



## Minutes of the 48<sup>th</sup> meeting of ENSREG

*(3 extraordinary ENSREG meetings took place on 27 February, 6 and 10 March 2022, thus the present meeting was renumbered as 48<sup>th</sup> meeting)*

24 March 2022

Hybrid meeting (virtually and in Brussels)

## Participants

ENSREG Members representing all EU Member States, with the exception of Belgium, as well as the European Commission (EC) participated in the meeting. Observers from Norway, Switzerland, Turkey, Ukraine, United Kingdom, the Council, the IAEA and WENRA also participated.

### 1. Adoption of the agenda

HLG-r(2022-47)\_612 Draft Agenda of the 47th ENSREG Meeting revised 15.3.2022

The ENSREG Chairperson, Ms Marta Žiaková, opened the 48<sup>th</sup> ENSREG meeting, which took place in hybrid format with both virtual and physical participation, and without interpretation due to the constraints imposed by the Covid-19 pandemic.

Ms Žiaková welcomed eight new ENSREG Members: Mr Thomas Augustin, Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology, Austria; Mr Michal Merxbauer, the State Office for Nuclear Safety, Czechia; Mr Gerrit Niehaus, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany; Mr László Juhász, the Hungarian Atomic Energy Authority; Ms Madara Vanaga, Ministry of Environment Protection and Regional Development, Latvia; Mr Javier Dies, Spain, the Spanish Nuclear Safety Council; Mr Juan Carlos Lentijo, the Spanish Nuclear Safety Council. She also welcomed two new ENSREG Observers: Ms Anna Bradford, IAEA, and Mr Oleh Korikov, the State Nuclear Regulation Inspectorate (SNRIU), Ukraine.

The Chair proposed to suspend Belarus's observership in ENSREG until further notice, suspension meaning not inviting Belarus as observers to the meetings of the group and not sharing any information or documents in relation to the work of the group.

The list of Members and Observers at the time of the meeting is attached as Annex II.

#### ENSREG took the decision to:

- suspend Belarus's observership in ENSREG until further notice.

### 2. Chairperson's introduction

HLG-r(2022-47)\_613 Draft Minutes of the 44th ENSREG Meeting\_with non\_editorial\_comments

The ENSREG Chair asked Members for approval of the draft minutes of the 44<sup>th</sup> ENSREG meeting including some substantial comments following the written procedure (deadline of 11 February 2022), as uploaded under the meeting documents on CIRCA BC.

#### ENSREG took the decision to:

- approve the draft minutes of the 44th ENSREG meeting.

### 3. Administrative Matters

#### - Election of the Chair and vice-Chairs

The EC representative reminded the Members of the expiry of the 2-year mandates of the ENSREG Chair and Vice-Chairs. During the last 44<sup>th</sup> ENSREG meeting it was agreed to suspend the period of the renewal or election of Chair and Vice-Chairs until the present meeting and the Member States were asked to propose new nominations by the end of February 2022. No expression of interest was received for either the position of Chair or Vice-Chairs.

3 Members, including the Commission, expressed their support to the renewal of the current mandate of the Chair for a second term of two more years, i.e. until the end of 2023. In order to ensure the continuity of ENSREG's work, EC suggested to renew the current mandates of two Vice-Chairs by one year, i.e. until the end of 2022. No objections were received.

#### ENSREG took the decision to:

- **extend the mandates of the current ENSREG Chair till the end of 2023 and two Vice-Chairs until the end of 2022.**

## **4. Ukraine – update since Extraordinary ENSREG meetings of February/March**

HLG\_r(2022-47)\_631 47 ENSREG Ukraine

HLG\_r(2022-47)\_632 47 ENSREG 24\_03\_22\_Statement of Ukraine

HLG-r(2022-47)\_614 Letter Chair Rostechнадзор UA Statement 27.3.2022

HLG\_r(2022-47)\_635 IAEA\_principal\_fulfillment\_military aggression

ENSREG Chair recalled that three urgent, extraordinary ENSREG meetings took place on 27 February, 6 and 10 March with the aim of evaluating the risks arising from the military actions taken by the Russian Federation at and near nuclear licensed sites in Ukraine and for identifying possibilities of support to the nuclear regulator of Ukraine SNRIU in response to the Russian invasion of Ukraine. As an outcome, ENSREG has published three statements on the safety of nuclear installations in Ukraine following the military aggression by Russia. Moreover, in the framework of WENRA, a standing technical group, coordinated by French nuclear regulator ASN, and composed of technical experts from WENRA, including some TSO of its member regulatory bodies, and HERCA, as well as the Joint Research Centre, EC, has been established to identify accident scenarios and the appropriate, coordinated responses to the identified scenarios.

Mr Oleh Korikov, the acting head of SNRIU, thanked ENSREG members and observers for their continued support to Ukraine. He gave an overview of the situation in the Ukraine following Russia's invasion into the country. He reported that working conditions in the nuclear installations have changed significantly as a result of Russia's full-scale war against Ukraine. Chornobyl NPP and Zaporizhzhia NPP were seized by Russian military forces; Zaporizhzhia NPP training centre severely damaged; the critical Research Neutron Source nuclear facility in Kharkiv suffered missile strike and one unexploded missile remains in the immediate vicinity of the Neutron Source building.

At the occupied sites (Chornobyl and Zaporizhzhia) Ukraine is no longer able to ensure the operator's compliance with the nuclear and radiation safety requirements (national safety requirements, IAEA safety fundamentals and specific safety requirements) and to ensure regulatory control. The operator's personnel at these facilities are exhausted due to the constant pressure of the Russian military. Conditions are deteriorating constantly and the risk of human failure is increasing. SNRIU called for immediate establishment of an effective mechanism to ensure nuclear and radiation safety in the country.

Mr Korikov called for appropriate political, administrative and technical support during the development of the below outlined measures and their promotion at the highest level:

- demilitarisation of sites and adjacent areas where nuclear energy is used, elimination of pressure from the military and representatives of Russian Federation and Rosatom, allowing independent European and IAEA observers and consultants to ensure adequate safety level compliance with nuclear regulatory requirements, standards and regulations, and restoring the regulatory control.
- ensuring safe corridors for shift changes, supplies of spare parts and materials, as well as safe places for storage of equipment, materials and relaxation of personnel.
- ensuring the presence of IAEA security and safeguards inspectors, as well as relevant technical personnel of IAEA, to restore control over nuclear materials and reliable communication with safeguards monitoring system at the IAEA headquarters, and conduct verification activities as required by appropriate agreements.

