48th Meeting of the Commission on Safety Standards

VIRTUAL MEETING on 17 and 19 November 2020

Report of the Meeting

Overview of main results of the meeting

A. The following draft safety standards were endorsed:

- DS477: Safety Guide on Leadership, Management and Culture for Safety in Radioactive Waste Management (revision and combination of GS-G-3.3 and GS-G-3.4).
- DS493: Safety Guide on Format and Content of the Package Design Safety Report for the Transport of Radioactive Material.
- DS510A: Safety Guide on Safety Assessment for Research Reactors and Preparation of the Safety Analysis Report (revision of SSG-20).
- DS510B: Safety Guide on Safety in the Utilization and Modification of Research Reactors (revision of SSG-24).
- DS514: Safety Guide on Equipment Qualification for Nuclear Installations.

B. The following draft DPPs were approved:

- DPP DS525: Safety Guide on Chemistry Programme for Water Cooled Nuclear Power Plants (revision of SSG-13).
- DPP DS526: Safety Guide on National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation.
- DPP DS527: Safety Guide on Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency (revision of GSG-2).
- DPP DS528: Safety Guide on Development and Application of Level 2 Probabilistic Safety Assessment for Nuclear Power Plants (revision of SSG-4).

C. **Policy discussion:**

- The CSS noted that the Covid-19 pandemic was far from over, and in many countries was entering a more serious phase. As such, there are likely to be further lessons and it would be premature to publish any final conclusions. The Secretariat should continue with a phased approach to considering the impact on the safety standards and keep the current focus on the collection of information. The analysis of this information should begin in 2021 and be followed by establishing an action plan at the end of 2021 for any future revisions to the safety standards in response to the Covid-19 pandemic.

- Suggestions for the priorities of the 7th term of the CSS had been provided in the report for the end of the 6th term. Further suggestions have subsequently been provided by CSS members. It was agreed that the Scientific Secretary of the CSS will consolidate all these suggestions and will issue a revised list of priorities for the 7th term of the CSS for CSS members to consider.

- It was proposed that minutes of the meeting of the chairs of the Safety Standards Committees will be prepared and made available to the CSS and the Committees members.

1. Opening session

1.1 Guidance on the conduct of the virtual meeting

Due to the ongoing Covid-19 pandemic, instead of the regular Headquarters meeting of the Commission on Safety Standards, procedures for online review of draft safety standards and draft DPPs were adopted (see agenda item 7), and the 48th Meeting of the CSS took place as a virtual meeting over two sessions held on 17 and 19 of November.

Mr D. Delattre welcomed the CSS participants logging on to the virtual meeting, and then explained how the meeting would be conducted on-line.

1.2 Opening of the meeting: DDG J.-C. Lentijo

Mr Juan-Carlos Lentijo, Deputy Director General and Head of the Department of Nuclear Safety and Security, opened the 48th meeting of the Commission on Safety Standards: he welcomed all members and thanked them for their efforts, especially given the difficult circumstances due to the ongoing Covid-19 pandemic. Mr Lentijo welcomed three new members of the Commission on Safety Standards: Ms Olga Lugovskaya from Belarus, Ms Nina Cromnier from Sweden and Mr Marc Kenzelmann from Switzerland.

Mr Lentijo thanked the CSS for the support provided at the previous meeting for the workplan on the implications of the Covid-19 pandemic on the safety standards and security guidance, and noted that the Agency was now progressing well with a preliminary gap analysis that will be further complemented by the draft Technical Report on Experiences in Member States in ensuring safety, security and reliable operation of nuclear and radiation facilities and activities during the Covid-19 pandemic.

Mr Lentijo noted that the agenda included the following:

- A presentation on the status of the Safety Standards and actions from the previous meetings, including actions to reduce delays in publishing.
- Agenda items providing information to CSS members (i) on NS activities, including work being done on SMRs, (ii) on the documents that describe the strategies and processes for the establishment of IAEA safety standards (SPESS) and (iii) on the work of the Safety Standards Committees and the Nuclear Security Guidance Committee.
- A session to provide further exchange of experience on dealing with the Covid-19 pandemic.
- A discussion to establish the priorities for the 7th term of the CSS.

Finally, Mr Lentijo informed the Commission about the International Conference on ”A Decade of Progress After Fukushima-Daiichi: Building on the Lessons Learned to Further Strengthen Nuclear Safety”, which is planned for 2021 (dates and format to be confirmed, depending on the Covid-19 situation). He encouraged all Member States to actively participate in the conference to further strengthen global nuclear safety.

Mr G. Caruso, Director of NSOC, provided further details of the conference including the draft programme and the main objectives He stressed that a call for actions to maintain the momentum in strengthening nuclear safety was a key issue.

1.3 Introductory remarks from the CSS Chair

Ms R. Velshi thanked Mr Lentijo for his introductory remarks and welcomed all participants, especially the new CSS members.

Ms Velshi expressed her sympathies with regard to the recent terrorist attack in Vienna. She also noted that the Covid-19 pandemic was continuing to present challenges to the work of the CSS and of its members. On the positive side, she noted that the virtual meeting format had continued to improve and had encouraged a wider participation in the meetings.

Ms Velshi stated that there were many challenges in addition to agreeing the workplan for the safety standards in light of the Covid-19 pandemic. These challenges included the setting of priorities for the 7th term of the CSS. This would need to consider the strategic role of the CSS as well as specific topics such as the Covid-19 pandemic and the approach to SMRs.

Ms Velshi was confident that the CSS would work together to successfully meet these challenges and thanked the CSS members for their contributions. She also paid special thanks to Dominique Delattre for his work as Scientific Secretary of the CSS, especially during the Covid-19 pandemic.

1.4. Introduction of new CSS members

Ms Velshi welcomed three new CSS members, as follows:

- Belarus: Ms Olga Lugovskaya;
- Sweden: Ms Nina Cromnier;
- Switzerland: Mr Marc Kenzelmann.

