06 November 2014

Commission on Safety Standards

Thirty-fifth Meeting

8-9 April 2014

IAEA Headquarters, Vienna

Report of the Meeting

Overview of main results of the meeting

A. The following draft Safety Standards were endorsed for publication:

- Safety Guide on Design of Electric Power Systems for NPPs, revision of NS-G-1.8 (DS430)
- Safety Guide on Instrumentation and Control Systems and Software Important to Safety for Research Reactors (DS436)
- Safety Guide on Construction for Nuclear Installations (DS441)
- Safety Guide on Radiation Safety for Consumer Products (DS458)
- Safety Guide on Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (2012 Edition) (DS461)

B. The following DPPs were approved:

- DPP for Safety Requirements on Safety of Research Reactors, revision of NS-R-4 (DS476)
- DPP for Safety Requirements on Safety of Nuclear Fuel Cycle Facilities, revision of NS-R-5 (DS478)
- DPP for a Safety Guide on Operating Experience Feedback for Nuclear Installations, revision of NS-G-2.11 (DS479)
- DPP for a Safety Guide on Design of the Reactor Coolant System and Associated Systems in Nuclear Power Plants, revision of NS-G-1.9 (DS481)
- DPP for a Safety Guide on Design of the Reactor Containment System for Nuclear Power Plants, revision of NS-G-1.10 (DS482)
- DPP for a Safety Guide on Severe Accident Management Programme for Nuclear Power Plants, revision of NS-G-2.15 (DS483)

C. The Commission welcomed the presentations of the end of term reports of the four Safety Standards Committees. The CSS welcomed their achievements and supported the recommendations made for the new term (on the safety-security interface, working methods with ad-hoc working groups, prioritization of the work on Safety Guides, joint sessions, feedback on the use of safety standards).

D. The Commission made recommendations for topics to be addressed at the Senior Regulators Meeting during the General Conference (linked with the conclusions from the CNS Review Meeting).

E. The Commission welcomed the progress report on the review and revision of safety standards in light of lessons learned from the Fukushima Daiichi accident and requested the CNS review meeting results be considered through the revision of the safety standards.

F. The Commission was satisfied with the information provided on DPPs and drafts of the Nuclear Security Series.

G. The Commission praised the recent development of an IAEA internal guidance for staff on how to address safety-security interfaces.

H. The Commission continued to support the development of an IT platform to further support the future review/revision/publication process of Safety Standards

1. Opening Session

1.1 Opening of the Meeting

Mr D. Flory, Deputy Director General of the Department of Nuclear Safety and Security, opened the 35th meeting of the Commission on Safety Standards and welcomed all members. He first thanked the Commission for its efforts in achieving wider interest in and use of the Safety Standards worldwide as we observe today. He considered that the work and achievements of the Commission are vitally important for continuous improvements in the Global Nuclear Safety and Security framework, which, in turn, supports international efforts aimed at ensuring high levels of safety in countries with mature nuclear programmes and in those considering or embarking on new nuclear energy programmes.

Mr Flory considered that the IAEA safety standards and their application, in particular the peer reviews and advisory services, at both national and international levels, are essential components that support the harmonized implementation of international instruments such as the Convention on Nuclear Safety and the Joint Convention, and the development of effective national safety infrastructures. Mr Flory noted that the Contracting Parties to the Convention on Nuclear Safety had concluded their 6th Review Meeting the previous week. Among matters arising during that meeting, the Contracting Parties had placed a request on the Secretariat to advance the IAEA safety standards with regard to reviewing and analysing the existing standards to develop requirements and technical criteria related to two safety objectives highlighted at the 2nd Extraordinary Meeting of the CNS, namely maintaining integrity of the containment and avoiding long term off-site contamination.

On the issue of the safety-security interface, Mr Flory noted that a first set of internal guidance for Technical Officers on how to address that interface had recently been developed, thanks to the contributions of an Ad Hoc Group composed of four NSGC members and the four Safety Standards Committees Chairs, and that this would be submitted to NSGC and the Safety Standards Committees for discussion at their meetings in June and July. Mr Flory highlighted a number of drafts on the agenda for which there are important safety-security interfaces, namely DS436 on I&C Systems and Software Important to Safety for Research Reactors (item 4.2), DS441 on Construction for Nuclear Installations (item 4.3) and NST013 on Radiological Crime Scene Management (item 5.3). Mr Flory also reported that the IAEA's internal auditing body had commenced a review of the so-called intermediate committee structure. He expected that the auditing body would continue to interview members of the five Committees, and maybe also the CSS during the forthcoming summer, with a view to making recommendations on further improving the effectiveness of this mechanism and identifying next steps to move towards the long-term vision.

As further important items on the agenda of this CSS meeting, Mr Flory highlighted the discussion of the progress report on the review of the IAEA Safety Standards in light of lessons learned from the Fukushima Daiichi accident, which would include the progress on the revision of the Safety Requirements and the review of the Safety Guides, including extension of the scope to standards covering research reactors and fuel cycle facilities. He also looked forward to the progress report on the development of the future IT platform for the feedback mechanism and the review/revision/publication of safety and security publications. He indicated his strong support for this project and noted that excellent feedback had been received from staff of the Department of Nuclear Safety and Security.

Mr Flory reported that, following discussions at RASSC in 2012 and 2013, the IAEA was finalizing a TECDOC addressing issues identified by international organizations on radioactive contamination of food and drinking water for existing post-emergency exposure situations. This TECDOC would provide information on factors that should be considered, with a focus on the methodology for developing the operational levels or standards at national levels.

He also reported that, in November 2013, the Department of Nuclear Safety and Security and the Department of Nuclear Energy had jointly developed an integrated peer review service for facilities and activities pertaining to radioactive waste management, management of spent nuclear fuel, assessment of radiological impacts to people and the environment, management of residues arising from uranium production, and decommissioning and remediation of sites contaminated by radioactive

materials. This new service, known as ARTEMIS, would address both regulatory issues and implementation by the operator, and would ensure that IAEA reviews offered in this area are better structured and delivered in a more consistent manner.

Finally, Mr Flory informed the Commission that, in the margins of the next IAEA General Conference in September 2014, the Scientific Forum titled "Radioactive Waste: Meeting the challenge" would address both technology and safety aspects of radioactive waste management. The Scientific Forum would aim at showing that the safe and sustainable management of radioactive waste is an essential element of the peaceful use of nuclear technologies and would present the status of management solutions for all types of radioactive waste technologies and demonstrate that technology and scientific understandings are backbones of solutions consistent with IAEA safety standards. Finally, the Scientific Forum would be a platform to discuss how available technological solutions meet current challenges of management of radioactive waste and spent nuclear fuel.

Mr Flory concluded by wishing all participants a very productive session.

Mr A. Gonzalez emphasized the importance of the outcome of the recent CNS Review Meeting, as reported by Mr Flory. He also raised the issue of quantitative criteria for post-emergency situations and the related TECDOC. He considered that this was an item which needed to be addressed as a priority. Rather than simply food and water, consumer products in general needed to be addressed, as different items play different roles in different countries. For both of these items, he requested that time be allowed for their discussion during this meeting, and that copies of the relevant documents be distributed to the Commission members.

Ms D. Drabova indicated that the outcome of the CNS Review Meeting would be discussed under agenda item 3 and that the Summary Report from the CNS Review Meeting would be distributed.

Mr M. Markovits referred to the Nuclear Security Summit that had taken place recently in The Hague; he understood that issues relating to the safety-security interface had been discussed at the Summit. Mr Flory reported that indeed the final communique from the Summit had included a discussion of the safety-security interface. This communique strengthened the work of the IAEA on nuclear security, nuclear safety and their interface.

1.2 Introductions, Adoption of the Agenda, Approval of the 34th CSS meeting report

Ms Drabova, Chair of the Commission, welcomed all participants, in particular the new members and observers of the Commission, namely Mr A. Hall from the UK (today represented by Mr M. Bassett), Mr Mohd Ali from Malaysia (who unfortunately was not able to attend this meeting), Mr M. Garribba from the European Commission and the new Chair of TRANSSC, Mr P. Hinrichsen. Unfortunately there were rather many absences and apologies sent for this meeting and Ms Drabova expressed her concern and understanding regarding the number of international meetings that the distinguished representatives on the Commission may be requested to participate in. A list of all participants is provided in Annex I.

Ms Drabova indicated that towards the end of this CSS meeting she would call for volunteers to provide presentations on the use of IAEA safety standards in their countries. In particular, she proposed that information on the management of the safety-security interface could be included in such presentations in the future.

The provisional agenda was approved and is provided in Annex II.

Ms Drabova informed the Commission that the draft report of the 34th CSS meeting had been made available. Comments had been received from Argentina and these had been accommodated to the extent possible.

Mr Gonzalez requested that his comments relating to the use of 'containment' and 'containment system' (reported under agenda item 2.1 of the report of the 34th CSS meeting) be clarified. This was of concern because of the ongoing use of the current, incorrect definition of 'containment', for example by delegations during discussions at the recent CNS Review Meeting. He queried when a revised Glossary would be available, and in the meantime suggested that the comment made by Mr

Delattre relating to the revised definition be removed from the meeting report, for clarification, as this revised definition was not yet available. Mr Delattre reported that a new version of the Glossary would be made available early in 2015. Ms Drabova agreed that it was essential that participants of international meetings have the same understanding of the term 'containment'.

The report of the 34th CSS meeting was approved, subject to these comments, and would be uploaded to the CSS website [Annex III, Action 35.01].

Mr M. Weber requested that the list of participants distributed at the beginning of each meeting specifies the official members and the alternates [Annex III, Action 35.02].

1.3 Administrative arrangements for the meeting, status of the main topics for the 5th CSS term, status of endorsed standards, response to remaining actions from the 32nd and 33rd meetings and to actions from the 34th Meeting

Mr D. Delattre informed the Commission of administrative arrangements for the meeting. He noted that all material had been made available more than two months in advance of the meeting for effective review by the Commission. Estimating the time necessary for each item, he expected that it might be possible to complete the CSS meeting by the following evening.

Mr Delattre presented the status of the main topics for the 4th CSS term and the 5th CSS term (see Annexes IV and V) and the status of the roadmap for the long term structure of the General Safety Requirements and the Specific Safety Requirements.

Mr Delattre also presented the status of the endorsed safety standards. He informed the Commission that two safety standards had been published so far in 2014 and provided details on eleven further safety standards, endorsed by the Commission, that were being published. Lists of currently valid, published standards, projects and draft standards under preparation/revision and drafts of the Nuclear Security Series that are interface documents are included as Annexes VI, VII and VIII respectively'.[1]

Mr Delattre also provided information on the response to the remaining actions from the 32nd CSS and 33rd CSS meeting, and to the actions from the 34th meeting (see Annex IX).

Mr Delattre's presentation is available on the CSS web site.

Mr P. Webster requested for future meetings, to ease understanding, that the general introductory presentation on the status of safety standards and on the status report on CSS priorities should be made available in advance of the meeting [Annex III, Action 35.03].

Mr Gonzalez made several points on Mr Delattre's presentation:

- In relation to topic 8 of the priorities for the 4th CSS term, he noted that not only uranium mining activities, but mainly coal mining activities were of importance for exposure to natural sources of radiation.
- In relation to topic 9 of the priorities for the 4th CSS term, he noted that more than nuclear medicine needed to be considered, such as also diagnostic medicine. On these two items, Mr Delattre explained that the text used in his presentation was the one established by the CSS at the beginning of its fourth term in 2008 but agreed that these could have been more precise.
- In relation to topic 5 of the priorities for the 5th CSS term, he noted that the draft DS399 would probably be co-sponsored by the International Labour Office. As a good practice, he considered that also the ILO could submit this Guide to the contact points in its Member States for comment, so as to reach all stakeholders.
- He applauded the access provided to the standards in all languages, and reiterated his concern that text in some languages (particularly Arabic) could not be copied.

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

- He felt that the time may be right now to move towards a common safety and security glossary, and in the future to develop a common safety, security and safeguards glossary.
- He highlighted the issue of the urgent need for certain standards, particular standards covering consumer products.

Mr I. Lund requested that it be clarified whether drafts DS472 and DS473 would be merged at this time. Mr Delattre expected that it would only be discussed following drafting whether these could readily be merged.

Mr K. Kamitani urged the Secretariat to investigate how it the publication of draft standards endorsed by the Commission could be expedited [Action 35.4, Annex III]. In particular, Japan looked forward to the issue of DS367, on Safety Classification of Structures, Systems and Components for Nuclear Power Plants.

Furthermore, Mr Kamitani recommended that, to ease understanding of changes to the text of standards, in addition to a table of resolution of comments, in their presentations to Safety Standards Committees Technical Officers should use a text file containing tracked changes.

Towards the end of his presentation, Mr Delattre set out three possible topics for the Senior Regulators' Meeting, to be held during the IAEA General Conference in September 2014:

- A historical perspective of the Senior Regulators' Meeting (as this would be its 30th meeting)
- Defence in depth, from a regulatory perspective
- Physical protection regulatory requirements and IAEA support for their implementation

Ms Drabova considered that the topic of defence in depth was of great importance and very timely for inclusion in the Senior Regulators' Meeting.

Mr Gonzalez suggested that the main issues raised in the recent CNS Review Meeting should be addressed, namely maintaining the integrity of the containment and the avoidance of large off-site contamination. Mr Webster recalled that the CNS Review Meeting had called for a diplomatic conference to be held on these matters. Mr Gonzalez considered that the Senior Regulators' Meeting could be a good opportunity to begin initial preparations for this conference. Mr Flory noted that the IAEA would only provide the framework for such a conference, but that the substantive discussion would be the work of the Contracting Parties to the CNS.

