

54th Meeting of the Commission on Safety Standards
28–30 November 2023, IAEA, Vienna
Report of the Meeting

Overview of main results of the meeting

A. The following draft safety standard was endorsed:

- *DS524: Safety Guide on Radiation Protection Aspects of Design for Nuclear Power Plants.*

B. The following draft DPPs were approved:

- *DPP DS547 for a Safety Guide on Regulatory Experience Feedback Management;*
- *DPP DS548 for a Safety Requirements publication on Predisposal Management of Radioactive Waste (revision of GSR Part 5);*
- *DPP DS549 for a Safety Guide on Control of Orphan Sources and Other Radioactive Material in the Metal Recycling and Production Industries (revision of SSG-17);*
- *DPP DS550 for a Safety Guide on Storage of Radioactive Waste (revision of WS-G-6.1);*
- *DPP DS551 for a Safety Guide on Decommissioning of Uranium Production Facilities.*

Policy discussions

- The CSS supports the work of the CSS Working Group on the preparation of the long term structure and plan for the safety standards. The CSS considers that development of a strategic plan for the implementation of the CSS recommendations is a priority. This will be provided for discussion at the next CSS meeting, together with a revised medium term plan.
- Suggestions for the priorities of the 8th term of the CSS were 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 8th term of the CSS for CSS members to consider.
- A revised draft end of term report for the 7th term of the CSS will be prepared and posted for CSS comments by mid-February 2024, and finalized thereafter.

1. Opening session

1.1 Opening of the meeting: Deputy Director General for Nuclear Safety and Security

Ms L. Evrard welcomed the members of the Commission on Safety Standards (CSS) to the meeting, and especially the new CSS members, as listed in Section 1.3. She also announced that Mr Marc Kenzelmann, Director General of the Swiss Federal Nuclear Safety Inspectorate (ENSI), Switzerland, was recently appointed by the IAEA Director General as Chair of the next term of the CSS, from 2024 to 2027.

Ms Evrard noted that the achievements of the CSS included the endorsement and approval of a large number of Document Preparation Profiles (DPPs) and draft safety standards, and the creation of a Strategic Planning Working Group. The CSS members had also provided feedback on national experiences of maintaining nuclear safety and security during the COVID-19 pandemic and contributed to discussions on the revision of SPESS B and SPESS F.

Ms Evrard noted that during the 7th term of the CSS, arrangements were effectively implemented to resolve delays in the IAEA publication process. She reported that the time between approval of safety standards and their publication has been significantly reduced, from an average of 24 months to 12 months. She hoped that further actions would continue to be considered and then implemented, as needed, to optimize the overall process for the development of the safety standards.

Ms Evrard noted that during the second half of the 7th term of the CSS, discussions started on the long term structure and plan for the safety standards, and these discussions will continue for the first half of the 8th term. Although no major changes are envisaged, it will be essential to address new challenges such as new technologies, use of artificial intelligence and implication of climate change. All Committees will be involved in this exercise and the cooperation of the CSS and all Committees will be crucial for achieving success.

Ms Evrard noted that it was the last meeting chaired by Ms Rumina Velshi, and thanked her on behalf of the Secretariat and all CSS members for handling the last eight CSS meetings in a very effective and steadfast manner. She noted that Ms Velshi's valuable involvement had contributed to creating momentum and confirmed the proactive role of the CSS in strengthening nuclear safety and security worldwide, through mobilizing such a wide range of experience and expertise from Member States.

Regarding the agenda of this meeting, Ms Evrard noted:

- A highly important task will be the establishment of the end of term report, along with recommendations for the 8th term.
- There was an item on the preparation of the long term structure and plan for the safety standards, including an update from the recently formed Working Group and a discussion on the next steps.
- There was also an item on the application of safety standards and nuclear security guidance during an armed conflict, and there would be updates from the Secretariat on the ongoing preparation of the TECDOC on this topic.

Finally, Ms Evrard drew the attention of the CSS members to important upcoming conferences, as follows:

- International Conference on Enhancing the Operational Safety of Nuclear Power Plants taking place in Beijing China from 15–19 April 2024;
- International Conference on Nuclear Security ICONS 2024: Shaping the Future being hosted from 20 to 24 May 2024 at the Agency headquarters.

Ms Evrard concluded by wishing all participants a productive meeting.

1.2 Introductory remarks from the CSS Chair

Ms R. Velshi thanked Ms Evrard for her introductory remarks and welcomed everyone to the final meeting of the 7th term of the CSS. She expressed thanks for the support received over the 7th term, in particular from the Secretariat, notably Mr S. Mallick, and Mr D. Delattre and his Section. Ms Velshi

also noted that it would be the last CSS meeting attended by Ms R. Bly, Mr P. Dicks and Mr P. Webster – she thanked them for their time and dedication to the Review Committees and to the CSS, and noted the excellent collaboration between the Committees and Commission during the 7th term of the CSS. She also encouraged the CSS to continue to be proactive and forward-looking in its 8th term.

Ms Velshi summarized the agenda for the meeting, noting that it would include a further session on ensuring safety during an armed conflict. The agenda also included an update on the preparation of the long term structure and plan for the safety standards and the preparation of the end of term report for the CSS would also be discussed.

Ms Velshi thanked the CSS members for their participation and looked forward to a successful meeting.

1.3 Introduction of new CSS members

Ms Velshi welcomed the new members of the CSS, and asked them to introduce themselves, as follows:

- Sweden: M. Knochenhauer
- China: L. Liu
- Brazil: A. Facure
- United Kingdom: D. Urquhart

In addition, she welcomed the new Scientific Secretary of NSGC, Ms K. Kouts, and the next CSS chair, Mr M. Kenzelmann from Switzerland.

Mr Delattre also noted that this would be the last CSS meeting for Mr P. Sales Barbosa, who had provided invaluable administrative support to the organization of the CSS.

A complete list of participants to this CSS meeting is provided in Annex I.

1.4 Adoption of the agenda

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

1.5 Confirmation of the adoption of the final report of the 53rd CSS meeting

Mr A. González commended the NS Safety Standards Development Section on the preparation of the CSS reports. With regard to the report of the 53rd CSS meeting, he requested that in section 3.2, it be made clear that there were three distinct issues:

- Normal transport of radioactive material (i.e. in packages);
- Transportable nuclear power plants;
- The use of nuclear propulsion for vessels.

The adoption of the report of the 53rd CSS meeting was confirmed, subject to the above clarification [Annex IV, Action 54.1].

1.6 Status of the IAEA safety standards and actions from previous meetings

Mr Delattre informed the Commission that eight Safety Guides had been published since the previous CSS meeting; this represented a total of 17 Safety Guides published in 2023, equalling the record set in 2022. A further five draft Safety Guides were in the final stages of the publication process, two of which were endorsed at CSS 52, and three at CSS 53 (i.e. the previous meeting). Mr Delattre reported that the total number of published safety standards was now 132.

Up-to-date information on the status of all safety standards and the Nuclear Security Series (published and in draft) is available at: <https://nucleus.iaea.org/sites/committees/Policy%20Documents/status.pdf>.

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

Mr Delattre's presentation is available in the [CSS meeting documents library](#) on the website.

Mr González stated that the two Safety Guides on the application of the concepts of exemption and clearance were very important, and noted that there had originally been an intention to combine these, because the two concepts are closely linked. He also noted that there continued to be problems with the translation of the word 'clearance'.

2. Reports from the Safety Standards Committees and the Nuclear Security Guidance Committee

2.1 Emergency Preparedness and Response Standards Committee (EPReSC)

Mr M. Grzechnik, EPReSC Chair, reported on the 16th meeting of EPReSC, at which EPReSC had received updates on the progress of the EPR related draft Safety Guides DS504, DS527 and DS534. The meeting participants had discussed a range of topics, including the processes for developing safety standards and informational publications, the establishment of three working groups to advise on the revision of GSR Part 7, the application of the safety standards during an armed conflict, and various activities and initiatives led by the Incident and Emergency Centre (IEC) of the IAEA. EPReSC had also received presentations from Romania, Egypt, the United Kingdom and the European Commission.