Mr Korikov called for the establishment of an international advisory committee to support SNRIU with the involvement of IAEA, ENSREG, WENRA and EU partners. The committee should aim to consider the important open safety issues that will be faced by the regulatory authority of Ukraine, develop recommendations and support measures for resolving them. Finally, SNRIU presented their Statement explaining the impact of the Russian war in Ukraine on the safety and security of nuclear installations and requesting ENSREG's support of the Ukrainian position in the negotiations of an agreed framework between IAEA and Ukraine.

ENSREG discussed SNRIU's request for ENSREG's recommendations on two issues:

- how to regulate nuclear safety under the current military conditions, and

(ii) how to regulate nuclear safety after the conflict is finished, e.g. what should their first regulatory actions be, whether to allow certain facilities to operate or to inspect them before taking this decision, what procedures should be applied.

Regarding the first question, Mr Garribba emphasised the importance of coming to an agreement which would allow IAEA to access the sites and analyse the actual status of the installations. The Chair of ENSREG added that once the agreement is in place, ENSREG would be able to propose means of ensuring nuclear safety under current circumstances. ENSREG members stressed the importance of the work done by IAEA in assisting Ukraine during the war and avoiding duplication by ENSREG. Mr Korikov highlighted that the agreement should be drafted in such a manner as not to contribute to the legitimisation of the presence of Russian military on the territory of Ukraine, and the presence of the Russian military and Rosatom representatives at the nuclear installations in particular.

Regarding the second question, it was agreed to create a small group led by WENRA, composed of a few EU regulators, JRC experts and SNRIU, to start discussing the procedures on verifying the safety of nuclear installations after the war. The Commission will share a non-paper developed by JRC and ENER as an input to the Group.

The EC informed that SNRIU has provided a list of items they need in order to deal with nuclear and radiological emergencies. DG ECHO, EC, is coordinating the procurement and delivery of such assistance. Strategic chemical, biological, radiological and nuclear (CBRN) stockpiles at the EU level will include both equipment and medical countermeasures, i.e. detectors as well other materials used in response to CBRN events. DG INTPA, EC, is investigating which specific support may be needed by the nuclear power plants. The EC representative informed that DG ECHO has also issued a specific call for proposal for the EU Member States under the CBRN rescEU for stockpiling certain equipment and medical counter-measures at the EU level.

The Chair of ENSREG reported that in response to her request for possible practical support to SNRIU, sent by email to ENSREG Members on 3 March, Denmark offered carrying out atmospheric dispersion calculations of radionuclides from any location within Ukraine. The Spanish member suggested creating a European alternative emergency support centre for storing mobile diesel generators, mobile pumps, cables, etc. in case of need in third countries.

Finally, ENSREG members agreed on the importance of receiving information from Ukraine, sharing it among the regulators and disseminating a unified approach to the public in due time. The Chair of WENRA reported that the HERCA/WENRA working group is working on the matter and invited JRC to participate in the group.

#### ENSREG decided to:

- **Create a working group led by WENRA, with JRC experts, to provide guidance on how to carry out regulatory responsibilities during and after a military conflict, as per SNRIU's request.**

#### ENSREG took note of:

- **SNRIU's presentation of the situation with situation in the Ukraine following Russia's invasion into the country and their requests for assistance;**
- **EC actions in providing practical support to SNRIU and Ukrainian nuclear operators.**

## **5. Second Topical Peer Review (TPR-II)**

### **- Progress Report by Chair of TPR-II Board**

**HLG-r(2022-47)\_623 TPR II Board\_Report to ENSREG 47th Meeting - March 24th 2022\_slides**

The Chair of the TPR-II Board, Ms Sylvie Cadet-Mercier, presented the status of the TPR-II preparations, recalling the decisions taken by ENSREG at its last meeting. Mr Lamberto Matteocci, from the Italian nuclear regulator ISIN, has been appointed as the TPR-II Board vice-Chair. The Board has met several times, with the team leaders and rapporteurs, and with WG1, and sent its comments on the Terms of Reference (ToR) and Technical Specifications (TS) to WG1 and to WENRA respectively.

Taking into account the developments in the TS since the public event of June 2021, in particular its focus on the most significant Safety Reference Levels, the Board has decided that the peer review will be organised along 3 thematic areas covering fire safety analysis, fire prevention and passive fire protection, and active fire protection, as well as along two country review groups. Therefore only five team-leaders and five rapporteurs would be needed, which accommodates the non-availability of the nominations from Sweden. The number of expert nominations remains at 38, where the aim is to have a distribution of experts with expertise in the different installation types. The absence of nominations from a few countries was noted.

The Board's comments on the ToR aimed to further clarify the description of the process, which includes review by thematic and country groups, and the role of the experts, team leaders, and rapporteurs.

The TS should highlight that the national assessments should include self-assessments and not predominantly descriptions. More than 260 installations are within the scope, even if counting similar installations only once. The Board recognises the need to select installations to keep the process manageable, focusing on the qualifying installations that would present a significant risk in case of fire. However, the criteria in the TS to arrive at a list of 'qualifying', 'candidate' and 'represented' installations is qualitative, and could be differently interpreted, creating difficulties of ensuring consistency. It is not clear how the selection would allow identification of good practices and areas of improvement, nor how national findings could be applied to other European installations. The Board therefore recommends that the TS define a clear process and criteria for the national selection of installations, and that justifications for the selection be provided. The Board considers that the sampling should result in a sufficient number of installations to allow a meaningful review, and that the process is fully transparent.

The draft TS envisages a process in which the Board reviews and endorses the coordinated sample of installations. Each regulatory authority is responsible for identifying the list of installations to be reported on, but this process falls outside the experts' review in the peer review process, which is important for transparency and ensuring the credibility of the whole process. The list of installations could be subject to peer review, but the timing is important. ENSREG was invited to take a position on the endorsement of the list of installations to be reported on, and whether the list should be peer reviewed in a dedicated phase.

- **Report by WG1 on its TPR-related activities**
  - o **Draft Terms of Reference**

**HLG-r(2022-47)\_620 TPR WG1 report to ENSREG 47th Meeting**

**HLG-r(2022-47)\_615 ToR TPR Review Process on Fire Protection (draft)**

WG1 Chair, Ms Kirsi Alm-Lytz, gave a brief overview of TPR-II related activities and the process of TPR-II. A WG1 sub-group of WG1 has drafted the ToR, taking input from participants of WG2 and WG3. It takes account of lessons from TPR-I and the guidance and comments received from the TPR-II Board. The ToR define the objectives of the peer review, namely to identify strengths and weaknesses in fire protection, to share operating experience, identify common issues/challenges at EU level, good practices, areas of good performance and areas for improvement. They also allow for follow-up measures to address areas for improvement. The process includes four phases, starting in the current preparation phase, the national assessments from 7/2022 to 10/2023, peer review from 11/2023 to 12/2024, and follow-up from 2025. Details in the annexes will continue to be worked on, but WG1 requests ENSREG approval of the main text to start the public consultation.