Mr W. Travers considered that the safety standards could usefully be addressed at the Senior Regulators' Meeting, and that this could perhaps fit well under the historical topic proposed for the meeting.

Mr Y.-H. Kim proposed that the issue of counterfeit, fraudulent and suspect items (known as CFSI) be included as a topic for the Senior Regulators' Meeting.

2. End of Term Reports from the Safety Standards Committees meetings and information on the meetings of the Nuclear Security Guidance Committee

2.1 Nuclear Safety Standards Committee (NUSSC)

Mr F. Feron, NUSSC Chair, reported that no NUSSC meeting had been held since the last CSS meeting, but that a Working Group meeting had been held to allow discussion between NUSSC members and IAEA staff on the current draft of DS462, following Member States consultation. Mr Feron also provided some detail on the content of the NUSSC 6th three-year report, which would cover learning from the Fukushima Daiichi accident, implementing the long-term structure of the standards, enhancing synergy between safety and security, NUSSC working methods and conclusions and recommendations for the next term.

Mr Feron's presentation is available on the CSS website.

Ms Drabova thanked Mr Feron and NUSSC as a whole for the enormous amount of work they had conducted following the Fukushima Daiichi accident.

Mr Kim proposed that the issue of CFSI could be addressed in the standards. Mr Feron considered that this issue might usefully be covered in the new Safety Guide on operating experience feedback. Mr Delattre also reported that the Department of Nuclear Energy was working on this issue. Mr Travers also noted that guidance in the standards in general had as a basic assumption the notion that efforts would always be made to achieve best practice and high quality. In contrast, the problem of CFSI was one in which other techniques would be needed, such as certain investigative methods to elicit indications of such deliberate circumvention of nuclear safety.

Mr Lund and Mr L. Reiman also thanked Mr Feron for NUSSC's hard work and praised the plan for future activities, such as the need for guidance on design extension conditions and on defence in depth, the need for a joint safety-security glossary and input from industry. Mr Reiman considered that monitoring of the workload of the Committees was very important, as was the management of the safety-security interface. He also queried what method would be used to revise the Safety Guides in the light of the Fukushima Daiichi accident. Mr Feron responded that so far around 40 Safety Guides had been identified that could warrant review and revision, which would take at least four years given the current productivity. The Secretariat was currently developing a process for taking a thematic approach, but it was still unclear whether this would ultimately be more efficient.

Mr Gonzalez requested that the report from the ICRP containing 18 recommendations following the Fukushima Daiichi accident be taken into account in the standards. Ms Drabova noted the plethora of reports covering the Fukushima Daiichi accident, but hoped that the IAEA Fukushima report, expected at the end of 2014, would provide a way of a prioritizing the work, and would be a useful tool for the Committees as input into their work and in benchmarking. Mr Gonzalez considered that, as three years have already passed since the accident, some important lessons that are already known need to be incorporated into the standards as a matter of urgency.

In relation to the issue of interfaces, Mr Gonzalez noted that a distinction needed to be drawn between what are standards (the work of the IAEA) and what are norms (produced by the so-called 'standards' organizations, but which are called norms in most European languages). The interface of the IAEA with INSAG needed to be clarified; there was sometimes confusion about what an INSAG document is and what a standard is. He considered that the role of INSAG was not to produce standards, but to provide general advice to the Director General. Mr Flory indicated that the IAEA Secretariat had a good working relationship with the Chair of INSAG, and indeed the Chair of CSS was an observer on INSAG, and so the IAEA could indeed suggest to INSAG some proposals for timelines and the structuring of the respective work.

Mr Weber considered that probably many of the insights of NUSSC (such as issues of workload, the relationship between standards and INSAG documents, the role of normative organizations) would also be relevant for the other Committees, and requested that the report to this 35th CSS meeting highlight the common items to be covered by the end of term reports of the Committees (See M. Delattre summary in 2.6) [Action 35.8, Annex III].

2.2 Waste Safety Standards Committee (WASSC)

Mr G. Williams, WASSC Chair, provided a presentation on the 36th WASSC meeting, which had been held in part together with RASSC. Mr Williams also covered the content of the WASSC three-year report, in particular recommendations for the next (seventh) term of WASSC.

WASSC 36 had approved four DPPs (DS476, DS478, DS479 and DS483), one draft Safety Guide for submission to Member States for comment (DS453) and two draft Safety Guides for submission to the CSS (DS441 and DS458). Information had been provided to WASSC on several drafts that were currently under development. Two draft Nuclear Security Series Implementing Guides (NST022 and NST048) were also cleared by WASSC. At the joint RASSC-WASSC session, the Russian Federation had made a proposal for the development of new standards as a contribution to the Nuclear Safety Action plan on the following topics:

- development of criteria for decision-making during transboundary transportation of people,

freight and vehicles with surface radioactive contamination in case of a large-scale accident;

- management of radioactive waste generated during decontamination of people and decontamination and disposal of freight and vehicles arriving from states affected in case of a large-scale accident;
- radiation protection of the public in case of an accident at a non-radioactive facility leading to radioactive contamination of an area, including criteria for decontamination of the territory of a populated area, residential and social buildings, and child welfare institutions;
- regulatory control of use of examination equipment which may cause irradiation of people.

Currently, one of these four points was already being addressed in the development of a TECDOC providing information for the management of large amounts of radioactive waste arising from nuclear or radiological incidents, including planning and licensing issues.

Mr Williams' presentation is available on the CSS website.

Mr Gonzalez expressed his concern about the continued development of separate safety standards (e.g. DS419 and DS420) and nuclear security guidance (e.g. NST048) for radioactive material, even with text included on interfaces. This would cause confusion in Member States and should not be perpetuated – joint guides covering safety and security were clearly needed.

Mr Gonzalez also expressed his concern at the delay in the issue of guidance on radiological environmental impact assessment (DS427). Furthermore, the focus should not be on the assessment, but rather on the control and minimization of radiological impact on the environment. He also expressed his support for the proposal of the Russian Federation, which had raised important issues that need to be dealt with urgently. Mr Williams also hoped that DS427 would now move forwards quickly as the draft was already far advanced. Ms Siraky (WASSC Coordinator) clarified that, however, WASSC would be asked to review the three drafts DS427, DS432 and DS442 at the same time, as they all deal with environmental matters. For this reason it may be that DS427 would be held back until the other two drafts were more advanced. Mr Gonzalez stressed again the urgent need for such guidance.

Mr Webster recalled that DS427 had already been in preparation for seven years, and so it had been proposed that the scope be reduced, to enable it to be developed further. Mr Williams noted that the elements relating to potential exposures had been under discussion, and RASSC and WASSC had in fact instructed the Technical Officer to retain that topic in the text.

Mr Kim indicated the need in Korea for reference standards on the issue of transport and storage of spent nuclear fuel. Mr Williams replied that SSG-15 covering the storage of spent nuclear fuel had been issued in 2012 and this would be reviewed in the light of feedback from the Fukushima Daiichi accident, to determine if revision is necessary. Mr Delattre added that the Transport Regulations cover the transport of spent nuclear fuel.

Mr Webster queried whether a final decision had been taken on whether DS460 would or would not include guidance for operators. Mr Williams and Mr Delattre clarified that DS460 would include guidance on communication by the operator as required by the regulatory body, but not communication by the operator in general, including for promotional purposes.

Mr Gonzalez queried whether two new documents on transboundary issues and on management of large amounts of waste, could now be expected to be developed following the proposal by the Russian Federation. Mr Williams informed CSS that the Safety Standards applied for the radioactive waste management after an incident are the same as for RW resulting from normal operation. The problems that arise after an incident are related to the scale of the problem, the anticipation of the operational measures and the timelines of regulatory measures to be taken. The TECDOC under development in the Waste and Environmental Safety Section covers these aspects of the application of the Safety Standards to such circumstances. In addition, Mr Delattre reported it had been agreed that the Secretariat would conduct a gap analysis to determine whether additional guidance was necessary, and that the outcome of this analysis would be discussed at the next meetings of the Safety Standards

Committees [Action 35.7, Annex III].

2.3 Radiation Safety Standards Committee (RASSC)

Mr G. Massera, RASSC Chair, provided a presentation on the work carried out during the sixth term of RASSC. He reported on the review and approval of safety standards, conclusions relating to the application of safety standards, the conduct of workshops on the Basic Safety Standards, issues identified by the RASSC working group on foodstuffs and drinking water, the key issues addressed by present term of RASSC, and future challenges for RASSC.

Mr Massera's presentation is available on the CSS website.

In response to a query by Mr Gonzalez, Mr Delattre clarified that, as a key difference from the interim edition of GSR Part 3, the logos of the cosponsoring international organizations would appear on the cover the final version of GSR Part 3.

Mr Gonzalez also noted that a common understanding was urgently needed to be established for key terms such as commodities and consumer products. Associated with this was that in translation sometimes no distinction was drawn between the two terms. Ms Drabova expressed her agreement with Mr Gonzalez's concerns, while Mr Delattre noted that, in addition to having a clear definition of terms, the scope of each standard needed to be properly understood. Mr Gonzalez also considered that titles needed to be sufficiently precise to enable a reader to determine what was actually contained in each standard. Mr Pinak considered that, firstly, appropriate terms should be established in English, and, subsequently, explanations must be provided if there is a potential for confusion in translation into other languages. In response to this, Mr Gonzalez advised the Secretariat to use terms that are both correct and easily translatable.

2.4 Transport Safety Standards Committee (TRANSSC)

Mr E.W. Brach, former Chair of TRANSSC, provided an overview of the 27th TRANSSC meeting. He reported on the two parts of the meeting: the three technical transport working groups (one of which had addressed the transport of spent nuclear fuel); and the core/business meeting. In particular, TRANSSC had concluded that a revision of the 2012 edition of the Transport Regulations was not warranted at this time. He also set out plans for the forthcoming 28th TRANSSC meeting, which would include a special induction for new TRANSSC members. He provided a detailed overview of the report on the TRANSSC three-year report, including accomplishments and future challenges.

Mr Brach's presentation is available on the CSS website.

Mr Weber asked whether other Committees had looked at TRANSSC's Work Plan, and its system for prioritizing tasks, as a possible model for their own working methods. Mr Brach was not aware of them doing so, but thought it could be a useful tool if they wanted to consider it, and was happy to provide further information.

Mr Gonzalez considered that transport offered an example for the other areas of safety: the transport standards were used universally because they worked. Since some States used the standards directly, it was important that they were printed and translated promptly when they were updated, and he was therefore concerned about the delay in publishing the Safety Guide supporting the latest version of the Transport Regulations. He welcomed the work with the UN Orange Book Subcommittee of Experts, and suggested that even closer cooperation (e.g. co-sponsorship of the Transport Regulations) might further help coordination with the modal regulations. Mr Brach commented that IMO and ICAO were also part of the process, and agreed that closer cooperation could be helpful.

Mr Travers asked whether TRANSSC's system of 'automatically' approving documents from other Committees on which there were no TRANSSC or transport-related comments might be adopted by other Committees. Mr Brach responded that it worked for TRANSSC but other Committees would decide for themselves. Mr Delattre added that a similar approach had been tried occasionally for CSS when the agenda was heavy.

2.5 Information on the third and fourth meetings of the Nuclear Security Guidance Committee (NSGC)

Mr G. Emi Reynolds, NSGC Chair, provided information on the 4th NSGC meeting. Four final drafts of Nuclear Security Series publications had been approved, while two DPPs had been approved to update existing Implementing Guides. In relation to interface documents, DS441 and DS436 had been cleared for submission to the CSS, while DS419 and DS420 had been cleared for submission to Member States for comment. In addition, the NSGC members from France, Hungary, the UK and the USA had volunteered to be members of the Ad Hoc Group to review guidance for drafters on interfaces. A large part of the NSGC work had covered the 'roadmap' for the Nuclear Security Series. For this a 'small group' had met in January 2014 and had clarified many details, and the revised roadmap would be presented at the next NSGC meeting. As a further important point, the DPPs on computer security had not been approved. These DPPs would be modified to specify that the focus is on the role of computer security in nuclear security, not computer security generally, and these would then be submitted to the next NSGC meeting for approval.

Mr Gonzalez expressed his appreciation for the efforts to bridge safety and security, and acknowledged that some of the difficulties experienced continued to reflect problems within Member States. He considered the question of terminology to be vital to further harmonization. A combined safety and security glossary would be preferable, but at least there should be agreement not to use the same terms with different meanings in the two areas, and the glossaries that exist should provide information on the relationship between safety and security terms, particular where there could be confusion. Mr Emi Reynolds agreed that a common glossary could be a longer term objective, but NSGC needed more time to get a stable set of terms and definitions for the Nuclear Security Series before attempting to combine [Action 35.5, Annex III].

2.6 Summary of the Meeting of the Chairs held on 4 November before the CSS meeting

Mr Delattre provided a summary of the meeting of the five Chairs of the SSCs and NSGC, and presented an overview of the various conclusions reached:

- An induction session will be organized at the next meetings of the renewed Committees to introduce SPESS and the use of the web sites
- The presentation to the CSS of the end of term reports was discussed. In this regard, Mr Delattre noted that there are common items from the four end of term reports (safety-security interface, working method with ad-hoc working groups, prioritization of the work on safety guides, joint sessions, feedback on the use of safety standards)
- The proposal for revision of SPESS A and B were also discussed. This includes the need to insert the revised TOR of the Committees and to include reference to the future IT platform
- The recently issued SPESS C guidance on safety/security interfaces was also presented and discussed
- The progress on the IT platform (see item 6.2) was also briefly presented to the Chairs
- The coordination on the review-revision of safety standards in light of the Fukushima accident was addressed
- The Russian Federation proposal on safety standards was discussed. It had been agreed that the Coordinators would discuss this further and provide a response from the Secretariat to the proposal.
- Information on the OIOS review of the intermediate Committee Structure was provided. The Chairs of all Committees except TRANSSC had been interviewed by OIOS in the margins of the meeting to obtain some initial views.
- The Chairs had agreed to support the application from the Tantalum-Niobium International Study Center for observer status at TRANSSC.