Mr Grzechnik summarized the topics discussed during the joint sessions with RASSC, and with NSGC and NUSSC. One draft safety standard and five DPPs had been approved at those joint meetings. He also reported that EPReSC had held an ad hoc virtual meeting with WASSC to assess and complete the actions for their joint projects.

Mr Grzechnik's presentation is available in the [CSS meeting documents library](#) on the website.

Mr Knochenhauer expressed his concern regarding the potential impact and challenges in the possible revision of GSR Part 7 given the ongoing revision of other relevant international publications such as ICRP 103, and asked for clarification on the timeline and feasibility of the revision. Mr Grzechnik responded that, at this stage, the working groups had only performed a gap analysis, and the decision on whether to revise GSR Part 7 would be made during EPReSC-19 in November 2024, in which case the nature, scope and magnitude of the proposal would be also discussed

Mr J. Heinonen stated that the decision to revise GSR Part 7 should be carefully evaluated to ensure there was enough substance for the revision, and to take into consideration the effects on other safety standards such as GSR Part 3. Mr J. Lee suggested that the revision of GSR Part 7 might be considered for inclusion not in the medium term plan but in the long term plan. Mr Grzechnik agreed that great care should be taken to ensure consistency with GSR Part 3 through cross-committee efforts. Mr F. Stephani noted that the working groups had invited the experts involved in the revision of GSR Part 1 after the 2011 Fukushima Daiichi nuclear power plant accident to share their experience of revising that safety standard by amendment, which could be an option for GSR Part 7.

Ms R. Sardella suggested that attention should be given to developing other emergency preparedness and response related safety standards prior to the revision of GSR Part 7, given the limited resources available in the Secretariat. Mr Grzechnik explained that the timeline for making the decision would ensure that the feasibility of the revision could be sufficiently evaluated.

Mr D. K. Shukla enquired whether public perception of emergency preparedness and response was being taken into account in the consideration for the revision of GSR Part 7, for example in relation to the siting of new nuclear installations in densely populated areas; any changes in the requirements with respect to emergency preparedness and response would be challenging. Mr Grzechnik responded that the current emergency preparedness and response standards and methods for assessing hazards and determining protection strategies involved a robust process that could also be applied for potential hazards associated with new technologies. He agreed that any significant changes in the requirements would need to be justified and communicated to the public.

Mr Urquhart expressed his support for the revision of GSR Part 7, and asked whether potential future scenarios would be taken into account, such as mobile reactors close to densely populated areas and extreme weather conditions. Mr Grzechnik responded that such scenario planning had not been discussed at the committee level but had been discussed in the working groups. Mr Stephani added that the abovementioned issues, as well as reactors in remote areas, were within the scope of the initial proposals made by the working groups for the revision of GSR Part 7 and would be presented at the next EPRESC-17 meeting. Regarding the effect of any revision on GSR Part 3, Mr Stephani noted that the working groups were not currently considering any changes to radiation protection aspects.

Mr González stated that it would be important to consider the changes not only in new potential hazards but also in design criteria for nuclear installations, which would substantially affect emergency planning. Mr González also highlighted the challenges in the public perception of radiation protection.

Mr Heinonen enquired about the status of the ongoing revision of GS-G-2.1 (DS504), particularly in light of considerations on small module reactors (SMRs). Mr Stephani responded that, owing to a shortage of technical officers in the IEC, priority had been given to the revision of GSG-2 (DS527) over DS504 and DS534. However, the challenges associated with SMRs had been discussed in the working groups.

Mr Stephani provided information on a draft TECDOC under development that will present the conclusions of a coordinated research project on emergency planning zones for SMRs. The TECDOC would be an NE publication and its technical content was currently being finalized prior to the editing process. In response to a question from Mr S. A. Morris, Mr Stephani clarified that the TECDOC would not constitute IAEA guidance on the issue but would serve as the basis for a future EPR Series publication. Mr Grzechnik added that the future EPR Series publication would be a good place to present technical information on new technology.

2.2 Nuclear Safety Standards Committee (NUSSC)

Mr Webster, NUSSC Chair, reported on the 55th and 56th meetings of NUSSC, including the joint meeting with EPRESC and NSGC (see agenda item 2.1). During those meetings, NUSSC had approved seven draft standards and seven DPPs. NUSSC had also received updates on progress with other draft safety standards and nuclear security series publications, and had presentations on the use of the safety standards in Spain and Japan. He reported on the end of term report for the 9th term of NUSSC and a list of priorities for the 10th term.

Mr Webster's presentation is available in the [CSS meeting documents library](#) on the website.

Mr Webster also spoke about delays in drafting encountered during the 9th Term of NUSSC from 2021 to 2023. During that period NUSSC had been involved in twenty-three projects, of which it had been the lead Review Committee on seventeen. A review of when the twenty-three projects had been tabled at either Step 7 or 11 of SPESS versus the dates on which they had been expected to be tabled found that two had progressed on-schedule, one had been early and the remaining twenty had been late, by an average of one-and-a-half years. Mr Webster described that although there can be valid reasons why any individual project could suffer a delay, the fact that so many were delayed by so much would indicate that program oversight was lacking. He further noted that since producing safety standards is a statutory duty of the Secretariat, adequate resources should be applied to this despite competition from other activities within NSNI.

In response to a question by Mr Morris on the revision of GS-G-3.1 (DS513), Mr Webster explained that the purpose of the revised publication was to provide recommendations on how to integrate leadership, management and culture for safety; there was no intention to change the requirements.

In response to a question by Mr Urquhart, Mr Webster stated that the delays in development of NUSCC-led draft standards had no major significance for safety since they affected safety guides and not safety requirements publications. Mr Webster explained that efforts were already under way by the Secretariat

to address delays in the development of draft standards, and encouraged the CSS members to further look into providing suggestions to make the SPESS B process more efficient.

Mr Jammal suggested that the Secretariat balance the priorities to continue with the development of safety standards without delays, learning from the challenges faced in the past, and he reminded the CSS members that the end of term report is submitted to the IAEA Director General. He stated that knowledge preservation and knowledge management was key as there was a turnover of the Chair of the CSS and the Chairs of three of the Safety Standards Committees. He noted that it is important for the Committee members to support the Chair. Also, he suggested that at the end of a term, a smooth transition within the Member States is also needed to ensure continuity. Finally, he highlighted the strategic role of the CSS in the development of the safety standards and the collaboration with the Review Committees. Mr Mallick noted that the terms of the Committees were three years and the term of the CSS was four years and it was once every twelve years that the CSS and all Review Committees reach the end of their terms at the same time.

Mr Mallick noted that the Secretariat had taken action and addressed clearing the backlog of draft standards awaiting publication, but other challenges relating to resources and priorities exist. He recalled that the SPESS B process had been reviewed in August 2023 following an evolutionary approach, and that the Secretariat was looking at identifying further efficiencies in the publication process, taking into account the resources available.

Mr Webster suggested that it would be useful to have all the information on the progress of each draft available in one place for reference. Ms Velshi summarized the action to be made [**Annex IV, Action 54.2**], and requested the next CSS Chair to follow up on the issue in the next CSS term. Ms Velshi congratulated Mr Webster on his work as NUSSC Chair over the last two terms.

2.3 Radiation Safety Standards Committee (RASSC)

Ms D. Carrijo da Silva Dias, speaking on behalf of the RASSC Chair and the RASSC Scientific Secretary, reported on the 54th and 55th meetings of RASSC, including the joint meeting with EPRESC (see agenda item 2.1). During these meetings, RASSC had approved six draft standards and seven DPPs.