## - Presentation by WENRA of the TPR-II Technical Specifications

HLG\_r(2022-47)\_630 220324 - WENRA TPR TS

HLG-r(2022-47)\_616 TPR\_Technical Specification draft 2022-02-22

The Chair of WENRA, Mr Olivier Gupta, acknowledged the work of the WENRA ad-hoc group which is drafting the TS. A preliminary version was presented to the last ENSREG plenary. Since then, a new draft was submitted to ENSREG containing the additional chapters and a description of a possible coordinated sampling process. With regard to the comments of the TPR-II Board on the selection of installations, the latest version includes a minimum criterion that the national selection shall include at least one facility of each type, if present and likely to present a significant radiological risk in case of fire. To compensate for the lack of further criteria, the TS include a request to each country to explain their selection based on the ratios between the candidate facilities and qualifying installations, where similarities between installations could allow a single representative selection, and how the proposed selection allows identification of good practices and areas for improvement. Initially it was intended that the Board or ENSREG would approve the selected installations. However, the selection of installations should be a national decision, and an ad-hoc TPR-II group could conduct a 'light peer review' to analyse if country proposals are reasonable based on provided explanations. A new version of the draft TS is expected in early April, taking account of the Board's comments. This version will be sent to ENSREG Secretariat for the public consultation.

### - WG3 contribution to TPR-II

#### o Stakeholder Engagement

HLG-r(2022-47)\_619 WG3-progress report March 2022

HLG-r(2022-47)\_618 Report on stakeholder meeting for plenary

HLG-r(2022-47)\_617 Draft ENSREG STAKEHOLDER ENGAGEMENT PLAN

The Chair of WG3, Mr Patrick Majerus, reminded that the Stakeholder Engagement Plan was presented and approved during the last ENSREG meeting. The language of the document was aligned with the TPR-II ToR and TS and the Plan is ready for public consultation. After having analysed the comments from the public consultation, the final version of the document will be prepared for approval.

WG3 Chair reported that the English versions of the three factsheets on TPR (Description of the TPR process in general; Conduct and outcome of TPR-I; Explanation on the topic selected for TPR-II) were approved during the last ENSREG meeting. They were translated into all EU official languages and sent to WG3 and ENSREG members for a language check. Documents will be finalised taking into account the comments received.

WG3 Chair asked ENSREG to approve and allow for publication on ENSREG website the summary report of the first stakeholders' engagement event which took place on 22 June 2021.

## - *ENSREG's discussion on TPR-II*

### **Terms of Reference:**

Members asked if the process description could be improved with respect to how the decision on findings is made at the end of the process, and whether a consensus process involving discussion of a proposal with the country representatives, similar to the CNS review process, would apply. The TPR-II Board Chair explained that the process is not like the CNS review since TPR-II has a group of experts whose responsibility is to identify the findings and reach consensus on them. Nonetheless, the views of the country group participants will be taken into account, and the discussion sessions will be open to everyone, with the aim to share experience. Members indicated that based on the TPR-I experience, communication between the experts and country representatives could be improved to better clarify explanations on the findings. The Commission representative added that the TPR process needs to add value and draw conclusions that increase reassurance of nuclear safety and provide opportunities for tangible safety improvements. Whilst the consensus principle is valid, it should not lead to compromise at the lowest common denominator.

Members made the following suggestions:

- Including additional explanation on why research reactors have been selected for site visits;

- Reviewing the text to have a clearer description of how findings will be arrived at involving the TPR experts and views of country representatives.

The Member from Sweden explained that the regulatory authority had been subject to a major re-organisation and consequently could not continue with the team leader nomination, but would nominate additional experts.

### **Technical Specifications:**

Several Members commented on the review process for the selection of installations to be reported on in the national assessments. The option of a 'light peer review' of the national regulators' choice of installations was favoured, having in mind the importance of transparency and credibility of the process, and minimising the impact on the timing of the subsequent steps. Each country should prepare its list of installations with the relevant criteria and justifications. It was indicated that such justifications had already been presented by some countries in the WENRA discussions. The WENRA Chair indicated that such information could be provided to the TPR-II Board by the end of April. To review the consistency of the choices, the team leaders in the Board should review the proposed selection, and the Board should issue any comments to the country involved. In case of disagreement with the Board's comments, the difference of opinion will be recorded in the national assessment report giving the associated reasoning. However, the final choice will be that of the regulator, who has overall responsibility.

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

- The progress reports from the Chair of the TPR II Board, Chair of WG1, Chair of WG3 and Chair of WENRA.

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

- Recommend that all three documents consistently refer to the topic of TPR II as 'fire-protection' rather than 'fire-safety', according to its earlier decision and in line with announcements at the public meeting in June 2021;
- Agree to a review process of the national proposals of the nuclear installations to be reported on involving the team-leaders in the TPR-II Board; however, the final selection of installations is a national decision. WENRA will provide the list of installations in the participating countries with the criteria and justifications for the review by the end of April 2022. This process should take place ahead of the start of the national assessments in July and outcomes reported to ENSREG at its next meeting;
- Invite the Board to review the ToR to have additional explanation on why research reactors have been selected for site visits, and to have a clearer description of how findings will be arrived at involving the TPR experts and views of country representatives.
- Approve the start of public consultation of the three documents taking account of the revisions discussed above, but allowing for further development of the texts during the consultation process;
- Go ahead with the publication the summary report of the first stakeholders' engagement event on the ENSREG website.

## **6. Stress-Tests and NAcP outside the EU**

### **- Report from Chair of Stress Test Board**

HLG\_r(2022-47)\_634 ENSREG ST Board report 24 March 2022 47th ENSREG

Ms Sylvie Cadet-Mercier, the Member of the ENSREG Board for Stress Tests in Third countries, on behalf of the Chair of the Board Mr Frank Hardeman, provided an overview of the activities of the Board since the last ENSREG plenary.

Two virtual meetings took place on 13 December 2021 and 16 March 2022 to discuss Belarus and Turkey peer reviews, as well as future peer reviews in Iran, Armenia and Egypt. The next meeting will take place in June 2022.

The Board decided not to present the Final EU Peer Review Report on the Implementation of Belarusian Stress Test National Action Plan (NAcP) to the Belarusian authorities in Minsk following Belarus's complicity in the Russian war of aggression against Ukraine. As the main safety relevant actions of the NAcP had been carried out, it was decided to suspend follow-up by ENSREG.

The lifetime of the Metsamor NPP, in Armenia, was extended until 2026 at least. The stress test was performed in 2016, the review of the NAcP took place in 2019. As some important safety related actions are not yet implemented, the Board has decided to request an update of the NAcP. Once the update is received, the Board will decide if a second follow-up peer review is needed.



