



**Minutes of the 41<sup>st</sup> meeting of ENSREG**  
 9-10 November 2020  
 Virtual meeting

## Participants

With the exception of Malta, ENSREG Members representing all EU Member States as well as the European Commission participated to the meeting. Romania and Hungary were represented by alternates nominated by an ENSREG Member. Observers from Belarus, Norway, Switzerland, the IAEA, WENRA and the EU Council also participated.

### 1. Opening of the meeting and adoption of the agenda

The ENSREG Chairperson, Ms Marta Žiaková, opened the virtual 41<sup>st</sup> ENSREG meeting, which was spread over two afternoon sessions. She reminded participants that the 40<sup>th</sup> ENSREG meeting planned for March 2020 had to be cancelled due to the Covid-19 pandemic. The meeting took place without interpretation due to the constraints imposed by the pandemic.

Ms Žiaková welcomed two new observers Ms Tadesse, representing the OECD Nuclear Energy Agency, and Mr Kenzelmann, representing the Swiss Federal Nuclear Safety Inspectorate. Mr Kenzelmann was invited to present himself; Mr Tadesse did not participate in the meeting. The list of Members and Observers at the time of the meeting is attached as Annex II.

Two additional points were added to the agenda under A.O.B. (EC information on ENSREG's response to the pandemic and an upcoming event on Small Modular Reactors). The adopted agenda is attached as Annex I.

### 2. Chairperson's introduction and report

[HLG\\_M\(2019-40\)\\_470 Minutes of the 39th ENSREG Meeting.pdf](#)

[HLG-r\(2020-40\)\\_497 Minutes of the ENSREG Senior Officials' Webex meeting 1.7.2020](#)

[HLG-r\(2020-41\)\\_499 ENSREG Senior Officials Webex 22 September 2020](#)

The Chair informed that all comments on the draft minutes of the last (39<sup>th</sup>) ENSREG meeting, which took place in November 2019, had been taken into account. The final minutes were approved in the present meeting and will be published on the ENSREG website.

The Chair also informed that throughout the year the working groups (WGs) had continued to meet either physically or – later – virtually. The Chair had met with the vice-Chairs, the WG Chairs and the Commission in virtual meetings, in June and September 2020. The records of both meetings can be found on CIRCA BC. Where possible, agenda points from the March 2020 meeting have been conducted through Written Procedures. However, some topics require discussion before taking decisions.

### 3. Court of Auditors – Audit for Nuclear Safety

[HLG-r\(2020-41\)\\_514 Court of Auditors Presentation SR 03-20 Nuclear safety](#)

Mr Helder Faria Viegas, European Court of Auditors (ECA), delivered a presentation on the audit that the ECA had carried out in 2019 on how the European Commission (EC) exercises its competences in the nuclear safety field including emergency preparedness and response. It has reviewed the EC legal framework and relevant policies, procedures, strategies, guidance documents provided to Member States as well as reports, studies, assessments. The Directorate General for Energy was the main auditee, as the main EC service for nuclear safety. Four opinions on nuclear investments projects were examined. Interviews with DG ENER and Joint

Research Centre were carried out and nuclear safety questions were discussed with experts in IAEA. The full report can be found under the following link: <https://op.europa.eu/webpub/eca/special-reports/nuclear-safety-3-2020/en/>

The EC representative commended the value of an independent, objective and thorough review of the Commission's activities in the nuclear safety area. The EC has committed itself to implement all the audit recommendations and some improvements were already in place.

## 4. Second Topical Peer Review (TPR-II)

### 4.1 Appointment of Chair and Vice-Chair

The Chair informed that the first call for nominations for the positions of TPR-II Chair and vice-Chair was sent on 20 July 2020 with a deadline of 01 October 2020, subsequently extended to 20 October 2020. Two nominations were received: Sylvie Cadet-Mercier from France for the position of Chair and Mr Kai-Jochen Weidenbrück from Germany for the position of vice-Chair. Mr Michael Hübel has been appointed as the EC's representative on the TPR-II Board.

After consultations with the new Board, a call for candidacies for the position of the Project Managers to join the Board, in view of their appointment by the March 2021 plenary meeting, will be launched. In due course, a call for a pool of experts to support the TPR will be launched as well.

**ENSREG took the decision to:**

**Approve the candidacies for the positions of Chair and vice-Chair.**

### 4.2 TPR-II Process Document

**HLG-r(2020-41)\_504 2nd TPR draft overall process document**

**HLG-r(2020-41)\_505 WG1 2nd TPR process to 41st ENSREG**

WG1 Chair Ms Kirsi Alm-Lytz presented the TPR-II overall process document, as uploaded to CIRCA BC, for ENSREG's approval. The arrangements for the TPR-II and process for topic selection were first discussed in the 39<sup>th</sup> plenary. The process document was prepared by WG1 in consultation with WG3 and WENRA-RHWG. (Reactor Harmonisation Working Group) The process document outlines the main responsibilities and the main steps of the overall process. The main actions of TPR-II respect the 6-year interval from TPR-I, as foreseen in Article 8e of Nuclear Safety Directive.

**ENSREG took the decision to:**

**Approve the TPR-II process document.**

### 4.3 TPR-II Topic Selection

**HLG-r(2020-41)\_513 WENRA Cover letter & report potential topics TPS-II**

The Chair of WENRA presented WENRA's proposal for the TPR-II topic of fire protection. The selection process inside WENRA had started in mid-2019, and had involved ENSREG WG1, ENISS and EC. WENRA reviewed several proposed topics against the seven selection criteria set by WG1 and have chosen two potential topics best fulfilling the criteria: fire protection, and qualification of selected systems, structures and components important to safety.

