

Minutes of the 44<sup>th</sup> meeting of ENSREG 24 November 2021 Hybrid meeting (virtually and in Brussels)

# Participants

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

# Closed session ENSREG Members only -

# **1. Adoption of the agenda**

HLG-r(2021-44)\_579 Draft Agenda of the 44th ENSREG Meeting

The ENSREG Chairperson, Ms Marta Žiaková, opened the 44<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 six new ENSREG Members: Mr Ciurea Ercau, of the Romanian National Commission for Nuclear Activities; Mr Gaina, of the Romanian Nuclear and Radioactive Waste Agency; Mr Holubetz, of the Austrian Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology; Mr Bouyt, of the French Directorate-General for Energy and Climate; Ms Kádár, of the Hungarian Atomic Energy Authority; and Ms Carinou, of the Greek Atomic Energy Commission. The list of Members and Observers at the time of the meeting is attached as Annex II.

The meeting started with a closed session for Members only to discuss and endorse the Final EU Peer Review Report on the Implementation of Belarusian Stress Test National Action Plan (the Report), as well as the Press Release. Ms Lugovskaya, the Head of the Belarusian nuclear regulator Gosatomnadzor (GAN) was invited to participate during the presentation of the Report.

The proposed agenda was adopted without modifications and is attached as Annex I.

# 2. Presentation of Astravets Final Peer Review Report

HLG-p(2021-44)\_171 Belarus NACP Peer Review Final Report HLG-r(2021-44)\_594 ENSREG Plenary meeting Nov 2021 Belarus NACP Peer Review HLG-r(2021-44)\_595 Status of Implementation Belarus NACP

The Peer Review Team (PRT) leader Mr Petteri Tiippana presented the outcomes of the Peer Review of Belarus Stress Test National Action Plan (NAcP). He recalled that the Peer Review had started in summer 2020. Due to the outbreak of the Covid-19 pandemic, the peer review exercise was divided into two phases. The first phase, focusing on high priority issues identified by the PRT, was completed in February 2021 with the site visit and the finalisation of the preliminary report which was discussed and endorsed in the 42nd ENSREG plenary in early March 2021. During the second phase online meetings to discuss the answers provided by the Belarusian regulator Gosatomnadzor (GAN) took place, followed by a second site visit on 30 August – 2 September 2021. The team was able to visit all relevant locations, to see and discuss all relevant documents, and to have open and constructive expert discussions on the findings. After the PRT finalised the Report, a meeting took place with the Belarusian counterparts for factual corrections. The Final Report was then discussed by the ENSREG Board for Stress Tests in Third Countries and sent for endorsement to ENSREG.

The PRT concluded that all recommendations identified in the 2018 PRT report have been reflected in the NAcP and all actions decided by GAN and Belarusian Nuclear Power Plant (BelNPP) meet the intent of the 2018

PRT report. GAN and BelNPP have expedited the implementation of several actions compared to the original schedule. Out of 22 recommendations 17 have been fully implemented and the remaining ones are being implemented. The PRT identified areas for further enhancement of safety.

To be noted: extending the seismic monitoring network and providing access to information are to be implemented by 2025; review and enforcement of the robustness of the volumetric protection of relevant buildings are to be implemented by December 2021. Regarding the indirect effects of an earthquake, i.e. the ability of the fire protection concept at BelNPP to mitigate fires induced by earthquakes, the PRT concluded that the significance is not major due to the low probability of fire resulting in simultaneous inoperability of all active safety systems and due to the possibility to remove heat by the passive heat removal systems. However, the PRT made suggestions for improving the fire safety systems.

The ENSREG 2012 compilation of recommendations and suggestions, and the CNS 2012 Summary report, typically used as references for the NACP, were not used by Belarus. However the PRT concluded that this had no significant impact to overall quality of the PR. The references used in the PR were relevant updated IAEA safety requirements and WENRA Safety Reference Levels (SRL).

The PRT encouraged GAN/BY to continue utilising peer reviews, and also encouraged GAN to engage with other regulators and regularly update the NACP and the Report on its implementation.

The PRT leader underlined that the PRT carried out their work under unusual conditions caused by the Covid-19 pandemic and by difficult political circumstances. He thanked the team for their commitment and motivation, the Commission for providing additional experts, the ENSREG Board for Stress Tests in Third Countries for their support, and the Belarusian counterparts for an active, open and constructive dialogue.

The Chair of ENSREG thanked the PRT for their dedication and diligence in carrying out the peer review, as well as EC for their support.

Ms Lugvoskaya thanked the PRT and its leader for assisting Belarus in all phases of stress test peer review process. She expressed their readiness to complete all the activities included in their NAcP in time and to keep all stakeholders informed on progress. The NAcP has been recently updated with additional activities taking into account the recommendation dealing with indirect effects.

The EC representative thanked the PRT for their work and GAN for their consistent support during the whole exercise. He inquired about GAN's readiness to regularly share information with ENSREG in case of events in the NPP, as there have been several such cases in the past. He also asked if the results of the recently accomplished OSART mission will be published.

Ms Lugovskaya informed that information on incidents at the NPP will be sent to IAEA's Incident Reporting System, where GAN is participating. She agreed that short information on NPP related events could be published on GAN's website. She also expressed GAN's readiness to share information with their partners in the framework of their bilateral agreements, as well as with ENSREG. She confirmed that the OSART report will be published on GAN's website.

Following the request of the PRT leader to inform on the status of Units 1 and 2 of the NPP, Ms Lugovskaya informed that Unit 1 is under operation. Regarding Unit 2, GAN's inspection for issuing the fuel load permit is foreseen for the beginning of December to be followed by the physical start up in mid-December.

# 3. Discussion on endorsement of Astravets Final Peer Review Report (ENSREG Members only)

HLG-r(2021-44)\_574 Belarus NAcP Peer Review Final Report

In the closed session for Members only, ENSREG Members discussed and agreed on the Final EU Peer Review Report on the Implementation of Belarusian Stress Test National Action Plan.

#### **ENSREG decided to:**

• approve the Final EU Peer Review Report on the Implementation of Belarusian Stress Test National Action Plan and its immediate publication.