Ms Carrijo da Silva Dias reported on the discussions that had taken place in the meetings, including the progress with all RASSC-led safety standards and informational publications under preparation, the workshops on safety standards in Member States, and other activities and initiatives of the IAEA's Radiation Protection Unit. A topical session had been held on secondary cancers following radiotherapy. RASSC also had received presentations from the USA and the UK, as well as reports from sixteen international organizations including the European Nuclear Installation Safety Standards Initiative (ENISS). She also noted that the end of term report for the 9th term and priorities for the 10th term of RASSC had been discussed.

Ms Carrijo da Silva Dias's presentation is available in the [CSS meeting documents library](#) on the website.

2.4 Transport Safety Standards Committee (TRANSSC)

Mr D. Pstrak, TRANSSC Chair, reported on the 46th and 47th meetings of TRANSSC. During these meetings, TRANSSC had approved one draft standard and three DPPs.

Mr Pstrak reported on the discussions that had taken place during the meetings, including on the interface and coordination between the development of the revision of SSG-26 (Rev. 1) and of the Safety Basis Document, and the establishment of new working groups for the revision of SSR-6 (Rev. 1) and for transportable nuclear power plants (TNPPs). He also noted that TRANSSC had received updates and reports from its working group and Technical Experts Groups (TTEGs), a country presentation from Pakistan, a research proposal from Germany, country experience on package design certificates from Canada, as well as reports from four international organizations.

Mr Pstrak's presentation is available in the [CSS meeting documents library](#) on the website.

As regards the revision of SSR-6 (Rev. 1), Mr Jammal enquired whether some guidance would be provided on the transition period for the Member States to adopt and implement the new A₁ and A₂ values. Mr Pstrak responded that the transition period discussed in TRANSSEC-47 had been 10 years. Ms S. Fayyaz added that the relevant information would be given in SSR-6 (Rev. 2) and SSG-26 (Rev. 2).

In response to a further question from Mr Jammal, Mr Pstrak and Ms Fayyaz responded that the next step in the development of the revision of SSR-6 (Rev. 1) is the 120-day Member States review and, then, following resolution of the comments by the technical officer and internal review by the Secretariat, the draft was expected to be discussed at Step 11 during the TRANSSEC-48 meeting.

Mr Jammal noted that the draft standards should clearly distinguish the use of A₁ and A₂ values for transporting packages from the D values used in the categorization of radiation sources for nuclear security purposes.

Ms G. Hirth asked whether only TRANSSEC members could join TTEGs or if they were broadly open to experts. Mr Pstrak clarified that the Chair of a TTEG had to be a TRANSSEC member, but other experts were welcome. However, the involvement of experts from the nuclear industry should be avoided in order to maintain a regulatory perspective.

Mr Urquhart remarked that careful attention was needed in the revision of SSR-6 (Rev. 1) to prevent observers from the industry from having undue influence. Mr Pstrak agreed, noting that the large number of comments often slowed progress, but it was also important to benefit from the experience offered by observers.

Mr González firstly underlined the importance of ensuring absolute coherence between the A₁ and A₂ values and clearance and exemption through coordination between the Safety Standards Committees. Secondly, he noted that, in addition to a working group for TNPPs, TRANSSEC needed another working group for reactors for propulsion. Thirdly, he suggested that TRANSSEC pursue co-sponsorship of safety standards by other international organizations. Fourthly, regarding the denial of shipments, he noted that it was a safety and security issue and should be a top priority for the General Conference.

Mr Shukla asked if the need for the frequent revision of SSR-6 (Rev. 1) had been analysed, based on real developments. He also noted that the current revision should take into account safe transport using new technology such as drones, safety and security aspects of storage in transit, and conveyances used by courier services. Mr Pstrak responded that challenges with respect to new technologies had been identified in the long term plan by TRANSSEC, and these included transport using drones and self-driving vehicles; artificial intelligence; and three-dimensional printing of radioactive material. Ms Fayyaz commented that other international organizations such as the International Maritime Organization (IMO) and United Nations Economic Commission for Europe (UNECE) provided recommendations on conveyances, for example on the design of vehicles. Regarding storage in transit, she agreed on the importance of the issue and noted that TRANSSEC would need to involve the necessary experts to cover this topic.

2.5 Waste Safety Standards Committee (WASSC)

Mr P. Dicks, WASSC Chair, reported on the 55th and 56th meetings of WASSC, including the ad hoc virtual joint meeting with EPRESC (see agenda item 2.1). During those meetings, WASSC had approved seven draft standards and seven DPPs. WASSC had received updates on the status of the WASSC-led safety standards, as well as feedback from WASSC members on the possible revision of the safety guides GSG-1 and WS-G-5.2. A topical session had been held on new advanced technologies, at which WASSC had received presentations from Canada, India and the United Kingdom, as well as updates from the IAEA and World Nuclear Association on activities and initiatives related to the

regulation of new technologies. He also reported that the end of term report for the 9th term of WASSC had been discussed, and a list of priorities suggested for the 10th term.

As this would be his last CSS meeting as Chair of WASSC, Mr Dicks also expressed his gratitude to the members of the CSS and the IAEA Secretariat for supporting WASSC's activities during his term of appointment. He shared his personal reflections on the work of the CSS and the Committees and asked CSS members to encourage representatives from their Member States to engage in discussions at the Safety Standards Committees, to support another review of SPESS B taking a revolutionary approach, and to provide recommendations for the next term of the Committees to assist with the establishment of priorities.

Mr Dicks' presentation is available in the [CSS meeting documents library](#) on the website.

In response to concerns raised by Mr J. Dies Llovera regarding the potential revision of waste classification covered by GSG-1, Mr Dicks said that WASSC had held discussions on a potential revision of GSG-1 but had not decided to proceed with the revision thus far.

Mr González said that attention should be given to the management of naturally occurring radioactive material arising from coal burning power plants and from energy production from renewable sources such as solar power and wind power. He noted that it was also important to ensure coherence between the safety standards and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management to distinguish between spent fuel as an asset and as waste. He remarked that it was important to learn from past lessons of declaring all used radioactive material as waste. For example, it had recently been discovered that actinium for medical applications could be produced using radium that had previously been disposed of as waste. Mr Dies Llovera also suggested replacing the term 'spent fuel' and the term 'irradiated fuel' as technology is progressing towards further use of spent fuel in SMRs.

Ms Velshi noted that the disposal of irradiated fuel posed many challenges in the area of safeguards and suggested that it might be useful to include guidance on safeguards issues in waste-related safety standards. Mr Dicks noted that the UK had a '3S' model and agreed that safeguards by design was very important and could be taken into account by WASSC.

2.6 Nuclear Security Guidance Committee (NSGC)

On behalf of the NSGC Chair, Ms K. Kouts, NSGC Scientific Secretary, reported on the 23rd meeting of the NSGC, including the joint meeting with EPRESC and NUSSC (see agenda item 2.1). During the meeting, NSGC had approved one draft nuclear security series (NSS) publication for submission to Member States for review and three draft NSS publications for submission to DDG-NS. All the interface documents submitted had been cleared, comprising one draft safety standard and four DPPs. The meeting participants had discussed the review of the NSS roadmap and the plans for revising the top level publications of the NSS including the terminology used therein. She also noted that NSGC had received feedback gathered from Member States on nuclear security related issues during the Covid-19 pandemic.

Ms Kouts' presentation is available in the [CSS meeting documents library](#) on the website.

In response to a question from Mr T. Elsner, Ms Kouts confirmed that the Nuclear Security Fundamentals (NSS No. 20) was planned to be revised in a batch with the Nuclear Security Recommendations (NSS Nos 13, 14 and 15) to ensure the harmonization of all four publications.

Ms Velshi thanked the members of the Review Committees for their work and for their efforts to collaborate with one another.

