

Minutes of the 29th meeting of ENSREG 15th January 2015 Brussels

Participants

ENSREG members from all EU Member States (with the exception of Estonia, Malta, and Romania) as well as the European Commission were presented in the meeting.

Observers were present from Switzerland, Turkey, Norway, IAEA, the Council of the EU and OECD-NEA.

1.0 Opening of the meeting and adoption of the agenda

The agenda was adopted with the addition of the issue of recent drone overflight of European nuclear sites under AoB.

2.0 Chairman's introduction and report

The chairman reported that since the last meeting Mr Hennenhöfer had represented ENSREG at the regulatory cooperation forum in Belarus. The RCF is a forum of nuclear power regulators that promotes the sharing of regulatory knowledge and experience through international cooperation and collaboration using the IAEA Safety Standards as its basis.

The ENSREG reflection group had performed the task on working group review. The findings would be presented under agenda point 4.

A majority of updated national action plans had been received by the EC by the 31st December 2014 deadline and are currently available on the ENSREG website for public consultation until 28th February 2015. The reports will be peer reviewed at the April NACP peer review workshop in Brussels. The chairman encouraged all members to raise challenging questions.

The chairman announced that Mr Molin would be standing down from his positions as Vice Chairman of ENSREG and Chairman of ENSREG WG3, having reached the end of his terms. Dr. C. Housiadas, chairman of the Greek Atomic Energy Commission was proposed and endorsed as Vice Chairman of ENSREG and Chairman of ENSREG WG3 by ENSREG. This appointment was made without prejudice to the conclusions that might be reached on the revision of the ENSREG Working Group structures. ENSREG thanked Mr Molin for his service and contributions.

Mr Thomas reported on behalf of the EC, that a number of important political decisions had been taken at the EU level on issues having potential implications for the nuclear sector.

The conclusions of September 2014 meeting of the European Council had identified the European Energy Security Strategy as a priority. The decision was taken by leaders that the EC should outline a strategy framework for an energy union by the end February 2015 for discussion in March 2015. The Strategic Framework will include an action plan that will identify a series of key actions to deliver on the five pillars of the Energy Union, mentioned by VP Sefcovic in his opening remarks at the EP hearing:

- supply security based on solidarity and trust
- a competitive and completed internal energy market
- moderation of energy demand
- decarbonisation of the EU energy mix
- research and innovation

The 2030 framework proposes a new governance framework based on national plans for competitive, secure and sustainable energy. Based on upcoming guidance by the Commission, these plans will be prepared by the Member States under a common approach, which will ensure stronger investor certainty and greater transparency, and will enhance coherence, EU coordination and surveillance. An iterative process between the Commission and Member States will ensure the plans are sufficiently ambitious, as well as their consistency and compliance over time.

EC announced its intention to publish a revised "Programme Indicatif Nucléaire Commune" (PINC) focusing on investment in the nuclear sector, in the second half of 2015.

3.0 Emergency preparedness and Response

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HLG_r(2015-29)_280 AtHLETH paper on Emergencies
HLG_r(2015-29)_290 HERCA-WENRA Approach - presentation
HLG_r(2015-29)_281 EC Position Paper on HERCA-WENRA paper on Emergencies
HLG_r(2015-29)_285 Council Directive 2013/59 EURATOM — BSS
HLG_r(2015-29)_283 EC Study - Off-Site Emergency Preparedness
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3.1 HERCA-WENRA approach to a better cross-border coordination of protective actions during the early phase of a nuclear accident

Mr Majerus and Mr Jamet delivered a two part presentation on the joint work performed by HERCA and WENRA.

Part I.- The General Mechanism of the HERCA-WENRA Approach for a better cross-border coordination of protective actions during the early phase of a nuclear accident. This approach had been approved by HERCA in June 2013 and by WENRA in October 2014.

Part II.- The HERCA-WENRA Approach in case of a Severe Accident requiring Rapid Decisions for Protective Actions, in the period where very little data is available about the Situation.

The HERCA-WENRA Approach provides mechanisms for countries to exchange information and to achieve practical and operational solutions on a voluntary basis during an emergency with cross border impacts allowing for coherent and coordinated protective actions regardless of national border line.

The reported main outcomes of the work were

- the development of a mechanism for cross border coordination of protective actions during the early phase of an accident, independent of the type of accident.
- the establishment of a common position for response in the improbable case of a very severe accident with limited information and the need of fast decisions on protective measures.
- and a common framework for preparedness arrangements (planning zones).

It was acknowledged that the cooperation of the various safety and civil protection authorities during the preparation of this report was very useful process in its own right.

It was acknowledged that the current directives and national laws do not adequately cover the cross-border issue and impacts nor issues arising beyond 30 km of the accident site, and that the work serves to address

these issues. It was also acknowledged that there is a need to establish an approach to managing severe accidents in the early phase where detailed technical information on the state of the reactor may be lacking.