The Iranian stress test national report (Bushehr-1 NPP) is expected to be available in the second semester of 2023. The peer review could take place once the Turkey peer review is finalised; however the formal invitation from Iran to carry out the ENSREG peer review has not yet been received.

The Board decided not to take any actions for the moment regarding the stress test peer review for El Dabaa NPP, Egypt, as the commissioning of the NPP is foreseen for 2026-2027 and the reply to EC proposal for the peer review has not yet been received.

The status of the Turkey peer review is presented below under the point “Akkuyu – peer review of stress test national report”.

### **Akkuyu – peer review of stress test national report**

**HLG\_r(2022-47)\_629 47th ENSREG 24 March 2022 Turkey Peer Review**

The team leader of the Turkey peer review, Mr Petteri Tiippana, presented the status of the peer review.

Mr Tiippana reported that the technical secretariat is now represented by Mr Jaroslav Baran, DG Energy, EC. The confirmed observers to the peer review are IAEA and Cyprus, but still awaiting a nomination from Egypt.

Currently the peer review team is reviewing the answers to the questions submitted by the peer review team and additional information provided by the Turkish nuclear regulator NDK on 15 March 2022. Meetings with NDK to clarify the answers will follow. The peer review team will start drafting the findings afterwards.

Due to delays in the construction of the Akkuyu NPP, the peer review team suggested to postpone the site visit planned for May 2022 to spring 2023. Instead, face-to-face meetings to discuss preliminary findings and review the documents would take place on 16-20 May 2022 in Turkey. The final report would be published after the site visit in 2023. The revised schedule was agreed with NDK and the ENSREG Board for Stress Tests in Third Countries. The team leader sent an inquiry to the team members if they would be available to continue the exercise for another year.

The peer review team had agreed with NDK that relevant IAEA’s Safety Standards, as well as WENRA Safety Reference Levels, will be used as references for the peer review. Mr Tiippana asked ENSREG to agree on postponing the site visit to spring 2023 and to provide guidance on conduct of the peer review on a Russian design and participation of the Russian vendor Rosatom considering the Russian war of aggression in Ukraine. He has also sent a request to the team members to consult their respective governments if they are allowed to continue their work under the current circumstances.

The EC representative and the Chair of ENSREG thanked the peer review team leader for his continuous efforts to progress of the exercise, as well as NDK for their cooperation.

The EC representative expressed approval of the two-step approach. He noted the need for collaboration by the team with on-site experts from Rosatom to complete the exercise fully which may be difficult in the current circumstances. He reported that there are currently no EU sanctions related to nuclear sector, and specifically to nuclear safety. However, EC is not authorised to have contacts with Russian Federation entities, unless cleared on a case-by-case basis.

The EC representative stressed the need to follow-up the implementation of Armenia’s national action plan.

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

- **the report made on behalf of the Chair of the ENSREG Board for Stress Tests in Third Countries;**
- **the progress of the peer review of the Turkish stress test national report and the updates.**

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

- **agree on the revised timeline for the Turkey stress test peer review.**

## **7. 6<sup>th</sup> ENSREG Conference**

**HLG\_r(2022-47)\_626 ENSREG Conference Programme-DRAFT-220317**

**HLG\_r(2022-47)\_625 Report to plenary - ENSREG Conference 24032022**

The Chair of the ENSREG Conference Steering Committee Mr Sebastian Kuhn reported on the few adjustments in the draft programme of the Conference to take place on 20-21 June 2022 (full programme uploaded on CIRCA BC). The Steering Committee proposed to include a point on the programme on the situation in Ukraine following the Russia’s

invasion. The Committee succeeded to have a balanced team of speakers and panellists in terms of gender and nationality balance. The Chair of the Steering Committee asked ENSREG to endorse the Programme.

After discussion ENSREG agreed to add a point addressing the regulatory issues raised by the Russian war of aggression in Ukraine as a separate item at the beginning of the event, and hence remove the point on Fukushima. The work done by ENSREG as a follow-up of Fukushima accident will be introduced under the point on WG1 activities.

The Spanish representative suggested adding a point on accident tolerant fuels to the Programme. WG1 Chair proposed to bring the issue up instead in the discussions on the next Work Programme of ENSREG.

#### ENSREG took decision to:

- **request the ENSREG Conference Steering Committee to update the draft Programme of the 6th Conference of ENSREG by adding a point addressing the regulatory issues raised by the Russian war of aggression in Ukraine and removing the point on Fukushima.**

## **8. Review of WG1, WG2 and WG3 activities (other than TPR-II matters) since the previous meeting**

- WG1: (K. Alm-Lytz)

HLG-r(2022-47)\_621 WG1 - Report to ENSREG 47th Meeting

HLG-r(2022-47)\_622 Post-Fukushima NAcP - STATUS REPORT 2021\_draft

WG1 Chair Ms Kirsi Alm-Lytz presented the activities of the group since last ENSREG meeting, other than the preparations for TPR-II which were already discussed under item 7 of the agenda.

WG1 held a virtual meeting 2-3 February 2022, where the following activities were discussed:

### **1. Implementation Status of Stress Tests National Action Plans (NAcP).**

WG1 Chair presented the Post-Fukushima NAcP status report for ENSREG's approval and publication on ENSREG website together with the previous status report of 2020.

ENSREG Members have committed to update their Stress Tests National Action Plans every two years until completion of all actions. The latest deadline to provide an update was the end of 2021. WG1 is following up until all the actions are closed and produces a status report every two years. The previous status report was approved in November 2020. Since then Finland, France, Slovenia and Sweden have finalised their NAcPs. Six countries (Bulgaria, Czech Republic, Hungary, Romania, Slovakia and Ukraine) still have open actions. The main reasons for delays are changes in the planning, new projects on improving safety in the NPPs, interactions between regulators and licensees. The remaining actions should be finalised by the end of 2022, with a few extending to 2023 or 2024, aiming to have the next status report of 2024 as a closure report. Countries are identifying further safety improvements, either those related to stress tests or new actions related to external hazards or accident management. The most significant safety improvements include installing means for managing severe accidents, additional means for heat removal functions and for ensuring emergency power.

The EC representative reiterated the importance of finalising the implementation under the NAcPs as soon as possible and closing the stress tests exercise by 2024.

The Finnish representative agreed with the need to finalising the exercise, however highlighted that delays may occur due to other or more important actions related to improvement of safety.

### **2. Following the IRRS programme in EU countries and IRRS/ARTEMIS synergies.**

WG1 Chair Ms Kirsi Alm-Lytz reported on the status of the IRRS (Integrated Regulatory Review Service) programme in EU countries, the first 10-year cycle of which is over and the next 10-year cycle is starting (task led by Belgium).