# 4. Approval of Press Statement (ENSREG Members only)

#### HLG-p(2021-44)\_172 ENSREG Press Release Belarus PR NAcP

ENSREG Members agreed to highlight the following points in the Press Release:

- A stress test and the implementation of follow-up actions focus on a number of aspects with the objective to enhance safety, but does not constitute a full basis for providing licenses to start operation nor to decide on long-term operation options. Such authorisations are based on national legislation under the responsibility of the national nuclear safety authorities.
- The Peer Review Team underlines that all recommendations formulated in the 2018 Stress Test Peer Review Report are important and encourages GAN to implement all the remaining recommendations identified by the EU Peer Review Report of the Belarus Stress Tests of July 2018 in a timely manner and to update the NAcP and publish regular reports on its status of implementation.

#### **ENSREG decided to:**

• approve the Press Release on the finalisation of the Final EU Peer Review Report on the Implementation of Belarusian Stress Test National Action Plan and its immediate publication on the ENSREG public website.

# - Open Session -

# 5. Chairperson's introduction

HLG\_r(2021-44)\_577 Draft Minutes of the 42nd ENSREG Meeting HLG\_r(2021-44)\_578 Draft Minutes of the 43rd ENSREG Meeting

The ENSREG Chairperson, Ms Marta Žiaková, opened the open session of the 44th ENSREG meeting and welcomed once more the six new ENSREG Members.

The Chair asked Members for approval of the draft minutes of the 42nd and the 43rd ENSREG meetings.

The Chair informed participants of the outcomes of the closed session, namely approval of the final Belarus peer review report and accompanying press release and approval for their publication on the ENSREG website.

#### ENSREG decided to:

• approve the minutes of the 42<sup>nd</sup> and 43<sup>rd</sup> ENSREG meetings.

# Second Topical Peer Review (TPR-II)

- Progress Report by Chair of TPR-II Board HLG-r(2021-44)\_580 TPR II Board\_Report to ENSREG 44th Meeting - November 24th 2021

- o Board proposal on site visits following July ENSREG plenary meeting
- Nomination of Team Leaders and Rapporteurs

The Chair of the TPR-II Board Ms Sylvie Cadet-Mercier presented the status of the TPR-II preparations, and in particular the proposals of the Board regarding the site visits and their articulation in the peer review for ENSREG's decision.

The Chair reported on the departure of the Vice-Chair of the Board Mr Kai Weidenbrück and invited ENSREG to nominate a replacement.

The TPR-II process is in the preparation phase. The topic of fire protection was chosen and WG1 has issued a report on the lessons learnt from TPR-I. The WG1 TPR-II subgroup is drafting the Terms of Reference while WENRA is drafting the Technical Specifications.

38 expert nominations had been received by the time of the plenary, thus each thematic group has enough competent experts. Six team leaders were selected from the eight nominations, maintaining those from regulatory bodies and keeping a country balance. All six nominated rapporteurs were also selected. When establishing thematic groups, attention will be paid to avoid having a team leader and a rapporteur from the same country. ENSREG was invited to endorse the proposed team leaders and rapporteurs.

The subsequent phases will be the national self-assessments (July 2022 – October 2023), the peer review (around 7.5 months for desktop review and the workshop taking place in summer 2024) and the follow-up (NAcPs and ENSREG Action Plan, during 2025). The Chair stressed the need to apply a graded approach for the self-assessment and the peer review due to the high number of installations (around 374, excluding waste facilities), in order to have a manageable peer review.

As a consensus on the inclusion of site visits as part of the peer review was not reached during the last ENSREG plenary, the TPR Board was asked to develop options taking account of ENSREG's views. The Board has therefore assessed further the questions of added value, the objectives and the articulation of site visits.

The TPR-II Board proposed that site visits would be beneficial to address and close any open issues identified in the peer review (if needed), as well as to share experience and national practices on specific fire protection issues.

However, site visits are not proposed for NPPs (as they receive OSART missions which include the topic of fire protection and as well to WANO reviews), fuel cycle facilities (no specific SRL, no specific safety issues, or operated by few licensees) and NPPs undergoing decommissioning (considered as an operating NPP while fuel is on site; no significant radiological risk when fuel is removed from the site).

Therefore, having analysed different types of installations involved, the TPR-II Board considered there is benefit **to propose site visits for research reactors only**, as fire protection is not covered to the same extent by the international review missions to which they are subject. In addition, the option of **visiting any other installation in case of a significant open issue being identified should be retained.** Short site visits to research reactors could be focused on the upgrades of the original design to meet the new WENRA SRLs and therefore enable experience sharing. To narrow down the scope even more, before the start of the peer review, the Board with WG1 TPR subgroup and WENRA's Working Group on Research Reactors will define criteria for selecting research reactors to be visited.

The Board **proposed to organise the site visits during the phase of the desktop review** of self-assessments with the aim of discussing the findings during the workshop sessions, to allow for exchanges before the reports are finalised.

The EC representative reported on the interest of South Africa, China and Canada to participate as observers in TPR-II. The Chair of ENSREG asked to clarify if they would like to participate in the exercise fully or only observe the process.

The EC representative drew participants' attention to the significance of the exercise in view of the increased interest in nuclear energy in Europe and suggested to focus on providing meaningful results and tangible safety improvements. He expressed the EC's readiness to provide support in the form of material and financial assistance, as well as human resources.

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

#### HLG-r(2021-44)\_581 TPR WG1 report

WG1 Chair Ms Kirsi Alm-Lytz gave a brief overview of TPR-II related activities and the process of TPR-II. The overall process description was approved by ENSREG plenary of November 2020. WG1 TPR subgroup together with the TPR-II Board is drafting the Terms of Reference (ToR), incorporating lessons learnt from TPR-I. The main elements of the ToR (objectives, process description, peer review organisation) will be presented for ENSREG's approval during the plenary of March 2022. Further details, e.g. more detailed workshop arrangements, will be developed by WG1 and TPR-II Board thereafter during 2022-2023.

WG1 Chair reminded participants that the decision on site visits is awaited to allow further development of the ToR.