The two potential topics were selected because they leave room for further harmonisation and safety improvements, and provide an opportunity for countries which do not have operating NPPs to participate. In the end fire protection was chosen for following reasons: fire is a highly significant risk for nuclear installations, there is a large experience feedback on fire related events, reasonable practical improvements can be identified, it is a technologically neutral field allowing inclusion of various nuclear installations, and this area was not covered by previous post-Fukushima investigations. WENRA also recommended to ENSREG to include a broad range of nuclear installations in the scope of TPR-II.

Agreement on the following points emerged during the ensuing discussion. General support was expressed for the proposed topic, which is of practical relevance. The technical scope of TPR-II needs to remain within the limits of the Nuclear Safety Directive. The scope should cover design and operation of NPP during construction, operation and decommissioning, and address both prevention and mitigation. Research reactors with a power level less than 1 MW should be excluded. A suggestion to exclude waste storage facilities also received support. Participants agreed that the technical scope needs to be carefully defined in the technical specifications.

WENRA will start drafting the technical specifications and will keep the TPR-II Board and WG1 informed. WG3 should be fully involved in discussions to ensure transparency and the conduct of public consultations. The EC expressed its readiness to contribute to drafting of the technical specifications.

#### ENSREG took the decision to:

**Approve fire protection as the topic of TPR-II.**

## 5. Stress-Tests and NAcP outside the EU

- Report from the Chair of Board for Stress Tests in Third Countries

[HLG-r\(2020-41\)\\_520 Report on ENSREG ST Board in Third Countries to ENSREG Plenary](#)

[HLG-r\(2020-41\)\\_510 ToR Third Countries Stress Test Board - for approval by the 41st ENSREG plenary](#)

[HLG-r\(2020-41\)\\_515 Minutes of the 1st meeting of the ENSREG ST Board in Third Countries](#)

[HLG-r\(2020-41\)\\_512 Belarus NAcP PR extension to Practical Arrangements](#)

[HLG-r\(2020-41\)\\_518 Lithuanian Position on Belarus NPP](#)

The ENSREG Chair introduced the topic. The Terms of Reference of the ENSREG Board for Stress Tests in Third Countries circulated to Members for comments with a deadline of 25 August 2020. The comments received were addressed in the draft version, uploaded to CIRCA. The name of the Board was suggested by France. The main substantial comments were aimed at clarifying that the Board works under the overall supervision of ENSREG in plenary formation.

The ENSREG Chair also drew Members' attention to the extension to the Practical Arrangements document with Belarus, covering the ongoing peer review in Belarus, which had been negotiated over the summer.

The Chair of the Board Mr Molin presented the activities of the Board for Stress Tests in Third Countries. Its members were appointed by a Written Procedure which expired on 31 August 2020: The Board is composed of a Chair, and three Members representing both nuclear and non-nuclear countries, together with a representative of the Commission. The Board members elected Mr Molin as Chair. The Board members are:

Ms Sylvie Cadet-Mercier (FR)

Mr Andreas Molin (AT)

Mr Frank Hardeman (BE)

Mr Latchesar Kostov (BG)

Mr Garribba represents the European Commission.

Since its establishment the Board had met twice. The Chair reported that the main activity so far concerned the ongoing ENSREG peer review of the implementation of Belarus' stress test National Action Plan, which covers the Astravets NPP. Following a high-level EC/ENSREG mission to Minsk in March 2020, at the end of June 2020, the government of Belarus agreed to host the peer review. Mr Tiippana was appointed as the peer review team leader by Written Procedure, and quickly established a peer review team. The review is progressing well, with the team planning to visit Minsk and Astravets in December to finalise their report.

The Chair also noted that due to resource constraints, preparatory work on the peer review of the Akkuyu NPP in Turkey would start after the completion of the Astravets peer review.

Mr Tiippana, reported on the ongoing Astravets peer review. As currently planned, following preparatory activities including technical video conferences, the peer review team would visit Minsk and Astravets in

December 2020, and would draft its report in view of adoption by an extraordinary ENSREG plenary at the end of January 2021.

Although the peer review was progressing well, the team was also considering options for completing the review in the event of a further deterioration of the pandemic situation. It seemed likely that not all peer review team members would be able to participate to the December mission, therefore the team was carefully examining the option of a hybrid mission, with a reduced team participating to the mission, supported virtually by the remaining team members. The team was also examining the necessary skill set and minimum viable size for the team travelling to Belarus. He also noted that the team considered that the overall peer review exercise could not be finalised without a physical mission by the full team to confirm written and oral exchanges.

The Chair of the Board for Stress Tests in Third Countries emphasised that no one should be forced to travel in present circumstances.

The Commission representative reported that he had spoken with the Belarusian deputy Foreign Minister, who had promised that the Belarusian side would undertake everything necessary on the Belarus side to ensure that the review can be accomplished in line with the schedule. Likewise, the Commission will provide whatever human resources and other support is necessary to ensure completion on schedule.

The Commission representative also noted that postponement of the entire mission should be avoided given the importance of early clarification of the implementation status of the key recommendations from the 2018 ENSREG report.

If, however, it is not possible to undertake the December 2020 review mission with the full team, the Stress Test Board should identify the optimal hybrid solution involving a reduced size team conducting the physical mission. In such a case, it will not be possible for the team to address all issues, and instead the team would need to focus on priority issues.

It was agreed that the Board should closely monitor the situation in view of identifying the optimal solution for organising a hybrid mission.

The Lithuanian Member presented a Lithuanian position paper on the Belarus National Action Plan Peer Review, expressing concerns that not all Peer Review Team recommendations following the Belarus' national stress test report were implemented so far and urging Belarus to suspend the commissioning of the first unit of the Astravets NPP until the completion of ENSREG peer review of Belarus NAcP and resolution of all indicated safety issues.