WG1 synchronised the EU list of IRRS experts with IAEA's database.

WG1 Chair reminded of the workshops on IRRS lessons learnt organised in 2014 by WG1 and in 2018 by IAEA. The next workshop should be planned for the first half of 2023. The objectives of the workshop would be to identify the main improvements in the regulatory framework triggered by IRRS missions in Europe, to share good practices and feedback from EU Member States, IAEA and EC, and continue to improve synergies between IRRS and ARTEMIS missions.

A common WG1 and WG2 subgroup, led by Belgium, is analysing how to improve the efficiency and effectiveness of IRRS and ARTEMIS missions. The subgroup has given feedback to IAEA on their guidance for back-to-back missions. The first back-to-back



mission will take place in Slovenia in April 2022. The subgroup will have another meeting with IAEA before the summer. The subgroup will start discussing the possibilities to have integrated mission.

The EC representative commended the work done on IRRS programme, IRRS/ARTEMIS synergies and the good cooperation with IAEA.

### 3. CFSI subgroup (Counterfeit, fraudulent and suspect items).

The CFSI subgroup is planning to hold a technical meeting with participating countries, some utilities and suppliers and produce a report by the end of 2022.

WG1 Chair informed of her resignation as an ENSREG Member and WG1 Chair as of 1 June 2022, and asked ENSREG to initiate nominations for a new WG1 Chair.

ENSREG Chair invited ENSREG Members to send nominations for the WG1 Chair by the end of May with the aim of appointing the new Chair during the next ENSREG plenary.

### ENSREG took the decision to:

- **approve the Post-Fukushima NAcP status report and its publication together with the previous report approved in November 2020.**

### ENSREG took note of:

- **the overview of the ongoing WG1 activities.**

- WG2: (S. Laporta)

### **HLG\_r(2022-47)\_624 WG2 report ENSREG 47**

The Chair of WG2, Mr Stephano Laporta, presented the activities of the working group since last ENSREG meeting. An online WG2 meeting took place on 2 March 2022 and the next meeting is planned to take place in Rome on 17 October 2022.

The Chair highlighted the following topics:

- **The second Topical Peer Review** – the scope of TPR-II addressing fire safety relates to WG2 competencies, such as waste stored in nuclear installations, spent fuel storage facilities and decommissioning operations. WG2 member Mr Matteocci has been nominated as Vice Chair of the TPR II Board and Mr Hedberg has been nominated to ENSREG WG1 TPR subgroup as WG2 representative. Members of WG2 (Italy, Czech Republic, Sweden and UK as observer), and members of WENRA WGWD (Working Group on Waste and Decommissioning), participate to the WENRA working group developing the Technical Specifications of TPR-II.
- **Final Report of the EC Study on Key Performance Indicators (KPIs) for monitoring implementation of national programmes** should be published shortly. It has been decided to resume the subgroup to have preliminary discussions on how to finalise the interim report on KPIs issued in 2020.
- Review of **Member States' approaches to defining starting point and end state of decommissioning** – a subgroup has circulated a survey on national policy and strategy for decommissioning as well as legal and regulatory requirements for implementing decommissioning activities to WG2 members in July 2021 and to ENSREG members in January 2022. 15 countries have provided the answers. Answers are awaited from Bulgaria, Czech Republic, Romania, Slovak Republic, Greece and Portugal.
- Review of **approaches in regulation and management of radioactive waste arising from non-energy uses** of nuclear and radiation technologies in activities linked to nuclear medicine application, including radioactive waste coming from production of radioisotopes used in the applications, and decommissioning of production facilities. WG2 plans to circulate a survey to all WG2 and ENSREG members soon and develop a preliminary analysis by the end of 2022.
- **The status of the peer reviews under the Directive 2011/70/Euratom** – WG2 Chair presented a list of countries which already received the ARTEMIS missions, as well as countries with missions foreseen.
- **The improvement of IRRS-ARTEMIS efficiency and effectiveness** - the work of the ENSREG WG1/WG2 subgroup was already discussed under agenda item 8.1 (WG1 report).

The EC representative and ENSREG Chair supported the call of WG2 Chair to ENSREG members to respond to the two surveys mentioned above. The EC representative underlined their importance in respect to the SAMIRA Action Plan – the Strategic Agenda for Medical Ionizing Radiation in 2021 and to a common definition of decommissioning stages.

ENSREG took note of:

- the presentation on WG2 activities.
- WG3: (P. Majerus)

HLG-r(2022-47)\_619 WG3-progress report March 2022

WG3 Chair Mr Patrick Majerus reported on the working group's main activities since last ENSREG meeting, except the preparations for TPR-II already discussed under item 5 of the agenda.

The Chair reported that the ENSREG website will be transferred to the Europa Web Platform, a service provided by the Commission, in the second half of 2022. This would involve a redesign of the website, maintaining it user friendly.

ENSREG adopted its **Communication Policy** document in November 2020 plenary. The **Communication Strategy** is being discussed within WG3 and will be presented for discussion in autumn ENSREG plenary.

ENSREG took note of:

- the presentation of WG3 activities.

## 9. EU SMR Partnership

- Status report from ENSREG SC representative

HLG\_r(2022-47)\_627 220324 ENSREG - report from EU SMR FINAL

ENSREG Chair reported on the activities related to EU SMR Partnership since last ENSREG plenary. Following the EC information session on the "EU SMR pre-Partnership Steering Committee (SC) and specific Work-Streams (WS)" on 14 December, ENSREG Members were invited in a letter from the ENSREG Chair dated 21 December 2021 to present candidates for representing ENSREG in the SC and to propose experts for the "WS 2 on SMRs licensing".

During the kick-off meeting of WS 2, with 16 participants nominated by 13 national regulatory authorities, Ms Sylvie Cadet-Mercier, Commissioner of ASN, France, was elected Chairperson of this Work-Stream. In this function she will be a Member of the Steering Committee as Work Stream 2 Chair.

In the letter of 8 March to ENSREG Members ENSREG Chair proposed a silence procedure for nominating Mr Marco Brugmans, Vice chairman of ANVS Board, Netherlands, to represent ENSREG in the SC. As no objections were received, Mr Brugmans is deemed appointed as ENSREG representative to Steering Committee meetings.

The kick-off meeting of the European SMR pre-Partnership Steering Committee took place on 17 March 2022.

Due to time constraints, it was decided to postpone the presentations of Mr Brugmans and Ms Cadet-Mercier on the outcomes of the Steering Committee and Work Stream 2 kick off meeting to the next ENSREG plenary.