3. Review/revision of IAEA Safety Standards in light of the TEPCO's Fukushima Daiichi NPPs accident

3.1 Information on the implementation of the Nuclear Safety Action Plan

Mr Caruso provided an update on the implementation of the Nuclear Safety Action Plan. He summarized some key facts and provided information relating to the assessment of safety vulnerability of NPPs, strengthening of IAEA peer reviews, strengthening emergency preparedness and response, strengthening the effectiveness of national regulatory bodies, strengthening the effectiveness of operating organizations, protection of people and the environment, and capacity building. He provided a summary of the conclusions of the International Expert Meetings on Radiation Protection after the Fukushima Daiichi Nuclear Power Plant Accident, held in February 2014, and on Severe Accident Management in the Light of the Accident at the Fukushima Daiichi Nuclear Power Plant, held in March 2014. He provided an outline of the working procedures for the development of the IAEA Fukushima Report and of the content of its five chapters. It was expected that the report would be submitted to the IAEA Board of Governors in March 2015 and launched at the IAEA General Conference in September 2015.

Mr Massera asked for clarification of Mr Caruso's reference to arrangements for termination of an emergency, and whether these were specific actions to be taken. Ms Buglova explained that the revision of GS-R-2 had expanded upon the description of and criteria for the termination of an emergency, and that a Safety Guide was also proposed to address specifically the actions to apply the requirements and recommendations for transition from an emergency situation to an existing or planned exposure situation.

Mr Gonzalez felt that the need for international harmonization of numerical criteria for movement of goods from and to the area of an emergency had been recognized for some time, and was not just a lesson learned from the Fukushima Daiichi accident. Some of these concerns were being addressed in EPR reports, but the criteria needed to have the status of safety standards.

Ms Drabova noted that perfect harmonization might not be possible, but agreed that improvement still needed to be pursued.

3.2 Progress report on DS462 and on the concomitant revision of GS-R-2 on Emergency Preparedness and Response (DS457) and of GS-R-3 on Leadership and Management System for Safety (DS456)

Mr Delattre, Ms Buglova and Ms Ranguelova provided a combined progress report on DS462 (revision of GSR Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4), DS457 (revision of GS-R-2) and DS456 (revision of GS-R-3). All three of these drafts had returned from the stage of soliciting Member State comments.

It appeared, from the comments provided, that the draft DS462 was close to a consensus. For this reason a cautious approach had been taken, to avoid departing from the consensus. DS462 would be submitted to the Committees in the summer for approval and to the CSS for endorsement in November 2014. Final approval by the Board of Governors was expected in March 2015.

For DS456, many Member States comments had been received and a consultancy meeting had been held in February 2014 to resolve these. Technical editorial review was ongoing. It was hoped also to submit DS456 along with DS462 for the next steps.

For DS457, again many Member States comments had been received, although most of these had been editorial. The resolution of comments had taken place in December 2013 to January 2014, with internal review in the IAEA and review by relevant international organizations within the IACRNE framework in February and March 2014. The review by the technical editor was expected to be complete in April 2014, to enable its submission to the Committees in summer and to the Commission in November 2014.

Mr Massera questioned the fact that many statements in the revision of NS-R-3 have been changed from “should” to “shall” statements. Mr Delattre clarified that these were indeed statements agreed to be as requirements, but wrongly expressed at the time as should statement. They were therefore carefully re-examined and now proposed as shall statement. This proposal was submitted to the Committees and the member states.

Mr Gonzalez noted that some of the material published in the latest publication of the EPR Series need to be part of the safety standards and Ms. Buglova answered that the latest published concepts are already part of the draft GSR Part 7 (DS457).

3.3 Progress report on subsequent revision of the other Specific Safety Requirements (NS-R-4 and NS-R-5)

4.6 Draft DPP for Safety Requirements on Safety of Research Reactors, revision of NS-R-4 (DS476)

4.7 Draft DPP for Safety Requirements on Safety of Nuclear Fuel Cycle Facilities, revision of NS-R-5 (DS478)

Ms Drabova suggested addressing together these items so as to save time and avoid the repetition of presentations.

Mr Shokr provided a progress report on the revision of these two Specific Safety Requirements, on Safety of Research Reactors (which would be published as SSR-3) and on Safety of Nuclear Fuel Cycle Facilities (which would be published as SSR-4). At the same time, he also presented draft DPP DS476 (agenda item 4.6) and draft DPP DS478 (agenda item 4.7). The three presentations are available on the CSS website.

Mr Shokr noted that the revisions of these two Specific Safety Requirements were initiated by the long-term structure of safety standards approved in 2008, the need to ensure consistency with other standards, the need to incorporate experience from Member States on application of the current versions of these standards, and the need to incorporate relevant feedback from the Fukushima Daiichi accident. It was intended now to extend the scope of NS-R-4 to cover also sub-critical assemblies, while the scope of NS-R-5 would remain unchanged. For both Specific Safety Requirements the interface between safety and security would be addressed. It was anticipated that an initial draft of both Specific Safety Requirements could be submitted to the Committees at the end of 2014.

For the draft DPP DS476, comments had been received from Israel, Korea and Pakistan, which related mainly to the scope of the requirements, and Mr Shokr clarified how these comments had been resolved.

Mr Kim indicated his agreement with the resolution of the comments. In response to a query by Mr Webster, Mr Shokr clarified that the concept of design extension conditions would be used in DS476, in accordance with the agreed IAEA definition.

Mr Feron reported on NUSSC’s comments on the DPP for DS476: requirements already established in NS-R-3 should not be repeated, only referred to; NS-R-4 should be examined to determine if some of the current requirements would be more appropriate as guidance, or indeed are already included in related Safety Guides; and where there is no technology specific issue, the requirements for design and operation of power plants should be used to the extent possible. He requested that these items be included in the DPP, so that these requests are not lost.

Mr Gonzalez indicated that Argentina wished to be actively involved in the development of both draft Specific Safety Requirements for two reasons: Argentina is one of the major exporters of research reactors; and in facilities in Argentina the natural uranium cycle is to be found, and many of the challenges there are quite different from those of the enriched uranium cycle. He also considered that the issue of whether requirements for power reactors and research reactors are compatible had been discussed during the recent CNS Review Meeting, and there it had been made very clear that the problems are quite different, and therefore the same requirements and obligations could not apply.

Argentina was convinced that a specific effort, separate from that of power reactors, was necessary for the development of specific requirements for research reactors, rather than generic requirements which would of course apply to all reactors. Mr Shokr reported that an Argentinian consultant was already involved in the development of DS476, and thanked Mr Gonzalez for Argentina's offer to participate in the development of DS478.

Mr Kamitani queried whether the difference between a sub-critical assembly and a research reactor would be clarified. Mr Shokr noted that most requirements were similar, other than those for fuel handling, core management, radiation protection, and in some cases emergency preparedness, and that furthermore the draft would provide for application of a graded approach. Currently preparation of a TECDOC on sub-critical assemblies was underway, but development of a Safety Guide on this topic was not yet envisaged.

With these comments, the Commission approved the DPP DS476.

For the draft DPP DS478, one comment had been received from Korea, and Mr Shokr clarified the resolution of this comment.

Mr Williams noted that the range of facilities covered by NS-R-5 (and thus also DS478) was very wide. He considered that particularly useful information was currently contained in the appendices of NS-R-5 for such different facilities. Mr Shokr explained that it was considered that much of the material in the appendices of NS-R-5 was either repetitive, or would be more appropriate as guidance. An analysis had been conducted to determine how the requirements currently in appendices could be merged, without loss of any material.

Mr Srivasista queried whether plutonium fabrication would be covered in DS478. Mr Carr, the Technical Officer for DS478, clarified that MOX fuel fabrication processes would be covered in DS478 and that the inclusion of other processes would depend on the needs and requests of Member States during the drafting.

Mr Gonzalez suggested that requirements for enriched uranium fuel and for natural uranium fuel be presented separately in the text, as the problems are quite different; he recalled that following the Fukushima Daiichi accident there had been much confusion on this issue and considered that there is a need to clarify the distinction.

With these comments, the Commission approved the DPP DS478.

3.4 Progress report on the review of Safety Guides

Mr Delattre provided a progress report on the review of Safety Guides in the light of lessons learned from the Fukushima Daiichi accident. He listed Safety Guides in nine different areas (regulatory framework, management system, safety assessment, emergency preparedness and response, radiation protection, design, operation, site evaluation, and decommissioning and radioactive waste management) that had been reviewed. In some cases a new DPP for a revision had already been prepared and was undergoing the review and approval process. Revisions would take into account lessons learned from the Fukushima Daiichi accident, but also would provide recommendations on how to implement the revised Specific Safety Requirements SSR-2/1 and SSR-2/2. Furthermore, a need for additional guidance had been identified in several areas. Safety Requirements and Safety Guides for other facilities and activities had also been identified for review and possible revision.

Mr Delattre's presentation is available on the CSS website.

Mr Williams clarified that the review of SSG-15, the Safety Guide on storage of spent nuclear fuel, would soon be commenced, and it was anticipated that it might undergo revision by addendum.

In relation to the need for additional guidance identified, Mr Reiman emphasized the importance of independence of safety systems acting at different levels of defence in depth, and that guidance on subsystems of a safety system was also necessary. For design extension conditions, he considered that an approach involving system-specific Safety Guides might be too complex, as circumstances comprising design extension conditions can be initiated by internal or by external hazards. He considered a separate Safety Guide on design extension conditions might be more appropriate. Mr

Yllera, a Technical Officer in the area of safety assessment, noted that it was clear that in certain system-specific Safety Guides it would be necessary to describe design extension conditions. The TECDOC currently under development would address more general issues such as the interpretation of the concept of practical elimination, the high variability of the heat sink and reinforcement of the independence of the levels of defence in depth. Later, when more consensus and better understanding had been achieved, a Safety Guide addressing these topics was envisaged.

3.5 Future activities

Mr Gonzalez conveyed a proposal from Argentina, which, he considered, underpins all activities of the Commission. He noted that in its December 2013 report to the UN General Assembly, UNSCEAR had clarified that at low radiation doses (typical of natural background radiation), radiation effects are not discernable and therefore they are not attributable. This statement had also been reinforced on the occasion of the release of UNSCEAR's report on the Fukushima Daiichi accident the previous week. Mr Gonzalez therefore proposed that RASSC prepare a policy statement on this issue and its possible implications for the safety standards [Action 35.9, Annex III].

Mr Massera confirmed that RASSC could consider any such request at its next meeting in June 2014, but expressed his concerns relating to how the non-attributability of effects would relate to the potential for legal action, as in practice the IAEA's technical work is used as a basis for making legal decisions. In response, Mr Gonzalez distinguished between the *attributability* of actions to causes, and the *imputability* of actions to people; the first has a scientific basis, the second may provide a basis for legal action and so should be outside the technical discussions of the Committees and the Commission, with such deliberations left to lawyers.

Ms Drabova supported the proposal from Argentina. Speaking on behalf of Australia, Mr Williams also supported the proposal, and referred RASSC to the summary by Mr Larsson of the International Experts' Meeting on Decommissioning and Remediation after a Nuclear Accident.

4. Approval of draft publications and DPPs

4.1 Draft Safety Guide on Design of Electric Power Systems for NPPs, revision of NS-G-1.8 (DS430)

Mr Duchac presented the draft Safety Guide for endorsement. He set out the background and scope of the draft Safety Guide. One comment had been received from India relating to a recommendation on the use of a standby AC power source as an alternate AC source, and Mr Duchac indicated how it was proposed that this comment would be resolved. Mr Duchac's presentation is available on the CSS website.

Mr Gonzalez noted that DS430 clarifies that the off-site power supply is not seismically qualified and the transmission system is not part of the safety classification system of the plant. This was the case in the Fukushima Daiichi plant, for example, and so following the recommendations of this Safety Guide would not have prevented the loss of off-site power that occurred at Fukushima. Mr Duchac agreed that this was the case, as the nearest off-site electrical substation may be a great distance from the plant, and indeed the question does arise as to whether such substations should also be seismically qualified or safety classified. This presently not being the case, design basis accidents with loss of off-site power must be postulated and the systems in the plant must be able to cope with this. Mr Hughes noted that in the case of the Fukushima Daiichi accident, even if off-site power had not been lost owing to the earthquake, it is likely that the flooding of the AC and DC power systems in the plant would have led to the same outcome.

The Commission endorsed the draft for publication.

4.2 Draft Safety Guide on Instrumentation and Control Systems and Software Important to Safety for Research Reactors (DS436)

Mr Hargitai presented the draft Safety Guide for endorsement. He indicated the objective of the draft and outlined its development process so far. Comments had been received from Korea and Mr

Hargitai indicated how these comments had been dealt with. Mr Hargitai's presentation is available on the CSS website.

The Commission endorsed the draft for publication.

Mr Delattre reported that there is a new proposal to prepare a draft Implementing Guide in the Nuclear Security Series containing nuclear security guidance for I&C systems for nuclear power plants.

4.3 Draft Safety Guide on Construction for Nuclear Installations (DS441)

Mr F. Jiang presented the draft Safety Guide for endorsement. He set out the background to the development of the Safety Guide and its objective. Comments had been received from Israel and Korea and Mr Jiang indicated how it was proposed that these comments be resolved. Mr Jiang's presentation is available on the CSS website.

Mr Kim queried the resolution of Korea's comment relating to establishment of a legal basis and acceptance criteria for regulatory oversight. Mr Jiang responded that it was considered that it would be more appropriate to provide such a recommendation instead in a Safety Guide specifically covering the functions of the regulatory body.