Mr Tiippana noted that the first set of answers to questions of the Peer Review Team was received from Belarus within the agreed deadline. As agreed, answers to Lithuanian and Austrian questions are expected to be received later, however they are partly reflected in the first set of questions and answers. Topical leads are going to identify the key recommendations.

The ENSREG Chair noted that once the peer review team has fully analysed the information received, Members will be able to comment on their Report during the next Plenary.

#### **ENSREG took the decision to:**

**Approve the Terms of Reference of the ENSREG Board for Stress Tests in Third Countries.**

#### **ENSREG took note of:**

- **the Board's first report to the plenary;**
- **the extension to the Practical Arrangements document covering the ongoing peer review in Belarus;**
- **the discussions regarding the arrangements for completion of the peer review in case of pandemic related difficulties.**

#### **ENSREG agreed on:**

**holding an extraordinary plenary in mid-January 2021 in view of the approval of the Belarus peer review report.**

## 6. Review of WG1, WG2 and WG3 activities since the previous meeting.

### 6.1 WG1 (K. Alm-Lytz)

[HLG-r\(2020-41\)\\_500 Post-Fukushima NAcP -STATUS REPORT 2019](#)

[HLG-r\(2020-41\)\\_521 Update of Ukraine's stress test National Action plan](#)

[HLG-r\(2020-41\)\\_506 WG1 Report to 41st ENSREG](#)

WG1 Chair Ms Alm-Lytz presented the WG1 activity report, as uploaded to CIRCA BC. Two WG1 meetings took place since last ENSREG plenary: on the 26<sup>th</sup> of February in Brussels and on the 15<sup>th</sup> of September virtually.

Ms Alm-Lytz informed participants about the most recent **two-yearly report on the implementation status of stress test National Action Plans (NAcP)**, the reporting date of which was at the end of 2019. In general, countries have completed most actions and many significant plant improvements have taken place. For those countries which had not yet addressed all actions, there were a variety of reasons for delays. In addition to the implementation of actions from the stress test process, improvement measures originating from periodic safety reviews, plant modifications and PSA or PRA results also need to be implemented at the plants.

Ms Alm-Lytz invited ENSREG members to approve the Post-Fukushima NAcP status report.

The Commission representative observed that the fact that the 10<sup>th</sup> anniversary of the Fukushima accident was rapidly approaching, without all recommendations being implemented, should be understood as a lesson for future peer reviews, e.g. TPR-II. Actions should be ranked by priority, and longer term actions clearly identified. The Austrian member stressed that in case of delays in implementation, it is very important to inform the general public and stakeholders about the reasons.

The WG1 Chair provided information on the ongoing work on **improving the effectiveness and efficiency of IRRS/ARTEMIS missions**. In 2018 a pilot mission combining IRRS and ARTEMIS took place in Spain. However, it is generally felt that it is difficult to combine ARTEMIS and IRRS missions, but there is more interest in back-to-back missions.

A subgroup, led by the Netherlands, met with representatives of the three concerned IAEA departments in February 2020. IAEA's view is that combining the two mission types is very difficult. In the short-term it was concluded that efforts to improve effectiveness and efficiency should instead focus on development of back-to-back missions and to stop efforts to develop combined missions. Nonetheless, in the medium term IAEA should be encouraged to develop a new peer review mission for the EU, which would meet the requirements of both the Nuclear Safety Directive and the Radioactive Waste Directive.

#### [ENSREG took the decision to:](#)

#### [Approve the Post-Fukushima NAcP – Status Report](#)

### 6.2 WG2 (S. Laporta)

[HLG-r\(2020-41\)\\_517 WG2 Report ENSREG 41](#)

[HLG-r\(2020-41\)\\_508 ENSREG WG2 Interim Report on KPIs](#)

[HLG-r\(2020-41\)\\_509 WG2 Draft technical position on reporting waste and spent fuel under the RWD](#)

WG2 Chair Mr Laporta presented the WG2 activity report. Two WG2 meetings took place since last ENSREG plenary: on the 12<sup>th</sup> of February in Rome and virtually on the 12<sup>th</sup> – 13<sup>th</sup> of October.

In relation to the study recently launched by EC on **Key Performance Indicators (KPIs)**, WG2 had decided to finalise the current position on KPIs as an interim technical position on progress towards implementation of

national programmes and KPIs. Once the results of the EC study are available, WG2 will finalise its technical position document in the form of guidance on the use of KPIs in national programmes. In relation to the study on KPI's, WG2 provided feedback on a questionnaire to be sent to Member States. WG2 asked for ENSREG endorsement of the interim report, as revised according to the comments received.

Regarding **Peer Reviews under the Radioactive Waste Directive**, Mr Laporta informed that so far 25 MS have hosted, requested or otherwise indicated their intention to carry out ARTEMIS missions. Regarding the two MS which had not yet requested a peer review mission, the EC representative emphasised that requesting peer reviews is a legal obligation under the Radioactive Waste Directive. One of the two concerned countries noted that invitation of peer review missions was the responsibility of the government, and that in that country a new government had just been formed.

The updated, consolidated list of experts for peer reviews under the Directive 2011/70/Euratom was transmitted to IAEA in October 2020. IAEA has dedicated a virtual training course to the pool of experts taking place between 13 November and 4 December.

WG2 had also discussed its activities under the next ENSREG Work Programme, covering 2021-2023 and had identified the following actions:

- follow up of the ENSREG interim position on Key Performance Indicators (KPIs);
- exploratory review of Member States' approaches to characterising the starting point and defining the end state of decommissioning;
- review of approaches in regulation and management of radioactive waste arising from non-energy uses of nuclear and radiation technologies;
- provision of support to the IAEA in improving the effectiveness and efficiency of IRRS and ARTEMIS missions (together with WG1).