A complete list of participants is provided in Annex I.

1.5 Adoption of the agenda

The agenda for the meeting was approved, and is reproduced in Annex II.

1.6 Status of the IAEA Safety Standards and actions from previous meetings (posted in advance of the meeting)

Mr Delattre presented the status of the roadmap for the long term structure of the safety standards, including those recently endorsed by the CSS. He informed the Commission that one General Safety Guide (GSG-14) and seven Specific Safety Guides (SSG-15 (Rev. 1), SSG-16 (Rev. 1), SSG-55, SSG-56, SSG-57, SSG-59 and SSG-52) have been (or are scheduled to be) be published in 2020. He also noted that five other safety standards endorsed by the Commission were in the final stages of the publication process, and that eight other endorsed Safety Guides were awaiting editing. The total number of published safety standards was 131, consistent with the long term structure.

Mr Delattre presented information on timescales for publication, which showed that, although the previous improvements had been maintained, a plateau had been reached and the timescales could be expected to deteriorate in future. Mr Delattre noted the letter from the DG to the Chair of the CSS (posted on the CSS webpage) indicating that the Secretariat was committed to taking actions intended to clear the backlog in publishing.

Comprehensive, up-to-date information on the status of all standards (published and in draft), as well as on the status of drafts of the Nuclear Security Series, is available at: http://www-ns.iaea.org/committees/files/CSS/205/status.pdf.

Mr Delattre described the progress with outstanding actions from previous CSS meetings: see Annex III.

Ms Velshi asked how funding for the translation of the Safety Glossary was being pursued; Mr Delattre replied that this was being sought through extra-budgetary funding and that a similar arrangement was needed for certain Safety Guides that had been identified as needing translation.

Mr R. Jammal enquired about the projected future timescales for publication of the safety standards and how priorities were determined. Mr Delattre replied that no immediate improvement could be expected without additional resources (i.e. extra staff or cost-free experts) being provided for editing. He also noted that several Safety Guides were currently being revised in batches, which would place an additional temporary demand on editing resources in the near future.

Mr A. González commented that translation of the safety standards (and the Glossary) was important for Member States from a legal perspective and suggested that this was of equal importance to the translation of other documents, for example for the General Conference. Mr J. Dies Llovera agreed that faster publication of translated safety standards was important, especially for the Transport Regulations.

Ms N. Cromnier suggested there was a need to streamline the publication process and to establish priorities for the publication of draft standards.

Ms Velshi said that she had appreciated the letter from the DG, and agreed that the timely publication of the safety standards was very important for Member States. She indicated that this subject would be further discussed under agenda item 5.

Mr G. Nageswara Rao asked whether safety standards that had already been endorsed by the CSS but not yet published could be made available. Mr Delattre confirmed that these were already freely available via the CSS webpage. Mr Nageswara Rao suggested that a more visible link might be helpful to Member States.

2. Questions on the pre-uploaded presentations on NS Activities

Mr Delattre reminded the CSS members that presentations on the following had been uploaded to the CSS website prior to the meeting:

- Current activities of NSOC, NSNI, NSRW, IEC and NSNS.
- A DPP for a Safety Report "Towards a Technology Neutral Safety and Regulatory Framework for SMRs", and a supporting presentation providing a short overview of the Agency strategy and approach to the safety of SMRs and an update on ongoing activities related to the safety of SMRs.

Ms K. Alm-Lytz expressed support for the technology neutral approach to SMRs and the application of a gap analysis to existing safety standards. Ms Alm-Lytz supported the "one house" approach to SMRs adopted by the Agency, and suggested that in future this could also include a consideration of safeguards.

Mr González commented that the conclusions of the Fukushima conference referred to by Mr Lentijo and Mr Caruso were very important to the CSS, especially in relation to the approach to low levels of public exposure. He also stated that the coordination between safety and nuclear security was very important, and there was a need to harmonize approaches.

Ms Velshi agreed with the comments from Ms Alm-Lytz and Mr González. Mr Lentijo confirmed that the coordination between safety and nuclear security was important, and noted that the 'normalization' of the nuclear security guidance had been highlighted by DG Grossi as a priority. He also noted that several actions to pursue these objectives were in progress at the Agency.

Ms M. Golshan responded that waste management, especially in relation to spent fuel, had been identified by WASSC as an issue for SMRs. Ms V. Ranguelova confirmed that waste management was being considered and, although it was not highlighted in the presentation of the Safety Report, it was included in the DPP. Ms Ranguelova invited CSS members with an interest to participate in the drafting of the Safety Report to communicate with her.

Ms Velshi reported that all the chairs of the Review Committees had appreciated the need to work together and coordinate the activities of the Committees with regard to SMRs.

Mr Nageswara Rao thanked the Secretariat for posting a lot of useful information, especially for new CSS members. He especially appreciated the information on SMRs and indicated that India would wish to participate in developing the approach to this subject. Mr Nageswara Rao suggested that it would be useful to also provide a contact point for each NS division in case CSS members had further queries.

3. Questions on the pre-uploaded presentation of the SPESS documents

Mr Delattre summarized the documents and the presentation on strategies and processes for the establishment of safety standards that had been uploaded to the CSS website. These included guidance for persons drafting safety standards and also for persons using the NSS-OUI platform to access and search the set of standards. Ms Velshi commented that the presentation on the step-by-step process was very useful for the CSS members.

Mr Jammal thanked the Secretariat for the information, and asked whether there was freely available access to the content of the safety standards via the NSS-OUI. Mr Delattre replied that there was open access for everyone; only access to the feedback mechanism was restricted, i.e. to persons such as CSS members who had applied for and been granted access.

Ms A.-C. Rigail asked whether the SPESS process had been updated to allow more time for Member States and Committees to review drafts revised in batches. Mr Delattre confirmed that lessons had been learned from DS497 (a batch of 7 draft Safety Guides), and that SPESS B had been updated to incorporate more time for these reviews.