Speaking on behalf of Australia, Mr Williams expressed his support for the draft and in particular praised the new recommendations relating to co-location of new nuclear facilities on sites with existing facilities.

The Commission endorsed the draft for publication.

4.4 Draft Safety Guide on Radiation Safety for Consumer Products (DS458)

Mr Gusev presented the draft Safety Guide for endorsement. He indicated the scope and structure of the Safety Guide and the resources that had been assigned to its development. Mr Gusev also noted the strong support for its approach and content as reflected in the comments received from Member States. He also indicated that it was expected that the Safety Guide would be cosponsored by the OECD Nuclear Energy Agency. Mr Gusev's presentation, including some additional informational slides, is available on the CSS website.

Several members indicated their support for the draft. Mr Gonzalez was concerned that the problem of consumer products was wider than apparent in the draft DS458 as presented, and requested that a subtitle be added to the title so as to clarify its scope and prevent misunderstanding. Mr Delattre explained that the reader should not rely solely on the title, but also read the section on what the scope of the standards is. Mr Salati expressed his agreement that the title must reflect the content of the Safety Guide. However, Mr Lund and Mr Massera considered that the target audience for the Safety Guide was not the general public and that users would have the correct understanding of the term 'consumer products' in the context of the safety standards. It was also noted that the safety guide had been developed fully in line with the definition of "consumer products" in the BSS. Mr Delattre finally suggested that, if feasible, a subtitle might be considered [Action 35.10, Annex III].

With these comments, the Commission endorsed the draft for publication.

4.5 Draft Safety Guide on Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (2012 Edition) (DS461)

Ms Capadona presented the draft Safety Guide for endorsement. She elaborated on the objective and justification for the Safety Guide and its place in the overall structure. No comments had been received from CSS members. Ms Capadona's presentation is available on the CSS website.

The Commission endorsed the draft for publication.

4.6 Draft DPP for Safety Requirements on Safety of Research Reactors, revision of NS-R-4 (DS476)

See agenda item 3.3.

4.7 Draft DPP for Safety Requirements on Safety of Nuclear Fuel Cycle Facilities, revision of NS-R-5 (DS478)

See agenda item 3.3.

4.8 Draft DPP for a Safety Guide on Operating Experience Feedback for Nuclear Installations, revision of NS-G-2.11 (DS479)

Mr Prohaska presented the draft DPP for approval. He set out the background and objective for the Safety Guide and the proposed timeline for development of the Safety Guide. Comments had been received from India, Korea and Israel, and Mr Prohaska indicated how it was proposed to deal with these comments. Mr Prohaska's presentation is available on the CSS website.

Mr Feron noted that NUSSC had requested that special emphasis be placed on organizational and human factors.

The Commission approved the DPP.

4.9 Draft DPP for a Safety Guide on Design of the Reactor Coolant System and Associated Systems in Nuclear Power Plants, revision of NS-G-1.9 (DS481)

Mr Yllera presented the draft DPP for approval. He set out the background and overview of the DPP, noting that it was one of the Safety Guides that had been selected for the pilot exercise carried out to assess the impact of changes to Safety Requirements following the Fukushima Daiichi accident. Comments on the DPP had been received from Japan and Korea, and Mr Yllera indicated that these had been accepted. Mr Yllera's presentation is available on the CSS website.

Mr Gonzalez pointed out that the need for guidance for independent cooling of the moderator is an important issue for heavy water reactors, if heavy water reactors were to be within the scope of the Safety Guide (which must be clearly specified). Mr Yllera noted that the focus of the Safety Guide is light water reactors, where the moderator is the coolant. He considered that a separate appendix, as had been done done for NS-G-1.9, might be appropriate for providing guidance for heavy water reactors.

The Commission approved the DPP.

4.10 Draft DPP for a Safety Guide on Design of Reactor Containment Systems for Nuclear Power Plants, revision of NS-G-1.10 (DS482)

Mr Poulat presented the draft DPP for approval. He set out the background and overview of the DPP, noting that this was also one of the Safety Guides that had been selected for the pilot exercise carried out to assess the impact of changes to Safety Requirements following the Fukushima Daiichi accident. Comments had been received from Korea, and Mr Poulat indicated that this comment had been accepted. Mr Poulat's presentation is available on the CSS website.

Mr Gonzalez and Mr Webster requested that the results of the 6th CNS Review Meeting be taken into account during development of the draft, specifically the paragraph 7 in Annex 3 as follows:

> "Contracting Parties of the 6th Review Meeting to urge the Agency, to request the appropriate safety standards committee(s) to review the existing standards, conduct a gap analysis and, if needed, develop requirements and technical criteria related to the 2 safety objectives (i.e. maintaining integrity of the containment and avoiding long term off-site contamination) highlighted during the 2nd Extraordinary Meeting. The goal should be to ensure that relevant

safety requirements and technical criteria that are technology neutral and quantitative are available."

In particular, Mr Gonzalez stressed that it should be made clear in the drafting of Safety Guide DS482 that a nuclear power plant must have a containment as a structure, and that the Safety Guide would apply to only such reactors, existing and new, that have a proper containment. Mr Gonzalez also elaborated on the incorrectness of using the word containment as an adjective (as in 'containment system', etc.), which could misleadingly give the impression that a physical containment is not necessary. He requested that the definition of containment in the IAEA Safety Glossary ("Methods *or* physical structures designed to prevent or control the release and the dispersion of radioactive substances") be clarified; he considered this could be achieved by replacing the conjunction '*or*' with an '*and*' [Action 35.11, Annex III].

Mr Feron further requested that the DPP for DS482 be updated to take the recommendations from the 6th CNS Review Meeting into account [Action 35.6, Annex III].

With these comments, the Commission approved the DPP.

4.11 Draft DPP for a Safety Guide on Severe Accident Management Programme for Nuclear Power Plants, revision of NS-G-2.15 (DS483)

Mr Hughes presented the draft DPP for approval. He set out some background to the initiation of the revision and the resources that would be taken into account in the development. This Safety Guide had also been selected the pilot exercise carried out to assess the impact of changes to Safety Requirements following the Fukushima Daiichi accident. Comments had been received from Israel and Korea and Mr Hughes indicated how it was proposed that these comments be addressed. Mr Hughes' presentation is available on the CSS website.

Mr Webster repeated the comment he made in connection with the draft DPP for DS482: this Safety Guide should also contain recommendations relating to the safety objectives of maintaining the integrity of the containment and avoiding long term off-site contamination.

With this comment, the Commission approved the DPP.

5. DPPs for draft Nuclear Security Series publications for information

5.1 DPP for the Revision of NSS09 on Security of Radioactive Material in Transport (NST048)

Mr Isaksson presented the draft DPP for information. He described the purpose, objective and scope of the Implementing Guide and summarized the intended development process. One comment had been received from India and Mr Isaksson indicated that this comment had been accepted. Mr Isaksson's presentation is available on the CSS website.

In connection with India's comment, Mr Massera queried whether characterization and categorization were possibly both necessary actions in the area of physical protection. Mr Isaksson explained that the change from characterization to categorization had been made for consistency with the draft Implementing Guide on Security of Nuclear Material in Transport (NST017, agenda item 5.4).

In response to Mr Weber's query on the different scopes of NST048 and NST017, Mr Isaksson clarified that indeed NST048 would cover all radioactive material, including radioactive material that could also be fissile, and that there may be some overlap in the two guides, which would need to be handled appropriately to ensure they were compatible.

Mr Bassett proposed that security culture also be addressed in this guide (and in the other Nuclear Security Series DPPs and drafts). Mr Isaksson clarified that the issue of security culture was covered in separate guidance, which would be referred to where necessary.

5.2 DPP for Revision of NSS11 Security of Radioactive Material in Use and Storage and of Associated Facilities (NST048)

Ms George presented the draft DPP for information. She elaborated on the purpose behind revision of Nuclear Security Series No. 11 (for consistency with other publications, to develop concepts for which further guidance is needed, and to expand the scope to cover more than just sealed radioactive sources), and set out steps in the development and the proposed structure. Mr George's presentation is available on the CSS website.

Mr Gonzalez repeated a comment that Argentina had made in several fora in the past: in order to meet the real needs of Member States, the IAEA should not development recommendations on safety and on security of radioactive sources in separate publications.

Mr Williams offered WASSC's input into the draft, at as early a stage as possible, to ensure the smooth development of the draft. As an example, the classification of material for nuclear security purposes needed to be properly associated with classification of material for waste management purposes.

5.3 Draft Implementing Guide on Radiological Crime Scene Management (NST013)

Mr Nogueira presented the draft for information. He described the objective and scope of the draft and provided an overview of its structure and development process. It was anticipated that the Implementing Guide would soon be issued and would be jointly sponsored by Interpol. Mr Nogueira's presentation is available on the CSS website.

Mr Gonzalez referred to ICRP report No. 96/227 and NCRP report No. 165, which cover a similar topic, and Mr Nogueira noted that these had been used in development of the draft.

5.4 Draft Implementing Guide on Security of Nuclear Material in Transport (NST017)

Mr Isaksson presented the draft for information. He set out the objective and scope of the draft and provided an overview of the development process. Mr Isaksson's presentation is available on the CSS website.

Mr Gonzalez noted that the guidance of the Nuclear Security Series was not part of the overall international system of regulations for transport (the UN Orange Book and the modal regulations). Mr Gonzalez also suggested that requirements for nuclear security be included in the Transport Regulations and noted that these could then be fed into the international system in the normal, efficient manner. Implementing Guides could then be developed as necessary to elaborate on how such security requirements are to be met. Mr Isaksson and Mr Brach reported that work was already underway at an international level to determine how transport requirements for nuclear security would be brought into the international system.

5.5 Draft Implementing Guide on Security of Information in Nuclear Security (NST022)

Mr Rowland presented the draft for information on behalf of the Technical Officer, Mr Dudenhoeffer. He summarized the objective and background to the Implementing Guide, and it was expected that it would be issued soon. Mr Rowland's presentation is available on the CSS website.

Mr Travers queried whether the Nuclear Security Series provided guidance relating to the dangers of 'over-classification' of security information. Mr Rowland reported that the draft dealt with appropriate classification of security information and provided related examples, and Mr Delattre elaborated further on the concepts of confidentiality, integrity and availability – proper guidance on the last of these concepts would ensure that information would always be available to those who need it.

6. Policy discussion

6.1 Guidance on how to address safety/security interfaces

Mr Delattre provided a presentation on the subject. Guidance had been developed by a task force within the Secretariat in 2013, and the Ad Hoc Group of four NSGC members and the four Chairs of the Safety Standards Committees had provided their input in early 2014. The main body of guidance for the drafting phase was structured in three main sections: addressing interfaces; not addressing safety in nuclear security drafts or vice versa; and introducing cross-references. The draft also provided an annex of sample questions intended to help identification of interfaces. The guidance was now in use by Technical Officers, but it would continue to evolve as experience was gained and would be presented to the Committees in the summer. The guidance would ultimately be included in SPESS C, as part of the general guidance for drafters.

Several members of the Commission praised the guidance as a good, realistic step forward. Mr Gonzalez felt that the final objective to integrate the areas of nuclear safety and nuclear security should be kept in mind in the course of necessary intermediary steps, such as the development of this guidance. Mr Reiman emphasized this final objective, by noting that the same users will always need to meet both safety requirements and security recommendations.

Mr Bassett reported on the UK experience, in which some of the greatest challenges faced in relation to safety-security interfaces were in the areas of remediation and decommissioning.

Mr Flory also noted that the guidance was a positive step forwards in a dynamic process, in which, for example, the IAEA's role in nuclear security was now firmly established and acknowledged.

The Secretariat was requested to further improve the guidance, to involve all Committees, and to prepare the incorporation of this guidance into SPESS C [Action 35.12, Annex III].

6.2 Progress report on the development of an IT platform for the future review, revision and publication of the safety standards

Mr Delattre provided a dynamic presentation on the development of an IT platform for the future feedback, review, revision and publication process. He set out the background and objectives of the project, and described the three necessary elements of the system: a knowledge and content management system; a process management system; and a user-friendly publication system. He also elaborated on the central role of metadata and explained the steps taken so far and the next steps envisaged. A pdf file of Mr Delattre's presentation is available on the CSS website.

Ms Drabova expressed her apprehension that such a new, sophisticated IT tool would still be able to ensure consistency, coherence and comprehensiveness of the content of the standards. Mr Delattre emphasized that proper use of metadata in the system would enhance the content. Indeed, the entire content of all the standards could be thought of as a single document with many, complex links, which this IT platform would facilitate.

Mr Lund praised the project and anticipated its great usefulness in harmonizing standards. However, he noted, it might necessitate a change in approach by drafters to achieve full benefit of its use.

Mr Williams also anticipated another benefit, namely that of having standards immediately available as soon as they are approved. This would also facilitate the use of the standards in Member States. He also suggested that Australia may be able to offer IT support in the project, and indicated that Australia would be particularly interested in trialing the finished product.

Mr Feron also expressed NUSSC's support for the project. Speaking on behalf of France, he anticipated there might need to be changes in how Member States interact with the IAEA in their review of standards. The development of the IT project should therefore takes into account Member States current working methods regarding the collection and submission of comments to the IAEA.

Mr Flory hoped that the system might facilitate this interaction, with the various contributors in Member States having access rights to the system, providing it was ensured that comments were submitted in a coordinated manner.

Mr Webster cautioned that it might be difficult to ensure that key points were discovered if there were too many sources of feedback. Mr Delattre noted that the current problem is an amount of feedback that is too limited, in particular from the users of standards. Of course, later on it might be necessary to have a filtering mechanism to ensure that only useful feedback is retained.