#### **ENSREG took the decision to:**

**Endorse the ENSREG WG2 Interim Report on Key Performance Indicators;**

**Approve the ENSREG WG2 Technical position concerning radioactive waste and spent fuel inventories under the Directive 2011/70/Euratom.**

### **6.3 WG3 (P. Majerus)**

[HLG-r\(2020-41\)\\_502 WG3 Progress Report to 41th ENSREG](#)

[HLG-r\(2020-41\)\\_501 ENSREG Communications Policy](#)

[HLG-r\(2020-41\)\\_503 WG on Transparency Arrangements](#)

WG3 Chair Mr Majerus presented the WG3 activity report, also uploaded on CIRCA BC. Two WG3 meetings took place since last ENSREG plenary: on the 12<sup>th</sup> of February in Vienna and on the 7<sup>th</sup> of October virtually. He mentioned WG3's involvement in TPR-II preparations, where they will continue to cooperate with WG1, WENRA and other stakeholders.

The paper on the "Survey of ENSREG Member Organisations on application of the ENSREG Principles for Openness and Transparency", which was presented two years ago in the ENSREG plenary, was finalised and the guidance updated. The final version was submitted to the plenary for approval. It could also serve as a basis for possible contributions for the ENSREG Conference.

The **widespread atmospheric detection of Ruthenium-106 in Europe in 2017** has been discussed in previous ENSREG plenary meetings. In early 2020 IAEA prepared a compilation of several countries measurements from that time. In the interests of transparency, WG3 requested approval for publication of the document (entitled Status of Measurements of Ru-106 and Ru-103 in Europe) on the ENSREG website.

Based on the 2014 communication strategy working paper, WG3 have developed the **ENSREG Communication Policy**, also uploaded to CIRCA BC. The document is aimed at ENSREG itself rather than national regulators. It is an internal ENSREG document depicting the high level principles on the basis of which ENSREG communicates with the public and other stakeholders. It is divided into three sections: purpose, communications in practice, and ENSREG's interaction with the public and stakeholders. WG3 proposed the document for approval and publication on the ENSREG website. The paper was approved for publication, subject to the incorporation of some edits proposed by the representative of the Netherlands.

#### ENSREG took the decision to:

**Publish the paper “Survey of ENSREG Member Organisations on application of the ENSREG Principles for Openness and Transparency”;**

**Publish a link on the ENSREG website to the IAEA document “Status of Measurements of Ru-106 and Ru-103 in Europe”;**

**Publish the Communication Policy of ENSREG, with the edits proposed by the NL Member.**

## 7. Report from WENRA

**HLG-r(2020-41)\_519 Update on WENRA Activities**

The WENRA Chair Mr Gupta presented WENRA's activities. WENRA has three types of participants: members, associated members and observers. In 2019, associate member status was granted to Russia. Mr Gupta stressed the WENRA's value as a venue where regulators can discuss informally without governments, licensees, or operating organisations.

Mr Gupta reported upon WENRA's principal activities:

- WENRA has approved revisions of two of the 2014 safety reference levels for power reactors, as well as two new releases, one of which on internal risks includes fire;
- Regarding research reactors, WENRA's WGRR (Working Group on Research Reactors) has prepared a complete set of safety reference levels. Previously an ad-hoc group, the WGRR will now become a permanent Working Group;
- An ad-hoc crosscutting working group has been created to ensure consistency across WGs;
- Contributing to TPR-II represents a priority activity for WENRA over the next three years.

The EC representative thanked Mr Gupta for presenting WENRA's current activities and hoped for continued sharing of information with ENSREG in the future. He noted that work on safety reference levels for research reactors is very important for the EC to ensure the safety of research reactors used in the medical field.

The EC representative invited WENRA to devote attention to the decommissioning of graphite core reactors, as problems with them exist in many EU countries.

The Netherlands representative presented the WGRR, which was created in 2017. The WGRR's 5 year action plan will include a benchmarking exercise for reference levels for research reactors.

## 8. ENSREG Work Programme 2021-2023

**HLG-r(2020-41)\_522 draft ENSREG Work Programme 2021 - 2023**

The three working groups have prepared proposals for the ENSREG Work Programme 2021-2023 complemented by input from DG DEVCO regarding the review by ENSREG of the European Instrument for International Nuclear Safety Cooperation (EI INSC) Multi-annual Indicative Programme.

**ENSREG Secretariat** presented the Work Programme. It reflects largely the ongoing activities and priorities of ENSREG, a few new additional activities have been included, others have been carried forward from the



previous period. The main priorities will remain support for the implementation of the Nuclear Safety Directive and the Radioactive Waste Directive; as well as launch of the preparations for TPR-II.

Members were invited to comment on the draft Work Programme by 30<sup>th</sup> of November. Any proposed changes will be shared with the Working Groups for their advice, and the Work Programme would be updated as necessary. The aim is to launch a written procedure for the approval of the WP by the end of the year / beginning of next year and to adopt the WP before the next plenary.

**ENSREG took the decision to:**

**Adopt its Work Programme for 2021 – 2023 by Written Procedure, incorporating comments received, as described above.**

## 9. ENSREG Conference 2021

### HLG-r(2020-41)\_516 Report to plenary - ENSREG Conference 2021

The Chair of the Steering Committee Mr Kuhn presented the preparatory steps for the ENSREG Conference 2021.

