Report of the Joint Meeting between Emergency Preparedness and Response Standards Committee (EPReSC) and Waste Safety Standards Committee (WASSC)

30 November 2016

International Atomic Energy Agency
Vienna

Approved by the 4th Meeting of EPReSC on XX-XX-2017 and by the 43rd Meeting of WASSC on XX-XX-2017
INTRODUCTION

The joint meeting between WASSC and EPRReSC was held in the morning session on November 30th. It was attended by 81 representatives from Member States (MS) and 10 from International Organization. Additionally, 11 representatives from MS attended the meeting thru WebEx Service.

EW-1: OPENING SESSION

EW1.1: Opening of the meeting

The meeting was opened by:

- Ms. Elena Buglova, Head of the Incident and Emergency Centre (IEC). In her remarks she emphasized the importance of joint sessions among different Safety Standards Committees. These kind of meetings allow for cooperation among the different Committees, allowing for a best understanding of the approach from the different safety fields and also for improving efficiency by optimizing the time devoted by MS representatives to discussion of different Safety Standards of common interest to different Committees. She also referred to Safety Standards of common interest for both Committees, for example DS468 on remediation activities. She ended desiring a fruitful meeting to the attendees.

- Mr. Peter Johnston, Director or NSRW Division, highlighted the challenging task of EPRReSC to ensure that EPR is adequately considered in all relevant Safety Standards, and that EPR receives a balanced consideration with respect to other equally important areas such as nuclear safety, radiation safety and waste safety. This means that all Safety Standards Committees and the Nuclear Security Guidance Committee must work together, in a collaborative manner and with the only goal of ensuring that Safety Standards are appropriate, up to date and of the highest possible quality. Hereafter, Mr. Johnston drew the attention of the attendees to a number of past and future events that are of interest to both Committees.

First, with reference to the outcomes of the International Conference on Advancing the Global Implementation of Decommissioning and Environmental Remediation Programmes, held in May 2016 in Madrid, the Agency is now working on a Plan of Actions on decommissioning and environmental remediation for the next 5 to 10 years. Some of the actions identified are related to the development of Safety Standards, addressing issues of reference levels, end-states, post-accident situations and evolving regulatory requirements for remediation in some Member States. These areas represent opportunities at the international level to develop specific guidance for the Member States.
Second, NSRW has a project under which the so-called Coordination Group for Uranium Legacy Sites (CGULS) is focused on the development of the Strategic Master Plan for remediation of uranium legacy sites in Central Asia. This plan provides the overarching strategy for implementation of remediation projects funded through the Environmental Remediation Account, established by the European Bank for Reconstruction and Development (EBRD) in 2015. A pledging conference is proposed for late 2017 to attract financial contributions to the Environmental Remediation Account. The remediation work that is proposed for the legacy sites in Central Asia is closely linked to the Safety Standards.

EW1.2: Introduction by the Chairs

Ms. Ann Heinrich, EPRSc Chair, summarized the purpose of EPRSc, as a standing SS Committee dealing with EPR aspects and also referred to the current priorities of the Committee, which related to both development of relevant SS to provide guidance to implement GSR Part 7 requirements; and also as a newly created Committee, there was a need to develop a comprehensive Work Plan for the upcoming years.

Mr. Geoff Williams, WASSC Chair, outlined the important role of joint sessions for approval of draft Safety Standards, especially in cases when the lead Committee is not the last one approving a certain draft.

EW1.3: Adoption of the agenda of the joint EPRSc-WASSC meeting

The draft agenda was adopted, with the inclusion of an additional point (“any other business”) to allow room for raising considerations that the attendees may deem important regarding future work of both Committees. It was agreed to alter the order of the presentations, to better suit the availability of the presenters.