Mr Gonzalez congratulated Mr Delattre on his work aiming to improve the system. He also recommended a parallel work to improve the quality of the content, indicating that this was a responsibility of the Commission. For example, other organizations such as UNSCEAR analyse documents in a completely different manner, with almost a line-by-line review at the review meetings.

6.3 Discussion on options for a fast track process

Mr Delattre introduced the topic, which was a response to a request made at the 34th CSS meeting. Following much analysis, the Coordination Committee had come to the conclusion that both content and consensus were important, and that a fast track process would be contrary to the consensus building necessary for standards. As an example, NSGC, which had early on established a fast-track process, recently decided no longer to retain this process.

However, two alternative possible approaches had been identified. First, on a case by case, focused, basis, however, it would be possible to carry out such a speedy process; an example of this was the accelerated, but still rigorous, consultation process on the new requirements on the dose limit for the lens of the eye, which had allowed them to be included in the Basic Safety Standards, GSR Part 3. A second option would be to produce a TECDOC quickly, to make available information, on which basis comments could be collected. After that a consensus building process could be conducted.

Mr Gonzalez considered that both approaches could be used in parallel and as necessary. With a new, scientific development, the first approach could be used. With a wider issue, such as that of consumer products, this would be less appropriate and the second approach might be more useful.

Mr P. Woodhouse reinforced Mr Delattre's comments. He noted that there were still issues relating to the speed of the publication process for standards. In fact, however, one of the main strengths of the standards is the level of consensus they represent.

Mr Delattre also suggested options involving more meetings of the Committees and the Commission each year, or decision making of the Committees and the Commission by electronic means. With the optimized schedule of meetings, the approval process could in fact be completed in one year for a standard on which there is already a strong consensus.

Mr Lund noted that part of the consensus building related to how the experts in Member States are given access to drafts at the review stage, particularly for drafts on which agreements were not obvious. A balance needed to be achieved between speed and consensus.

Mr Hinrichsen also noted that the publication process was a significant factor in the speed at which standards are issued.

6.4 Relationship between IAEA publications and coordination with the IAEA Safety Standards

Mr Delattre informed the Commission of the mechanisms for interaction with external organizations such as the International Standards Organization and the International Electrotechnical Commission. Concerning internal cooperation in the IAEA, he recalled the Inter Office Memorandum and process that facilitated communication with the Department of Nuclear Energy, using a graded approach depending on the importance of the interface with safety. He suggested that improvements might be

possible in this process. There was also a less formalized arrangement for publications from the Department of Nuclear Energy that might have an interface with nuclear security.

Ms Drabova encouraged CSS members to consider where challenges might lie in this respect, and requested the Secretariat to explain the different categories of publications and their different scopes [Action 35.13, Annex III].

7 Use of IAEA Safety Standards in Member States

Mr Webster provided a presentation on the use of the IAEA safety standards in Canada. He described the functioning of the Canadian Nuclear Safety Commission and described which nuclear standards of the Canadian Standards Association are informed by the IAEA safety standards. He noted that Canada considered that changes to IAEA standards must be measured, that changes must maintain standards as technology-neutral, and that new standards must respect fundamental concepts. However, Canada is also concerned that the use of IAEA standards will be increasingly challenging as widely used terminology is redefined and requirements on specific design solutions are promoted rather than objective-based safety requirements. Mr Webster's presentation is available on the CSS website.

In the discussion that followed, Mr Webster informed the Commission that a mapping of IAEA standards with CSA standards was available on the CNSC website. He reported that there have been few challenges in applying CSA standards in the area of waste disposal. In relation to the challenge of establishing technology-neutral standards, he recalled the efforts made to ensure that experts in CANDU reactors, for example, understand how standards could apply for other designs. Mr Salati informed the Commission about an ongoing IAEA workshop in Brazil covering mining and milling of uranium ore, to which Canadian experts were contributing.

Mr Bezzubtsev provided a presentation on the use of the IAEA safety standards in the Russian Federation. He set out the structure of the executive authorities in the Russian Federation and of the legislative and regulatory documents and described the system of federal norms and roles. He also provided a mapping of how Russian documents are in compliance with IAEA safety standards for various safety aspects, which had been identified during IRRS missions in 2009 and in 2013. IAEA safety standards are taken into account in the revision of Russian documents, sometimes directly and sometimes as a basis for their development. Mr Bezzubtsev's presentation is available on the CSS website.

Ms Collet provided a presentation on the use of the IAEA safety standards in Spain. She summarized the organization of the Consejo de Seguridad Nuclear, its regulatory functions and the various facilities under its oversight. She elaborated on Spain's commitment to the international nuclear safety framework and to the development of IAEA safety standards in particular, and she provided information on the Instructions issued by the CSN. She also reported on the IRRS follow-up mission to Spain and on the measures Spain has undertaken following the Fukushima-Daiichi accident. Ms Collet's presentation is available on the CSS website.

In the discussion that followed, Ms Collet explained that members of the board of the CSN are appointed by and report to parliament, and explained how it is ensured, by rotation at least every 10 years, that resident inspectors at plants remain effective. She also explained that EU Directives are incorporated through laws or through royal degrees, as appropriate, and noted that Spain had participated in the EU 'stress tests'.

Mr Bassett provided a presentation on the use of the IAEA safety standards in the United Kingdom. He provided a short description of the Office of Nuclear Regulation and recent changes, such as its establishment as a separate public institution on 1 April 2014. He indicated that further information could be found on the ONR website. He described the UK nuclear regulatory regime, which is non-prescriptive and goal setting and in which compliance with the IAEA safety standards is not prescribed, and he described regulatory expectations of licensees' use of IAEA safety standards. He also noted that security law and regulations are now included in the same law as nuclear safety, and

noted that the safety-security interface is addressed in 2014 ONR Safety Assessment Principles. Mr Bassett's presentation is available on the CSS website.

In the discussion that followed, Mr Bassett also explained that the UK's Technical Inspection Guides, as well as its Technical Assessment Guides, draw on the IAEA safety standards where appropriate. He also elaborated on some elements applied for ensuring there is consistency in regulatory findings: there is an internal peer review process among inspectors; there is a process of 'regulatory assurance' for challenging regulatory decisions made by inspectors; and the basis for decisions is made public in project assessment reports. Mr Gonzalez noted some caveats to the general statement that the UK does not prescribe compliance with IAEA safety standards: for instance, the UK is party to the ILO Radiation Protection Convention, so compliance with the Basic Safety Standards is prescribed, and the EU Directive applies to UK facilities.

Mr Delattre invited all those individuals in Member States who had examined IAEA safety standards as a basis for the development of national regulations to provide feedback to the IAEA on the standards.

The members of the Commission from Brazil and Argentina volunteered to provide presentations at the 36th CSS meeting in November 2014, while the member of the Commission from Finland volunteered to provide a presentation at the 37th CSS meeting in March 2015.

8. Miscellaneous. Report of the meeting, Date of the next meeting

Mr Delattre informed the Commission of the dates proposed for holding the next meeting, namely from 3 to 5 November 2014.

Mr Delattre also indicated that a draft list of actions resulting from the 35th CSS meeting would be provided for comment to the CSS members [Annex III, Action 35.14] and that the draft report of the 35th CSS meeting would be posted for comment to the CSS web site [Annex III, Action 35.15].

Mr Delattre informed the Commission that all presentations made at the 35th CSS meeting would be posted on the CSS web site [Annex III, Action 35.16].

ANNEX I

PARTICIPATION AT THE 35th CSS MEETING

The Commission

A.J. González, Argentina

C.-M. Larsson, Australia (sent apologies – unable to attend; represented by Mr Williams)

J.-P. Samain, Belgium

I.P. Salati de Almeida, Brazil

R. Jammal, Canada (sent apologies – unable to attend; represented by Mr Webster)

Jun Yu, China (sent apologies – unable to attend; represented by Liu Chunlong)

D. Drabova (Chair), Czech Republic

L. Reiman, Finland

J.-L. Lachaume, France (sent apologies – unable to attend; represented by Mr Feron)

A. Vorwerk, Germany

S. S. Bajaj, India (sent apologies – unable to attend; represented by Mr Srivasista)

M. Markovits, Israel

T. Fuketa, Japan (sent apologies – unable to attend; represented by Mr Kamitani)

Y. H. Kim, Republic of Korea

M. Demčenko, Lithuania (sent apologies – unable to attend)

M. Mohd Ali, Malaysia (sent apologies – unable to attend)

I. Soufi, Morocco (sent apologies – unable to attend)

M. A. Habib, Pakistan (sent apologies – unable to attend; represented by Mr Mannan)

V.S. Bezzubtsev, Russian Federation

C.O. Phillips, South Africa (sent apologies – unable to attend; represented by Mr Pule)

A. Gurguí Ferrer, Spain

I. Lund, Sweden

W. Travers, United Arab Emirates

A. Hall, United Kingdom (sent apologies – unable to attend; represented by Mr Bassett)

M. Weber, United States of America

Observers

M. Garribba, EC

C. Cousins, ICRP (sent apologies – unable to attend)

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

K. Shimomura, OECD NEA (sent apologies – unable to attend)

Chairpersons of the Review Committees

G. Emi-Reynolds, NSGC

F. Feron, NUSSC

G. Massera, RASSC

P. J. Hinrichsen, TRANSSC

G. Williams, WASSC

Representatives and associated experts

Mr Bassett, Mr Brach, Mr Chára, Ms Collet i Campo, Ms Forest, Mr Kamitani, Mr Kuznetsov, Mr Lee, Mr Maldague, Mr Mannan, Mr Ogiso, Mr Park, Mr Pule, Mr Srivasista, Ms Rosales-Cooper, Mr Weidenbrueck

IAEA Staff Members

P.-S. Hahn, Director, Division of Radiation, Transport and Waste Safety (NSRW)

J. Lyons, Director, Division of Nuclear Installation Safety (NSNI)

K. Mrabit, Director, Office of Nuclear Security (NSNS)

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

P. Woodhouse, Head, Safety and Security Coordination Section (SSCS)

G. Caruso, Special Coordinator, Nuclear Safety Action Team (NSAT)

A. Al Khatibeh, T. Andrews, G. Bruno, J. Hilliard, P. Hughes, M. Lipar, Daming Liu, A. Nicic, M. Pinak, S. Samaddar, A. Shokr, C. Torres-Vidal

N. Capadona, V. Carr, A. Duchac, D. Dudenhoeffer, C. George, I. Gusev, T. Hargitai, P. Hughes, P. Isaksson, F. Jiang, C. Nogueira, B. Poulat, G. Prohaska, J. Yllera

Coordinators of review Committees and of the Commission on Safety Standards

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

G. Siraky, Waste and Environmental Safety Section (NSRW), WASSC

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

T. Colgan, Radiation Safety and Monitoring Services Section (NSRW), RASSC

I. Barraclough, Safety and Security Coordination Section (SSCS), NSGC

D. Delattre, Scientific Secretary of the CSS, Safety and Security Coordination Section

ANNEX II

AGENDA

Thirty-fifth Meeting of the
COMMISSION ON SAFETY STANDARDS
8-9 April 2014

1. Opening Session

1.1 Opening of the Meeting (10:00); *D. Flory DDG*-NS

1.2 Introductions, Adoption of the Agenda, Approval of the 34th CSS meeting report; *D. Drabova*

1.3 Administrative arrangements for the meeting, Status on the main topics for the 5th CSS term, Status of the endorsed Standards and Response to Actions from the 32nd, 33rd and 34th Meetings; *D. Delattre*

2. Reports of the Safety Standards Committees meetings and information on the second meeting of the Nuclear Security Guidance Committee

2.1 Nuclear Safety Standards Committee, *F. Feron, Chairman/M. Svab, Scientific Secretary - NUSSC*

2.2 Radiation Safety Standards Committee, *G. Massera, Chairman/T.Colgan, Scientific Secretary - RASSC*

2.3 Waste Safety Standards Committee, *G. Williams, Chairman/G. Siraky, Scientific Secretary – WASSC*

2.4 Transport Safety Standards Committee, *E.W. Brach, Former Chairman/S. Whittingham, Scientific Secretary – TRANSSC*

2.5 Information on the third and fourth meetings of the Nuclear Security Guidance Committee, *G. Emi Reynolds, Chairman/I. Barraclough, Scientific Secretary –NSGC*

2.6 Summary of the meeting of the Chairs held on 7 April 2014 before the CSS meeting, *D. Delattre*

3. Review/revision of IAEA Safety Standards in light of the TEPCO Fukushima Daiichi NPP accident

3.1 Information on the implementation of the Nuclear Safety Action Plan, *G. Caruso*

3.2 Progress report on DS462 (revision of GSR Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4) and on the concomitant revision of GS-R-2 on Emergency Preparedness and Response and of GS-R-3 on Leadership and Management System for Safety, *D. Delattre, E. Buglova and M. Lipar*

3.3 Progress report on subsequent revision of the other Specific Safety Requirements (NS-R-4 and NS-R-5), *A. Shokr*

3.4 Progress report on the review of safety guides, *D. Delattre*

3.5 Future activities

4. Approval of draft publications and DPPs

4.1 Draft Safety Guide DS430: Design of Electric Power Systems for NPPs, revision of NS-G-1.8, *A. Duchac*

4.2 Draft Safety Guide DS436: Instrumentation and Control Systems and Software Important to Safety for Research Reactors, *T. Hargitai*