- Information from WENRA on progress with TPR-II Technical Specifications

HLG-r(2021-44)\_582 TPR Technical Specification\_draft 15 11 2021 HLG-r(2021-44)\_593 WENRA TPR TS HLG-r(2021-44)\_596 Update WENRA activities November 2020-November 2021

The Chair of WENRA Mr Oliver Gupta reported on the progress with the TPR-II Technical Specifications (TS). Three parts of the TS have been finalised (general requirements, general information, fire safety analysis), while the remaining parts are still in progress (fire protection concept and its implementation, references, Annex I – detail contents list of the National Assessment Reports (NARs), Annex II – abbreviations).

The main objective of the TS is to detail the content of the NARs. The main principles endorsed in the last ENSREG plenary are being taken into account: inclusion of as many types of installations falling under the Nuclear Safety Directive as possible; considering all stages in the lifecycle of the installations; using WENRA's SRLs as clear references for the benchmarking; and applying a graded approach.

The TS has identified four topics capturing various aspects of fire protection. The main focus is on fire safety analysis (FSA), as it addresses all levels of defence in depth. Information included in NAR will allow comparison of methodologies used in various countries to perform FSA. The remaining three topics (fire prevention, active fire protection (incl. human firefighting) and passive fire protection) will allow comparison of how practices are implemented in installations. WENRA's ad-hoc working group working on the TS will prepare a focused proposal, which will be grouped into a single chapter "Fire protection concept and its implementation".

The Chair of WENRA outlined the graded approach to be implemented. The TPR-II will cover all the facilities covered by NSD, but:

- exclude facilities that do not pose a significant radiological risk;
- the level of the detail requested in the NAR should reflect the risk significance of the facility;
- focus on the most significant SRLs;
- select facilities to be reported on using a sampling approach, so as to only report on representative installations, while maintaining country balance.

The TS will be finalised by the end of 2021 and then reviewed at WENRA level. It will be sent to ENSREG at the end of February/beginning of March 2022. Following ENSREG's approval, a public consultation will be launched. WENRA would then review the comments from the consultation and submit the final draft to ENSREG for approval by June 2022.

- WG3 contribution to TPR-II

HLG-r(2021-44)\_583 ENSREG WG3 report TPR\_Nov2021 HLG-r(2021-44)\_584 Ensreg\_Factsheet\_1-V2 HLG-r(2021-44)\_585 Ensreg\_Factsheet\_2-V2 HLG-r(2021-44)\_586 Ensreg\_Factsheet-3-TPR2 HLG-r(2021-44)\_587 Draft ENSREG STAKEHOLDER ENGAGEMENT PLAN (for plenary meeting)

The Chair of WG3 Mr Patrick Majerus presented 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) to be used for informing the stakeholders, the media and the public in general about the TPRs. The content of the factsheets had already been approved in the last ENSREG plenary. The WG3 Chair asked the present plenary to approve the layout/design of the factsheets, which had been prepared by a professional EC designer. Thereafter, EC will translate them into all EU national languages.

The WG3 Chair presented the Stakeholder Engagement Plan and asked for ENSREG's approval. The main elements of the Plan are: the factsheets; promotion of the TPR on the ENSREG website; organisation of public stakeholder meetings; public consultation on the draft TS, draft ToR and draft Stakeholder Engagement Plan; development of ToR for a standing TPR Focus Group; and publication of results and public consultation of the national assessments prior to the peer review workshop, including a summary of stakeholder contributions into the TPR Summary Report.

## - ENSREG's discussion on TPR-II

#### Site visits:

Some Members and Observers indicated that the proposals for site visits as presented by the Chair of the TPR-II Board were balanced and realistic, whilst others requested additional clarifications. These requests related to the added value and sufficiency of time for site visits; the need for developing criteria on installations to visit; the process of the selection of the plants and addressing the security issues, plus clear instructions on reporting observations from visits and dealing with them in the analysis of the TPR-II; further clarity of the objectives related to open issues; the possibility to share experience through workshops; and the importance of including information from OSART and other peer review findings in the national reports.

On the specific proposal of site visits for research reactors, it was pointed out that INSARR reviews (Integrated Safety Assessment of Research Reactors) have been carried out at some sites, and the WENRA SRLs for research reactors have not yet been implemented in all national regulations. Besides, it was requested to take the existing missions to research reactors into account. WENRA and WG1 were asked to provide more information on their internal discussions.

Some Members, including the EC representative, stressed the importance of increasing the trust in nuclear safety through the level of credibility given to the exercise via inclusion of site visits. Recognising the additional work involved, the EC would look at means of providing support.

#### **Technical Specifications (TS):**

Several Members commented on the large number of installations involved and welcomed the graded approach. One Member asked whether the discussion on focusing on specific SRLs has been finalised. Two Members questioned the choice of the reference date for installations to be included in the exercise, suggesting to indicate an earlier date of 30 June 2022 for construction license. One Member raised the question of how to handle NPPs moving into the phase of decommissioning during the time of the exercise.

The EC representative stressed the importance of presenting developments of the TS to ENSREG. He indicated that recently updated IAEA standards related to fire protection should be taken into account in the review process, and expressed readiness to provide contributions to WENRA in drafting the TS.

#### **Terms of Reference:**

Members commended the good progress with ToR and made the following suggestions:

- Decreasing the large number of installations, e.g. excluding low risk facilities;
- Ensuring a common understanding of terminology used, such as "challenges, best practices, areas for improvement".

One Member questioned whether sufficient time had been allowed for Questions and Answers (3 months each).

#### Experts and composition of the teams:

Members expressed confidence in the composition of the team. The EC representative reported that three DG JRC experts will join the team and also expressed concern that some Member States have not yet nominated experts.

#### Stakeholder involvement:

One Member expressed his support to the Stakeholder Engagement Plan, while inviting to consider the impact of these activities.

#### Nomination of the Vice-Chair of the TPR-II Board:

One Member suggested to nominate a representative from a non-nuclear Member State, as the other members of the Board represent nuclear countries.

#### ENSREG took the decision to:

- accept the proposals for the nominations of team leaders and rapporteurs as presented;
- agree to the proposals for site visits with a focus on research reactors and potentially on other installations in case of open issues, and invited the TPR Board with WG1 TPR subgroup and WENRA's Working Group on Research Reactors to prepare criteria on choosing the research reactors to visit, as well as on defining open issues for other installations to be visited;
- recommend that the scope of TPR-II include only the nuclear installations that have a construction permit before 30 June 2022;
- invite nominations to the position of the Vice-Chair of the TPR-II Board by 8th of December 2021, to be later approved via written procedure;
- encourage WENRA to closely cooperate with ENSREG on TS for TPR-II and to make sure that the proposed time schedule is being followed;
- approve the graphic design of the factsheets, which will be translated and available to be used by Member States;
- approve the Stakeholder Engagement Plan.