The EC representative emphasised the importance of nuclear regulators' participation in the process. He thanked participants of Work Stream 2 for joining the initiative and Mr Brugmans for taking up the role of ENSREG representative in the Steering Committee.

ENSREG took note of:

- the nomination of Mr Marco Brugmans, Vice chairman of ANVS Board, Netherlands, to represent ENSREG in the European SMR pre-Partnership Steering Committee;
- the nomination of Ms Sylvie Cadet-Mercier, Commissioner of ASN, France, as Chairperson of the Work-Stream 2 on SMR licensing. In this function she will also be a Member of the European SMR pre-Partnership Steering Committee.

## 10. A.O.B.

- Corrosion – information from Slovakia

HLG\_r(2022-47)\_633 ENSREG corrosion Slovakia final

Due to time constraints, it was decided to postpone the presentations of Slovakia and WENRA to the next ENSREG plenary. ENSREG Chair reported briefly about a corrosion case in Slovakia. Complete presentation with pictures is available on CIRCA BC.

## - Ongoing and Planned studies by the Commission

### HLG\_r(2022-47)\_628 Commission Studies

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

Studies published:

- Study on the applicability of the regulatory framework for nuclear facilities to fusion facilities. Towards a specific regulatory framework for fusion facilities<sup>1</sup>;
- Study “Analysis to support the implementation in practice of Articles 8a-8c of Directive 2014/87/Euratom”<sup>2</sup>.

Studies to be published soon:

- Study on Key Performance Indicators for monitoring implementation of national programmes on safe and long-term management of spent fuel and radioactive waste;
- Self-assessment on Safety culture maturity of the NDAP operations;
- Resilience of the Nuclear Sector in Europe in the Face of Pandemic Risks.

<sup>1</sup> <https://op.europa.eu/en/publication-detail/-/publication/e1579af9-8d44-11ec-8c40-01aa75ed71a1/language-en>

<sup>2</sup> <https://op.europa.eu/en/publication-detail/-/publication/08039352-62d9-11ec-a033-01aa75ed71a1/language-en/format-PDF/source-253267103>

## Studies ongoing:

- 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;
- Safe, sustainable operation of research reactor facilities in the EU;
- Study on monitoring of radioactive discharges from nuclear facilities in the EU.

## Studies in preparation:

- Activities to follow up on the Commission report on the implementation of the NSD;
- Benchmarking of EUR Technical Requirements for SMRs against European Regulatory Framework on Safety;
- Study on the European nuclear energy ecosystem: is it fit for EU's climate objectives.

ENSREG took note of:

- **the information on published, ongoing and planned studies conducted by the Commission.**

- **Presentation of Taxonomy Delegated Act**

**HLG\_r(2022-47)\_636 Taxonomy Complementary DA - 24 March 2022**

Mr Martin Spolc, DG FISMA, EC, presented the EU Taxonomy and its Complementary Climate Delegated Act on specific gas and nuclear energy activities.

The Taxonomy Regulation<sup>3</sup> was negotiated with the European Parliament and the European Council and entered into force in July 2020. The first Climate Delegated Act<sup>4</sup> is in application since January 2022. Nuclear energy and gas were dropped from the first Climate Delegated Act, as more analysis was needed. The EC adopted the Complementary Delegated Act<sup>5</sup> on specific gas and nuclear energy activities formally on 9 March 2022. It was transmitted to the European Council and the European Parliament on 10 March 2022. European Parliament and the Member States will scrutinise the document for 4 months (the scrutiny period can be extended for an additional 2 months). If accepted, it will start applying in January 2023.

The Taxonomy Regulation is not an instrument of EU energy policy. Its goal is to reorient the capital flows towards sustainable investment. It is a voluntary tool, useful for investors and companies clarifying which economic activities substantially contribute to its six environmental objectives, the most important being climate mitigation and adaptation. The Taxonomy Regulation increases transparency in the financial markets, as market participants have to disclose how they had used taxonomy in the design of their sustainable products.

Renewables have an absolute priority in the European Green Deal and Taxonomy in order to help achieve climate neutrality by 2050. At the same time nuclear energy plays a role in bridging potential gaps in the move towards renewable energy sources. However, Member States remain fully responsible and competent for deciding their own energy mix that could be consistent with their commitment to decarbonisation and climate neutrality.

<sup>3</sup> Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088

[https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852/law-details\\_en](https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852/law-details_en)

<sup>4</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R2139&from=EN>

<sup>5</sup> [https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2022-631\\_en.pdf](https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2022-631_en.pdf)

The three conditions for being eligible to benefit from EU Taxonomy, as set out in detail in the Complementary Delegated Act, are:

1. a given economic activity has to substantially contribute to climate objectives;
2. a given economic activity must not harm any of the other climate objectives. It is particularly important for nuclear sector, when it comes to disposal of nuclear waste;
3. a given economic activity has to comply to technical screening criteria.

The Taxonomy Complementary Delegated Act is based on:

- The reports of the EU Technical Expert Group on Sustainable Finance;
- Research by the EU's Joint Research Centre (JRC);
- Review of JRC's report by Member States' experts on radiation protection and waste management appointed by the Scientific and Technical Committee under Article 31 of the Euratom Treaty, as well as by experts from the Scientific Committee on Health, Environmental and Emerging Risks (SCHEER);
- Consultations (on gas) carried out as part of the first Climate Delegated Act;
- Consultation with the Platform on Sustainable Finance and Member States Expert Group on Sustainable Finance (MSEG), as well as discussions with the European Parliament.

The above reviews concluded that the compliance with the safety standards and waste management requirements under the regulatory framework in EU member states ensure high level of protection for the environment and for people. Thus EC has decided to include nuclear energy and gas into the Taxonomy, subject to strict conditions.

The three activities in the Complementary Delegated Act are the following:

- advanced technologies with closed fuel cycle (Generation IV) (no sunset clause);
- new nuclear power plant projects for energy generation, which will be using best-available existing technologies (Generation III+) (recognition for approval of construction permits until 2045);
- modification and upgrades of existing nuclear installations for the purpose of lifetime extension (recognition for approval by competent authority until 2040).
- comprehensive nuclear safety and waste management requirements apply for all nuclear activities to qualify, in full compliance with all relevant regulatory requirements and with the best technology criterion, and monitored by the EC. Additional and stricter requirements apply notably on waste disposal.

Five most important conditions for recognising nuclear activities:

- there must be adequate financial resources for both waste management and decommissioning during the lifetime of nuclear installations;
- operational disposal facilities in the relevant Member State for low and intermediate level radioactive waste should be notified to the EC and included in the national programme;
- there must be a plan in the relevant Member State to have a disposal facility for high level radioactive waste in operation by 2050;
- all projects should ensure the accident tolerant fuel by 2025;
- all projects should be notified to EC and all issues raised by the EC with relevance to the technical screening criteria need to be addressed to become eligible.