4.3 Draft Safety Guide DS441: Construction for Nuclear Installations, *F. Jiang*

4.4 Draft Safety Guide DS458: Radiation Safety for Consumer Products, *I. Gusev*

4.5 Draft Safety Guide DS461: Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (2012 Edition), *N. Capadona*

4.6 Draft DPP DS476: Safety of Research Reactors, revision of NS-R-4, *T. Hargitai*

4.7 Draft DPP DS478: Safety of Nuclear Fuel Cycle Facilities, revision of NS-R-5, *V. Carr*

4.8 Draft DPP DS479: Operating Experience Feedback for Nuclear Installations, revision of NS-G-2.11, *G. Prohaska*

4.9 Draft DPP DS481: Design of the Reactor Coolant System and Associated Systems in Nuclear Power Plants, revision of NS-G-1.9, *J. Yllera*

4.10 Draft DPP DS482: Design of Reactor Containment Systems for Nuclear Power Plants, revision of NS-G-1.10, *B. Poulat*

4.11 Draft DPP DS483: Severe Accident Management Programme for Nuclear Power Plants, revision of NS-G-2.15, *P. Hughes*

5. DPPs for draft Nuclear Security Series publications for information

5.1 DPP NST044: Revision of NSS09 on Security of Radioactive Material in Transport, *S. Isaksson*

5.2 DPP NST048: Revision of NSS11 Security of Radioactive Material in Use and Storage and of Associated Facilities, *C. George*

5.3 Draft NST013: Radiological Crime Scene Management, *C. Noguiera*

5.4 Draft NST017: Security of Nuclear Material in Transport, *S. Isaksson*

5.5 Draft NST022: Security of Information in Nuclear Security, *D. Dudenhoeffer*

6. Policy discussion

6.1 Guidance on how to address safety/security interfaces

6.2 Progress report on the development of an IT platform for the future review, revision and publication of the safety standards

6.3 Discussion on options for a fast track process

6.4 Relationship between IAEA publications and coordination with the IAEA Safety Standards

7. Use of IAEA Safety Standards in Member States

8. Miscellaneous. Report of the meeting, Date of the next meeting

ANNEX III

ACTIONS ARISING FROM THE 35th MEETING OF THE COMMISSION

35.01 The final report of the 34th CSS meeting to be uploaded on the CSS web page. **[Action: Secretariat, CSS Scientific Secretary]. Done**

35.02 The Secretariat to distribute at the beginning of each meeting, together with the list of participants, the list of appointed representatives at the CSS. **[Action: Secretariat, CSS Scientific Secretary].**

35.03 The general introductory presentation on the status of safety standards and on the status report on CSS priorities to be made available in advance to the CSS meetings. **[Action: Secretariat, CSS Scientific Secretary].**

35.04 The Secretariat to investigate how to expedite the publications process of draft standards endorsed by the CSS, the delay in the publication of SSG-26 being an example of a situation where the Member States don't have access to the safety guide on how to implement the Safety Requirements SSR-6 published in October 2012 despite a clear request from the CSS that these documents should made available together. **[Action: Secretariat, NS Department with MT Department].**

35.05 The Secretariat to finalize and make available an electronic version of the Safety Glossary and to continue to work towards harmonization, where feasible, of the use of terms in the safety standards and the nuclear security series. **[Action: Secretariat, SSPU and NSNS].**

35.06 The Secretariat to take into account the result of the 6th CNS review meeting in future development of safety standards. **[Action: Secretariat, NS Department].**

35.07 The Secretariat to propose and discuss at the Safety Standards Committee an approach to address the proposal from the Russian Federation. **[Action: Secretariat, NSRW].**

35.08 The report of the 35th meeting to highlight the common items covered by the end of term reports of the Safety Standards Committees. **[Action: Secretariat, CSS Scientific Secretary].**

35.09 RASSC to prepare a policy/position paper on the UN General Assembly deliberation on the attribution of radiation effects and inference of risk and possible implications for the safety standards. **[Action: Secretariat, NSRW, and RASSC].**

35.10 The Secretariat to study the possibility of adding a subtitle to the safety guide DS458 on Radiation Safety for Consumer Products so as to clarify its scope. **[Action: Secretariat, TO for DS458 with the RASSC Coordinator, the SSPU Technical Editors and the Publications Committee].**

35.11 The Secretariat to consider the results of the 6th CNS review meeting through the development of the draft DS482 and to clarify the definition of containment as a structure. **[Action: Secretariat, TO for DS482 and SSPU Technical Editor]**

35.12 The Secretariat to further improve the guidance on how to address the interface between safety and security, with involvement of all Committees and to prepare the incorporation of this guidance into SPESS C. **[Action: Secretariat, SSPU and the Review Committees].**

35.13 The Secretariat to present at the next meeting a description of the different categories of safety related publications from the NS Department. **[Action: Secretariat, SSPU].**

35.14 A list of actions resulting from the 35th CSS meeting to be provided for comments to the CSS members. **[Action: Secretariat, CSS Scientific Secretary]. Done, this list.**

35.15 The draft report of the 35th CSS meeting to be posted for comments to the CSS members. **[Action: Secretariat, CSS Scientific Secretary].**

35.16 The presentations made at the 35th CSS meeting to be uploaded on the CSS web page. **[Action: Secretariat, CSS Scientific Secretary]. Done**

ANNEX IV

STATUS OF MAIN TOPICS OF THE 4TH CSS TERM

#	Main topics	Reference set of SG	Status/action
1	Guidance and assistance to countries considering the launch of a nuclear programme and in particular to provide guidance on the establishment of the necessary safety infrastructure	Item 1	DS424 published as SSG-16
2	Guidance related to a new generation of nuclear reactor designs, the manufacturing of components, the quality of construction and commissioning of new plants	Items 22, 42 and 43	DS462 (revision of SSR-2/1) DS349 published (GS-G-3.5). Construction: DS441 draft with the CSS for final endorsement Commissioning: SSG-28 being published
3	Guidance and assistance related to the new applications of radiation sources	Items 68 to 76	DS409 published (SSG-8) DS408 published (SSG-11) DS419 approved for MS consultation DS420 approved for MS consultation DS434 for a safety guide on radioisotope production facilities being drafted. DPP approved by the CSS DS470 on Radiation Sources in Research and Education and DS471 on X-ray Generators and Sources Used for Inspection Purposes. DPPs approved by the CSS DS458 Radiation Safety and Regulatory Control for Consumer Products with the CSS for endorsement
4	Guidance on the extension of the operating lifetime of NPPs beyond their planned design life, while preserving the safety margins and the issues relating to the ageing management of structures, systems and components	Items 40 and 45	Draft DS 426 published as SSG-25 NS-G-2-12 on ageing management recently published
5	Guidance on seismic safety that considers the potential consequences of earthquakes in new designs and ageing management of operating NPPs' structures, systems and components	Item 18 and Item 41	DS422 published (SSG-9) DS383 published (NS-G-2.13) Note additional work on other external hazards: DS417 published (SSG-18) DS405 published (SSG-21)
6	Question on how best to design and implement safety measures and security measures in an integrated manner	NA	Joint AdSec/CSS session in April 2009 and joint AdSec/CSS Task Force established in June 2009 Final Joint AdSec CSS Session in November 2011 NSGC established, first meeting in June 2012 Interface Group first meeting in September 2012 Revision of SPESS C ongoing

7	Assistance and additional safety guidance to countries dealing with expanded uranium exploration and mining	Item 83	DS 421: in publication DPP for DS459 approved by the CSS
8	Guidance on public exposures to natural sources of ionizing radiations (radon, NORM residues, aircrew…) and for the safety of uranium mining activities	Item 5	
9	Crucial need to further improve promotion of the application of the safety standards on medical applications including recommendations that will reduce the frequency of over or under exposures related to nuclear medicine, and to enhance these standards as appropriate	NA. Relates to the application of SS, in particular of item 68	DS399 being drafted Draft expected for the Autumn meetings of the Committees (need for co-sponsor approval)
10	Improvement on the coverage of human and organizational factors in the safety guides	Item 6 and 42	DS349 published (GS-G-3.5)

ANNEX V

STATUS OF MAIN PRIORITIES FOR THE 5TH CSS TERM

1. Finalization of the General Safety Requirements (including review following the Fukushima Daiichi accident): **Close to finalization. DS457 and DS456 submitted to SSCs for final approval, DS450 approved by the BoG**

2. Initiation of the revision of the remaining Specific Safety Requirements (including review of other Specific Safety Requirements following the Fukushima Daiichi accident): **firstly SSR-2/1 and SSR-2/2, then revision of NS-R-4 and NS-R-5 (DPP at this CSS meeting, items 4.06 and 4.07). DPP for the revision of NS-R-3 approved by the CC. To be submitted to the RCs in June/July 2014**

3. Enhancing the feedback process: **Used for the above activities. Database being designed with MTIT. Presentation at this meeting (item 6.2)**

4. Exposure to radon: **DS421 approved at the last CSS meeting**

5. Medical exposure: **DS399 being drafted, to be submitted to the Autumn meetings of the Committees**

6. Application of the justification principle: **DS401 approved at the last CSS meeting**

7. Harmonization of exemption, clearance criteria and other radionuclide specific criteria: **DS458 on consumer products at this 35th CSS meeting and other topics to be initiated**

8. NORM related issues: **DS459 being drafted**

9. Occupational radiation protection, including its application to rescuers: **DS453 (submitted to MS consultation) and DS457 (SSCs for final approval in June/July 2014)**

10. Knowledge management: **DS456 on the revision of GS-R-3, and revision of GSR-Part 4 (addendum) SSCs for final approval in June/July 2014**

11. Regulatory oversight of human and organizational factors: **revision of GSR Part 1 (DS462 SSCs for final approval in June/July 2014)**

12. The safety/security interface: **process and Committees in place. Harmonization of the TORs of the RCs at the CSS agenda (item 6.1). Guidance for drafters being developed (revision of SPESS C)**

13. Usefulness of standards for countries embarking on nuclear power programmes: **Difficulty to identify a precise indicator. Presentation from UAE at the 33rd CSS meeting**

14. The need for more detail in standards on PSA and severe accident management: **DPP for the revision of NS-G-2.15 approved by NUSSC and submitted to this CSS meeting for approval (item 4.11)**

ANNEX VI

CURRENT SAFETY STANDARDS

[status on 17 April 2014]

A. Safety Fundamentals

SF-1	Fundamental Safety Principles (2006) **Co-sponsorship:** Euratom, FAO, ILO, IMO, OECD/NEA, PAHO, UNEP, WHO [ACEFRS][2]

B. General Safety Standards (applicable to all facilities and activities)

GSR Part 1	Governmental, Legal and Regulatory Framework for Safety (2010) [ACEFRS]
GS-R-3	The Management System for Facilities and Activities (2006) [ACEFRS]
GSR Part 3	Radiation Protection and Safety of Radiation Sources – Revision of the International BSS, Interim Edition (2011) [ACEFRS]
GSR Part 4	Safety Assessment for Facilities and Activities (2009) [ACEFRS]
GSR Part 5	Predisposal Management of Radioactive Waste (2009) [ACEFRS]
WS-R-5	Decommissioning of Facilities Using Radioactive Material (2006) [ACEFRS]
GS-R-2	Preparedness and Response for a Nuclear or Radiological Emergency (2002) **Co-sponsorship:** FAO, OCHA, OECD/NEA, ILO, PAHO, WHO [ACEFRS]
GS-G-2.1	Arrangements for Preparedness for a Nuclear or Radiological Emergency (2007) **Co-sponsorship:** FAO, OCHA, ILO, PAHO, WHO [ES]
GS-G-3.1	Application of the Management System for Facilities and Activities (2006) [ER]
GS-G-3.2	The Management System for Technical Services in Radiation Safety (2008) [EF]
GS-G-3.3	The Management System for the Processing, Handling and Storage of Radioactive Waste (2008) [E]
GSG-1	Classification of Radioactive Waste (2009) [E]
GSG-3	The Safety Case and Safety Assessment for the Predisposal Management of Radioactive Waste (2013) [E]
RS-G-1.1	Occupational Radiation Protection (1999) **Co-sponsorship:** ILO [ACEFRS]
RS-G-1.2	Assessment of Occupational Exposure Due to Intakes of Radionuclides (1999) **Co-sponsorship:** ILO [ACEFRS]
RS-G-1.3	Assessment of Occupational Exposure Due to External Sources of Radiation (1999) **Co-sponsorship:** ILO [ACEFRS]
RS-G-1.4	Building Competence in Radiation Protection and the Safe Use of Radiation Sources (2001) **Co-sponsorship:** ILO, PAHO, WHO [ACEFRS]
RS-G-1.7	Application of the Concepts of Exclusion, Exemption and Clearance (2004) [CERS]
RS-G-1.8	Environmental and Source Monitoring for Purposes of Radiation Protection (2005) [E]
RS-G-1.9	Categorization of Radioactive Sources (2005) [ACEFRS]

[2] A=available in Arabic; C=available in Chinese; E=available in English; F=available in French; R=available in Russian; S=available in Spanish

WS-G-2.3	Regulatory Control of Radioactive Discharges to the Environment (2000) (under revision) [ACEFRS]
WS-G-2.5	Predisposal Management of Low and Intermediate Level Radioactive Waste (2003) (under revision) [ERS]
WS-G-2.6	Predisposal Management of High Level Radioactive Waste (2003) (under revision) [ERS]
WS-G-3.1	Remediation Process for Areas Affected by Past Activities and Accidents (2007) [ES]
WS-G-5.1	Release of Sites from Regulatory Control on Termination of Practices (2006) [ERS]
WS-G-5.2	Safety Assessment for the decommissioning of Facilities Using Radioactive Material (2008) [E]
WS-G-6.1	Storage of Radioactive Waste (2006) [ERS]
GSG-2	Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency (2011) [AEFRS]
GSG-4	Use of External Experts by the Regulatory Body (2013) [E]