EW-2: REVIEW OF IAEA SAFETY STANDARDS

EW2.1 DS478 Draft Safety Requirements: Safety of Nuclear Fuel Cycle Facilities

Mr Ramon Gater (NSNI) introduced the document, which is intended to replace the Safety Requirements NS-R-5 first published in 2008. NS-R-5 was subsequently updated in 2014 with the addition of supporting annexes. Following approval, the new Safety Requirements will be referred to as SSR-4 in the long-term structure of Safety Standards. The scope of the document remains essentially unchanged from NS-R-5; it includes the safety of facilities for the storage of spent nuclear fuel and HLW waste. The new information incorporated in DS478 includes inter alia: (1) relevant lessons from the Fukushima Daiichi NPP accident; (2) design extension
conditions, severe accident management, periodic safety review, hydrogen control; (3) the interface between nuclear safety and security; and (4) the Section “preparation for decommissioning” to replace “decommissioning”.

Mr Gater reviewed the process of approval and development of the document, which was submitted to the Member States for comment in July 2015. Prior to the meeting, 91 comments were received from Committee members. In his presentation, Mr Gater summarized how the comments to the draft from the Member States and Committee members have been addressed, and explained the reasons for rejecting specific comments.

In the subsequent discussion, Ms Geupel raised the question whether DS478 will provide examples for DECs in nuclear fuel cycle facilities. While referring to three typical cases – overfilling of an UF₆ cylinder; loss of cooling/uncovering of a spent fuel pool; and extended power blackout in a spent fuel reprocessing facility – Mr Gater pointed out that such examples for DECs will not be included in DS478 since they should ideally be identified in the safety assessment for the respective facility. He also mentioned that a Safety Report/TECDOC, which introduces DECs in more detail, is currently under preparation. Croatia asked about the interface between nuclear safety and security in DS478. The presenter explained that this topic is covered in Section 11 of the draft.

There were no further comments or questions to the presentation. The DS478 was APPROVED for submission to the CSS for endorsement.

**EW2.2 DS468 Draft Safety Guide: Remediation Process for Areas Affected by Past Activities and Accidents**

Ms Michelle Roberts (NSRW) and Ms Tamara Yankovich (NSRW) jointly presented the document, which is intended to replace the Safety Guide WS-G-3.1 published in 2006. The revised Safety Guide will reflect the relevant requirements in Section 5 of GSR Part 3 and takes into account lessons learned from the Fukushima Daiichi NPP accident.

The objective of the document is to provide guidance on implementing the requirements on remediation in relation to (1) areas contaminated by residual radioactive material arising from past activities that were never subject to regulatory control or were subject to regulatory control but not in accordance with the requirements of the existing IAEA and national safety standards; and (2) areas affected by a nuclear or radiological emergency, after the release and deposition has finished and adequate information is available to activate remedial actions.

A total of 234 comments from Committee members were received in advance of the meeting.

The presenters put up for discussion whether additional case studies, for example on remediation of former legacy sites on uranium mining, should be included in DS468. The presenters raised the question whether additional case studies, for example on remediation of former legacy sites on uranium mining, should be included in DS468.
Australia recommended adding a paragraph on environmental assessment (references to the Draft Safety Guides DS427, DS432 and DS442). Belarus raised the question how the DS468 is related to the DS474. The presenters replied that DS468 does address 'remedial actions' while DS474 deals with 'protective actions' (both terms are defined in GSR Part 3). Canada proposed to replace the term ‘transition phase’ by ‘transition from an emergency to an existing exposure situation’. Ireland requested the consistent use of the term 'health and safety' throughout the document.

The draft was APPROVED for submission to Member States for comments.

**EW2.3 DS434 Draft Safety Guide: Radiation Safety of Radioisotope Production Facilities**

Mr Igor Gusev (NSRW) introduced the document which will be one of the series of facility-specific Safety Guides. In order to avoid overlap with other Safety Guides, the scope of this document is restricted to accelerators (principally cyclotrons) and does not address radioisotope production at research reactors. A total of 75 comments from Committee members were received prior to the meeting. One comment requested that the title be changed to *Radiation Safety of Accelerator Radioisotope Production Facilities* in order to better reflect its contents. All comments were accepted.

Portugal asked if the aspects related to radioisotope transport were addressed. The presented replied that TRANSSC was currently addressing this topic. The document presented is mainly devoted to radioisotope production. USA pointed out that the scope of the document should include aspects pertaining to waste management and decommissioning of such kind of facilities. The presenter answered positively, by saying that the comments raised by the USA on this regard had been accepted.