2.7 Summary of the meetings of the Chairs held before the CSS meeting

Mr Delattre reported on the results of the meeting of the Chairs of the Review Committees, drawing attention to the discussions on the scope of the CSS working group and updates on the CSS end of term report. He also described the process for finalization and approval of the end of term report. Mr Delattre reported on discussions on the future coordination of the Committees' work on transportable nuclear power plants and the possibility to invite members from other Review Committees to participate in the working group activities organized by TRANSSC. The Chairs had also received a presentation on the work done within the scope of the Nuclear Harmonization and Standardization (NHSI) initiative and how it could affect the revision of related safety standards. Mr Delattre also mentioned that Mr Webster had expressed his concerns that the current copyright statement might dissuade people from wanting to reuse the content and had enquired what the Agency could do about it. Following this request by the NUSSC Chair, initial discussions had been held on the copyright of the safety standards and how it affects the use, reproduction, and translation of the safety standards.

Ms S. Le Masurier, from the IAEA Publishing Section, had been invited to the CSS meeting to provide a presentation on copyright matters. Ms Le Masurier explained the current copyright arrangements, which are common for all IAEA publications. She provided two options for moving forward: (a) consult with the IAEA's Legal Department and investigate whether the copyright statement could be reworded to be more user friendly or (b) move all IAEA publications to full open access. She noted that the IAEA's publications have been free to read for nearly a quarter of a century. She continued that the IAEA follows an inclusive and open approach to requests for reuse of the text or unofficial translations of the safety standards. She explained the difference in the process for translations into official languages of the IAEA and other languages. She elaborated on the opportunities and risks related to providing full open access to all IAEA publications, and asked the CSS members whether they would support a move to full open access. This would mean that anyone would be able to reuse, repurpose, take parts, or create derivative versions of the IAEA's publications, by simply referencing the Agency without requesting permission. She added that there would still be a written statement explaining the status of copyright in the front of all publications.

Ms Velshi expressed her view that there is a general tendency to move to open access. She thanked the NUSSC Chair for raising the point of copyright and thanked Ms Le Masurier for providing options for the way forward.

Mr Urquhart queried if the Agency had ever denied a request to reuse or translate the content of publications, or if the arrangement was purely of an administrative nature. Ms Le Masurier responded that there had been a few instances in the past when the request had been rejected after consultation with the technical department responsible for the publication and it had always been NS publications that had been rejected.

Mr Lee shared the approach followed for translation in the Republic of Korea where the content is presented in both the English and the Korean language in the same publication, to avoid misinterpretation of the original text.

Mr González remarked that translation to official and non-official languages are two different areas that merited separate discussions. He noted that official IAEA translations could be improved by closer collaboration with the translators.

Following a question by Mr Jammal, Ms Le Masurier clarified that under the current arrangements people are free to use IAEA publications but not to reproduce or translate whole books. The copyright arrangements also prevent unofficial translations, if an official one already exists. Mr Jammal noted that the current copyright statement might create a false perception of the accessibility of IAEA publications.

Mr Shukla supported the view that there should not be any permission needed for translating the safety standards so long as a disclaimer was included to indicate that in all cases of conflict the English version will prevail.

Ms Batandjieva-Metcalf informed the Commission about the approach followed by UNSCEAR for the use of the content of the UNSCEAR reports and their translation. Ms Le Masurier verified that the UNSCEAR approach was similar to that of the IAEA.

Ms Velshi asked Ms Le Masurier to investigate further the actions needed to facilitate full open access to the safety standards. Ms Le Masurier noted that the Secretariat will consult with other IAEA departments, including the Office of Legal Affairs, about the possibility of changing the copyright statement for the IAEA publications or providing open access to IAEA publications to facilitate their use and translation into non-official languages by Member States. The Secretariat will provide an update at the next CSS meeting. [Annex IV, Action 54.3]

3. Approval of draft publications and DPPs

NOTE: The draft submitted to the Commission at this meeting will be subsequently posted as a final edited version on the CSS website. 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 IV, Action 54.4].

3.1 Draft Safety Guide DS524 on Radiation Protection Aspects of Design for Nuclear Power Plants

Mr M. Gajdos presented the background, scope and status of the draft Safety Guide. He then summarized the resolution of comments from Member States and the Review Committees. CSS comments had been received from Germany and Pakistan and had been resolved.

The presentation is available in the [CSS meeting documents library](#) on the website.

Mr Heinonen noted that in para 6.2 of the draft DS524, one of the comments had suggested changing ‘design extension accidents’ to ‘design extension conditions’, but that it had instead been changed to ‘severe accidents’. Mr Gajdos responded that the focus was on an accident that might result in a significant radioactive release, and that this was considered the most appropriate term.

Mr Dies Llovera suggested that it was equally important to focus on existing NPPs, especially in relation to the use of accident-tolerant fuels and their positive impact on lowering the core damage frequency. Mr Gajdos agreed that this was important, but noted that should accidents do occur even if accident-tolerant fuels are used, radiation protection aspects addressed in DS524 are relevant for such cases for existing, as well as for new NPPs.

Mr González asked whether it was too late to consider co-sponsorship by ILO, given its competence and authority in this topic. Ms Velshi replied that at SPESS Step 12 (CSS endorsement of the draft) it was too late to consider co-sponsorship.

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

3.2 Draft DPP DS547 for a Safety Guide on Regulatory Experience Feedback Management

Mr M. Javaid introduced the draft DPP, describing the background and justification for the proposed publication, as well as the objectives, scope and proposed structure and production schedule. CSS comments had been received from India, Pakistan and the Republic of Korea, and had been resolved, and the DPP had been revised accordingly.

The presentation is available in the [CSS meeting documents library](#) on the website.

Mr N. Maqbul welcomed the proposed publication and, noting the value of the IAEA Incident Reporting System for Operating Experience (IRS), suggested that a similar system might be useful for capturing regulatory experience. Mr Javaid said that this was being discussed.

Mr Dies Llovera said that human resources were extremely important, including staffing and recruitment issues, and that it was also important to consider the effectiveness of the regulatory body. Mr Javaid agreed, and indicated that human resources issues would be addressed in Section 5 of the proposed Safety Guide.

Mr Pstrak asked whether experience from competent authorities for the transport of radioactive material would also be included. Mr Javaid replied that TRANSSC would be included in the development process of the draft.

The Commission approved the DPP.

3.3 Draft DPP DS548 for a Safety Requirements on Predisposal Management of Radioactive Waste, revision of GSR Part 5

Mr G. Bruno introduced the draft DPP, describing the objective of the revision of the safety requirements, as well as the scope, proposed structure and provisional development schedule of the revised publication. CSS comments had been received from Pakistan; all these comments had been considered but were rejected with reasons given.

The presentation is available in the [CSS meeting documents library](#) on the website.

Mr Maqbul confirmed that the comments from Pakistan had been satisfactorily resolved.

Mr González noted that the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management contained several obligations but did not explicitly refer to predisposal management. Mr Bruno responded that predisposal management was inherent in the national disposal programme specified by the Joint Convention.

The Commission approved the DPP.

3.4 Draft DPP DS549 for a Safety Guide on Control of Orphan Sources and Other Radioactive Material in the Metal Recycling and Production Industries, revision of SSG-17

Mr T. Hailu introduced the draft DPP, describing the background and justification for the proposed publication, as well as the objectives, scope, proposed structure in comparison to SSG-17, and the provisional development schedule. He also presented the resolution of comments received from the Review Committees. CSS comments had been received from India and these had been resolved.

The presentation is available in the [CSS meeting documents library](#) on the website.

Mr Dies Llovera mentioned the need to progress on the consideration to integrate GPS tracking of sources as a future development on the control of orphan sources.

Mr González noted the importance of conventions and codes of conduct for global safety, and the role of the IAEA safety standards in assisting Member States to fulfil their national obligations.

The Commission approved the DPP.

3.5 Draft DPP DS550 for a Safety Guide on Storage of Radioactive Waste, revision of WS-G-6.1

Mr A. Guskov introduced the draft DPP, describing the background and justification for the publication, as well as the objectives, scope, proposed structure and provisional development schedule. He also noted the need to develop the draft in parallel with the revisions of GSR Part 5 (DS548, see agenda item 3.3) and GSG-3 (DS553). CSS comments had been received from Pakistan and these had been considered but were rejected with reasons given.