The criteria for the activities in the Complementary Delegated Act will have to be reviewed every 3 years to take into account the latest technological developments.

The Spanish representative commended that accident tolerant fuel was added to the Act.

The Austrian representative suggested to EC to withdraw the Complementary Delegated Act, as nuclear installations are endangered not only by natural risks, but also by terror and war acts, and thus cannot be qualified as sustainable.

#### ENSREG took note of:

- **DG FISMA presentation and discussion after.**
- **US NRC Observership to ENSREG**

The EC representative informed that US NRC have informally approached EC with a wish to apply for Observer status in ENSREG. EC is in favour of a close relationship between the US NRC and ENSREG; however it would not propose a formal observership at the present moment. FR and EC representatives stressed the importance of reciprocity in respect of granting observership status to third countries.

ENSREG took note of:

- US NRC wish to apply for Observer status in ENSREG.

#### **4. Next meeting**

ENSREG's 49<sup>th</sup> plenary meeting is planned to be held physically in Brussels on the 21<sup>st</sup> of June 2022 afternoon, following the 6<sup>th</sup> ENSREG Conference (20-21 June 2022).



## **Annex I**

### **Agenda**

#### **Hybrid 47th meeting of ENSREG**

**24th March 2022 (09:00 – 17:00 Brussels time)**

1B Room, Albert Borschette Conference Centre

Rue Froissart 36, 1049 Brussels, Belgium

and by Webex conference call

#### **09:00 – 12:45 - Morning session**

- 1. Adoption of the agenda (09:00-09:10)**
- 2. Chairperson's introduction (09:10-09:25)**
- 3. Administrative Matters (09:25-10:00)**
  - Election of the Chair and vice-Chairs
- 4. Ukraine – update since Extraordinary ENSREG meetings of February/March (10:00-10:30)**

#### **Coffee break (10:30-10:45)**

- 5. Second Topical Peer Review (TPR-II) (10:45-12:15)**

**Progress Report by Chair of TPR-II Board**

**Report by WG1 on its TPR-related activities**

- Draft Terms of Reference

**Presentation by WENRA of the TPR-II Technical Specifications**

- Draft Technical Specifications

**WG3 contribution to TPR-II**

**Stakeholder Engagement**

- 6. Stress-Tests and NAcP outside the EU (12:15-12:45)**

- Report from Chair of Stress Test Board
- Akkuyu – peer review of stress test national report

#### **12:45 – 14:00 lunch break**

#### **14:00 – 17:00 Afternoon session**

**7. 6th ENSREG Conference (14:00-14:30)**

**8. Review of WG1, WG2 and WG3 activities (other than TPR-II matters) since the previous meeting (14:30-15:15)**

WG1: (K. Alm-Lytz)

WG2: (S. Laporta)

WG3: (P. Majerus)

**Coffee break (15:15-15:30)**

**9. EU SMR Partnership (15:30-16:00)**

- Status report from ENSREG SC representative

**10. A.O.B (16:00-16:50)**

- Corrosion – information from Slovakia
- Ongoing and Planned studies by the Commission
- Presentation of Taxonomy Delegated Act

**12. Next Meeting (16:50-17:00)**

## **Annex II**

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

(Status 24 March 2022)

#### **Members:**

Austria:	Dr V. Ehold, Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology Mag. Thomas Augustin, 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 T. Bachiyiski, 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 Mr J. Panek, Director for Nuclear Energy, Safety and ITER, DG ENER
Croatia:	Ms A. Getaldić, 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. M. Merxbauer, 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:	Mr P. Tiippana, Radiation and Nuclear Safety Authority Ms K. Alm-Lytz, Radiation and Nuclear Safety Authority
France:	Mr B. Doroszczuk, Nuclear Safety Authority (ASN) Mr G. Bouyt, Ministry for the Ecological Transition
Germany:	Mr T. Elsner, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) Mr G. Niehaus, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)
Greece:	Dr Ch. Housiadas, Greek Atomic Energy Commission (EEAE) Ms E. Carinou, Greek Atomic Energy Commission (EEAE)
Hungary:	Ms A. B. Kádár, Hungarian Atomic Energy Authority (HAEA) Mr L. Juhász, Hungarian Atomic Energy Authority (HAEA)
Ireland:	Dr M. Lehane, Environmental Protection Agency
Italy:	Mr S. Laporta, Institute for Environmental Protection and Research, ISPRA
Latvia:	Ms D. Šatrovska, Ministry of Environment Protection and Regional Development Ms M. Vanaga, 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
Malta:	Mr P. Brejza, Commission for the Protection from Ionising and Non-Ionising Radiation Mr J. Cremona, Commission for the Protection from Ionising and Non-Ionising Radiation
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. Cantemir Ciurea Ercau, National Commission for Nuclear Activities Mr. Mihaita Gaina, 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. Dies, Spanish Nuclear Safety Council Mr J.-C. Lentijo, Spanish Nuclear Safety Council
Sweden:	Ms N. Cromnier, Swedish Radiation Safety Authority Mr G. Szendrő, Ministry of the Environment

### Observers:

European Council:	Mr J. Bielecki, Division for Energy and Atomic Questions
IAEA:	Ms A. Bradford, Department of Nuclear Safety and Security
Norway:	Mr H. Mattsson, Norwegian Radiation and Nuclear Safety Authority
OECD NEA:	Ms R. Tadesse, OECD Nuclear Energy Agency
Switzerland:	Mr M. Kenzelmann, Swiss Federal Nuclear Safety Inspectorate (ENSI)
Turkey:	Mr. Dr. Z. Demircan, Nuclear Regulatory Authority of Republic of Turkey (NDK)
Ukraine:	Mr O. Korikov, State Nuclear Regulation Inspectorate of Ukraine (SNRIU)
United Kingdom:	Mr M. Foy, Office for Nuclear Regulation of United Kingdom (ONR)
WENRA:	Mr O. Gupta

## Annex III

### ENSREG 47<sup>th</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	AUGUSTIN	Thomas
BULGARIA	Nuclear Regulatory Agency	BACHIYSKI	Tsanko
CROATIA	Ministry of the Interior	TEČIĆ	Zdravka
CYPRUS	Ministry of Labour, Welfare and Social Insurance	SAKKAS	Demetris
CZECHIA	State Office for Nuclear Safety	DRABOVA	Dana
CZECHIA	State Office for Nuclear Safety	MERXBAUER	Michael
CZECHIA	State Office for Nuclear Safety	CHARA	Jan
CZECHIA	State Office for Nuclear Safety	HERTLOVA	Lucie
DENMARK	National Institute of Radiation Protection	ØHLENSCHLÆGER	Mette Karin
DENMARK	Danish Emergency Management Agency	THOMSEN	Jimmy
ESTONIA	Estonian Environmental Board	MURU	Karin
FINLAND	Radiation and Nuclear Safety Authority (STUK)	ALM-LYTZ	Kirsi
FINLAND	Radiation and Nuclear Safety Authority (STUK)	TIIPPANA	Petteri
FRANCE	Nuclear Safety Authority (ASN)	DOROSZCZUK	Bernard
FRANCE	Ministry for the Ecological Transition	BOUYT	Guillaume
FRANCE	Nuclear Safety Authority (ASN)	CADET-MERCIER	Sylvie