4. Covid-19 update session

4.1. Information on updates posted on the CSS web page

Mr Delattre indicated that a significant amount of additional information on dealing with the Covid-19 pandemic had been received from CSS members since the previous meeting on 4 June 2020. This included information from the Republic of Korea, Spain, Pakistan, Israel, Egypt, China, United States of America, Japan, Slovakia, India, Russian Federation, Canada, France and Switzerland.

4.2. Progress report on the workplan prepared by the Secretariat on possible implications on the Safety Standards and information on concomitant work for the security guidance

Mr Delattre reported that a preliminary gap analysis of the safety standards had been undertaken by each part of NS for discussion by the Coordination Committee. This preliminary analysis has been consolidated into a single document by NSOC and will be used for further internal discussions.

Mr Delattre reported that a first draft of the Technical Report summarizing the experiences reported by Member States from earlier in 2020 would be produced by the end of November 2020. Although only a first draft, it was hoped that this would provide further input to the preliminary gap analysis, which would be shared with the CSS and the Safety Standards Committees in 2021. These activities were intended to support the previously agreed 2-step approach for review and possible revision of the safety standards in response to the Member States' experience from the Covid-19 pandemic.

Mr D. Roberts suggested that the focus should be on international cooperation to continue to gather information, share experience and collate lessons to be learned. He noted that the Covid-19 pandemic was far from over, and in many countries was entering a more serious phase. As such, there were likely to be further lessons and it would be premature to publish any conclusions. He also stated that any changes to the safety standards should be considered only after these reports had been finalized. These views were supported by Ms Alm-Lytz, Ms Cromnier, Mr Nageswara Rao, Mr T. Elsner, Mr González, Ms G. Hirth, Mr S. Alten, Mr A. Hart and Ms M. Žiaková.

Ms Alm-Lytz also recommended that any changes to safety standards should aim to widely address hazards, and not just the Covid-19 pandemic. Ms Golshan commented that in collating the lessons learned it was important to also emphasize the positive aspects, i.e. that the arrangements for managing facilities and activities had successfully continued during the pandemic.

Ms Velshi summarized the discussions by noting the broad agreement within the CSS that the Covid-19 pandemic was continuing and that it is important to not draw any premature conclusions. As such the current focus should continue to be the collection of experiences from Member States. **[Annex IV,**

Action 48.01]

Ms Velshi concluded that a phased approach would be necessary, and asked when the preliminary gap analysis and the draft Technical Report would be made available to the CSS. Mr Delattre replied that the draft report and the preliminary gap analysis would be made available by mid-2021. He also reminded the CSS that any subsequent proposals to revise the safety standards would first be prepared as a DPP for approval by the Safety Standards Committees and the CSS.

4.3. Exchange of experience from CSS members

Mr J. Lee reported that the Republic of Korea had been effective in controlling the Covid-19 pandemic: consequently, there had been an increased focus on remote working arrangements, but no other significant issues to report.

Mr Elsner reported that the arrangements in Germany during the first wave of the Covid-19 pandemic had been considered a success, but he noted that further vigilance was needed during the second wave and that lessons continued to be learned.

Mr González commented that the lessons would be different in different States, but that one immediate lesson was that the denial of shipment for consignments of radioactive material had been made worse by the pandemic.

Mr Alten noted that the pandemic had raised specific issues for States with new nuclear power programmes, in particular with respect to international cooperation between regulatory bodies.

Mr Jammal reported that Canada had updated its Covid-19 hazard assessment for staff of the regulatory body. As a result, the inspection programme for nuclear power plants had continued, but other inspection programmes had been suspended. Mr Jammal suggested that IAEA should consider discussions with ILO on the protection of workers.

Ms Rigail reported that there was a second lockdown in France; however, this had not created major problems for the nuclear industry. Ms Rigail suggested that in considering the wider effects of the Covid-19 pandemic, the CSS could consider the effects on its own operations.

Mr R. Sharafutdinov reported that the Russian Federation had continued to ensure effective regulatory oversight of nuclear facilities and had introduced Covid-19 testing for relevant personnel.

Mr Nageswara Rao reported that the Covid-19 pandemic was continuing in India. Arrangements had been put in place for remote working, wherever practicable, in the initial phase of lockdown followed by phase wise working from office with appropriate social distancing norms. He reported that there was continued progress with the commissioning of NPPs and one of the new NPPs attained criticality during this period. Also, the number of personnel at NPPs that had tested positive for Covid-19 was very low. Mr Nageswara Rao also informed that preparatory meeting for the upcoming follow-up IRRS mission to India took place in the virtual mode during this period.

4.4. Future steps

Mr Lentijo thanked the CSS members for their input to this process. He concluded that both the CSS and the Secretariat were in agreement that the extended nature of the pandemic necessitated a step-by-step approach. The current focus remained on the collection of information; the next step would be the digestion of this information and this would start in 2021. Only after this, would a plan to revise the safety standards, if considered necessary, be prepared. This was a prudent approach, and he emphasized the CSS would be regularly informed of progress and consulted**.**

Mr Delattre confirmed that the steps outlined by Mr Lentijo would be followed, and that a review of the preliminary gap analysis by the CSS should be possible in 2021. The publication of the technical report on the experience of Member States could also be considered. After this, he suggested that an action plan could be agreed with the CSS at the end of 2021, which identified the individual safety standards that needed revision and contained a proposed timescale for these revisions. **[Annex IV, Action 48.02]**

5. Recommendations on the priorities for the 7th term of the CSS

Mr Delattre reminded the CSS members that priorities for the 7th term of the CSS had been suggested in the end of term report from the 6th term, and that further suggestions and comments had been received from CSS members from Argentina, the United Kingdom, Finland, Germany, France and the Russian Federation. He also noted that discussions at the CSS meeting had indicated a need for a complete overview of the safety standards. Ms Velshi asked for views on the suggestions and comments received, and suggested that the CSS needed to discuss how best to consolidate these into a plan for the 7th term of the CSS.