Following a Written Procedure, which expired on 24 October, ENSREG members had endorsed:

- the leading regulatory authority, which volunteered to chair the Conference (Germany);
- the Chair/President of the Conference (Wolfgang Cloosters, DG of the German regulatory authority);
- the Chair of the Steering Committee for the preparation of the Conference (Sebastian Kuhn, Germany); and
- the other members of the Steering Committee (Eva Gratzner-Heilingsetzer, Austria; Luc Chaniel, France; Igor Grlicarev, Slovenia; Ignacio Martin Granados, Spain; Marko Kravos, European Commission).

Ms Ann MacLachlan is again proposed as conference moderator. The Chair of the Steering Committee for the last Conference Mr Lamberto Mateocci will join the next meeting of the Steering Committee in December to share his experience and ideas.

It is proposed to keep the same format as the previous conference, that is 1,5 to 2 days and 4-5 topic sessions. The Steering Committee was invited to reconsider the proposed dates of 3-4 June, 2021, due to clashes with other events, however aiming to hold it before summer holidays.

Members were invited to suggest topics for the Conference by the 27<sup>th</sup> of November. A call for topics had already been launched early summer, but only two proposals were received: transposition of Article 8(4) of NSD and the role of nuclear regulators in its implementation; ENSREG abroad – peer reviews outside the EU. During the plenary the Austrian member suggested to present the work of ENSREG.

Once the topics will be chosen, possible panellist will be identified and the programme should be completed by the end of February 2021. The programme will be presented for approval during next ENSREG plenary and the invitations will be launched after.

**ENSREG took the decision to:**

**Request the Steering Committee to proceed on the proposed basis, while checking again for alternative dates before the summer break in 2021.**

## 10.6th ENSREG Report to the Council and the European Parliament

### HLG-r(2020-41)\_507 6th ENSREG report for approval by the 41st ENSREG plenary

The 6<sup>th</sup> ENSREG report to the Council and the European Parliament covers the period of the years 2018-2019. It was prepared by the ENSREG Secretariat, taking into account comments from the Working Groups and ENSREG members, for approval in the March 2020 plenary. As the meeting was cancelled, the report was



updated during the summer and further comments were integrated. After the approval of ENSREG, the Chair will transmit it to the Director-General of DG Energy of the European Commission, which will inform the Secretary Generals of the Council of the EU and the European Parliament.

### [ENSREG took the decision to:](#)

[Approve the 6<sup>th</sup> ENSREG Report to the Council and the European Parliament.](#)

## 11. Ongoing and Planned Studies by the Commission

### [HLG-r\(2020-41\)\\_525 Commission Studies](#)

The EC presented the ongoing and planned studies contracted by the Commission.

Studies already published following up on PINC, and in particular on the implementation of the RWD:

- Study on market for decommissioning nuclear facilities in the European Union;
- Study on the risk profile of the funds allocated to finance the back-end activities of the nuclear fuel cycle in the EU;
- Support to the mid-term evaluation of the nuclear decommissioning assistance programmes in Lithuania, Bulgaria and Slovakia.

Studies to be published soon:

- Study on the insurance, private and financial markets in the nuclear third party liability field;
- Methodologies of cost assessment for radioactive waste and spent fuel management. An overview of the practices adopted in the EU;
- Benchmarking analysis of Member States approaches to definition of national inventories radioactive waste and spent fuel;
- Comprehensive examination and analysis of the situation of transport of nuclear materials;
- Analysis to Support Implementation in Practice of Articles 8a-8c of Directive 2014/87/Euratom.

Studies ongoing / in preparation:

- Study on Key Performance Indicators for monitoring implementation of national programmes on safe and long-term management of spent fuel and radioactive waste;
- Study to support the ex post evaluation of the nuclear decommissioning assistance programme 2014-2020;
- Study on radioactive waste classification schemes in the EU;
- Implementation of Nuclear and Radiological Emergency Preparedness and Response Requirements in EU Member States and Neighbouring Countries;
- Resilience of the Nuclear Sector in Europe in the Face of Pandemic Risks.

Members were invited to contact the Secretariat should they need additional information regarding any study.

## 12.A.O.B

### 12.1 Presentation on Halden Reactor

#### [HLG-r\(2020-41\)\\_526 DSA Presentation on the Research Manipulation at IFE](#)

The Norwegian nuclear safety regulator, DSA, presented the ongoing investigation into potential irregularities of research activities at Halden site in Norway. The Norwegian Institute for Energy Technology (IFE) is the operating organisation responsible for two nuclear research reactors: the Halden boiling reactor at the Halden site and the JEEP II reactor at Kjeller site in Norway. While examining possible irregularities related to previous

experiments carried out at Halden reactor in the 1990s and 2000s, IFE concluded that manipulations are related to dishonest representation of research results.

According to the information that DSA has received so far, the manipulations do not seem to have influenced the safety of nuclear facilities in Norway or abroad. DSA informed the regulatory bodies in the countries of the affected organisations identified in the investigation.

DSA has requested IFE to report on the progress of the investigation and will keep ENSREG informed, also by presenting its report once the investigation is finalised.

The EC representative highlighted the importance of swift notification by regulators of any cases where fraudulent activities are concerned. Given the possible consequences for safety across the EU, ENSREG would be the appropriate forum. Commission representative and ENSREG Chair asked DSA to inform ENSREG about the progress of the investigation and to share the lessons learned.

## 12.2 Ukraine – Observership

[HLG-r\(2020-41\)\\_511 Letter from ENSREG Chair to Chair of Ukrainian nuclear regulator](#)

[HLG-r\(2020-41\)\\_521 Ukraine Candidacy](#)

The Chair of ENSREG reported that she had sent a letter to the Head of the Ukrainian Regulator inviting Ukraine to apply for observership in ENSREG. In response Ukraine have formally applied for Observer's status.