The is available in the [CSS meeting documents library](#) on the website.

The Commission approved the DPP.

3.6 Draft DPP DS551 for a Safety Guide on Decommissioning of Uranium Production Facilities

Mr Z. Fan introduced the draft DPP, describing the background and justification for the new Safety Guide, as well as the objectives, scope, proposed structure and provisional development schedule. He

also presented the resolution of comments received from the Review Committees. No CSS comments had been received.

The presentation is available in the [CSS meeting documents library](#) on the website.

The Commission approved the DPP.

3.7. Endorsement by the CSS of the RASSC conclusion that RS-G-1.10 is superseded by existing safety guides

Mr J. Bosnjak presented RASSC's discussions and analysis of the need to revise and update IAEA Safety Standards Series No. RS-G-1.10, Safety of Radiation Generators and Sealed Radioactive Sources, which was published in 2006. Considering that most of the information included in the safety guide was covered by other safety standards that had been developed since then, RASSC had concluded that a revision of RS-G-1.10 would not add value to the existing collection of safety standards. It could therefore be superseded and any of its content that was not included in existing safety standards could be incorporated into an IAEA informational publication providing practical guidance.

The presentation is available in the [CSS meeting documents library](#) on the website.

Mr Shukla said that the presentation highlighted the need for a specific safety requirements publication on radiation facilities including, for example, design and manufacturing requirements.

Mr Jammal expressed the opinion that the justification for RASSC's decision had not been explained in sufficient detail.

Ms Velshi said that the CSS would need greater reassurance that no important content would be lost as a consequence of such a decision before endorsing it. She asked RASSC to present further details at the next CSS meeting [Annex IV, Action 54.5].

4. DPPs and draft nuclear security guidance for information

None submitted.

5. Ensuring safety during an armed conflict

Ms M. Nikolaki provided an update on the status of the analysis on ensuring nuclear safety and nuclear security in an armed conflict situation. She reported that the Secretariat would be developing an interim TECDOC publication and the scope of the publication would include identified challenges in the application of safety requirements and lessons learned from expert review missions to Ukraine and how the seven pillars for ensuring nuclear safety and security have been used as a reference by the IAEA for collecting and documenting information during expert review missions to Ukraine. She emphasized that the intention was not to provide an exhaustive list of identified challenges, but rather to focus on broad topical areas impacted given the continually evolving nature of the armed conflict. The DPP for the TECDOC had been presented to INSAG in April 2023 and to the CSS in May 2023 during its 53rd meeting. The interim TECDOC is expected to be published during the first or second quarter of 2024.

Mr Urquhart noted that it would be good if the idea was captured that Member States commit wherever there is conflict in the world to act in a way that protects the ability of other sovereign States to discharge and comply with their obligations under the IAEA's requirements and the IAEA Director General's seven pillars.

6. Preparation of the long term plan for the IAEA safety standards

Mr Heinonen, Chair of the CSS Working Group, presented a summary of the Group's initial discussions. He presented the composition and scope of the Working Group and emphasized that the

Group's first objective was to establish how to develop the long term structure and plan, before establishing the content of the plan itself. He outlined the aspects that would need to be evaluated in developing the long term plan, including an evaluation of the current structure of the safety standards and criteria for their development, among other elements set out in SPESS A. Environmental scanning would also be key, including input from other organizations and from the Chairs of the Safety Standards Committees. He noted that if such scanning identified any topics for more immediate action, they could be incorporated into the medium-term working plans of the Safety Standards Committees.

Mr Heinonen's presentation is available in the [CSS meeting documents library](#) on the website.

Mr J-L. Lachaume noted that he had joined the Working Group because of the insight he could offer as a result of his experience in helping to develop the 2008 long term plan. In his opinion, the current situation of the safety standards was very different to how it had been the last time the process was undertaken, and there might not be as much work to do this time.

In response to questions from Mr Jammal and Mr Morris about the Working Group's timeline, Mr Heinonen indicated that the goal was to get the long term structure and plan approved in 2026, presenting interim results of the Working Group's discussions to the CSS at its biannual meetings in a stepwise manner. Mr Jammal stressed the importance of ensuring continuity and documenting the process, especially considering the upcoming changes in membership of the CSS. Mr Mallick noted that, if there were no major changes to the structure as it stood, the process could be expedited; the Agency would also support the work of the Group, as necessary. Mr Delattre suggested that the Working Group might meet before and after each CSS meeting and work on home assignments in between, in order to make steady progress.

Mr Shukla said that it was important both to reflect on the past and to consider the future objectives and how to meet them. It was essential to establish whether the necessary systems and mechanisms existed and, if so, whether they were effective. He recalled that the safety–security interface had been assigned importance in the 2008 long term plan; however, the full integration of those two aspects had to begin at the top and could not realistically be implemented while there were two separate fundamentals. . Finally, he cautioned against potential of falling into the anchoring trap of being too attached to one initial idea and not taking the holistic view and courage to make changes.

Mr. Shukla pointed out that user selects documents to be referred based on concerned facilities and activities. He expressed that instead of present practice of developing guidance separately for GSR and SSR series, if guides are issued for specific facilities and activities, consolidating guidance for generic as well as specific safety requirement, user friendliness can still be achieved irrespective of overall large number of safety standards, as user needs to refer only limited number of documents.

Mr González agreed that the safety–security interface remained an important unresolved issue. He further noted the differences in the use of the words 'standards' and 'norms'; the word 'standard' was used in English and Chinese, whereas 'norm' was used in Arabic, French, Russian and Spanish. Another aspect to consider in the long term was the encouragement of co-sponsorship of publications by specialized agencies, which carried more weight than the mere cooperation of these organizations.

Mr Stephani suggested that the Working Group might consider getting feedback from the IAEA review missions about how safety standards were implemented in Member States. In response to a question by Mr Morris regarding whether IAEA review missions constituted assessments, Ms Evrard confirmed that the IAEA Statute authorized the Agency to establish safety standards and provide for their application. Peer reviews were performed only upon request from Member States and involved a review of national practices against the safety standards. The resulting recommendations could be used by the Member State as appropriate.

In response to a comment by Mr Dies Llovera regarding the need to develop a safety guide on improving the operation of regulatory bodies, current IAEA regulation covers specific requirements on regulatory bodies at GSR-1 and associated GSG 12 & 13 and others. Mr Morris questioned whether that topic fell under the mandate of the IAEA. Ms Hirth noted that, while a safety guide on improving regulatory

effectiveness would be useful for countries with well established nuclear regulatory bodies, it might put too much pressure on those that do not have a regulatory body. Ms Velshi pointed out that the members of the Working Group represented countries in various stages of development of a nuclear programme. Mr Knochenhauer said that although the effectiveness of regulatory bodies in applying the safety standards was relevant to the CSS, there were more appropriate forums for discussing the effectiveness of regulatory bodies in general.

Ms Hirth suggested that the Working Group could use other conferences, events and side events as opportunities to gather more information for environmental scanning. It would be useful to receive cross-cutting feedback from each country reflecting its national viewpoint rather than individual inputs from the country's members of each different Review Committee.

The CSS Working Group will continue its work on developing a proposal for establishing the long term structure and plan for the IAEA safety standards and will report on the progress at the next CSS meeting [Annex IV, Action 54.6].

7. Information from ICRP, UNSCEAR and OECD/NEA

Mr Nakoski presented a summary of recent OECD/NEA activities that had been discussed during the October 2023 Steering Committee meeting and covered topics such as the roadmap for new nuclear, the small modular reactors dashboard, and a technical opinion paper on small modular reactors. He presented events organized and conducted on different aspects of nuclear safety, highlighting those relating to the safe deployment of innovative technologies, as well as work in the area of external hazards assessment. He informed the Commission about the published report on Gender Balance in the Nuclear Sector that contains national data collected from OECD countries and is the first survey that summarizes in numbers the underrepresentation of women in the nuclear sector. He also remarked on the NEA-Ukraine Visiting Experts Programme.