C. Specific Safety Standards (applicable to specified facilities and activities)

C.1. Nuclear Power Plants

SSR-2/1	Safety of Nuclear Power Plants: Design (2012) [ACEFRS]
SSR-2/2	Safety of Nuclear Power Plants: Commissioning and Operation (2011) [ACEFRS]
NS-R-3	Site Evaluation for Nuclear Installations (2003) [ACEFRS]
SSG-16	Establishing the Safety Infrastructure for a Nuclear Power Programme (2012) [E]
GS-G-1.1	Organization and Staffing of the Regulatory Body for Nuclear Facilities (2002) [CEFRS]
GS-G-1.2	Review and Assessment of Nuclear Facilities by the Regulatory Body (2002) [CEFR]
GS-G-1.3	Regulatory Inspection of Nuclear Facilities and Enforcement by the Regulatory Body (2002) [CEFRS]
GS-G-1.4	Documentation for Use in Regulating Nuclear Facilities (2002) [CEFRS]
GS-G-3.5	The Management System for Nuclear Installations (2009) [E]
SSG-12	Licensing Process for Nuclear Installations (2010) [ES]
GS-G-4.1	Format and Content of the Safety Analysis report for Nuclear Power Plants (2004) [EC]
NS-G-1.1	Software for Computer Based Systems Important to Safety in Nuclear Power Plants (2000) (under revision)[CEF]
NS-G-1.3	Instrumentation and Control Systems Important to Safety in Nuclear Power Plants (2002) (under revision) [ECFR]
NS-G-1.4	Design of Fuel Handling and Storage Systems for Nuclear Power Plants (2003) [ERS]
NS-G-1.5	External Events Excluding Earthquakes in the Design of Nuclear Power Plants (2003) [ER]
NS-G-1.6	Seismic Design and Qualification for Nuclear Power Plants (2003) [ER]
NS-G-1.7	Protection against Internal Fires and Explosions in the Design of Nuclear Power Plants (2004) [ER]
NS-G-1.8	Design of Emergency Power Systems for Nuclear Power Plants (2004) (under revision) [ER]
NS-G-1.9	Design of the Reactor Coolant System and Associated Systems in Nuclear Power Plants (2004) [ERS]

NS-G-1.10	Design of Reactor Containment Systems for Nuclear Power Plants (2004) [ER]
NS-G-1.11	Protection against Internal Hazards other than Fires and Explosions in the Design of Nuclear Power Plants (2004) [E]
NS-G-1.12	Design of the Reactor Core for Nuclear Power Plants (2005) [ECR]
NS-G-1.13	Radiation Protection Aspects of Design for Nuclear Power Plants (2005) [ER]
NS-G-2.1	Fire Safety in the Operation of Nuclear Power Plants (2000) [ECFR]
NS-G-2.2	Operational limits and Conditions and Operating Procedures for Nuclear Power Plants (2000) [CEFRS]
NS-G-2.3	Modifications to Nuclear Power Plants (2001) [CEFRS]
NS-G-2.4	The Operating Organization for Nuclear Power Plants (2001) [CEFR]
NS-G-2.5	Core Management and Fuel Handling for Nuclear Power Plants (2002) [ER]
NS-G-2.6	Maintenance, Surveillance and In-Service Inspection in Nuclear Power Plants (2002) [ER]
NS-G-2.7	Radiation Protection and Radioactive Waste Management in the Operation of Nuclear Power Plants (2002) [ERS]
NS-G-2.8	Recruitment, Qualification and Training of Personnel for Nuclear Power Plants (2002) [ER]
NS-G-2.9	Commissioning for Nuclear Power Plants (2003) (under revision) [E]
SSG-25	Periodic Safety Review of Nuclear Power Plants (2013) [E]
NS-G-2.11	A System for the Feedback of Experience from Events in Nuclear Installations (2006) [ERS]
NS-G-2.12	Ageing Management for Nuclear Power Plants (2009) [ER]
NS-G-2.13	Evaluation of Seismic Safety for Existing Nuclear Installations (2009) [E]
NS-G-2.14	Conduct of Operations at Nuclear Power Plants (2008) [ERS]
NS-G-2.15	Severe Accident Management Programmes for Nuclear Power Plants (2009) [ER]
SSG-13	Chemistry Programme for Water Cooled Nuclear Power Plants (2011) [ER]
NS-G-3.1	External Human Induced Events in Site Evaluation for Nuclear Power Plants (2002) [ECFR]
NS-G-3.2	Dispersion of Radioactive Material in Air and Water and Consideration of Population Distribution in Site Evaluation for Nuclear Power Plants (2002) (under revision) [ER]
SSG-9	Seismic Hazards in Site Evaluation for Nuclear Installations (2010) [E]
SSG-18	Meteorological and Hydrological Hazards in Site Evaluation for Nuclear Installations (2011) [E]
SSG-21	Volcanic Hazards in Site Evaluation for Nuclear Installations (2012) [ES]
NS-G-3.6	Geotechnical Aspects of Site Evaluation and Foundations for Nuclear Power Plants (2005) [ECR]
SSG-2	Deterministic Safety Analysis for Nuclear Power Plants (2009) [E]
SSG-3	Development and Application of Level 1 Probabilistic Safety Assessment for Nuclear Power Plants (2010) [E]
SSG-4	Development and Application of Level 2 Probabilistic Safety Assessment for Nuclear Power Plants (2010) [E]
WS-G-2.1	Decommissioning of Nuclear Power Plants and Research Reactors (1999) (under revision) [AECFR]
79	Design of Radioactive Waste Management Systems at Nuclear Power Plants (1986) (under revision) [E]

C.2. Research Reactors

NS-R-3	Site Evaluation for Nuclear Installations (2003) [ACEFRS]
NS-R-4	Safety of Research Reactors (2005) [ACEFRS]
SSG-9	Seismic Hazards in Site Evaluation for Nuclear Installations (2010) [E]
SSG-18	Meteorological and Hydrological Hazards in Site Evaluation for Nuclear Installations (2011) [E]

SSG-21	Volcanic Hazards in Site Evaluation for Nuclear Installations (2012) [E]
GS-G-1.1	Organization and Staffing of the Regulatory Body for Nuclear Facilities (2002) [CEFRS]
GS-G-1.2	Review and Assessment of Nuclear Facilities by the Regulatory Body (2002) [CEFR]
GS-G-1.3	Regulatory Inspection of Nuclear Facilities and Enforcement by the Regulatory Body (2002) [CEFRS]
GS-G-1.4	Documentation for Use in Regulating Nuclear Facilities (2002) [CEFRS]
GS-G-3.5	The Management System for Nuclear Installations (2009) [ER]
SSG-12	Licensing Process for Nuclear Installations (2010) [ES]
NS-G-2.11	A System for the Feedback of Experience from Events in Nuclear Installations (2006) [ER]
NS-G-2.13	Evaluation of Seismic Safety for Existing Nuclear Installations (2009) [E]
NS-G-4.1	Commissioning of Research Reactors (2006) [E]
NS-G-4.2	Maintenance, Periodic Testing and Inspection of Research Reactors (2006) [E]
NS-G-4.3	Core Management and Fuel Handling for Research Reactors (2008) [E]
NS-G-4.4	Operational Limits and Conditions and Operating Procedures for Research Reactors (2008) [E]
NS-G-4.5	The Operating Organization and the Recruitment, Training and Qualification of Personnel for Research Reactors (2008) [E]
NS-G-4.6	Radiation Protection and Radioactive Waste Management in the Design and Operation of Research Reactors (2008) [E]
WS-G-2.1	Decommissioning of Nuclear Power Plants and Research Reactors (1999) (under revision) [AECFR]
SSG-10	Ageing Management for Research Reactors (2010) [E]
SSG-20	Safety Assessment for Research Reactors and Preparation of the Safety Analysis Report (2012) [E]
SSG-22	Use of a Graded Approach in the Application of the Safety Requirements for Research Reactors (2012) [E]
SSG-24	Safety in the Utilization and Modification of Research Reactors (2012) [E]

C.3. Fuel Cycle Facilities

NS-R-3	Site Evaluation for Nuclear Installations (2003) [ACEFRS]
NS-R-5	Safety of Nuclear Fuel Cycle Facilities (2008) (under revision) [E]
SSG-9	Seismic Hazards in Site Evaluation for Nuclear Installations (2010) [E}
SSG-18	Meteorological and Hydrological Hazards in Site Evaluation for Nuclear Installations (2011) [E]
SSG-21	Volcanic Hazards in Site Evaluation for Nuclear Installations (2012) [E]
GS-G-1.1	Organization and Staffing of the Regulatory Body for Nuclear Facilities (2002) [CEFRS]
GS-G-1.2	Review and Assessment of Nuclear Facilities by the Regulatory Body (2002) [CEFR]
GS-G-1.3	Regulatory Inspection of Nuclear Facilities and Enforcement by the Regulatory Body (2002) [CEFRS]
GS-G-1.4	Documentation for Use in Regulating Nuclear Facilities (2002) [CEFRS]
GS-G-3.5	The Management System for Nuclear Installations (2009) [E]
SSG-12	Licensing Process for Nuclear Installations (2010) [ES]
NS-G-2.11	A System for the Feedback of Experience from Events in Nuclear Installations (2006) [ER]
NS-G-2.13	Evaluation of Seismic Safety for Existing Nuclear Installations (2009) [E]
SSG-5	Safety of Conversion Facilities and Uranium Enrichment Facilities (2010) [E]
SSG-6	Safety of Uranium Fuel Fabrication Facilities (2010) [E]

SSG-7	Safety of Uranium and Plutonium Mixed Oxide Fuel Fabrication Facilities (2010) [E]
WS-G-2.4	Decommissioning of Nuclear Fuel Cycle Facilities (2001) (under revision) [ECFRS]
SSG-15	Storage of Spent Nuclear Fuel (2012) [E]

C.4. Radioactive Waste Disposal Facilities

SSR-5	Disposal of Radioactive Waste (2011) [ACEFRS]
GS-G-1.1	Organization and Staffing of the Regulatory Body for Nuclear Facilities (2002) [CEFRS]
GS-G-1.2	Review and Assessment of Nuclear Facilities by the Regulatory Body (2002) [CEFR]
GS-G-1.3	Regulatory Inspection of Nuclear Facilities and Enforcement by the Regulatory Body (2002) [CEFRS]
GS-G-1.4	Documentation for Use in Regulating Nuclear Facilities (2002) [CEFRS]
GS-G-3.4	The Management System for the Disposal of Radioactive Waste (2008) [E]
SSG-1	Borehole Disposal Facilities for Radioactive Waste (2009) [E]
SSG-14	Geological Disposal Facilities for Radioactive Waste (2011) [E]
SSG-23	The Safety Case and Safety Assessment for the Disposal of Radioactive Waste (2012) [E]
SSG-29	Near Surface Disposal Facilities for Radioactive Waste (2014)[E]

C.5. Mining and Milling

RS-G-1.6	Occupational Radiation Protection in the Mining and Processing of Raw Materials (2004) [ES]
WS-G-1.2	Management of Radioactive Waste from the Mining and Milling of Ores (2002) (under revision) [ERS]

C.6. Applications of Radiation Sources

GSR Part 3	Radiation Protection and Safety of Radiation Sources – Revision of the International BSS, Interim Edition (2011) [ACEFRS]
GS-G-1.5	Regulatory Control of Radiation Sources (2004) **Co-sponsorship:** FAO, ILO, PAHO, WHO [EFS]
RS-G-1.4	Building Competence in Radiation Protection and the Safe Use of Radiation Sources (2001) **Co-sponsorship:** ILO, PAHO, WHO [ACEFRS]
RS-G-1.5	Radiological Protection for Medical Exposure to Ionizing Radiation (2002) **Co-sponsorship:** PAHO, WHO (under revision) [CEFRS]
RS-G-1.9	Categorization of Radioactive Sources (2005) [ACEFRS]
RS-G-1.10	Safety of Radiation Generators and Sealed Radioactive Sources (2006) **Co-sponsorship**: ILO, PAHO, WHO [EFS]
WS-G-2.2	Decommissioning of Medical, Industrial and Research Facilities (1999) (under revision) [ACEFRS]
WS-G-2.7	Management of Waste from the Use of Radioactive Materials in Medicine, Industry, Agriculture, Research and Education (2005) [CERS]
SSG-8	Radiation Safety of Gamma, Electron and X Ray Irradiation Facilities (2010) [E]
SSG-11	Radiation Safety in Industrial Radiography (2011) [AEFS]
SSG-17	Control of Orphan Sources and Other Radioactive Material in the Metal Recycling and Production Industries (2012) [ER]
SSG-19	National Strategy for Regaining Control over Orphan Sources and Improving Control over Vulnerable Sources (2011) [AES]

C.7. Transport of Radioactive Material

SSR-6	Regulations for the Safe Transport of Radioactive Material 2012 Edition (2012) [ACEFRS]
TS-G-1.1 Rev1	Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (2008) (under revision) [ES]
TS-G-1.2	Planning and Preparing for Emergency Response to Transport Accidents Involving Radioactive Material (2002) [ERS]
TS-G-1.3	Radiation Protection Programmes for the Transport of Radioactive Material (2007) [ES]
TS-G-1.4	The Management System for the Safe Transport of Radioactive Material (2008) [E]
TS-G-1.5	Compliance Assurance for the Safe Transport of Radioactive Material (2009) [E]
TS-G-1.6 Rev1	Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (2009 Edition) (2014) [E]

ANNEX VII

PROJECTS AND DRAFT STANDARDS UNDER DEVELOPMENT

[status on 17 April 2014]

PROJECTS:

DS488: Design of the Reactor Core for Nuclear Power Plants, revision of NS-G-1.12 [Step 2]

DS487: Design of Fuel Handling and Storage Systems for Nuclear Power Plants, revision of NS-G-1.4 [Step 2]

DS486: Establishing the Safety Infrastructure for a Nuclear Power Programme (Rev. 1), revision of SSG-16 [Step 2]