In France and some other countries the public presentation of the results had been appreciated by civil society, there being no discernable increased public concerns due to discussions of such extreme cases.

3.2 BSS requirements for national emergency plans

The EC indicated that the topic of EP&R had evolved since the work on the stress tests. ENSREG had included the topic in the ENSREG action plan and the EC had indicated its intention to commission a study on Emergency Preparedness and Response (EP&R).

The study, published in December 2013, had been initiated by DGs ENER and ECHO to review EP&R arrangements in EU Member States, Norway and Switzerland. Consultations with stakeholder groups had been incorporated into the methodology with the specific objective to provide additional validity to the data collected by the contractor and to the conclusions. An important conclusion from the study was that Member States have established systems based on a different understanding of what constitutes appropriate Emergency Preparedness and Response measures. A synthesis was prepared by the contractor. However, the EC noted that this study cannot be regarded as an EC point of view.

The Commission recalled that the Basic Safety Standards Directive (BSS) requires Member States to prepare national emergency plans. The Commission will support Member States in the transposition of the BSS including through a dedicated workshop on EP&R.

3.3 Discussion

The chairman thanked HERCA-WENRA for the presentations and expressed his initial view that there was a genuine need for the issue of diverging national approaches to Emergency Preparedness and response to be addressed in order to reinforce public confidence. One potential way forward suggested by the report was to improve coordination and harmonisation of approaches during the initial hours of an accident. The report also recognised the importance of clear communication during the early stages of an incident. The issue of ensuring a coherent transition from early stage emergency management to long term management was highlighted as a topic requiring further attention. The floor was opened for discussion.

ENSREG congratulated HERCA and WENRA for their work which represented a very positive step forward on the issue of Emergency Preparedness and Response. The topic was clearly the moral responsibility of regulators. The report represented valuable guidance to Member States, in the design of their national arrangements, including in their implementations of the Basic Safety Standards Directive (BSS) and the amended Nuclear Safety Directive (NSD).

One member suggested there was an implicit contradiction between the amended NSD's safety objective (that there should be no releases of radioactivity outside the facility in the event of a nuclear accident) and increased attention for (off-site) Emergency Preparedness and Response. ENSREG considered that while one can aim for an extremely low probability of releases of radioactivity in the event of a Nuclear accident, this was still an objective and that it was impossible to guarantee "no release". Also the HERCA-WENRA work clearly indicated that a radiological accident could never be **totally** excluded. It was therefore the moral responsibility of the regulators and the civil protection authorities to be prepared, should it occur. The additional preparation represents an extra layer within a defence in depth strategy which many regulators were trying to develop into their overall safety strategy.

The EC and ENSREG emphasised the need for a coherent implementation of the EP&R issues at the national level in the context of the implementation of the relevant provisions on EP&R in the BSS and NSD. As a first step towards this goal ENSREG encouraged its members to open a dialogue with their civil protection groups at the national level.

On the issue of the next steps to take, the various members expressed the view that there appeared to be opportunities for improving the collaboration and coordination between the different Member States

authorities involved in Emergency Preparedness response, both within and between the Member States. Moreover, it was raised that there is rarely a single forum where experts on safety, radiation protection and civil protection authorities are brought together to address the system adequately. ENSREG identified the need for an improved dialogue and collaboration at the national level between safety bodies and civil authorities as a first step to identifying further opportunities for improving collaboration.

Members asked the EC whether it was planning further legal measures in the field of EP&R. Members were of the general opinion that an implementation of the current guidance by HERCA-WENRA into a legal form, would only result in a watering down of the valuable work done. The EC confirmed that they had no current plans for new legislation in the area. They believed that the HERCA-WENRA guidance was an important enabler towards a coherent implementation of current legislation, namely in the BSS and the NSD. The EC did however envisage actions to facilitate a phase of dialogue, such as general and specific topical workshops to assist transposition.

The chairman concluded that ENSREG had a strong interest and important experiences on the issue of EP&R but no overall responsibility. Pragmatic and workable approaches needed to be developed.

ENSREG decided to ask Member States regulatory authorities to engage with the civil protection authorities on EP&R implementation at the individual national level and supported the idea to receive feedback on Member States' implementation work by the middle of 2016.

4.0 Revision of the ENSREG Working Group Structures and of the ENSREG Work Programme

HLG_p(2014-27)_135 ENSREG Workprogramme 2014-16 final HLG_p(2011-15)_76 ENSREG Rules of Procedure HLG_p(2012-21)_161 ENSREG Working Group Rules of Procedure HLG_r(2015-29)_282 Paper on Task Force on WGs

The chairman reported that after detailed consultations, the work of the reflection group on ENSREG Working Groups had failed to reach a clear position.