Mr Alten agreed with the comments posted by the UK that some of the issues identified by the 6th term were for the Secretariat to consider and were not really within the remit of the CSS. He suggested that the main priorities for the CSS were the revision of safety standards by amendment and in batches, the safety–security interface, SMRs and the actions in response to the Covid-19 pandemic.

Ms Golshan noted that the Safety Standards Committees had a variety of priorities and that these needed to be grouped.

Mr N. Sandberg supported the priorities that had already been stated for the 7th term of the CSS, especially the need to strengthen DPPs. He also stated that the revision of batches of safety standards should be reviewed by the CSS and that the Secretariat should be prepared to reconsider the approach depending on the outcome of this review.

Ms Alm-Lytz said that the CSS should consider the long term roadmap for the safety standards, and the need for revisions to SPESS A.

Ms Velshi invited Mr Delattre to suggest how all the input from CSS members might be consolidated to prepare and manage a programme of work for the 7th term of the CSS. Mr Delattre replied that, as Scientific Secretary of the CSS, he would do this and issue a revised list of priorities for CSS members to consider. **[Annex IV, Action 48.03]**

6. Questions on the reports from the Safety Standards Committees and the Nuclear Security Guidance Committee

As part of the format of the virtual meeting, the reports from the Committees were not presented, but were instead uploaded to the CSS website for review by CSS members prior to the meeting. This session was provided to allow CSS members to ask questions or raise comments on these reports. Ms Velshi also asked the chairs of the Committees to summarize their current priorities.

6.1 Emergency Preparedness and Response Standards Committee (EPReSC)

Ms A. Heinrich reported that the EPReSC priorities included the safety–security interface, the road map for EPR publications, and a focus on the EPR series of publications.

6.2 Nuclear Safety Standards Committee (NUSSC)

Mr P. Webster reported that the NUSSC meeting was scheduled for the week after the CSS meeting; however, NUSSC had already identified a number of priorities, including a roadmap for the Safety Guides being led by NUSSC, learning lessons from the revision of batches of Safety Guides, streamlining SPESS B in relation to the revision of safety standards, and the application of safety standards to existing nuclear facilities.

Mr González asked whether the approach to different types of SMR was also a priority for NUSSC: Mr Webster confirmed that it was a priority.

6.3 Radiation Safety Standards Committee (RASSC)

Ms R. Bly reported that the priorities of RASSC included ensuring that the right level of publication was selected, establishing a roadmap for publications on existing exposure situations, and completion of the Safety Guides on exemption and clearance.

Mr González commented that it was not necessarily expected that the issue of the IAEA safety standards would directly follow the categorization of the ICRP exposure situations, and that the exposure categories (occupational, public and medical) might be a better approach. He also suggested that it was necessary to first consider the scope of regulatory control in an 'umbrella publication' to ensure consistency in the recommendations for exemption and clearance. Ms Bly replied that RASSC was considering such a publication. Mr M. Pinak confirmed that the Secretariat was also considering this in response to a resolution from the general conference. This would begin by reviewing the individual projects currently in progress with a view to eventually developing a harmonized approach to all types of radiation exposure. Mr Jammal asked whether a project plan would be developed for this; Mr Pinak confirmed that this would be the case.

6.4 Transport Safety Standards Committee (TRANSSC)

Mr Hinrichsen reported that TRANSSC priorities included continuing the work of the technical working groups, initiating a review of the need to revise SSR-6 (Rev. 1) at the end of 2021 using NSS-OUI, and the need for more guidance on the implementation of SSR-6 (Rev. 1). In response to an earlier discussion, he also informed the CSS that SSR-6 (Rev. 1) was now available in all the official languages.

Mr Whittingham added that another priority for TRANSSC was considering how transportable SMRs might be covered by the requirements of SSR-6 (Rev. 1).

Mr González suggested that denial of shipment (DoS) was a radiation safety issue that RASSC should also consider." Mr P. Hinrichsen agreed with this and reported that TRANSSC provides an Agenda item in its meetings for the Transport Facilitation Working Group (TFWG) to provide an update on this issue to TRANSSC. With regard to a possible Code of Conduct to resolve this problem, Mr S. Whittingham added that a Technical Meeting was planned for March 2021 but it is now being organized as a virtual meeting due to the continued Covid-19 pandemic restrictions.

6.5 Waste Safety Standards Committee (WASSC)

Ms M. Golshan reported that WASSC had a long list of topics of interest, including policies and strategies for decommissioning and remediation, classification and storage of radioactive waste and spent fuel aspects for SMRs. Mr Ramzi noted that this list included the possible need for more guidance on the management of disused sealed sources, and asked for more details. Ms Golshan replied that this issue had been highlighted during the Joint Convention review meeting, as of particular interest to States without a nuclear power programme. Mr Jammal enquired whether there was any intention to diverge from the Code of Conduct on the Safety and Security of Radioactive Sources on this subject. Ms Golshan replied that this was not the intention. Mr González said that there is already further guidance on this topic under the Code of Conduct. Mr H. Mansoux replied that the supplementary guidance to the Code of Conduct on the mamagement of disused radioactive sources was mainly providing for objectives and principles for the safe and secure management, but that more specific guidance should could be considered.

6.6 Information on the meetings of the Nuclear Security Guidance Committee (NSGC)

Mr S. Bayer reported that the priorities of NSGC included joint publications on the safety–security interface, and rearranging a joint meeting with RASSC to discuss this. NSGC was also interested in reviewing the top tier of Nuclear Security Guidance publications.