#### ENSREG took note of:

- the progress made in WG1 on TPR-II ToR;
- the interest of non-EU countries to participate as observers with a decision on the level of participation to be made on a case-by-case basis in future.

# **6. Administrative Matters**

The EC representative reminded the Members of the expiry of the 2-year mandates of the ENSREG Chair and Vice-Chairs. Taking into account the COVID context which has prevented formal and informal interactions between ENSREG members, it was suggested to exceptionally extend the current mandates until the next ENSREG plenary meeting in March 2022, when the decision on the positions would be taken. Members were invited to nominate candidates for the positions of Chair and Vice-Chairs until the end of February 2022.

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

• the expiry of the 2-year term for the ENSREG Chair and Vice-Chairs.

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

- extend, in view of the exceptional circumstances and in derogation from its Rules of Procedure, the mandates of the ENSREG Chair and Vice-Chairs until the next ENSREG plenary meeting in March 2022, when the decision on the renewal or new appointments for the positions would be taken;
- invite Members to nominate candidates for the positions of ENSREG Chair and Vice-Chairs by the end of February 2022.

# 7. Stress-Tests and NAcP outside the EU

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

#### HLG-r(2021-44)\_597 ENSREG ST Board reporting 24 November 2021

The Chair of the ENSREG Board for Stress Tests in Third countries, Mr Frank Hardeman, provided an overview of the activities of the Board since the last ENSREG plenary.

The Chair reported on the changes in the composition of the Board due to the retirement of the previous Chair, Mr Andreas Molin (AT). Following a Written Procedure, Mr Frank Hardeman (BE) took over the position of the Chair and Mr Patrick Majerus (LU) joined the Board as a representative of a non-nuclear country. The Chair thanked Mr Molin for his work and welcomed Mr Majerus.

The 10th meeting of the Board took place on the 16th of September 2021, where the peer reviews in Belarus and Turkey were discussed, as well as the possibilities to carry out peer reviews in Iran and other countries.

The Chair thanked, on behalf of the Board, the peer review team and its leader Mr Tiippana for their outstanding work during the Belarus peer review. He reported that during the last meeting of the Board the outcomes of the second peer review phase were presented, the Final EU Peer Review Report was discussed and the Board approved its transmission to ENSREG for endorsement. The Board discussed the presentation of the Final Report to the Belarusian authorities and NGOs and the EC undertook to raise the issue with Belarus counterparts. The Board agreed to stress the importance of closing the remaining open actions in a press release.

The Chair reported that the composition of the Turkey peer review team has been decided and the Board has welcomed the appointment of Mr Tiippana as its leader. Following the approval of the Board, the Practical Arrangements Document was transmitted to Turkey and the desktop review phase has commenced.

The Chair informed about the interest of Iran in its stress test peer review, which could begin once the Turkey peer review is finalised. The Board expects the Iranian stress test national report to be available by the second half of 2022 and in line with the stress test methodology. He pointed out that several potential experts for the peer review exercise are involved in EU support projects to Iran and would be ineligible to participate.

Mr Hardeman informed that EC undertook to contact Egypt on provisional timing of a possible stress test peer review. The Board is expecting to receive an update by EC on UAE and Ukraine at their next meeting on the 13th of December 2021.

The EC representative confirmed that the Commission has officially invited Egypt to carry out a stress test peer review and to participate as an observer in the Turkey peer review, although an answer had not yet been received.

He affirmed the EC's willingness to organise an online presentation of the Belarus Final Peer Review Report to stakeholders and NGOs, the details of which will be discussed during the next meeting of the Board.

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

#### HLG-r(2021-44)\_575 Stress test peer review team for the Akkuyu Nuclear Power Plant HLG-r(2021-44)\_598 ENSREG Plenary Nov 2021 Turkey Peer Review HLG-r(2022-44)\_605 LT position on the status of implementation of Stress Tests' Peer Review Team recommendations in BY

The team leader of the Turkey peer review Mr Petteri Tiippana informed participants about the progress in the construction of Akkuyu NPP (4 VVER units). It is foreseen that Unit 1 would start commercial operation in 2023. Turkey has invited ENSREG to conduct a peer review of the Turkish stress test national report submitted to ENSREG in June 2019.

Mr Tiippana expressed his satisfaction with the composition of a well-qualified peer review team, especially in Topic 1 on Extreme Natural Hazards. He informed that Cyprus will participate as an observer to the exercise and observers from IAEA and Egypt are expected as well.

He informed that the desktop review is progressing, the team is compiling a full set of questions received. Questions and comments would be submitted to the Turkish nuclear regulator NDK by December 2021. A videoconference would take place in January-February 2022 between Turkey and the peer review team to clarify the questions, written answers by NDK are expected by March 2022, a videoconference for clarifying the answers is foreseen for April 2022. A country visit, after which the peer review team report would be finalised, is foreseen for May 2022.

The ENSREG Chair commended the swift progress of the peer review and thanked Mr Tiippana and the team for their work.

The EC representative thanked the Turkey peer review team and its leader, the Chair of the ENSREG Board for Stress Tests in Third Countries and the ENSREG Chair for their work. He acknowledged the importance of Turkey's willingness to participate in the exercise. He noted positive changes in the regulatory framework in Turkey and informed about Turkey's plans to build more NPPs.

The Lithuanian representative congratulated the Board and the peer review teams on their work. He wished to present the Lithuanian position on the status of implementation of the stress test peer review team recommendations in Belarus to the open session of the plenary. He emphasised (in line with the approved Final EU Peer Review Report and Press Release) that stress tests and the implementation of follow-up actions

should not be used to justify or authorise the safe operation of the Belarusian NPP. He also emphasised that all recommendations formulated in the 2018 Stress Test Peer Review Report are important and should be implemented in a timely manner. He encouraged GAN to update the Belarus NACP and publish regular reports on its implementation. At the same time, from the very beginning of the implementation of the Belarusian NPP project Lithuania was of the opinion that the whole package of modern safety requirements shall be implemented there. This is why Lithuania insists now on suspending the operation of Unit 1 and commissioning of Unit 2 of the Belarus NPP until all modern international safety requirements are implemented.