Russian Federation referred to the graded approach, which in his opinion should be emphasized for this kind of facilities. Egypt asked about aspects specific to EPR in the draft. The presenter pointed out that a section of the draft SS is devoted to this aspect and all the comments on its content had been addressed. Ms Geupel referred to one comment about research reactors when used for radioisotope production. The presenter replied informing that the comment had been accepted and reflected in a change of the title of DS434. France pointed out that the title of the section devoted to EPR in the SS ("Emergency Plan and Procedures") didn't have an adequate wording. The presenter answered that this title had been suggested in one comment.

There were no other comments or questions to the presentation. The draft was APPROVED for submission to Member States for comments.

**EW2.4 DS449 Draft Safety Guide: Format and Content of the Safety Analysis Report for NPPs (Revision of GS-G-4.1)**

Mr Palmiro Villalibre (NSNI) gave a presentation summarizing this draft SS. He stressed the need for revision, mentioning that the current Safety Guide GS-G-4.1,
issued in 2004, provides guidance to outdated Safety Requirements (such as GS-R-1, NS-R-1, NS-R-2, and NS-R-3). The revision takes into account the feedback from the use of GS-G-4.1, the practices in Member States regarding the Safety Analysis Report for current reactors designs (new structure and content), as well as the lessons learned from the Fukushima Daiichi NPP accident (i.e. design robustness against extreme external hazards; safety margins for internal and external hazards; identification of and safety analysis for design extension conditions (DECs); identification of event sequences and accident scenarios to be ‘practically eliminated’). The DPP for DS449 has been approved by the CSS in November 2015. A total of 325 comments from Committee members were received in advance of the meeting. There are no unresolved comments or issues remaining. No questions were raised to the presentation.

The draft was APPROVED for submission to Member States for comments.

**EW-3: ANY OTHER BUSINESS**

Mr. Williams introduced this AOB point, referring to the International Conference on the Safety of Radioactive Waste Management, which was held from 21 to 25 November 2016. On this regard, he suggested a point for debate, regarding the problem that many States are facing a challenge to decide on siting of a HLW disposal facility. This could be considered as a failure of the waste management system, linked to political will and social acceptance. Ms Heinrich highlighted the importance of communication topics, and referred also to the specific point on this regard included in the afternoon session of EPreSC. Australia referred to national experience in the waste storage decision process; it was difficult to engage the public.

Mr. Williams asked the audience to raise other topics of interest. Australia asked about the meaning of waste management to be included in emergency planning and the need for further clarification of the requirements of GSR Part 7 in this regard. France replied that, in their view, waste management in strict sense should refer more to an existing exposure situation rather than to an emergency situation. USA informed that their national regulations regarding radioactive waste disposal facilities include the need to consider the waste generated in case of an emergency. USA clarified that the requirement establishes that facilities for waste generated in routine activities should include additional spare storage capacity to cope with waste potentially generated in case of an emergency. Germany informed that they are now drafting a new law addressing waste storage. One important point of the debate is the establishment of criteria for managing radioactive waste arising from an emergency as conventional waste. Mr. Williams agreed that addressing waste management in the preparedness phase is a challenging point. He referred to the experience of Fukushima, and considered as a crucial aspect the definition of clearance levels to be used during the emergency. France informed that they are updating the French Post Accidental management doctrine to address the waste
generated in case of events of very low probability. Japan provided clarification about clearance levels in force in the country, now they have time to consider this aspect in a comprehensive manner, but during the accident it was much more difficult. That’s why it’s important to consider this point at the preparedness stage. USA referred also to the fact that they have protocols in place setting criteria to minimize the waste generated in case of an emergency. Ms. Nestoroska Madjunarova mentioned that this aspect of waste management was addressed in DS474, including specific implementing criteria.

EW-4: CLOSING OF THE MEETING

The joint EPR/eSC/WASSC session was closed by the Chairs, Ms Heinrich and Mr Williams. They thanked both Committees for their active participation in the meeting and for their valuable contribution to the discussions.

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