The Chair informed that participation of non-EU countries in the discussions of ENSREG allows the sharing of European nuclear safety values beyond the EU. The current observers are not only observing, but also supporting the work of ENSREG in different forms, especially in the framework of nuclear stress tests. The EC representative informed that ENSREG rules of procedure also foresee the possibility for ENSREG members to discuss specific sensitive matters without the presence of observers, if requested by a member or requested and decided by the Chair.

The Chair invited ENSREG members to approve Ukraine's candidacy.

[ENSREG took decision to:](#)

[Approve Ukraine's candidacy.](#)

## 12.3 Covid-19 Info Exchange Forum

Mr Hübel presented the Covid-19 Info Exchange Forum on ENSREG platform on Circa BC.

At the outbreak of the pandemic the Commission created a forum on CIRCA BC for ENSREG Members and Observers to share information on their responses to the pandemic. Though it was actively used in spring, no new contributions have been uploaded to the forum since summer. As the pandemic has persisted, ENSREG Members and Observers were invited to continue using the forum for exchanging information.

Mr Hübel noted that EU Energy Ministers held informal discussions to discuss pandemic response and recovery. As a follow up to the discussions, the European Commission published a set of 20 good practices and lessons learnt to address risks in the energy sector that are associated with pandemic risks. It takes stock of exchanges with relevant expert groups in the EU, principally: the Electricity, Gas, and Oil Coordination Groups, the European Offshore Authorities Group, and ENSREG. The Commission also adopted guidelines aiming to facilitate the free cross-border movement of critical workers and to ensure the availability of goods during COVID-19 outbreak, which help to ensure smooth cross-border movement of critical staff and critical materials in the nuclear sector. The Commission will continue to closely monitor the energy security of supply situation. ENSREG members were encouraged to continue updating information on pandemic responses on the CIRCA BC forum.

#### 12.4 EU-U.S. high-level forum on small modular reactors

The Commission representative reported on the EU-U.S. high-level event on small modular reactors that took place on the 21<sup>st</sup> of October, 2019. A number of EU Member States, as well as industrial players, show a strong interest in such reactors for electricity production, district or process heating or other industrial purposes. U.S. colleagues are interested in organising the event again because of the advancements in the field in Americas and the partnership that has been established with Canada. U.S. held an internal event for defining their position and EC has foreseen to hold a similar event in order to define the intentions and strategy of industrial players in Europe in early 2021. The EC representative invited ENSREG Members to participate to the discussion, especially on licensing simplifications. Interested colleagues were invited to contact Mr Garribba or Ms Petrovičová (DG Energy, EC) with proposals for the agenda of the event.

#### 13. Next meeting

**ENSREG's 42<sup>nd</sup> plenary meeting is planned to be held virtually on two afternoons of 3 and 4 March 2021.**

## **Annex I**

**Agenda 41<sup>st</sup> meeting of ENSREG**  
**Meeting held by Webex conference call**  
***09 November 12:30 – 17:00 Brussels time***  
***10 November 12:00 – 17:00 Brussels time***

1. Opening of the meeting, adoption of the agenda
2. Chairperson's introduction and report
3. Court of Auditors - Audit of Nuclear Safety
4. Second Topical Peer Review (TPR-II)
  - 4.1 Appointment of Chair and Vice-Chair
  - 4.2 TPR-II Process Document
  - 4.3 TPR-II Topic Selection
5. Stress-Tests and NAcP outside the EU
  - Report from Chair of Stress Test Board
6. Review of WG1, WG2 and WG3 activities since the previous meeting:
  - WG1: (K. Alm-Lytz)
  - WG2: (S. Laporta)
  - WG3: (P. Majerus)
7. Report from WENRA
8. ENSREG Work Programme 2021 – 2023
9. ENSREG Conference 2021
10. 6th ENSREG Report to the Council and the European Parliament
11. Ongoing and Planned studies by the Commission
12. A.O.B
  - Presentation on Halden Reactor
  - Ukraine – Observership
13. Next Meeting

## Annex II

### **List of Members and Observers**

(Status 21 October 2020)

#### **Members:**

Austria:	Mr A. Molin, Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology Dr V. Ehold, Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology
Belgium:	Mr F. Hardeman, Federal Agency for Nuclear Control Mr M. Demarche, ONDRAF-NIRAS
Bulgaria:	Mr L. Kostov, Nuclear Regulatory Agency of the Republic of Bulgaria Mr B. Stanimirov, Nuclear Regulatory Agency of the Republic of Bulgaria
Commission:	Mr M. Garribba, Deputy Director-General, DG ENER vacant position
Croatia:	Ms M. Klanac, Ministry of the Interior Ms Z. Tečić, Ministry of the Interior
Cyprus:	Mr A. Yiannaki, Ministry of Labour, Welfare and Social Insurance Mr D. Sakkas, Ministry of Labour, Welfare and Social Insurance
Czechia:	Ms D. Drabova, State Office for Nuclear Safety Mr P. Krs, State Office for Nuclear Safety
Denmark:	Ms M. Øhlenschläger, National Institute of Radiation Protection Mr J. Thomsen, Danish Emergency Management Agency
Estonia:	Ms K. Muru, Estonian Environmental Board Mr I. Puskar, Estonian Environmental Board
Finland:	Ms K. Alm-Lytz, Radiation and Nuclear Safety Authority Mr P. Tiippana, Radiation and Nuclear Safety Authority
France:	Mr B. Doroszczuk, Nuclear Safety Authority (ASN) Mr A. Louis, Ministry for the Ecological and Inclusive Transition
Germany:	Dr W. Cloosters, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) Mr T. Elsner, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)
Greece:	Dr Ch. Housiadas, Greek Atomic Energy Commission Assoc. Prof. G. Nikolaou, Greek Atomic Energy Commission
Hungary:	Mr G. Fichtinger, Hungarian Atomic Energy Authority Mr S. Hullán, Hungarian Atomic Energy Authority
Ireland:	Dr M. Lehane, Environmental Protection Agency Dr C. McMahon, Environmental Protection Agency
Italy:	Mr S. Laporta, Institute for Environmental Protection and Research, ISPRA Mr U. Bollettini, Ministry of Economic Development
Latvia:	Ms D. Šatrovska, Ministry of Environment Protection and Regional Development Ms Z. Balode, Ministry of Environment Protection and Regional Development