There was clearer consensus and agreement on the need for a review and revision of the ENSREG Work Programme. It was proposed that this action would be performed by the existing reflection group under the lead of the UK, who would report back to the next meeting with their considerations for the objectives of and how the work programme could be improved to better meet the needs of ENSREG.

The issue of working groups would be re-examined once the Work Program had been approved, as this would create additional clarity on the work to be done and the appropriate sub-structures for ENSREG.

ENSREG took the decision to review and revise ENSREG Work Programme and to report back to the next ENSREG meeting with proposals on how to achieve this.

ENSREG took the decision to request WG3 to consider alternative models for the delivery of the ENSREG Website and communication needs.

5.0 Topical Peer Review

HLG_r(2014-28)_268 Revised NSD - COUNCIL DIRECTIVE 2014-87-EURATOM
HLG_r(2015-29)_284 EC paper on the topic of Long Term Operation (LTO) as the topic for the first Topical
Peer Review under the Revised Nuclear Safety Directive

5.1 Early feedback on the work of WENRA on the 2017 topical peer review exercise

Mr Wanner, chairman of WENRA, presented WENRA's preliminary work on the Topical Peer Review (TPR). He reported that WENRA had discussed the method and topic for the TPR and attributed the task to the Reactor Harmonisation Working Group (RHWG). The work had only just started and would continue at the February meeting.

Initial thoughts on possible topics had identified "Implementation of Safety Reference levels (SRL)", due to the known difficulties in implementing SRL at both the regulatory and operational level.

ENSREG considered that all topic proposals required to be fully evaluated by ENSREG. ENSREG agreed that the EC proposed topic on Long Term Operation (LTO) was indeed relevant. But cautioned that the topic had multiple facets and that it would be necessary to focus on specific LTO-related issues, such as perhaps ageing and fire suppression systems. Mr Wanner proposed that the RHWG should interact and exchange views with WG1 ENSREG to agree on the topic and process to be proposed to ENSREG. The RHWG would initially present their work on the method to the WENRA plenary in March following which WENRA would report to ENSREG in June.

5.2 Long term operation – peer review of national regulatory body safety assessment methodologies

The EC indicated that due to the well-known age profile of European NPPs, Long Term Operations were now a reality in the EU. Therefore, it was important to remember the paramount priority to maintain the highest levels of nuclear safety, in any decision to embark on reactor life extension and to identify opportunities to strengthen associated safety performance. This topic of the peer review exercise would offer ENSREG the opportunity to establish a shared position on the guiding safety related principles of LTO. The EC expressed their desire for an early decision on the topic and perhaps by the next ENSREG meeting, given the need to initiate the execution of the exercise by 2017.

The UK delegation highlighted that a key consideration was to identify the tipping point beyond which continued operation on safety grounds would no longer be possible.

5.3 Discussion on the topic of the 2017 Topical Peer Review

ENSREG was unanimous in its position that that the TPR must be a technical peer review leading to practical safety improvements and not merely a process based exercise. On the process to be followed, several members considered it relevant to learn from both positive and negative experiences from the stress test exercise. On the issue of timing, members considered on balance, that it was appropriate to immediately initiate planning of the TPR exercise, to be well prepared for a launch in 2017. Although a potential conflict of interest was identified with the August 2017 transposition deadline of the amended Nuclear Safety Directive and the requirement to start the TPR in 2017, the EC were of the opinion that these dates were compatible if decisions were made on time.

ENSREG supported the proposal for an early WG1 and WENRA RHWG collaboration to develop the topic and method. On the topic, safety reference level implementation, fire safety in the context of LTO, robustness of instrumentation under accident conditions and containment integrity were all suggested as relevant candidate topics which should be evaluated further, although DE were clearly not in favour of LTO. In reply to the question on how countries without Nuclear Power Plants (NPP) should engage with the TPR in a proportional manner, the EC clarified that the selection should be driven by the member states with nuclear programmes, as the peer reviews need to address primarily issues rising directly in operating installations. In any event it was considered important that ENSREG should take a final decision early on the topic and process. Finally the

IAEA highlighted that it could be important to consider its SALTO Guidelines for Peer Review of Long Term Operation and Ageing Management of Nuclear Power Plants should an LTO related topic be selected.

ENSREG took the decision that WENRA should report to the ENSREG plenary with a range of evaluated technical peer review topics in June for further discussion with a view to establishing a decision by the end of the 2015. Preparations for implementation would then be made during 2016.

6.0 ENSREG conference 2015 – identification of the main conference objective.

HLG_r(2015-29)_286 ENSREG Conference 2015 Programme - V3 HLG_r(2015-29)_289 ENSREG CONFERENCE 2015 – An update paper by the United Kingdom

The UK representative of the conference organising committee reported that two meetings had been convened to prepare for the event. A paper and a draft conference programme had been circulated with the meeting documents and the organising committee requested feedback and approval to continue to the next detailed stage of the organisations. The UK would organise the financing of the event with the amounts national regulators would contribute being established based on previously agreed formula.