Responding to a question from Mr Morris, Mr Nakoski clarified that OECD/NEA had not dedicated attention to the topic of talent development and capacity building and that one of the meetings next year would focus on that matter. NEA plans to analyse potential cooperation with universities.

The presentation is available in the [CSS meeting documents library](#) on the website.

Ms Batandjieva-Metcalf presented a summary of recent UNSCEAR activities that included a summary of the 70th session of UNSCEAR and the progress that had been made on ongoing scientific evaluations and a new UNSCEAR evaluation on the effects of ionizing radiation on the nervous system launched in April 2023. Other topics included the future programme of work of UNSCEAR for the years 2025 to 2029 (to be finalized in 2024), the strategy used in UNSCEAR's Global Survey to collect data on public exposure to ionizing radiation, current collaboration efforts between UNSCEAR and the IAEA and other organizations, and outreach activities, such as webinars.

Mr González emphasized the importance of the scientific evaluation by UNSCEAR of the occurrence of secondary cancers after radiotherapy treatment. He noted that there is tangible international support for this work. He also recalled that findings from the UNSCEAR 2012 report led to the development and publication of the IAEA Safety Report Series No. 122, Attribution of Radiation Health Effects and Inference of Radiation Risks: Considerations for Application of the IAEA Safety Standards.

Ms Hirth added details on the scope and format of scientific evaluations. She noted that, for each evaluation, multiple studies are analysed and for studies with different results, analysis of other factors is usually taken into the scope of further studies. She noted that UNSCEAR pays rigorous attention to the data and analyses conducted and she encouraged the CSS members to reach out to their country representatives and epidemiologists to contribute to the studies.

Ms Batandjieva-Metcalf referenced the International Nuclear Workers Study (INWORKS) paper that was being considered by the UNSCEAR expert group "Epidemiological studies of radiation and cancer". The draft report was scheduled for critical review in January 2024 before submission to the Committee's review and discussion at its 71st session (20–24 May 2024, Vienna). Based on the expected detailed discussion, the report was planned for the Committee's approval in 2025. She

confirmed the readiness to make a detailed presentation on the work undertaken by UNSCEAR on epidemiological studies of radiation and cancer in a future CSS meeting [Annex IV, Action 54.7].

The presentation is available in the [CSS meeting documents library](#) on the website.

Mr Delattre noted that the representative from ICRP was not available to speak at the meeting, but had provided documents that were available in the [CSS meeting documents library](#) on the website.

8. Preparation of the end of term report for the 7th CSS term, including recommendations for the 8th term

Mr Delattre reported on the development of the end of term report for the 7th CSS term. He highlighted a few of the key topics that had already been discussed by the CSS members such as the outcome of the Strategic Planning Working Group and how the CSS would look into the development process of draft standards. Mr Delattre concluded that recommendations for the 8th CSS term would need to be developed and Ms Velshi opened up the floor to receive feedback on recommendations from CSS members.

Mr Jammal requested that the Secretariat prioritize the development of a monitoring tool (dashboard) based on feedback from the Review Committees to indicate the current status of draft standards, to be used by members of the CSS and Review Committees. Mr Urquhart and Ms Hirth expressed support for this proposal. He also proposed that CSS meetings should include a standing agenda item to discuss emerging issues and challenges and Ms Velshi agreed.

Mr Urquhart highlighted many upcoming challenges that have the potential to impact nuclear safety such as improvements in artificial intelligence capabilities (particularly potential impacts on human factors), climate change and advanced nuclear reactor designs. He emphasized the need to continually investigate opportunities to improve the SPESS process in order to provide flexibility to better meet evolving needs in a timely manner. Ms Velshi confirmed that this topic would be addressed in the long term strategy and recommended that it be separated into two recommendations – one on potential future challenges and one on the review and revision of SPESS. Ms Velshi agreed that the impact of artificial intelligence was an emerging issue.

Mr Shukla recommended that the CSS should work in parallel with the CSS Working Group for the long term strategy to ensure effective coordination. Ms Velshi expressed her support of the recommendation. Mr Shukla also stated the need to maintain technology neutrality in the safety requirements and the need to establish criteria for optimizing the number of facility specific safety guides. He suggested that, as transport was applicable to all facilities and activities, the transport regulations could be issued as a general safety requirements publication and specific requirements be covered for specific facilities under SSR series. He also indicated that there might potentially be a gap in the specific safety requirements publications on the topic of radiation sources, excluding nuclear installations. Specific safety requirements be considered for radiation applications (radiation facilities) also to complement GSR part-3 to fill the potential gap.

Mr Shaw reminded the Commission that safety standards represent good practice and are based on Member States' experience and feedback; to produce a useful safety guide, sufficient content was needed. Mr Heinonen agreed that the maturity of the input from users needs to be considered when developing safety standards; however, emerging topics could be taken into account in the long term plan without implying that action needed to be taken immediately.

Mr Dies Llovera recommended that the long term plan include considerations on the effectiveness and capacity building of the regulatory body.

Mr González reiterated several challenges to be addressed by the CSS such as issues relating to transport (i.e. transport of radioactive material, nuclear power plants, and propulsion vessels), clarification of the terms used for advanced reactor designs, issues relating to the operation of NORM with regard to the dose limits, translatability of the safety standards, clear definition of the hierarchy of the safety

standards, differences in regulatory approaches (i.e. prescriptive and non-prescriptive) used in Member States. He also supported Mr Urquhart's proposal to prioritize the topic of the impact of artificial intelligence in nuclear safety, particularly with regard to medical radiography.

Ms Sardella suggested that more emphasis should be placed on collecting Member State feedback on the use of safety standards and on developing a systematic methodology to collect feedback from IAEA peer review missions on the effectiveness of the implementation of the safety requirements.

Mr Jammal supported Ms Sardella's proposal and emphasized the need to investigate how safety standards are used in review missions and to identify those standards which might be ambiguous. Mr Morris proposed that the CSS could incorporate the results of workshops on improving and coordinating Integrated Regulatory Review Service (IRRS) missions. Mr Lee suggested expanding the scope of IRRS missions to more clearly incorporate the application and effectiveness of safety standards. Mr Jammal suggested that the Secretariat's database on IRRS missions could be utilized to provide some of this information. Ms Hirth cautioned against sharing specific data collected from IRRS missions, but concurred that it could be utilized to identify potential ambiguities in the safety standards.

Mr Morris highlighted the need to better understand how coordination between NHSI and the CSS and Review Committees is achieved.

Mr Maqbul proposed that the CSS request feedback from the perspective of Member States on the applicability of safety standards. Mr González expressed his support for this proposal and further suggested including feedback from regulatory bodies and networks (e.g. from the Ibero-American Forum of Radiological and Nuclear Regulatory Agencies (FORO)).

Ms Hirth expressed support for Mr Heinonen's proposal for the scope of the CSS Working Group, particularly with regard to environmental scanning. She proposed that Member State participation in the Committees and the Commission could be encouraged to increase awareness on the work undertaken. She also noted that the Commission could consider issues identified in the safety resolution adopted at the 67th General Conference of the IAEA.

Ms Velshi requested for the chair of each Review Committee to also provide feedback and recommendations for the 8th CSS term.

Mr Grzechnik suggested expediting the development of the long term strategy.

Mr Pstrak supported Mr Grzechnik's suggestion and added that the CSS should utilize the input already provided by the Review Committees and the technical knowledge within the body of the Review Committees to provide information on emerging issues.

Mr Dicks expressed his support for Mr Heinonen's proposal for environmental scanning in order to have a better awareness of emerging issues and challenges and emphasized the need for improvements in knowledge management.

Ms Gandhi raised some points on behalf of Mr Webster. She emphasized the support for the proposal to develop a monitoring tool (dashboard) for the use of tracking the status of draft standards and to review the SPESS process to identify areas for improvements.