6.7 Summary of the Meeting of the Chairs on 12 November 2020

Mr Delattre reported that the meeting of the Chairs of the Review Committees and of the Commission had addressed the following topics:

- Involvement of the Committees to investigate potential implications of the Covid-19 outbreak on the safety standards (step 2 of the gap analysis).
- Work of the Committees as input for the CSS priorities.
- Harmonization for the preparation of the End of Term Reports.
- Work by the Committees on SMRs and other advanced technologies.
- The strategic role of the CSS.

Mr Delattre confirmed that the draft minutes of the meeting had been posted on the CSS webpage. Mr Jammal requested that official minutes of these meetings continue to be prepared and made available to the CSS and the Review Committees.

To conclude this agenda item, the CSS and the Secretariat expressed their sincere thanks to Anne Heinrich, Paul Hinrichsen and Stephen Bayer, the outgoing chairs of EPReSC, TRANSSC and NSGC, respectively. Mr Jammal noted that it was important to ensure an effective transfer of knowledge between the outgoing and incoming chairs.

7. Approval of draft publications and DPPs

NOTE: The drafts submitted to the Commission at this meeting will be subsequently posted as a final edited version on the CSS web site. CSS members will be notified and given a period of two weeks to provide comments. At the end of this period, if there are no objections, the draft will be considered to be endorsed (i.e. by 'silent approval'). **[Annex III, Action 48.04]**

7.01. Draft Safety Guide DS477 on Leadership, Management and Culture for Safety in Radioactive Waste Management

Mr D. Bennett introduced the draft Safety Guide and noted that one CSS comment had been received from Pakistan and had been addressed.

Ms Alm-Lytz expressed support for the draft Safety Guide, and noted that it was well drafted and formulated, and would be of use in Finland. She noted that there might be some overlap in content with other Safety Guides, but considered that this was inevitable to some extent.

Mr Elsner also expressed support for the draft Safety Guide and specifically noted that the recently added paragraph 3.6 in relation to pandemics addressed the subject in a general way and was considered appropriate. Ms Golshan supported this view.

The Commission endorsed the draft for publication, subject to subsequent silent approval of the final edited version.

7.02. Draft Safety Guide DS493 on Format and Content of the Package Design Safety Report for the Transport of Radioactive Material

Ms N. Capadona introduced the draft Safety Guide and noted that one CSS comment had been received from Japan regarding the examples presented in the Appendices. This comment had been very difficult to resolve effectively; following discussions it had been decided to reject the comment.

Mr T. Yamada said that the explanation from Ms Capadona had been accepted.

The Commission endorsed the draft for publication, subject to subsequent silent approval of the final edited version.

7.03. Draft Safety Guide DS510A on Safety Assessment for Research Reactors and Preparation of the Safety Analysis Report

7.04. Draft Safety Guide DS510B on Safety in the Utilization and Modification of Research Reactors

Ms F. Nasseer introduced both draft Safety Guides, and reported that a total of 5 CSS comments had been received from Germany. All of these comments had been satisfactorily resolved.

The Commission endorsed both drafts for publication, subject to subsequent silent approval of the final edited versions.

7.05. Draft Safety Guide DS514 on Equipment Qualification for Nuclear Installations

Mr A. Duchac introduced the draft Safety Guide and reported that no comments had been received from the CSS.

The Commission endorsed the draft for publication, subject to subsequent silent approval of the final edited version.

7.06. Draft DPP DS525 for a Safety Guide on Chemistry Programme for Water Cooled Nuclear Power Plants (revision of SSG-13)

Mr K. Maekelae introduced the draft DPP and noted that CSS comments had been received from Israel and Pakistan. These comments had been accepted and the DPP revised accordingly.

The Commission approved the DPP.

7.07. Draft DPP DS526 for a new Safety Guide on National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation

Mr Bennett introduced the draft DPP, and reported that CSS comments had been received from France, Germany and Slovakia. All these comments had been accepted except for the following:

- A proposal to expand the scope to include radioactive substances was considered too large a change.
- The suggestion to use “stakeholders” instead of “interested parties” was rejected because it is not consistent with the Safety Glossary.
- The proposal to reorganize the contents list was rejected because this had already been discussed extensively, while noting that this is only a tentative list.

Mr González noted that care was needed in developing the Safety Guide to ensure that it respected the responsibility of individual States to develop their own national strategies and policies. Mr Jammal agreed with these comments, but stated that guidance on this subject would be useful. He stated his support for the DPP and encouraged input from the Safety Standards Committees on the content of the draft Safety Guide. Mr Nageswara Rao said that he agreed with the comment from Mr González, and suggested that the reference in the title to national strategies was problematic.

Mr Delattre agreed that WASSC should be encouraged to provide input and that the title could be considered again during the drafting. Mr Bennett confirmed that the intention was not to be prescriptive in terms of specific policies and strategies.

The Commission approved the DPP.

7.08. Draft DPP DS527 for a Safety Guide on Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency (revision of GSG-2)

Mr J. Anderson introduced the draft DPP, and reported that one CSS comment had been received from Pakistan suggesting the inclusion of guidance values for emergency workers. Mr Anderson noted that these values were included in the safety requirements and it had been agreed with the commenter that this suggestion would be rejected.

The Commission approved the DPP.

7.09. Draft DPP DS528 for a Safety Guide on Development and Application of Level 2 Probabilistic Safety Assessment for Nuclear Power Plants (revision of SSG-4)

Mr J. Luis Hernandez provided a presentation on the background to the DPP and the proposed contents of the Safety Guide. CSS comments had been received from Israel and Pakistan. Two of these comments had been rejected, but had been discussed with the commenters and the reasons for the rejections had been accepted.

Mr Jammal asked for more details on the accepted comment (regarding an expanded list of references). Mr. Luis Hernandez answered that the updated list of references aims only at considering the latest references on the use of Level 3 PSA from NEA since the link between Level 2 and Level 3 PSA will be considered as one of the potential uses of Level 2 PSA. Mr. Luis Hernandez also mentioned that the Safety Assessment Section was considering to propose next year a DPP related to the development and application of Level 3 PSA. Then, Mr. Jamal, and commented that the interconnectivity between level 2 PSA and level 3 PSA was an important consideration, but it was equally important to emphasize that the purpose of PSA is not to determine what is safe or unsafe. Mr Nageswara Rao agreed with the comments from Mr Jammal, and Mr Webster commented that the connections with level 3 PSA could be mentioned in the Background to the Safety Guide.