Lithuania:	Mr M. Demčenko, State Nuclear Power Safety Inspectorate (VATESI) Mr S. Šlepavičius, State Nuclear Power Safety Inspectorate (VATESI)
Luxembourg:	Mr P. Majerus, Ministry of Health Mr G. Lentz, Permanent Representation of Luxembourg to the EU
Malta:	Mr P. Brejza, Occupational Health and Safety Authority (OHS) Mr J. Cremona, Occupational Health and Safety Authority (OHS)
The Netherlands:	Mr M. Brugmans, Authority for Nuclear Safety and Radiation Protection Ms A. van Bolhuis, Authority for Nuclear Safety and Radiation Protection
Poland:	Mr L. Mlynarkiewicz, National Atomic Energy Agency Mr M. Koc, National Atomic Energy Agency
Portugal:	Mr J. Oliveira Martins, Portuguese Environment Agency Mr P. Rosário, Portuguese Environment Agency
Romania:	Mr G. Ioniță, National Commission for Nuclear Activities Control Ms C. Paraschiv, Nuclear & Radioactive Waste Agency
Slovakia:	Eng. M. Žiaková, Nuclear Regulatory Authority of the Slovak Republic Mr M. Turner, Nuclear Regulatory Authority of the Slovak Republic
Slovenia:	Mr I. Sirc, Slovenian Nuclear Safety Administration Mr I. Grlicarev, Slovenian Nuclear Safety Administration
Spain:	Mr J-M Serena, Spanish Nuclear Safety Council Mr R. Cid, Spanish Nuclear Safety Council
Sweden:	Ms N. Cromnier, Swedish Radiation Safety Authority Mr G. Szendrő, Ministry of the Environment

### **Observers:**

WENRA	Mr O. Gupta, WENRA Chair
Council:	Mr J. Bielecki, Division for Energy and Atomic Questions
IAEA:	Mr G. Caruso, Department of Nuclear Safety and Security
OECD NEA:	Ms R. Tadesse, OECD Nuclear Energy Agency
Norway:	Mr H. Mattsson, Norwegian Radiation Protection Authority
Switzerland:	Mr M. Kenzelmann, Swiss Federal Nuclear Safety Inspectorate (ENSI)
Turkey:	Mr Z. Demircan, Turkish Atomic Energy Authority
Belarus:	Ms O. Lugovskaya, Gosatomnadzor

**Annex III**ENSREG 41<sup>st</sup> Meeting Presence list**Members and experts**

Country	Organisation	Surname	Name
AUSTRIA	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	EHOLD	Verena
AUSTRIA	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology	MOLIN	Andreas
BELGIUM	Federal Agency for Nuclear Control	HARDEMAN	Frank
BELGIUM	Federal Agency for Nuclear Control	DEMARCHE	Marc
BULGARIA	Nuclear Regulatory Agency	KOSTOV	Latchesar
BULGARIA	Nuclear Regulatory Agency	STANIMIROV	Borislav
BULGARIA	Nuclear Regulatory Agency	KATZARSKA	Lidia
CROATIA	Ministry of the Interior	TECIC	Zdravka
CYPRUS	Ministry of Labour, Welfare and Social Insurance	SAKKAS	Demetris
CZECHIA	State Office for Nuclear Safety	KRS	Petr
CZECHIA	State Office for Nuclear Safety	DRABOVA	Dana
CZECHIA	State Office for Nuclear Safety	CHARA	Jan
DENMARK	Danish Emergency Management Agency	THOMSEN	Jimmy
DENMARK	National Institute of Radiation Protection	ØHLENSCHLÆGER	Mette Karin
DENMARK	National Institute of Radiation Protection	ULFBECK	David Garf
FINLAND	Radiation and Nuclear Safety Authority (STUK)	ALM-LYTZ	Kirsi
FINLAND	Radiation and Nuclear Safety Authority (STUK)	TIIPPANA	Petteri
FRANCE	Ministry for the Ecological and Inclusive Transition	LOUIS	Aurélien



Country	Organisation	Surname	Name
FRANCE	Nuclear Safety Authority (ASN)	DOROSZCZUK	Bernard
FRANCE	Nuclear Safety Authority (ASN)	CHANIAL	Luc
FRANCE	Nuclear Safety Authority (ASN)	ETHVIGNOT	Thierry
FRANCE	Permanent Representation of France to the EU	THEVENOT	Caroline
FRANCE	Permanent Representation of France to the EU	MARABEAU	Gwladys
GERMANY	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	ELSNER	Thomas
GERMANY	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	KUHN	Sebastian
GERMANY	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	DIETSCHKE	Christoph
GERMANY	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	STOPPA	Gisela
GERMANY	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	WEIDENBRÜCK	Kai
GERMANY	Federal Ministry for Economic Affairs and Energy	OSTER	Fernando
GREECE	Greek Atomic Energy Commission (GAEC)	HOUSIADAS	Christos
GREECE	Greek Atomic Energy Commission (GAEC)	CARINO	Eleftheria
GREECE	Greek Atomic Energy Commission (GAEC)	TAFILI	Vasiliki
HUNGARY	Hungarian Atomic Energy Authority (HAEA)	BALLER	Barbara
HUNGARY	Hungarian Atomic Energy Authority (HAEA)	LÓRÁND	Ferenc
ESTONIA	Estonian Environmental Board	PUSKAR	Ilmar
ESTONIA	Estonian Environmental Board	MURU	Karin
IRELAND	Environmental Protection Agency	MCMAHON	Ciara
ITALY	Institute for Environmental Protection and Research, ISPRA	LAPORTA	Stefano