The ENSREG Chair underlined that ENSREG took a common position of approving the Final EU Peer Review Report on the Implementation of Belarusian Stress Test National Action Plan and invited members to further express their independent positions on the broader set of questions separately.

#### ENSREG took note of:

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

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

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

#### HLG-r(2021-44)\_588 WG1 - Report to ENSREG 44th Meeting HLG-r(2021-44)\_576 ENSREG 1st TPR status report\_final 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 6 of the agenda.

WG1 held a virtual meeting on the 14th of September 2021, where the following activities were discussed:

#### 1. ENSREG Status Report for TPR-I.

Following TPR-I, ENSREG established an action plan which was approved in ENSREG plenary in November 2019. It took into account the Council Conclusions on TPR which were published in March 2019. The action plan included actions for member states (producing NAcPs by end of September 2019 and updating them by end of May 2021 and end of 2023) and for WG1 (preparing lessons learnt for TPR-II, the status report end of 2021 and a summary report May 2024).

The action plan also included actions addressing four EU-level challenges identified in TPR-I. WG1 took contact with international organisations and their entities dealing with ageing management issues to investigate their activities in the areas covered by these challenges. IAEA/IGALL is covering many of the topics in their ongoing programme and they took into account the lessons learnt from TPR-I. NEA/CSNI/WGIAGE is focusing on the topic of ageing management of concrete structures and they took one of the EU level challenges in focus. WENRA/RHWG took lessons learnt from TPR-I into account in the revision of the Safety Reference Levels in 2020. EC/DG RTD is promoting research related to the generic challenges and addressing the topics in the EU Framework Programme for Research and Innovation; DG JRC raised awareness of the actions through participation in the European Network for Inspection and Qualification (ENIQ), the 8th technical area of the European based R&D association on Gen II & III reactors, NUGENIA.

WG1 Chair presented the ENSREG Status Report for TPR-I, as uploaded on CIRCA BC, for approval by ENSREG with the aim to publish it by the end of the year. The Report gives a brief summary of the implementation status in each country, as well as a summary of the lessons learnt from TPR-I. More detailed information can be found in the NACPs and their updates published on ENSREG website. Many of the actions have already been completed and the remaining ones are progressing well and most should be finalised within a couple of years.

#### 2. Implementation Status of Stress Tests National Action Plans.

WG1 Chair reminded the seven countries which have not yet finalised their NAcPs that the next deadline to provide an update before the end of 2021. In the last WG1 meeting a closure presentation was made by Sweden, which is still expected to submit the closure report. WG1 will produce a status report for approval for the next plenary in March 2022 (task led by Finland).

The EC representative stressed the importance of finalising the NAcPs and closing the exercise, in the light of the 10th anniversary of Fukushima.

#### 3. Following the IRRS programme in EU countries.

WG1 Chair reported on the status of the IRRS 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 Chair reminded of the importance to have timely follow-up missions.

WG1 is updating the IRRS pool of experts, a discussion is ongoing how to synchronise the EU list of experts with IAEA database. Countries where contact points are missing were asked to submit new names (Cyprus, Portugal, Italy, Latvia).

A common WG1 and WG2 subgroup is analysing how to improve the efficiency and effectiveness of IRRS and ARTEMIS missions. The subgroup is led by the Netherlands and the leadership will be taken over by Belgium. Many countries are planning to have back-to-back missions (IRRS mission followed by ARTEMIS mission in a couple of months). In the longer term, integrated missions would be desirable.

Two meetings with the IAEA task force working on these synergies took place. Among other ideas, it was proposed to have one ARTEMIS expert cover the "Waste and Spent Fuel Facilities" in the IRRS mission. IAEA is also working on identifying which questions from the self-assessment will be addressed by either IRRS or ARTEMIS.

The IAEA task force is drafting guidance for back-to-back missions, the first one of which will take place in Slovenia in spring 2022. WG1 will continue to have meetings with IAEA for developing ideas, will observe the upcoming back-to-back missions and will share experience with the participating countries.

WG1 has started preparing for the European Workshop on IRRS "lessons learnt" to take place in 2022 to discuss the experience of the first cycle of IRRS missions.

EC representative highlighted that 3 Member States had not yet invited a follow-up mission after the initial IRRS mission. He stressed the need of raising the issue with IAEA and the concerned MS.

Finnish Member and EC representative invited WG1 to analyse together with IAEA the possibilities for improving IRRS missions based on the first 10-year cycle experience, in order not to have an identical exercise.

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

There were some delays in the work of the CFSI subgroup (led by France) due to Covid-19 and Brexit. A technical meeting among the regulators participating in the group, some utilities and suppliers is planned for February 2022.

#### ENSREG took the decision to:

• approve the ENSREG TPR-I Status Report and its publication by the end of the year according to the Council Conclusions.

#### ENSREG took note of:

• the overview of the ongoing WG1 activities for information.

## - WG2: (S. Laporta)

#### HLG-r(2021-44)\_592 WG2 report ENSREG 44

The Chair of WG2 Mr Stephano Laporta presented the activities of the working group since last ENSREG meeting. Online WG2 meetings took place on 16 June and 15 October 2021. The next online meeting is foreseen for March 2022.

The Chair highlighted the following topics:

- Involvement of WG2 in Topical Peer Reviews 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 representatives participate in the WG1 TPR subgroup and WENRA working group developing the Technical Specifications of TPR-II.
- On 23-24 February 2021 WG2 participated in the EC workshop where preliminary findings of the study on Key Performance Indicators (KPIs) for monitoring implementation of national programmes have been presented and discussed. Once the final report of the EC study is available, WG2 will 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 questionnaire within WG2 members and plans to circulate the questionnaire within ENSREG to obtain the views of all EU Member States.
- A task group within WG2 was created to review the **approaches in regulation and management of radioactive waste arising from non-energy uses** of nuclear and radiation technologies. First meeting took place in November to discuss the work programme. WG2 plans to circulate a survey within all ENSREG members.
- Regarding the status of the peer reviews under the Directive 2011/70/Euratom, WG2 Chair presented a list of countries which already performed the ARTEMIS missions, as well as countries with missions foreseen. Some missions have had to be postponed due to the Covid-19 pandemic.
- WG2 participation in the ENSREG WG1/WG2 subgroup on the improvement of IRRS-ARTEMIS efficiency and effectiveness, already discussed under agenda item 9.2 (WG1 report).