Mr Dies Llovera noted that PSA was used at the design stage of an NPP, but not always used thereafter. He suggested that the continued use of PSA, for example as part of periodic safety assessment, should be encouraged as a means for prioritizing potential improvements. Mr Luis Hernandez replied that this could be addressed in the Safety Guide in the section on application of level 2 PSA.

The Commission approved the DPP.

8. DPPs and Draft Nuclear Security Series publications for information

8.01 Draft DPP for an Implementing Guide NST064 on Radiological Crime Scene Management

Mr P. Burton provided a brief description of the draft DPP for information, and reported that no comments had been received from the CSS.

Mr González commented that it is was still unclear what the role of the CSS was in receiving information on the nuclear security guidance publications. Mr Delattre replied that this was currently being considered by the Secretariat for interface drafts.

9. Any other Business. Report of the meeting. Date of the next meetings

Ms B. Batandjieva-Metcalf provided a summary of recent UNSCEAR activities, which had been posted on the CSS website. This included an update of the 2013 report on the radiological consequences of the Fukushima-Daiichi accident, work in relation to medical exposures, and updating the work on biological mechanisms associated with radiation exposure at low doses and low dose rates. UNSCEAR was also undertaking a survey to update the report on public exposure.

Ms Alm-Lytz enquired whether the next CSS meeting should be held after the next round of meetings of the Safety Standards Committees. Mr Delattre replied that the timing of the CSS meeting was not a

factor in the overall timescales for publication of the standards, and previously the CSS meeting had been held first.

Ms Hirth asked about the process for establishing the new terms of the Safety Standards Committees. Mr Delattre replied that note verbals will be issued to call for new nominations to the Committees. The DDG of NS would then appoint the new chairs. The previous chairs and the new chairs would be invited to the next CSS to ensure a smooth transfer.

Ms Rigail enquired whether more time would be available for the CSS to review the 7 draft Safety Guides in DS497. Mr Delattre confirmed that this would be the case, in accordance with the revised SPESS B.

Mr Lentijo closed the main agenda for the meeting by congratulating the outgoing chairs of EPReSC and TRANSSC and thanked the CSS members for their work. He also reported to the CSS that the next Director of the Division of Nuclear Security would be Elena Buglova, and that he hoped this would provide an opportunity to continue to enhance the coordination of safety and security.

Mr Delattre indicated that a draft list of actions resulting from the 48th CSS meeting would be provided for comment to the CSS members **[Annex III, Action 48.05]** and that the draft report of the 48th CSS meeting would be posted on the CSS web site for comment **[Annex III, Action 48.06]**. Mr Delattre informed the Commission that all presentations made at the 48th CSS meeting would be posted on the CSS web site **[Annex III, Action 48.07]**.

Mr Delattre informed the Commission that the weeks scheduled for the next CSS meetings are **6–9 April 2021** and **15-19 November 2021**.

Ms Velshi noted that the CSS meeting in April 2021 was likely to also be a virtual meeting, and encouraged CSS members to send any suggestions to Mr Delattre on possible improvements to the conduct of such meetings.

ANNEX I

PARTICIPATION AT THE 48th CSS MEETING

The Commission

R. Velshi (Chair of CSS)

A. J. González, Argentina

G. Hirth, Australia

O. Lugovskaya, Belarus (sent apologies – represented D. Pavlov)

R. Di Prinzio, Brazil (sent apologies – unable to attend)

R. Jammal, Canada

J. Yu, China

M. R. M. Ezz El-Din, Egypt

K. Alm-Lytz, Finland

A.-C. Rigail, France

T. Elsner, Germany

G. Nageswara Rao, India

F. Gov, Israel

T. Yamada, Japan

J. Lee, Republic of Korea

K. Mrabit, Morocco

M. Z. A. Baig, Pakistan (sent apologies – represented F. Mansoor)

A. Ferapontov, Russian Federation (sent apologies – represented by R. Sharafutdinov)

M. Žiaková, Slovakia

O. Phillips, South Africa

J. Dies Llovera, Spain

N. Cromnier, Sweden

M. Kenzelmann, Switzerland

S. Alten, Turkey

A. Hart, United Kingdom

D. Roberts, United States of America

Observers

L. Vinhas, AdSec (sent apologies – unable to attend)

M. Hübel, EC

C. Cousins, ICRP (sent apologies – represented by C. Clement)

R. Meserve, INSAG (sent apologies – unable to attend)

N. Muroya, OECD-NEA

B. Batandjieva-Metcalf, UNSCEAR

Representatives and experts supporting CSS members and observers

M. Aparicio, P. Bringer, C. Cole, K. Goto, T. Granier, T. Kato, D. Konoplev, M. Mihaila, H. Nilsson, F. Pelayo, A. Rivera, N. Sandberg, R. Sardella, G. Swarz, V. Timonina, M. Turner, K-J. Weidenbrück, A. White, S. Wittick, Y. S. Yoon.