Country	Organisation	Surname	Name
ITALY	National Inspectorate for Nuclear Safety and Radiation Protection (ISIN)	LAMBERTO	Matteocci
ITALY	National Inspectorate for Nuclear Safety and Radiation Protection (ISIN)	DIONISI	Mario
LATVIA	Ministry of Environmental Protection and Regional Development	ŠATROVSKA	Dace
LITHUANIA	State Nuclear Power Safety Inspectorate (Vatesi)	DEMČENKO	Michail
LITHUANIA	State Nuclear Power Safety Inspectorate (Vatesi)	ŠLEPAVIČIUS	Sigitas
LITHUANIA	Permanent Representation of Lithuania to the EU	NAVICKAITĖ	Jolanta
LUXEMBOURG	Ministry of Health - Directorate of Health - Department of radiation protection	MAJERUS	Patrick
NETHERLANDS	Authority for Nuclear Safety and Radiation Protection (ANVS)	BRUGMANS	Marco
NETHERLANDS	Authority for Nuclear Safety and Radiation Protection (ANVS)	JANSEN	Robert
NETHERLANDS	Authority for Nuclear Safety and Radiation Protection (ANVS)	BOOM	Jurrian
POLAND	National Atomic Energy Agency	MLYNARKIEWICZ	Lukasz
POLAND	National Atomic Energy Agency	KOC	Michal
POLAND	National Atomic Energy Agency	GLOWACKI	Andrzej
PORTUGAL	Portuguese Environment Agency	OLIVEIRA MARTINS	João
PORTUGAL	Portuguese Environment Agency	ROSÁRIO	Pedro
ROMANIA	National Commission for Nuclear Activities Control (CNCAN)	COCA	Madalina
SLOVAK REPUBLIC	Nuclear Regulatory Authority of the Slovak Republic	ŽIAKOVÁ	Marta
SLOVAK REPUBLIC	Nuclear Regulatory Authority of the Slovak Republic	TURNER	Mikulas
SLOVENIA	Slovenian Nuclear Safety Administration	SIRC	Igor
SLOVENIA	Slovenian Nuclear Safety Administration	GRLICAREV	Igor
SLOVENIA	Slovenian Nuclear Safety Administration	DOLINŠEK	Urška
SPAIN	Spanish Nuclear Safety Council	CID	Rafael

Country	Organisation	Surname	Name
SPAIN	Spanish Nuclear Safety Council	SERENA	Josep María
SPAIN	Spanish Nuclear Safety Council	DE LOS REYES	Alfredo
SPAIN	Spanish Nuclear Safety Council	REDOLI	David
SWEDEN	Swedish Radiation Safety Authority	CROMNIER	Nina
SWEDEN	Ministry of the Environment	SZENDRÖ	Gabor

## Observers

NAME	SURNAME	ORGANISATION
LUGOVSKAYA	Olga	Gosatomnadzor, Belarus
MATTSSON	Håkan	Norwegian Radiation and Nuclear Safety Authority
BRAY	Edward	Norwegian Radiation and Nuclear Safety Authority
KENZELMANN	Marc	Swiss Federal Nuclear Safety Inspectorate (ENSI)
NILLSON	Hugo	Swiss Federal Nuclear Safety Inspectorate (ENSI)
BIELECKI	Janusz	Council of the European Union
LERCEL	Bartosz	Council of the European Union
CARUSO	Gustavo	International Atomic Energy Agency (IAEA)
KOBEIN-APOLLONER	Marlene	International Atomic Energy Agency (IAEA)
GUPTA	Olivier	WENRA

## European Commission

NAME	SURNAME	
<b>Garribba</b>	Massimo	Deputy Director General – DG ENER
<b>Wächter</b>	Gerhard	Assistant to the Deputy Director General – DG ENER
<b>Rhein</b>	Hans	Head of Unit/D1 – DG ENER
<b>MacLean</b>	Finlay	Team Leader/D1 – DG ENER
<b>Kravos</b>	Marko	Policy Officer/D1 – DG ENER
<b>Asikainen</b>	Aila	Policy Officer/D1 – DG ENER
<b>Kumžaitė</b>	Eglė	Policy Assistant/D1 – DG ENER
<b>Petrovičová</b>	Zuzana	Head of Unit D2 – DG ENER
<b>Brunetti</b>	Gianfranco	Deputy Head of Unit D2 – DG ENER
<b>Hübel</b>	Michael	Head of Unit D3 – DG ENER
<b>Jilek</b>	Jan	Deputy Head of Unit D3 – DG ENER
<b>Murphy</b>	Simon	Policy Officer/D3 – DG ENER
<b>Chirtes</b>	Amelia Paula	Legal and Policy Officer/D3 – DG ENER
<b>Martín Ramos</b>	Manuel	Programme Officer – Research - JRC
<b>Noel</b>	Marc	Programme Officer – Research - JRC
<b>Daures</b>	Pascal	Senior Expert - DG DEVCO
<b>Pascal</b>	Ghislain	Programme Manager - DG DEVCO

## Other

NAME	SURNAME	
<b>Faria Viegas</b>	Helder	European Court of Auditors