Mr Mallick stated that the Secretariat would continue to provide support to the Review Committees and had already started on process improvements for the project management of developing safety standards. He stated that the Secretariat would continue to review the SPESS process to identify areas for improvement and to address challenges in knowledge management and transitions in IAEA staff and Review Committee Chairs in a systematic manner. He stated that the Secretariat would try to involve stakeholders in the development of the long term plan, as needed, including incorporating Member State feedback and he emphasized that the Secretariat would support these activities.

Mr Delattre stated that the end of term report would be updated to reflect the discussions just held, and recommendations would be sorted by topical area and used to establish priorities for the 8th CSS term. The draft end of term report is expected to be available for comment in January 2024.

9. Update on the new web page for the Committees and the Commission

Ms Karseka-Yanev thanked the CSS members who had been involved in the testing of the new website, and whose feedback had led to many useful improvements in the website. She demonstrated the new website, drawing attention to some of its new features. Noting that the old website would be decommissioned at the end of the year, she announced that a webinar would be held before the next CSS meeting to provide training on the new website. Mr Delattre recalled that CSS members would need a nucleus account to be able to sign in to the new website.

10. Any other business. Report of the meeting. Dates of the next meetings

Mr Delattre indicated that a draft list of actions resulting from the 54th CSS meeting would be provided for comment to the CSS members [**Annex IV, Action 54.9**] and that the draft report of the 54th CSS meeting would be posted on the CSS web page for comment [**Annex IV, Action 54.10**]. Mr Delattre informed the Commission that all presentations made at the 54th CSS meeting would be posted on the CSS web page [**Annex IV, Action 54.11**].

He also noted that a revised draft end of term report would be prepared, taking into account the discussions at the 54th meeting of the CSS. The draft report would be posted for CSS comments by mid-February 2024, and finalized thereafter [**Annex IV, Action 54.12**].

Mr Delattre informed the Commission of the following dates for the next CSS meetings:

- **CSS 55:** week from 27 to 31 May 2024
- **CSS 56:** week from 25 to 29 November 2024
- **CSS 57:** week from 19 to 23 May 2025
- **CSS 58:** week from 8 to 12 December 2025

Ms Velshi thanked all participants, and the meeting was adjourned.

ANNEX I

PARTICIPATION AT THE 54th CSS MEETING

The Commission

R. Velshi (Chair of CSS)
A. J. González, Argentina
G. Hirth, Australia
O. Lugovskaya, Belarus (sent apologies – unable to attend)
A. Facure, Brazil
R. Jammal, Canada
L. Liu, China
M. R. M. Ezz El-Din, Egypt (sent apologies – unable to attend)
J. Heinonen, Finland
J-L Lachaume, France
T. Elsner, Germany
D. K. Shukla, India
F. Gov, Israel (sent apologies – unable to attend)
T. Yamada, Japan
J. Lee, Republic of Korea
M. Zniber, Morocco (sent apologies)
F. Mansoor, Pakistan (sent apologies – represented by N. Maqbul)
A. Ferapontov, Russian Federation
M. Žiaková, Slovakia
C. O. Phillips, South Africa (sent apologies)
J. Dies Llovera, Spain
M. Knochenhauer, Sweden
R. Sardella, Switzerland
A. Bölme, Türkiye
R. Urquhart, United Kingdom
S. A. Morris, United States of America

Observers

F. Mansoor, AdSec (sent apologies)
M. Hübel, EC
C. Clement, ICRP (sent apologies)
S. Burns, INSAG (sent apologies)
N. Muroya, OECD/NEA (sent apologies – represented by J.A. Nakoski)
B. Batandjieva-Metcalf, UNSCEAR
M. Kenzelmann, Switzerland

Representatives and experts supporting CSS members and observers

D. Anuchin, M. Aparicio, E. Blagodarina, A. Franzen, T. Granier, T. Hwang, S.H. Kim, M. Oberle, S. Oreshnikov, F. Pelayo Loscertales, E. Shamin, M. Turner, D. Ulanov, F. Wei, C. Zhang

Chairs of the Review Committees

EPreSC: M. Grzechnik

NSGC: P. Lardiez. Holgado (*sent apologies*)

NUSSC: P. Webster

RASSC: R. Bly (*sent apologies*)

TRANSSC: D. Pstrak

WASSC: P. Dicks

Coordinators of Review Committees and of the Commission on Safety Standards

F. Stephani, Incident and Emergency Centre (IEC), EPreSC

S. Gandhi, Regulatory Activities Section (NSNI), NUSSC

O. Guzmán López Ocón, Radiation Safety and Monitoring Section (NSRW), RASSC (*sent apologies – represented by D. Carrijo da Silva Dias*)

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

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

K. Kouts, Programme Development and International Cooperation Section (NSNS), NSGC

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

IAEA Secretariat

L. Evrard, Deputy Director General, Department of Nuclear Safety and Security

S. Mallick, Director, Office of Safety and Security Coordination (NSOC)

H. Vandenhove, Director, Division of Radiation, Transport and Waste Safety (NSRW)

A. Bradford, Director, Division of Nuclear Installation Safety (NSNI)

N. Abonasara, K. Alm-Lytz, K. Asfaw, J. Bosnjak, G. Bruno, E. Buglova, A. Clark, C. Cole, P. Contri, Z. Fan, C. Fischer, M. Gajdos, A. Gomez Cobo, L. Guo, A. Guskov, O. Holmberg, T. Hailu, J. Hou, M.A. Javaid, F. Jiang, S. Le Masurier, J. Luis Hernandez, T. Karseka-Yanev, M. Nikolaki, H. Pappinisseri Puthanveedu, S. Pohgosyan, J. Rovny, P. Sales Barbosa, D. Sears, P. Shaw, A. Suzuki, J. Wiles, R. Wright.

ANNEX II

AGENDA OF THE 54TH MEETING OF THE COMMISSION ON SAFETY STANDARDS

1. Opening Session

- 1.1. Opening of the Meeting (14:10); *L. Evrard, DDG NS*
- 1.2. Introductory remarks from the CSS Chair (14:20); *R. Velshi*
- 1.3. Introduction of new CSS members from Brazil, China, Sweden and UK as well as new NSGC Scientific Secretary and introduction of the appointed CSS Chair for the next term
- 1.4. Adoption of the agenda (14:30); *CSS members*
- 1.5. Confirmation of the adoption of the final report of the 53rd CSS meeting; *CSS members*
- 1.6. Status of the IAEA Safety Standards and actions from previous meetings; *S. Mallick and D. Delattre*

2. Reports from the Safety Standards Committees and the Nuclear Security Guidance Committee

- 2.1. Emergency Preparedness and Response Standards Committee; *M. Grzechnik, Chairperson / F Stephani, Scientific Secretary*
- 2.2. Nuclear Safety Standards Committee (two meetings); *P. Webster, Chairperson / S. Gandhi, Scientific Secretary*
- 2.3. Radiation Safety Standards Committee (two meetings); *R. Bly, Chairperson / O. Guzmán López-Ocón, Scientific Secretary*
- 2.4. Transport Safety Standards Committee (two meetings); *D. Pstrak, Chairperson / S. Fayyaz, Scientific Secretary*
- 2.5. Waste Safety Standards Committee (two meetings); *P. Dicks, Chairperson / N. Aghajanyan, Scientific Secretary*
- 2.6. Nuclear Security Guidance Committee; *P. Lardiez Holgado, Chairperson / K. Kouts, Scientific Secretary*
- 2.7. Summary of the meetings of the Chairs held before the CSS meeting.

3. Approval of draft publications and DPPs (10:50 to 12:30)

NOTE: It is assumed, for the item 4.1 that the CSS will be provided with the result of the editorial review in the Publishing Section at the CSS meeting or soon after, for tacit approval through the web page.