Chairpersons of the Review Committees

EPReSC: A. Heinrich

NSGC: S. Bayer

NUSSC: P. Webster

RASSC: R. Bly

TRANSSC: P. Hinrichsen

WASSC: M. Golshan

Coordinators of Review Committees and of the Commission on Safety Standards

R. de la Vega, Incident and Emergency Centre (IEC), EPReSC

M. Svab, Regulatory Activities Section (NSNI), NUSSC

T. Colgan, Radiation Safety and Monitoring Section (NSRW), RASSC (not present - represented by M. Pinak)

S. Whittingham, Regulatory Infrastructure and Transport Safety Section (NSRW), TRANSSC

N. Aghajanyan, Waste and Environmental Safety Section (NSRW), WASSC

S. Case-Lackner, Programme Development & Int Cooperation Section, NSGC (not present - represented by A. Hallock)

D. Delattre, Scientific Secretary of the CSS (NSOC), Safety Standards and Security Guidance Development Section

IAEA Secretariat

J.-C. Lentijo, Deputy Director General, Department of Nuclear Safety and Security

R. A. Raja Adnan, Director, Division of Nuclear Security (NSNS)

G. Caruso, Director, Office of Safety and Security Coordination (NSOC)

G. Rzentkowski, Director, Division of Nuclear Installation Safety (NSNI)

E. Buglova, Head, Incident and Emergency Centre (IEC)

L. Guo, K. Maekelae, S. Mallick, H. Mansoux, M. Pinak, V. Ranguelova, J. Rowat, D. Senior, A. Shokr, J. Tierney, P. Vincze.

J. Anderson, K. Asfaw, M. Bassett, D. Bennett, G. Bruno, P. Burton, P. Calle Vives, N. Capadona, A. Duchac, C. Fischer, S. Geupel, A. Guskov, F. Jiang, T. Karseka-Yanev, M. Kobein-Apolloner, D. Kochkarov, J. Luis Hernandez, M. Moracho, F. Naseer, M. Nikolaki, M. Prevost, P. Shaw, M. Yuzawa, L. Zhou.

ANNEX II

Agenda of the 48th Meeting of the COMMISSION ON SAFETY STANDARDS

WebEx meetings on 17 and 19 November 2020

CSS web page: The CSS members will find on the IAEA web site a so-called "CSS members' area" at the address https://www-ns.iaea.org/committees/css/. This include a sub-folder named "CSS documents for comments

17 November 2020, 13:00 to 15:30

1. Opening Session

1.1. Member joining the Webex meeting. (13:00) Guidance from the Secretariat on the conduct of the meeting

1.2. Opening of the Meeting (13:10); *DDG J.-C. Lentijo*

1.3. Introductory remarks from the CSS Chair (13:20); *R. Velshi*

1.4. Introduction of new CSS members (Sweden, Switzerland, Belarus)

1.5. Adoption of the agenda (13:30), *CSS members*

1.6 Status of the IAEA Safety Standards and actions from previous meetings (will be posted in advanced to the meeting), *D. Delattre*

2. Questions on the pre uploaded presentations on NS Activities (13:40-14:00)

3. Questions on the pre-uploaded presentations of the SPESS documents (14:00-14:20)

4. Covid-19 outbreak dedicated session

4.1. 14:20 Information on updates posted on the CSS web page

4.2. 14:25 Progress report on the workplan prepared by the Secretariat on possible implications on the Safety Standards and information on concomitant work for the security guidance

4.3. 14:35 Exchange on experience from CSS members

4.4. 15:15-15:30 Future steps

19 November, 13:00 to before 15:30

5. Review of the 6th CSS term end of term report and recommendation for the seventh term (13:30-14:15)

The objective is for the 7th term CSS members to establish priorities for its four-year term, based on the recommendations from the 6th term.

6. Questions on the pre-uploaded reports from the Safety Standards Committees and the Nuclear Security Guidance Committee (13:00-13:30)

6.1. Emergency Preparedness and Response Standards Committee; *A. Heinrich, Chairperson/R. de La Vega, Scientific Secretary*

6.2. Nuclear Safety Standards Committee; *P. Webster, Chairperson /M. Svab, Scientific Secretary*

6.3. Radiation Safety Standards Committee; *R. Bly, Chairperson/T. Colgan, Scientific Secretary*

6.4. Transport Safety Standards Committee; *P. Hinrichsen, Chairperson /S. Whittingham, Scientific Secretary*

6.5. Waste Safety Standards Committee; *M. Golshan, Chairperson/N. Aghajanyan, Scientific Secretary*

6.6. Information on the meetings of the Nuclear Security Guidance Committee; *S. Bayer, Chairperson / A. Hallock, A/Scientific Secretary*

6.7. Summary of the meeting of the Chairs held on 12 November 2020 before the CSS meeting

7. Approval of draft publications and DPPs (14:15 to 15:00)

NOTE1: DS487 on Design of Fuel Handling and Storage Systems for Nuclear Power Plants endorsed at the 45th CSS meeting is available now as MTCD edited version for silence approval with a deadline of 30 September 2020.

NOTE2: DS498 on Design of Nuclear Installations against External Events Excluding Earthquakes, discussed at the 47th CSS meeting, where a paragraph was added related to Covid-19 implications will be submitted at the 50th NUSSC meeting to review the added paragraph and then again to the CSS.

NOTE3: It is assumed, for the items 7.01 to 7.05, that the CSS will be provided with the results of the editorial review in the Publishing Section after CSS meeting or soon after, for tacit approval through the web page.

7.01. Draft Safety Guide DS477 on Leadership, Management and Culture for Safety in Radioactive Waste Management, *D. Bennett – WASSC Chair*

7.02. Draft Safety Guide DS493 on Format and Content of the Package Design Safety Report for the Transport of Radioactive Material, *N. Capadona – TRANSSC Chair*

7.03. Draft Safety Guide DS510A on Safety Assessment for Research Reactors and Preparation of the Safety Analysis Report, *F. Naseer – NUSSC Chair*

7.04. Draft Safety Guide DS510B on Safety in the Utilization and Modification of Research Reactors, *F. Naseer – NUSSC Chair*

7.05. Draft Safety Guide DS514 on Equipment Qualification for Nuclear Installations, *A. Duchac – NUSSC Chair*

7.06. Draft DPP DS525 for a Safety Guide on Chemistry Programme for Water Cooled Nuclear Power Plants, revision of SSG-13, *M. Maekelae – NUSSC Chair*