DS485: Ageing Management and Long Term Operation for Nuclear Power Plants, revision of NS-G-2.12 [Step 2]

DS484: Site Evaluation for Nuclear Installations, revision of NS-R-3 [Step 2]

DS449 - Content of the Safety Analysis Report for Nuclear Installations (revision of GS-G-4.1) [Step 2]

DRAFT STANDARDS UNDER DEVELOPMENT:

DS483: Severe Accident Management Programme for Nuclear Power Plants, revision of NS-G-2.15 [Step 5]

DS482: Design of Reactor Containment Systems for Nuclear Power Plants, revision of NS-G-1.10 [Step 5]

DS481: Design of the Reactor Coolant System and Associated Systems in Nuclear Power Plants, revision of NS-G-1.9 [Step 5]

DS479: Operating Experience Feedback for Nuclear Installations, revision of NS-G-2.11 [Step 5]

DS478: Safety of Fuel Cycle Facilities, revision of NS-R-5 [Step 5]

DS477 - The Management System for the Predisposal and Disposal of Radioactive Waste [Step 5]

DS476: Safety of Research Reactors, revision of NS-R-4 [Step 5]

DS475 - Arrangements for Public Communications in Preparedness and Response for a Nuclear or Radiological Emergency [Step 5]

DS474 - Arrangements for the termination of a nuclear or radiological emergency [Step 5]

DS473 - Regulatory Body Functions and Processes, revision and combination of GS-G-1.2, GS-G-1.3, GS-G-1.4, part of GS-G-1.5, part of SSG-12 and part of WS-G-5.1 [Step 5]

DS472 - Organisation, Management and Staffing of a Regulatory Body, revision and combination of GS-G-1.1, part of GS-G-1.5, GSG-4 and DS113 and DS460 [Step 5]

DS471 - Radiation Safety of X-ray Generators and Radiation Sources Used for Inspection Purposes and for Non-Medical Imaging [Step 5]

DS470 - Radiation Safety of Radiation Sources Used in Research and Education [Step 5]

DS469 - Planning and Preparing for Response to Transport Events Involving Radioactive Material, revision of TS-G-1.2 [Step 5]

DS468 - Remediation Process for Areas with Residual Radioactive Material (revision of WS-G-3.1) [Step 5]

DS462 - Revision through addenda of GSR-Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4: coordination (DS462), GSR Part 1 (DS463), NS-R-3 (DS464), SSR-2/1 (DS465) and GSR Part 4 (DS466), SSR-2/2 (DS467) [Step 11]

DS461 - Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (2012 Edition) (revision of TS-G-1.6) [Step 14]

DS460 - Communication and Consultation with Interested Parties [Step 6]

DS459 - Management of Radioactive Residues from Mining, Mineral Processing, and other NORM related Activities (revision and expansion of WS-G-1.2) [Step 5]

DS458 - Radiation Safety and Regulatory Control for Consumer Products [Step 14]

DS457 - GSR Part 7: Preparedness and Response for a Nuclear or Radiological Emergency (revision of GS-R-2) [Step 10]

DS456 - GSR Part 2: Leadership and Management for Safety (revision of GS-R-3) [Step 9]

DS455 - Establishing a National Radiation Safety Infrastructure [Step 6]

DS454 - Predisposal Management of Waste from the Use of Radioactive Materials in Medicine, Industry, Research, Agriculture and Education (revision of WS-G-2.7) [Step 6]

DS453 - Occupational Radiation Protection (revision of RS-G-1.1, RS-G-1.2, RS-G-1.3, RS-G-1.6, GS-G-3.2) [Step 8]

DS452 - Decommissioning of Nuclear Facilities, except Facilities using NORM and Medical, Industrial, Research and Disposal Facilities (revision of WS-G-2.1 and WS-G-2.1) [Step 5]

DS450 – GSR Part 6: Decommissioning (revision of WS-R-5) [Step 14]

DS448 - Predisposal Management of Radioactive Waste from Reactors (revision of WS-G-2.5) [Step 9]

DS447 - Predisposal Management of Radioactive Waste from Fuel Cycle Facilities (revision of WS-G-2.6) [Step 9]

DS446 - Commissioning for Nuclear Power Plants (revision of NS-G-2.9) [Step 14]

DS442 - Regulatory control of radioactive releases to the environment from facilities and activities (revision of WS-G-2.3) [Step 5]

DS441 - Construction for Nuclear Installations [Step 14]

DS440 - Design of Auxiliary and Supporting Systems in Nuclear Power Plants [Step 5]

DS439 - Appendix IV "Reprocessing Facilities" and Appendix V "Fuel Cycle Research and Development Facilities" of NS-R-5 [Step 14]

DS436 - Instrumentation and Control and Software Important to Safety for Research Reactors [Step 14]

DS434 - Radiation Safety of Radioisotope Production Facilities [Step 5]

DS433 - Safety Aspects in Siting for Nuclear Installations (revision of 50-SG-S9) [Step 14]

DS432 - Radiation Protection of the Public and the Environment [Step 5]

DS431 - Design of I & C Systems for NPPs (revision of NS-G-1.1 and NS-G-1.3) [Step 10]

DS430 - Design of Electric Power Systems for NPPs (revision of NS-G-1.8) [Step 14]

DS427 - Radiological Environmental Impact Analysis for Facilities and Activities [Step 6]

DS425 - Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (revision of TS-G-1.1) [Step 14]

DS421 - Protection of the Public against Indoor Exposure to Natural Sources of Radiation [Step 14]

DS420 - Radiation Safety for Nuclear Gauges [Step 7]

DS419 - Radiation Safety for Well Logging Sources [Step 7]

DS407 - Criticality Safety in the Handling of Fissile Material in Facilities and Activities [Step 14]

DS403 - Decommissioning of Medical, Industrial and Research Facilities (revision of WS-G-2.2) [Step 5]

DS401 - Application of the Principle of Justification to Practices, including Non-Medical Imaging [Step 14]

DS399 - Radiation Safety in Medical Uses of Ionizing Radiation (revision of RS-G-1.5) [Step 5]

DS381 - Safety of Fuel Cycle R&D Facilities [Step 6]

DS367 - Safety Classification of Structures, Systems and Components in Nuclear Power Plants [Step 14]

DS365 - Risk-Informed Decision Making [being developed as a TECDOC]

DS360 - Safety of Reprocessing Facilities [Step 6]

DS357 - Monitoring and Surveillance of Radioactive Waste Disposal Facilities [Step 14]

ANNEX VIII

DRAFTS OF THE NUCLEAR SECURITY SERIES UNDER DEVELOPMENT (INTERFACE DOCUMENTS ONLY; TENTATIVE TITLES ONLY) [status on 17 April 2014]

NST049: Detection of and Initial Response to Radioactive Material at Undesignated Points of Entry and Exit [Step 3]

NST048: Security of Radioactive Material in Use and Storage and of Associated Facilities [Step 5]

NST045: Computer Security for Nuclear Security [Step 3]

NST044: Security in the Transport of Radioactive Material [Step 5]

NST041: Preventive and Protective Measures against Insider Threats [Step 5]

NST036: Security of Instrumentation and Control Systems at Nuclear Facilities [Step 7]

NST024: Security Management and Security Plans for Radioactive Material and Associated Facilities [Step 5]

NST023: Security in Nuclear Facilities and of Nuclear Material in Use and Storage [Step 7]

NST022: Security of Information in Nuclear Security [Step 12]

NST020: Sustaining a Nuclear Security Regime [Step 5]

NST017: Security of Nuclear Material in Transport [Step 12]

NST016: Detection of and Initial Response to Radioactive Material at Designated points of Entry and Exit [Step 5]

NST014: Nuclear Forensics in Support of Investigations [Step 11]

NST013: Radiological Crime Scene Management [Step 13]

NST011: Preventive Measures for Nuclear and Other Radioactive Material out of Regulatory Control [Step 7]

NST009: Capacity Building for Nuclear Security [Step 5]

NST006: Framework for International Cooperation and Assistance on Nuclear Security [Step 5]

NST005: Regaining Control over Nuclear and Other Radioactive Material out of Regulatory Control [Step 5]

NST004: Developing a National Framework for Managing Nuclear Security Events [Step 5]

NST002: Regulations, Agreements and Associated Administrative Measures for Nuclear Security [Step 7]

ANNEX IX

STATUS OF REMAINING ACTIONS FROM THE 32nd AND 33RD MEETINGS OF THE COMMISSION AND STATUS OF ACTIONS FROM THE 34TH MEETING

32.2. The CSS welcome the progress on the interfaces between the Safety Standards Series and the Nuclear Security Series and note that the issue is not restricted to checking adequacy of cross-references but also include the verification, for interface documents, that safety measures don't comprise safety and that safety measures don't compromise security. This objective to be reflected in internal guidance for the actors involved. **[Action: Secretariat, Sc. Secretary CSS and NSGC]** Discussion with the 5 Chairs on 22 March 2013 – Establishment of an internal Working Group in September 2013. Draft sent to the NSGC/ SSC ad hoc group. Comments received in March and April 2014. Discussion at the Chairs meeting on 7 April and item 6.1 of this meeting.

32.7. The transport related Safety Guides to be translated into all official languages. **[Action: Secretariat, Safety and Security Coordination Section with MTCD]** On-going

32.9. The Safety Glossary to be revised considering the issue of different language versions and the Secretariat to work toward a unified safety and security glossary. **[Action: Secretariat, Safety and Security Coordination Section]** On-going

32.12. The Secretariat to investigate issues relating to issuing safety standards essentially as electronic version and the Safety Standards Committees to be consulted on future challenges on the publication process, noting the support for the CSS on moving from a document by document revision process to a feedback based, topical oriented revision process. **[Action: Secretariat, Scientific Secretary CSS]** New Word file on the web site that includes the whole collection of IAEA Safety Standards, including the one not yet published but approved by the PC. IT platform under development. Progress report at agenda Item 6.2 of this meeting.

33.03 Guidance for Technical Officers to be prepared, as part of a revision of SPESS C, on how to address safety security interfaces. **[Action: Secretariat, SSCS and Chairs of the Review Committees].** On-going (similar to action 32.2 above)

33.11 The Secretariat to ensure when drafting DS469 that its section 3 clearly deals with the responsibilities of consigners and carriers involved in a transport event. **[Action: Secretariat, NSRW].** On-going

33.14 The technical editorial review of draft Safety Standards to be carried out before final review by the Committees and the CSS. **[Action: Secretariat, SSCS].** Continuing

33.16 The presentation initially planned at the 33rd meeting of a progress report on the establishment of an IT platform for the safety standards in electronic format and for the future review/revision process to be updated and presented at the 34th CSS meeting. **[Action: Secretariat, SSCS].** 34th CSS meeting, agenda item 6.2

34.01 The final report of the 33rd CSS meeting to be uploaded on the CSS web page. **[Action: Secretariat, CSS Scientific Secretary]. Done**

34.02 The Secretariat to reflect on the relationship between several IAEA publications, both from NS and from other Departments and on the coordination process for these publications and the IAEA Safety Standards. **[Action: Secretariat, SSCS]. At this meeting, item 6.4**

34.03 The draft DS450 on Decommissioning of Facilities endorsed subject to inclusion of references to relevant international conferences. **[Action: Secretariat, NSRW, TO for DS450]. Considered for the finalization of DS450 and its submission to the BoG**

34.04 The draft DS401 endorsed subject to CSS comments on its title, on the inclusion of an additional reference and on clarification on to what the justification applies. **[Action: Secretariat, NSRW, TO for DS401]. Done**

34.05 The DPPs DS472 and DS473 approved subject to further assessment on the need to combine the two drafts and noting that, while they will cover the requirements 36 of GSR-Part 1 like DS460, DS460 will be expanded to better address regulatory requirements on communication and consultation in order to implement other requirements than requirement 36 of GSR part 1. Furthermore, DS460 will proceed as a standalone Safety Guide with a possibility that, in the future, it may become a chapter of a broader, more encompassing Safety Guide. **[Action: Secretariat, NSNI, TOs for DS472, DS473 and DS460]. In progress. Two drafts kept at this stage. DS460 will be kept but will be mentioned in DS473.**

34.06 The DPP for DS474 approved subject to further consideration of the proposed title and further review of the list of references. **[Action: Secretariat, IEC, TO for DS474]. Done**

34.07 The Secretariat to reflect on possible options for a faster process for the review and approval of urgent draft Safety Standards. **[Action: Secretariat, SSCS]. At this meeting, item 6.3**

34.08 The DPP for DS475 approved subject to further consideration of the proposed title, the inclusion of additional references and the need to cover training beyond spokespersons. **[Action: Secretariat, IEC, TO for DS475]. Done**

34.09 The Secretariat to continue, in a step by step manner, the development of the proposed IT platform for the content management system, process management and publication of electronic safety standards **[Action: Secretariat, SSCS]. Progress report at this meeting, item 6.2**

34.10 The draft mid-term report to be updated based on comments received during the CSS meeting. Input from the Commission to be provided to the Secretariat by November 20. A revised draft incorporating this input to be prepared by the Secretariat and the CSS Chair and to made available early in December on the CSS web site for final consultation with a view to finalize the mid-term report before December 20. **[Action: Secretariat, CSS members, Secretariat with the CSS Chair]. Done**

34.11 A list of actions resulting from the 34th CSS meeting to be provided for comments to the CSS members. **[Action: Secretariat, CSS Scientific Secretary]. Done.**

34.12 The draft report of the 34th CSS meeting to be posted for comments to the CSS members. **[Action: Secretariat, CSS Scientific Secretary]. Done, item 1.2 of this meeting.**

34.13 The presentations made at the 34th CSS meeting to be uploaded on the CSS web page. **[Action: Secretariat, CSS Scientific Secretary]. Done**