- 3.1. Draft Safety Guide DS524 on Radiation Protection Aspects of Design for Nuclear Power Plants, *M. Gajdos*
- 3.2. Draft DPP DS547 for a Safety Guide on Regulatory Experience Feedback Management, *Z. H. Shah*
- 3.3. Draft DPP DS548 for a Safety Requirements on Predisposal Management of Radioactive Waste, revision of GSR Part 5, *G. Bruno*
- 3.4. Draft DPP DS549 for a Safety Guide on Control of Orphan Sources and Other Radioactive Material in the Metal Recycling and Production Industries, revision of SSG-17, *T. Hailu*
- 3.5. Draft DPP DS550 for a Safety Guide on Storage of Radioactive Waste, revision of WS-G-6.1, *A. Guskov*
- 3.6. Draft DPP DS551 for a Safety Guide on Decommissioning of Uranium Production Facilities, *Z.*

Fan

- 3.7. Endorsement by the CSS of the RASSC conclusion that RS-G-1.10 is superseded by existing safety guides; *O. Guzmán López-Ocón and RASSC Chair*

4. DPPs and draft nuclear security guidance for information

Nothing to report

5. Ensuring safety during an armed conflict (15:00 to 16:00) *S. Mallick*

- Progress on the analysis on maintaining safety and nuclear security during an armed conflict; *M. Nikolaki*
- Information on the preparation of a TECDOC on Challenges in the application of the IAEA safety standards and nuclear security guidance during an armed conflict; *J. Rovny*

6. Preparation of the long term plan for the IAEA safety standards; *CSS Working Group, Safety Standards Committees Chairpersons, CSS*

7. Information from ICRP, UNSCEAR and OECD/NEA

8. Preparation of the end of term report for the 7th CSS term, including recommendations for the 8th term; *D. Delattre, CSS*

9. Update on the new web page for the Committees and the Commission

10. AoB, Report of the meeting; Date of the next meetings:

- **CSS 55:** week from 27 to 31 May 2024
- **CSS 56:** week from 25 to 29 November 2024
- **CSS 57:** week from 19 to 23 May 2025
- **CSS 58:** week from 8 to 12 December 2025

ANNEX III

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

50th MEETING

50.01. The fully edited versions of the two endorsed draft Safety Guides — DS503 and DS515 — will be posted on the CSS webpage as soon as they are available. CSS members will be alerted by email for a two-week silence approval procedure with the objective of confirming the CSS endorsement of these drafts. **[Action: Secretariat, CSS members]. Done – both Safety Guides published**

51st MEETING

51.5. The fully edited versions of the thirteen endorsed draft Safety Guides — DS509a–h, DS511, DS517a–c and DS520 — to be posted on the CSS webpage as soon as they are available. CSS members to be alerted by email for a two-week silence approval procedure with the objective of confirming the CSS endorsement of these drafts. **[Action: Secretariat, CSS members]. Done – all 13 Safety Guides published**

52nd MEETING

52.3. The IAEA Office of Legal Affairs and MTCD will be consulted regarding the potential rewording of the copyright notice for NS publications. **[Action: Secretariat]. In progress – MTCD provided an update during Agenda item 2.7 of this meeting**

52.4. The fully edited versions of the five endorsed draft Safety Guides — DS470, DS499, DS500, DS521 and DS523 — will be posted on the CSS web page as soon as they are available. CSS members will be alerted by email for a two-week silence approval procedure with the objective of confirming the CSS endorsement of these drafts. **[Action: Secretariat, CSS members]. DS499, DS500 and DS521 published as GSG-17, GSG-18 and SSG-86, respectively; DS470 and DS523 being edited**

52.8. CSS members will provide further input on the concept paper for the preparation of the long term plan for the IAEA safety standards. **[Action: CSS members]. Done – Agenda item 8 of this meeting**

52.9. The Safety Standards Committee Chairs will discuss the concept paper for the preparation of the long term plan for the IAEA safety standards within their various Committees and provide feedback on the results. **[Action: Safety Standards Committees]. Done – Discussions held during the meetings of the Chairs**

53rd MEETING

53.2. The fully edited versions of the three endorsed draft Safety Guides — DS508, DS512 and DS522 — will be posted on the CSS web page 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]. In progress – drafts in editing**

53.3. A working group comprising several members of the CSS will be established to prepare the CSS contribution for the future development of the long term plan for the IAEA safety standards **[Action: CSS Chair, CSS Scientific Secretary]. WG established – first meeting on 14 September, second meeting on 28 November**

53.4. The Secretariat will report back to the CSS on internal discussions regarding the need to update the Board of Governors on changes to the safety standards establishment system since the issue of GOV/INF/772 **[Action: Secretariat]. BoG was regularly informed by GOV/INF documents when**

important changes were made (GOV/INF/2012/3 and GOV/INF/2015/9). A further update for information of the BoG will be included in the next NSR

53.5 The progress report on the working plan established to implement the recommendations of the Commission for its 7th term will be complemented to develop the end of term report, including proposed recommendations for the 8th term [Action: CSS Scientific Secretary]. **Done for the agenda item 8 of the 54th CSS meeting**

53.6. A draft list of actions from the 53rd CSS meeting (this list) will be provided to CSS members for comment [Action: Secretariat, CSS Scientific Secretary]. **Done, this list**

53.7. The draft report of the 53rd CSS meeting will be posted on the CSS web page for comment [Action: Secretariat, CSS Scientific Secretary]. **Done. Agenda item 1.5 of the 54th CSS meeting**

53.8. The presentations made at the 53rd CSS meeting will be posted on the CSS web page [Action: CSS Scientific Secretary]. **Done**

ANNEX IV

ACTIONS ARISING FROM THE 54th MEETING OF THE COMMISSION ON SAFETY STANDARDS

54.1. The final report of the 53rd CSS meeting will be uploaded on the CSS web page after incorporating a comment by a CSS member. **[Action: Secretariat, CSS Scientific Secretary]**

54.2. The Secretariat will develop and make available to the SSCs and CSS a tool to monitor the progress in the drafting, review and approval of safety standards. **[Action: Secretariat, CSS Scientific Secretary]**

54.3. The Secretariat will further consult with other IAEA departments about the possibility of amending the copyright statement for the IAEA publications to facilitate the use of safety standards by Member States. The Secretariat will provide an update at the next CSS meeting. **[Action: Secretariat, CSS Scientific Secretary]**

54.4. The fully edited version of the endorsed draft Safety Guide DS524 will be posted on the CSS web page as soon as it is available. CSS members will be alerted by email for a two-week silent approval procedure with the objective of confirming the CSS endorsement of this draft. **[Action: Secretariat, CSS members]**

54.5. The Secretariat will provide to the CSS members a detailed analysis on RS-G-1.10 to justify that RS-G-1.10 can be considered as superseded by other existing publications. **[Action: Secretariat]**

54.6. The CSS Working Group will continue its work on developing a proposal for establishing the long term structure and plan for the IAEA safety standards and will report on the progress at the next CSS meeting. **[Action: CSS Scientific Secretary, Chair and Members of the CSS Working Group]**

54.7. An update on the work undertaken by UNSCEAR on epidemiological studies of radiation and cancer will be presented at future CSS meetings. **[Action: CSS Scientific Secretary]**

54.8. The progress report on the working plan established to implement the recommendations of the Commission for its 7th term will be complemented to develop the end of term report, including proposed recommendations for the 8th term **[Action: CSS Scientific Secretary]**

54.9. A draft list of actions from the 54th CSS meeting (this list) will be provided to CSS members for comment. **[Action: Secretariat, CSS Scientific Secretary]**

54.10. The draft report of the 54th CSS meeting will be posted on the CSS web page for comment. **[Action: Secretariat, CSS Scientific Secretary]**

54.11. The presentations made at the 54th CSS meeting will be posted on the CSS web page. **[Action: CSS Scientific Secretary]**

54.12. A second draft end of term report will be prepared, taking into account the discussions at the 54th meeting of the CSS. The draft report will be posted for CSS comments by mid-February 2024, and finalized thereafter. **[Action: CSS Scientific Secretary, Secretariat, CSS, CSS Chair]**