The EC representative reminded participants of the obligation under the Directive 2011/70/Euratom to invite ARTEMIS missions and encouraged completing the first cycle of missions as soon as possible. He underlined the need to review the process of ARTEMIS missions for the second cycle.

The ENSREG Chair welcomed the creation of the subgroup dealing with approaches in regulation and management of radioactive waste arising from non-energy uses of nuclear and radiation technologies.

#### ENSREG took note of:

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

#### HLG-r(2021-44)\_589 WG3-progress report November 2021

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 6 of the agenda.

Two online meetings took place since last ENSREG plenary: 27 September and 14 October 2021.

The Chair reported on the technical improvements to the **ENSREG website** to make it faster, more stable and more reliable. The website has migrated to the HTTPS: secure protocol. In the future, the website could be transferred to the Europa Web Platform, a service provided by the Commission. This would involve a redesign of the website (already planned); the address of the website would slightly change and the Commission logo might appear next to the ENSREG logo.

ENSREG adopted its **Communication Policy** document in November 2020 plenary. The **Communication Strategy** is being discussed within WG3 and will be presented to ENSREG next year.

ENSREG took note of:

• the presentation of WG3 activities.

#### 9. 6th ENSREG Conference

HLG-r(2021-44)\_590 Report to plenary - ENSREG Conference 24112021 HLG-r(2021-44)\_599 ENSREG Conference Programme 2022-DRAFT-2

The Chair of the ENSREG Conference Steering Committee Mr Sebastian Kuhn reported on the preparations of the 6<sup>th</sup> ENSREG Conference postponed from 2021 and now planned to take place on 20-21 June 2022.

The Steering Committee met on 19 October 2021. There were no changes in the composition of the Committee and Ms MacLachlan remains the moderator. The Chair of the Committee presented the format of the sessions and the draft programme, where no major changes to the last year programme were identified. Only a few vacancies remain for speakers and panellists. The Committee will meet in January to finalise the programme and will present it for ENSREG's approval in the plenary of March 2022. The invitations shall be launched afterwards.

The Committee is preparing for a physical event, but if a physical is not possible in June 2022 due to the continuation of the Covid-19 pandemic, the Conference could either be postponed or held virtually. The Chair of ENSREG suggested considering a hybrid format as a third option. The Chair of the Steering Committee noted that previous conferences provided the possibility of following a web stream and asking questions online.

Concerning the topic of the 1<sup>st</sup> session "Nuclear Safety – Fukushima: 10 years after", the Finnish and Austrian Members and the UK Observer highlighted the importance not only of looking back over what had been achieved in terms of nuclear safety since Fukushima, but also to look forwards to examine further possibilities for improvement of nuclear safety. The Finnish member suggested inviting WANO to present their perspective. The Austrian Member underlined the need to declare the reasons for not having finalised the stress test exercise 10 years after the Fukushima accident. The EC representative concurred on the need to maintain an incisive approach to ensuring nuclear safety.

The Austrian Member suggested inviting specialists from non-nuclear safety disciplines as presenters for sharing experience. The Chair of the Steering Committee confirmed that the Committee is considering addressing not only nuclear safety issues, but also safety in other areas, as was the case in previous conferences. The EC representative suggested adjusting the topic of the 2<sup>nd</sup> session "Nuclear Safety – Public participation in waste management and LTO" to cover a wider scope of public participation.

Responding to the suggestion of the Austrian Member to send out invitations earlier, the Chair of the Steering Committee clarified that the invitations to the panellists have already been sent and sending invitations to participants 3 months in advance is sufficient based on experience. He encouraged the ENSREG members to disseminate the dates within their organisations. A "save the date" message will be prepared and sent to potential participants by e-mail in December or early January.

#### ENSREG took note of:

• the draft Programme of the 6<sup>th</sup> Conference of ENSREG.

# **10. A.O.B.**

Ongoing and Planned studies by the Commission

#### HLG-r(2021-44)\_600 Commission Studies

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

Studies in the process of publication:

- Study on Key Performance Indicators for monitoring implementation of national programmes on safe and long-term management of spent fuel and radioactive waste;
- Development and try-out of an on-site process for sharing knowledge created in the frame of the nuclear decommissioning assistance programme 2014-2020;
- Analysis to Support Implementation in Practice of Articles 8a-8c of Directive 2014/87/Euratom.

Studies ongoing:

- Study to support the evaluation of the nuclear decommissioning assistance programme 2014-2020;
- Self-assessment on Safety culture maturity of the Nuclear Decommissioning Assistance Programme (NDAP) operations;
- 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.

Studies in preparation:

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

Mr Gupta informed that the EUR (European Utility Requirements) document was discussed during last plenary of WENRA and it was identified as very relevant for serving as a basis for WENRA's interactions with ENISS. WENRA will report to EC on the process of their work with the aim of avoiding duplication with the study carried out by the Commission.

The Chair of ENSREG informed about a study conducted by IAEA on the applicability of IAEA requirements and guidance to SMRs. The conclusions of the study are presented on the IAEA website.

#### ENSREG took note of:

• the information on ongoing and planned studies conducted by the Commission.

# - 7th ENSREG Report to the Council and the European Parliament – Information on state of play

The EC representative recalled that the 6th ENSREG Report to the Council and the European Parliament, covering the years 2018 and 2019 and approved at the plenary of November 2020, was transmitted to the Council of the EU and the European Parliament at the end of the year 2020. The Chair of ENSREG presented the Report to the Council at the beginning of 2021.

The preparations of the 7<sup>th</sup> ENSREG Report to the Council and the European Parliament were discussed in the last ENSREG plenary meeting. WG2 and WG3 have already sent their inputs. Following the review by the WG

Chairs, the draft Report will be circulated to ENSREG for comments in early 2022. The Report would be endorsed at the next plenary of March 2022.