Country	Organisation	Surname	Name
FRANCE	Nuclear Safety Authority (ASN)	CHANIAL	Luc
FRANCE	Nuclear Safety Authority (ASN)	ETHVIGNOT	Thierry
FRANCE	Nuclear Safety Authority (ASN)	PEIRO	Stephanie
FRANCE	Permanent Representation of France to the EU	THEVENOT	Caroline
FRANCE	Permanent Representation of France to the EU	COUFFON	Eloise
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)	STOPPA	Gisela
GERMANY	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	DITSCHKE	Christoph
GREECE	Greek Atomic Energy Commission (EEAE)	HOUSIADAS	Christos
GREECE	Greek Atomic Energy Commission (EEAE)	CARINO	Eleftheria
HUNGARY	Hungarian Atomic Energy Authority (HAEA)	RETFALVI	Eszter
IRELAND	Environmental Protection Agency	LEHANE	Michael
IRELAND	Environmental Protection Agency	KELLEHER	Kevin
ITALY	Institute for Environmental Protection and Research, ISPRA	LAPORTA	Stefano
ITALY	National Inspectorate for Nuclear Safety and Radiation Protection (ISIN)	MATTEOCCI	Lamberto
ITALY	National Inspectorate for Nuclear Safety and Radiation Protection (ISIN)	DIONISI	Mario
Country	Organisation	Surname	Name



LATVIA	Ministry of Environmental Protection and Regional Development	ŠATROVSKA	Dace
LATVIA	Ministry of Environmental Protection and Regional Development	VANAGA	Madara
LITHUANIA	State Nuclear Power Safety Inspectorate (Vatesi)	DEMČENKO	Michail
LITHUANIA	State Nuclear Power Safety Inspectorate (Vatesi)	ŠLEPAVIČIUS	Sigitas
LUXEMBOURG	Ministry of Health - Directorate of Health - Department of radiation protection	MAJERUS	Patrick
MALTA	Commission for the Protection from Ionising and Non-Ionising Radiation	BREJZA	Paul
MALTA	Commission for the Protection from Ionising and Non-Ionising Radiation	CREMONA	Joseph
THE NETHERLANDS	Authority for Nuclear Safety and Radiation Protection (ANVS)	BRUGMANS	Marco
THE NETHERLANDS	Authority for Nuclear Safety and Radiation Protection (ANVS)	BOOM	Jurrian
POLAND	National Atomic Energy Agency	MŁYNARKIEWICZ	Łukasz
PORTUGAL	Portuguese Environment Agency	OLIVEIRA MARTINS	João
PORTUGAL	Portuguese Environment Agency	ROSÁRIO	Pedro
ROMANIA	National Commission for Nuclear Activities Control (CNCAN)	ION	Mihaela
SLOVAK REPUBLIC	Nuclear Regulatory Authority of the Slovak Republic	TURNER	Mikulas
SLOVENIA	Slovenian Nuclear Safety Administration	SIRC	Igor
SPAIN	Spanish Nuclear Safety Council	DIES	Javier
SPAIN	Spanish Nuclear Safety Council	LENTIJO	Juan Carlos
SPAIN	Spanish Nuclear Safety Council	GRANADOS	Ignacio Martin
<b>Country</b>	<b>Organisation</b>	<b>Surname</b>	<b>Name</b>
SWEDEN	Swedish Radiation Safety Authority	CROMNIER	Nina

## Observers

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Organisation	Surname	Name
European Council	BIELECKI	Janusz
European Council	LERCEL	Bartosz
International Atomic Energy Agency (IAEA)	BRADFORD	Anna
Norwegian Radiation and Nuclear Safety Authority	MATTSSON	Håkan
Nuclear Regulatory Authority of Republic of Turkey (NDK)	ALTEN	Serhat
Nuclear Regulatory Authority of Republic of Turkey (NDK)	GÜLOL	Oya
Nuclear Regulatory Authority of Republic of Turkey (NDK)	KARAMAN	Enes
Office for Nuclear Regulation, United Kingdom	FOY	Mark
State Nuclear Regulatory Inspectorate of Ukraine (SNRIU)	KORIKOV	Oleh
State Nuclear Regulatory Inspectorate of Ukraine (SNRIU)	RYBALKA	Natalia
State Nuclear Regulatory Inspectorate of Ukraine (SNRIU)	GOROSHANSKYI	Andrii
Swiss Federal Nuclear Safety Inspectorate (ENSI)	NILSSON	Hugo
Swiss Federal Nuclear Safety Inspectorate (ENSI)	MÜLLER	Annatina
WENRA	GUPTA	Olivier

## European Commission

Surname	Name	Directorate General
Garribba	Massimo	Deputy Director General – DG ENER
Panek	Jan	Director for Nuclear Energy, Safety and ITER – DG ENER
Naudužaitė	Monika	Assistant to the Deputy Director General – DG ENER
Wächter	Gerhard	Adviser Euratom Coordination – DG ENER
Rhein	Hans	Head of Unit/D1 – DG ENER
MacLean	Finlay	Team Leader/D1 – DG ENER
Kravos	Marko	Policy Officer/D1 – DG ENER
Baran	Jaroslav	Policy Officer/D1 – DG ENER
Kumžaitė	Eglė	Policy Assistant/D1 – DG ENER
Hübel	Michael	Head of Unit D3 – DG ENER
Jilek	Jan	Deputy Head of Unit D3 – DG ENER
Murphy	Simon	Policy Officer/D3 – DG ENER
Pouleur	Yvan	Policy Officer/D3 – DG ENER
Patel	Bharat	Policy Assistant/D3 – DG ENER
Pascal	Ghislain	Policy Coordinator/D2 – DG ENER
Švedkauskaitė	Jolanta	Team Leader/D2 – DG ENER
Alvarez Aguilera	Carlos	Policy Officer/D2 – DG ENER
Pastor Juste	Antoni	Policy Officer/D2 – DG ENER
Noel	Marc	Project Manager - Scientific / Technical Project Manager/A7 - JRC
Spolc	Martin	Head of Unit/B2 – DG FISMA