators. Opening remarks were delivered among others by the President of the conference as well as by ENSREG, IAEA, and industry representatives.

In the four topical sessions, many key issues emerged from the presentations given by invited speakers and panellists, as well as discussions with the public.

In the session dedicated to **spent fuel and radioactive waste management**, the need for timely political decision-making balancing transparency and effectiveness was stressed. Developing the most appropriate approaches takes time and requires discussion with the operators and the public. It also requires a strong trust in the regulators. The issue of regional disposals was mentioned, but mostly in a theoretical way, as regulators stressed the need (and requirement in most countries) to secure national waste management solutions. The importance of knowledge and experience retention, as well as the need to ensure funding for long term solutions, were also stressed. Interim storage facilities were also part of the discussion, but many participants underlined the fact that the construction of such facilities can only be considered if they are part of a more general approach comprising final solutions. Finally, waste management must also take into consideration dismantling and decommissioning issues.

In the session dedicated to **licensing**, regulators and vendors stressed the fact that there is a need to reinforce cooperative efforts (and associated benchmarking) on codes and standards as well as national processes for licensing, for instance on new designs such as small modular reactors (SMRs). All parties have to make the best of existing cooperative frameworks such as the multinational design evaluation programme (MDEP), which provides the possibility to share operating experience on existing Generation 3 nuclear power plants between regulators and licensees. On the licensing process, a strong desire for public engagement to discuss the best safety standards was expressed. Finally, it was recognised that lessons learned in design and construction must include those of supply chain and its control.

In the session related to **long term operation (LTO)**, the participants agreed that the first responsibility lies with the licensees. If they wish to extend the operation of an installation, they must notify the regulator in order to initiate an assessment process for potential approval. They must also take into consideration that investments are needed to ensure the continuous improvement of nuclear safety and must inform the regulators of the scope and nature of the investments they intend to make. The general approach must be holistic, taking into account safety and risks: in that sense, current reflections on “timely implementation of reasonably practicable safety improvements” to decrease risk, as stated in the 2014 nuclear safety directive, are pivotal. The issue of effective and constructive public engagement in the decision-making process regarding LTO was raised. The need to complete the Topical Peer Review on Ageing Management is also essential, and will be a major input to upcoming LTO discussions.

In the session on **supply chain control**, the French regulator shared its lessons learned on carbon segregation issues, both on technical anomalies and on supply chain irregularities. On the second issue, which was the core of the debate, participants exchanged on ways to prevent them: the need to promote safety culture – in particular a questioning attitude – in the supply chain was stressed, especially among workers, foremen and line managers who have to be aware of the final use of the equipment and therefore what is ultimately at stake. Programmes supporting potential whistleblowers and transparency on detected events must also be encouraged. Moreover, there is a need to ensure the integrity of data management. Regarding the detection of irregularities reinforced inspector training, changes in inspection methodology and scope and independent audits were highlighted.

The Conference was closed by its president Mr Tiippana, who noted that these two days are a special moment of interaction within the global nuclear community and that they need to be as fruitful as possible. In conclusion, he left the participants with three questions to ponder: what did we all learn? Did we manage to build trust among members of the community? And finally, did we actually find ways to enhance safety or decrease risk?

The ENSREG Conference illustrated the consensus regarding continuous improvement of nuclear safety, a priority shared by multiple stakeholders as well as the need for effective communication and public participation. The conference also allowed all participants to contribute to the debate and to share their expectations related to nuclear safety.

The conference was streamed on the ENSREG website. The presentations and speeches, as well as photos and video recordings, are also available on that website.