WG1 Chair informed that the Secretariat started drafting the text of the WG1 contribution and it will be sent to the Secretariat shortly.

**ENSREG took the decision to:** 

- approve the procedure for the preparation and adoption of the 7th ENSREG Report to the Council and the European Parliament covering 2020 and 2021.
  - Small Modular Reactors Information by the Commission

The EC representative reported on the outcomes of the first EU workshop on Small Modular Reactors on 29 June 2021 which gathered over 100 stakeholders, including representatives from the regulatory authorities. The event endorsed a vision paper which proposed a "European SMR Partnership". The idea was supported by the participants of the event.

Based on the vision paper, the Commission/DG Energy (in cooperation with FORATOM and SNETP) has worked to identify the initial steps of a roadmap towards the establishment of the "European SMR Partnership" to possibly launch its work by early 2023.

The preparations of the Partnership will be carried out by a dedicated Steering Committee (co-chaired by the Commission/DG Energy) whose activities will be structured under five workstreams on: market integration and deployment, licensing, financing and partnership, supply chain adaptation, and innovation, research and development. All the main stakeholders will be invited to join the Steering Committee or the five working groups as applicable, to discuss the relevant matters.

ENSREG members were invited to nominate experts to the Workstream on Licensing of SMRs (WS2) by the end of the year. The work would start next year with the discussion on the objectives and boundary conditions and the first ideas would be discussed during next ENSREG plenary.

In order to facilitate the nominations by ENSREG members, the Commission will organise an information session for interested ENSREG representatives and experts from nuclear regulators on the work of the Group on 14 December 2022.

**ENSREG took the decision to:** 

- Invite Members to nominate experts to the Workstream on Licensing of SMRs after the information session for nuclear regulators on the preparations of SMR Partnership on 14 December 2022,
- Ask ENSREG Chair to put in place a process to nominate an ENSREG representative to the SMR Partnership Steering Committee.

# **11.** Next meeting

Depending on the development of the Covid-19 pandemic situation, ENSREG's 45<sup>th</sup> plenary meeting is planned to be held either virtually or in hybrid format (physically in Brussels and virtually) on the <u>24<sup>th</sup> of March 2022</u>.

# <u>Annex I</u>

# Agenda

# Hybrid 44th meeting of ENSREG

# 24th November 2021 (09:00 - 17:00 Brussels time)

MANSHOLT Room, Charlemagne Building 170, rue de la Loi/Wetstraat, 1049 Brussels, Belgium and by Webex conference call

# 09:00 – 10:20 - Closed session ENSREG Members only

- 1. Adoption of the agenda
- 2. Presentation of Astravets Final Peer Review Report
- 3. Discussion on endorsement of Astravets Final Peer Review Report
- 4. Approval of Press Statement

(10:20) 10 minute break for connection of non-Members

# 10:30 – Open Session

- 5. Chairperson's introduction (10:30 10:45)
- 6. Second Topical Peer Review (TPR-II) (10:45 12:30)

## Progress Report by Chair of TPR-II Board

- Board proposal on site visits following July ENSREG plenary meeting
- Nomination of Team Leaders and Rapporteurs

Report by WG1 on its TPR-related activities

Information from WENRA on progress with TPR-II Technical Specifications

WG3 contribution to TPR-II

# 12:30 – 14:00 lunch break

- 7. Administrative Matters (14:00 14:20)
- 8. Stress-Tests and NAcP outside the EU (14:20 15:00)

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

# 9. Review of WG1, WG2 and WG3 activities (other than TPR-II matters) since the previous meeting (15:00 – 15:50)

WG1: (K. Alm-Lytz)

WG2: (S. Laporta)

WG3: (P. Majerus)

## 10. 6<sup>th</sup> ENSREG Conference (15:50 – 16:15)

## 11. A.O.B (16:15 – 16:45)

- Ongoing and Planned studies by the Commission
- 7th ENSREG Report to the Council and the European Parliament Information on state of play
- Small Modular Reactors Information by the Commission

## 12. Next Meeting

# <u>Annex II</u>

# **List of Members and Observers**

(Status 24 November 2021)

# Members:

Austria:	Mr V. Holubetz, 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 T.Bachiyski, 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 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. Øhlenschlæger, 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 G. Bouyt, Ministry for the Ecological Transition
Germany:	Dr W. Cloosters, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (E Mr T. Elsner, 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:	Mr S. Hullán, Hungarian Atomic Energy Authority (HAEA) Ms A. B. Kádár, 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 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, 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. Mihaita GAINA, Nuclear & Radioactive Waste Agency Mr. Cantemir CIUREA ERCAU, National Commission for Nuclear Activities
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. Szendrö, Ministry of the Environment
<b>Observers:</b>	
Belarus:	Ms O. Lugovskaya, Gosatomnadzor
Council:	Mr J. Bielecki, Division for Energy and Atomic Questions
IAEA:	Mr G. Caruso, 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 H. Plachkov, State Nuclear Regulatory Inspectorate of Ukraine (SNRIU)
United Kingdom:	Mr M. Foy, Office for Nuclear Regulation of United Kingdom (ONR)
WENRA	Mr O. Gupta

# Annex III

# ENSREG 44<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	HOLUBETZ	Volker
BELGIUM	Federal Agency for Nuclear Control	HARDEMAN	Frank
BELGIUM	ONDRAF-NIRAS	DEMARCHE	Marc
BULGARIA	Nuclear Regulatory Agency	BACHIYSKI	Tsanko
CROATIA	Ministry of the Interior	TEČIĆ	Zdravka
CROATIA	Ministry of the Interior	GETALDIC	Ana
CYPRUS	Ministry of Labour, Welfare and Social Insurance	SAKKAS	Demetris
CZECHIA	State Office for Nuclear Safety	DRABOVA	Dana
CZECHIA	State Office for Nuclear Safety	HABADOVA	Sylvia
CZECHIA	State Office for Nuclear Safety	CHARA	Jan
DENMARK	National Institute of Radiation Protection	ØHLENSCHLÆGER	Mette Karin
DENMARK	Danish Emergency Management Agency	THOMSEN	Jimmy
ESTONIA	Estonian Environmental Board	PUSKAR	Ilmar
FINLAND	Radiation and Nuclear Safety Authority (STUK)	ALM-LYTZ	Kirsi
FINLAND	Radiation and Nuclear Safety Authority (STUK)	TIIPPANA	Petteri