7.07. Draft DPP DS526 for a new Safety Guide on National Policies and Strategies for the Safety of Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation, *D. Bennett – WASSC Chair*

7.08. Draft DPP DS527 for a Safety Guide on Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency, revision of GSG-2, *J. Anderson – EPReSC Chair*

7.09. Draft DPP DS528 for a Safety Guide on Development and Application of Level 2 Probabilistic Safety Assessment for Nuclear Power Plants, revision of SSG-4, *J. Luis Hernandez – NUSSC Chair*

8. DPPs and draft Nuclear Security Series publications for information (15:00-15:05)

8.01. Draft DPP Implementing Guide NST064 on Radiological Crime Scene Management, *P. Burton – NSGC Chair*

9. 15:05 AoB, Report of the meeting. Date of the next meetings:

- CSS 49: week from 6 to 9 April 2021
- CSS 50: week from 15 to 19 November 2021

ANNEX III

STATUS OF OUTSTANDING ACTIONS FROM PREVIOUS MEETINGS OF THE COMMISSION ON SAFETY STANDARDS

44th MEETING

44.03 The MTCD edited versions of the draft safety guides DS403, DS471, DS481, DS482, DS486, DS488, DS491 and DS492 to be posted for silent approval by the CSS **[Action: Secretariat, CSS]. Done.**

44.07 Funds should be sought for the translation of the 2018 Edition of the Safety Glossary into all official languages. **[Action: Secretariat]. Funding for translation into French and Spanish has been obtained. Translation into Arabic Chinese and Russian is under Action 46.06.**

45th MEETING

45.03 The MTCD edited versions of the draft safety guides DS419, DS420, DS434, DS440, DS449, DS459, DS475, DS487 and DS489 to be posted on the CSS web page, as soon as they are available. CSS members to be alerted by email for a two week silent approval procedure with the objective of confirming the CSS endorsement of these drafts. **[Action: Secretariat, CSS]. DS419, DS420, DS434, DS440, DS475, DS487 and DS489 are completed. DS449 and DS459 are still to be completed.**

46th MEETING

46.02 The MTCD edited versions of the draft safety guides DS469, DS494, DS496 and DS506 to be posted for silent approval procedure by the CSS **[Action: Secretariat, CSS]. None completed so far.**

46.06 The Secretariat is still seeking additional funding for the translation of the 2018 Edition of the Safety Glossary in Arabic, Chinese and Russian. **[Action: Secretariat, CSS]. No funding so far.**

46.08. The CSS supports the actions being undertaken by the Secretariat to increase the resources available in MTCD for the publication of the safety standards, and will continue to review the implementation of these measures with the aim of reducing the timescale between CSS approval and final publication. **[Action: Secretariat, CSS]. On-going.**

47th MEETING

47.01. The CSS supports the two-step workplan prepared by the Secretariat on addressing the implications of the Covid-19 pandemic on the safety standards. CSS members are invited to submit any further comments by 26 June 2020 **[Action: CSS members]. Done. See agenda item 4.2.**

47.02. CSS members are encouraged to continue providing reports or updates on their national experience from maintaining nuclear safety and nuclear security during the Covid-19 pandemic **[Action: CSS members]. Additional input from several CSS members. On-going. See agenda item 4.3.**

47.03. CSS members are invited to continue to post suggestions on the CSS webpage on the priorities for the 7th term of the CSS, based on the recommendations from the 6th term. This will be discussed and agreed upon at the 48th meeting in November 2020 **[Action: CSS members]. Additional input from several CSS members. On-going. See agenda item 5.**

47.04. The fully edited versions of the four endorsed draft safety guides — DS468, DS507, DS490 and DS498 — will be posted on the CSS webpage as soon as they are available. CSS members will be alerted by email for a two-week silent approval procedure with the objective of confirming the CSS endorsement of these drafts**. [Action: Secretariat, CSS]. No progress so far.**

ANNEX IV

ACTIONS ARISING FROM THE 48th MEETING OF THE COMMISSION ON SAFETY STANDARDS

48.01. The CSS notes that there are likely to be further lessons from the Covid-19 pandemic and it would be premature to publish any conclusions. CSS members are encouraged to continue providing reports or updates on their national experience from maintaining nuclear safety and nuclear security during the Covid-19 pandemic **[Action: CSS members]**.

48.02. The Secretariat will continue with a phased approach, to analyse information collected from Member States' experience, prepare the Technical Report on Experiences in MS in ensuring safety, security and reliable operation of nuclear and radiation facilities and activities during the Covid-19 pandemic, and the Covid-19 gap analysis to be presented to the CSS and the Committees for discussion in 2021, followed by the preparation of an action plan on possible implications for the safety standards **[Action: Secretariat, CSS members, Review Committees]**.

48.03. The Secretariat will prepare a set of recommendations for the 7th term of the CSS, based on the recommendations from the 6th term and the discussion at the 47th and the 48th meetings. This will be posted for final comments and finalized before the end of the year **[Action: Secretariat, CSS members]**.

48.04. The fully edited versions of the five endorsed draft safety guides — DS477, DS493, DS510A, DS510B and DS514 — will be posted on the CSS webpage as soon as they are available. CSS members will be alerted by email for a two-week silent approval procedure with the objective of confirming the CSS endorsement of these drafts. **[Action: Secretariat, CSS members]**.

48.05. A draft list of actions from the 48th CSS meeting will be provided to CSS members for comment (this list) **[Action: Secretariat, CSS Scientific Secretary]**.

48.06. The draft report of the 48th CSS meeting will be posted on the CSS webpage for comment **[Action: Secretariat, CSS Scientific Secretary]**.

48.07. The presentations made under agenda items 1.6, 2, 3 and 6 and the UNSCEAR paper provided under agenda item 9 at the 48th CSS meeting will be posted on the CSS webpage **[Action: Secretariat, CSS Scientific Secretary]**.