ENSREG considered that more International participation should be encouraged, given that it had been a guiding principle and ambition of ENSREG to realise an International conference and not merely a regional event. In addition speakers from academia, NPP operators and environmental organisations should be considered to gain a breadth of perspective on the issues of safety of nuclear installations. On the subject of EPR it would be important that representatives from the Civil Protection community be invited to lead the discussions on EPR given their governance role in this field.

ENSREG members were generally in agreement with the draft programme, agreeing that the topics identified were both current and relevant. That said it was felt that there was a need for a better structuring of some topics, and the public engagement session in particular. They were particularly encouraged by the clear priority given to discussion sessions. On peer review there was a desire that these should have a forward looking / horizon scanning perspective.

ENSREG agreed to the proposed conference programme considering the comments received and invited the organising committee to continue with developing the detail of the conference sessions.

7.0 Regulation and licensing of alternative supply of VVER fuel – initial reflections.

The EC introduced the subject by indicating that in the context of energy security of supply strategy adopted last year there would be increased attention paid to and a call for diversification of fuel supply for NPPs. In this context the EC wanted to know the views of nuclear safety regulators, their national experiences from the license of fuel supplies by vendors and whether a more active cooperation could be envisaged between ENSREG members in the licensing process of fuel suppliers. The EC recognised that for most types of reactors fuel supplies from at least two suppliers are regularly licensed and used. This is not the case for VVER reactors. Moreover the EC recognised that the issue of supply diversification has an important economic dimension that goes beyond the responsibilities of the regulators.

The chairman clarified that there were potentially 2 separate issues relating to fuel licensing.

- licensing of production i.e. the supplier
- licensing of the use of the fuel

and that of the two, the latter was a reasonably rapid process

FI reported that it had past experience of 2 fuel suppliers for its 2 VVER reactors, both UK and Russian and currently had 2 licensed fuel suppliers.

CZ reported that it had previous experience with the licensing of a second supplier fuel for its VVER reactors.

In both cases fuel supply contracts are primarily economic and financial decisions. From the licensing point of view both cases did not highlight exceptional safety issues.

SK highlighted that for some countries, discussions on fuel security of supply had to be understood in a wider context of discussions on all fuels, such as gas and oil. From the June meeting of ESA, the conclusions had been that alternative supplies were desirable in principle, that the vendor should take the decision, that there were few technical barriers to diversification, and that the decision was typically driven by economic considerations.

HU reported that on the VVER diversification issue, the regulator was only involved on safety issues and that it could take time to license a new fuel supplier. They confirmed that the information on fuel is a sensitive issue, and confidential and cannot be shared. This limits regulators ability to collaborate on the issue.

The EC was asked for status information on an RTD project NFR E16 on the subject. The COM replied that a selection had been carried out on the 20th November 2014 but that no additional information was available at this time.

In summary, although there are clear and apparent benefits in regulators working together on fuel supplier licensing, there were limits as to how far this collaboration could go, due to strict confidentiality issues associated with the fuel design.

8.0 AOB

8.1 Drone over-flights of NPPs

The EC indicated that the issue of drone over-flight had arisen as a European Parliamentary question asking if the issue had been discussed in ENSREG.

Mr Jamet reported that ASN were currently unaware of who was responsible for the recent drone over-flights of French nuclear sites. The drones could be programmed in advance or remotely and were difficult to intercept. The current assessment was that the issue was primarily a security issue and that there are no immediate new safety concerns. Despite this FR reported that it did intend to perform an extend analysis to consider potential scenarios out-with existing safety cases and would be prepared to share information with other countries once the work was completed. DE reported that it would also perform such an analysis.

It was clarified that drone flights were out with the coverage of the recent stress test exercise, as humaninduced events had not been included in the ToR.

The EC is currently evaluating the potential for the creation a regulatory framework for drones under the responsibility of the European Aviation Safety Agency but were first trying to build international consensus through JARUS.

In conclusion the French and German regulatory authorities would perform work to assess the possible new safety implications associated with drone over-flights and would share their findings where possible with ENSREG.

8.2 General Issues

The chairman indicated that he had accepted an invitation to present ENSREG at the US NRC regulatory interface conference in March 2015.

The NL reported that they had undergone an IRRS mission in November 2014 and that a major finding had been that there was a need for more independence of the Dutch regulator. The NL authorities had reacted

immediately to the conclusion, setting up a new regulatory organisation with full independence. This organisation is already operational although the legal formalities are expected to take about one year to complete.

9.0 Next meeting

The Netherlands supported the proposal from Italy to hold the next meeting following on from the ENSREG conference. The secretariat would make arrangements for the next meeting on the afternoon of the 30^{th} June starting at 14:00.