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Country	Organisation	Surname	Name	
FRANCE	Ministry for the	BOUYT	Guillaume	
	Ecological Transition		Guillaume	
FRANCE	Nuclear Saftey Authority (ASN)	DOROSZCZUK	Bernard	
FRANCE	Nuclear Safety Authority (ASN)	CADET-MERCIER	Sylvie	
FRANCE	Nuclear Safety Authority (ASN)	CHANIAL	Luc	
FRANCE	Nuclear Safety Authority (ASN)	ETHVIGNOT	Thierry	
FRANCE	Nuclear Safety Authority (ASN)	PEIROT	Stephanie	
FRANCE	Permanent Representation of France to the EU	THEVENOT	Caroline	
FRANCE	Permanent Representation of France to the EU	MARABEAU	Gwladys	
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)	DITSCHE	Christoph	
GERMANY	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	LUXEM-FRITSCH	Monika	
GERMANY	Federal Ministry for Economic Affairs and Energy	OSTER	Fernando	
GREECE	Greek Atomic Energy Commission (GAEC)	HOUSIADAS	Christos	
GREECE	Greek Atomic Energy Commission (GAEC)	CARINOU	Eleftheria	
HUNGARY	Hungarian Atomic Energy Authority (HAEA)	KÁDÁR	Andrea Beatrix	

Country	Organisation	Surname	Name
HUNGARY	Hungarian Atomic Energy Authority (HAEA)	BALLER	Barbara
HUNGARY	Hungarian Atomic Energy Authority (HAEA)	NAGY	Szilvia
HUNGARY	Hungarian Atomic Energy Authority (HAEA)	LORAND	Ferenc
IRELAND	Environmental Protection Agency	LEHANE	Michael
IRELAND	Environmental Protection Agency	FANNING	Andy
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)	ΜΑΤΤΕΟϹϹΙ	Lamberto
ITALY	National Inspectorate for Nuclear Safety and Radiation Protection (ISIN)	DIONISI	Mario
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
LITHUANIA	Permanent Representation of Lithuania to the European Union	RATKEVIČIŪTĖ	Justina
LITHUANIA	Ministry of Foreign Affairs	USEVIČIŪTĖ	Jūratė
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

Country	Organisation	Surname	Name
MALTA	Commission for the Protection from Ionising and Non-Ionising Radiation	CREMONA	Joseph
NETHERLANDS	Authority for Nuclear Safety and Radiation Protection (ANVS)	BRUGMANS	Marco
NETHERLANDS	Authority for Nuclear Safety and Radiation Protection (ANVS)	BOOM	Jurrian
POLAND	National Atomic Energy Agency	MLYNARKIEWICZ	Lukasz
PORTUGAL	Portuguese Environment Agency	OLIVEIRA MARTINS	João
PORTUGAL	Portuguese Environment Agency	ROSÁRIO	Pedro
ROMANIA	Nuclear & Radioactive Waste Agency	GAINA	Mihaita
ROMANIA	National Commission for Nuclear Activities Control (CNCAN)	ION	Mihaela
ROMANIA	Nuclear & Radioactive Waste Agency	PARASCHIV	Cornelia
SLOVAK REPUBLIC	Nuclear Regulatory Authority of the Slovak Republic	ŽIAKOVÁ	Marta
SLOVAK REPUBLIC	Nuclear Regulatory Authority of the Slovak Republic	KARELOVÁ	Marcela
SLOVENIA	Slovenian Nuclear Safety Administration	SIRC	lgor
SLOVENIA	Slovenian Nuclear Safety Administration	GRLICAREV	lgor
SPAIN	Spanish Nuclear Safety Council	SERENA	Josep Maria
SPAIN	Spanish Nuclear Safety Council	CID	Rafael
SPAIN	Spanish Nuclear Safety Council	DE LOS REYES	Alfredo
SWEDEN	Swedish Radiation Safety Authority	CROMNIER	Nina

# Observers

Surname	Name	Organisation
LUGOVSKAYA	Olga	Gosatomnadzor, Belarus
BRADFORD	Anna	International Atomic Energy Agency (IAEA)
MATTSSON	Håkkan	Norwegian Radiation and Nuclear Safety Authority
PLACHKOV	Hryhorii	State Nuclear Regulatory Inspectorate of Ukraine (SNRIU)
GORASHCHENKOVA	Ganna	State Nuclear Regulatory Inspectorate of Ukraine (SNRIU)
BORZDOVA	Ganna	State Nuclear Regulatory Inspectorate of Ukraine (SNRIU)
GUPTA	Olivier	WENRA
FOY	Mark	Office for Nuclear Regulation, United Kingdom
URQUHART	Donald	Office for Nuclear Regulation, United Kingdom
NILSSON	Hugo	Swiss Federal Nuclear Safety Inspectorate (ENSI)
ALTEN	Serhat	Nuclear Regulatory Authority of Republic of Turkey (NDK)
GÜLOL	Оуа	Nuclear Regulatory Authority of Republic of Turkey (NDK)

# **European Commission**

Surname	Name	Directorate General	
Garribba	Massimo	Deputy Director General – DG ENER	
Panek	Jan	Director for Nuclear Energy, Safety and ITER – DG ENER	
Wächter	Gerhard	Assistant to the Deputy Director General – DG ENER	
Rhein	Hans	Head of Unit/D1 – DG ENER	
MacLean	Finlay	Team Leader/D1 – DG ENER	
Kravos	Marko	Policy Officer/D1 – DG ENER	
Asikainen	Aila	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	
Patel	Bharat	Policy Assistant/D3 – DG ENER	
Brunetti	Gianfranco	Deputy Head of Unit/D2 – DG ENER	
Kukovecz	Mate	Policy Officer/D2 – DG ENER	
Pascal	Ghislain	Policy Coordinator/D2 – DG ENER	
Farrar	Brian	Deputy Head of Unit - JRC	
Noel	Marc	Project Manager - Scientific / Technical Project Manager - JRC	
Carvajal	Ursula	Project Officer - Scientific / Technical Officer - JRC	
Martin Ramos	Manuel	Programme Officer – Research - JRC	