27 November 2007

Commission on Safety Standards

Twenty-first Meeting

5-6 June 2007

IAEA Headquarters, Vienna

Report of the Meeting

1. Opening

Mr. Taniguchi opened the 21st meeting of the Commission on Safety Standards. He noted the increasing importance of the IAEA safety standards and the fact that their quality and relevance, reflecting an international consensus on what constitutes a high level of safety, are increasingly recognized and appreciated by the Member States and by the members of the international nuclear community. He observed that the safety standards are actually being used more extensively and that the feedback from their application through the wider and deeper sharing of experience and lessons learned will be a main element for the continuous improvement of the safety standards.

Mr. Taniguchi pointed out that a new important challenge for the IAEA will be to assist new countries launching nuclear power programmes, regarding which additional requests to the Agency for cooperation come in almost every month. He mentioned that it is also important to address new applications of nuclear technology, which are rapidly expanding in both developed and developing countries. He therefore insisted on the need to revise the current collection of safety standards in order to cover, as soon as possible, new power plants and new applications, as well as ageing facilities and organizations, in a more comprehensive, more consistent and more user friendly manner.

Mr. Taniguchi presented an overview of recent activities of the Department of Nuclear Safety and Security and informed the Commission of a number of important events relating to the safety standards including:

- The first full scope mission of the newly established Integrated Regulatory Review Service (IRRS) conducted in France in November 2006: Jointly with the IAEA, France organized in March 2007 a seminar on the feedback from the recent IRRS missions. This initiative illustrated what types of mechanisms can be put in place to benefit from the networking of actual users of the IAEA's safety standards and services, so as to collect their feedback and continuously improve the standards and safety levels worldwide through the promotion of sharing and the mutual learning of good and best practices identified in the Member States.
- The International Conference on Lessons Learned from the Decommissioning of Nuclear Facilities: The conference highlighted the importance of incorporating insights gained from decommissioning into the design, operation and maintenance of new and existing facilities. This conference provided an excellent opportunity to promote the actual application of the IAEA safety standards in this area.
- The International Conference on the Challenges faced by Technical and Scientific Support Organizations (TSOs) in Enhancing Nuclear Safety: With regard to the safety standards, the Conference recommended that the TSOs become more involved in the process of developing IAEA safety standards, in facilitating their application and in collecting feedback on them, so as to make a more active contribution to the enhancement of the global nuclear safety regime through a proactive approach.
- The fourth meeting of the Competent Authorities under the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, planned for 10 to 13 July 2007. The main objectives are: to review progress achieved since the last meeting in 2005 and to review progress in the implementation

of the International Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological Emergencies.

- An Organizational Meeting for the preparation of the Fourth Review Meeting for the Convention on Nuclear Safety is to take place from 24 to 26 September 2007 in Vienna. The Fourth Review Meeting itself will take place from 14 to 25 April 2008 in Vienna.

Mr. Taniguchi concluded that considering the increasing recognition and utilization of the safety standards and the very high expectations for the future use of nuclear technology, it is essential to have a clear and logical structure to apply consistently the common philosophy and principles established as the unified Fundamental Safety Principles. He also highlighted the importance of limiting the number of requirements and maintaining a manageable number of user friendly safety guides so as to facilitate their actual use and feedback for their future review and revision.

2. Introductions, Adoption of the Agenda and Approval of the Report of the 20th meeting

Mr. Lacoste, Chairman of the Commission, welcomed the participants and introduced Mr. Hiraoka from Japan nominated by the Director General M. El Baradei to replace Mr. Abe. He expressed the sympathy of the Commission to the Russian delegation following the death of Mr. Yurasov, who had been nominated as a new CSS member in December 2006. He informed the members that the Russian delegation would be headed by Mr. Chayka.

He reported apologies received from Mr. Souza Assis from Brazil, Mr. Eun from Korea, Mr. Weightman from the UK, Mr. Magugumela from South Africa and Mr. Holm from Sweden. He finally welcomed Mr. Barcelot Vernet representing Spain, Ms. Marechal representing Brazil, Mr. Hall representing the UK and Mr. Pather representing South Africa and who is also the Chairman of WASSC.

With regard to the tentative agenda, Mr. Delattre reported on comments received in advance of the meeting from the CSS members and proposed several arrangements in order to ensure their appropriate consideration as well as to facilitate the conduct of the meeting. Mr. Gonzalez commented that some important items did not appear clearly on the agenda. The Secretariat clarified that these items had been considered and that they would be addressed through the presentations prepared for item 3 of the proposed agenda. The duration of the meeting was commented as being too short for in depth discussion considering the number of items on the proposed agenda. The agenda with the arrangements proposed was adopted [Annex 1]. It was also concluded that there was a need to reserve three days for future meetings.

With regard to the report of the 20th meeting, Mr. Lacoste reminded the Commission that a first draft report had been issued on 15 December 2006. Following the comments received, in particular those from Mr. Gonzalez and Mr. Tanaka, a revised version addressing the comments had been distributed on 9 March 2007. The Commission approved this revised version. The Scientific Secretary will upload the final report on the Safety Standards web page. [Annex II, 21.1].

3. Activities Related to Safety Standards and other Safety and Security Related Publications

3.1 Nuclear Installation Safety, *P. Jamet, DIR-NSNI*

Mr Jamet informed the Commission of the forthcoming Fourth Review Meeting of contracting parties to the Convention on Nuclear Safety. He reminded the Commission that the Organizational Meeting is scheduled for 24-26 September 2007. The deadline for the transmission of the national reports is 28 September 2007 and the Review Meeting itself will take place from 14 to 25 April 2008.

Mr. Jamet also informed the Commission of the priority given in NSNI to the finalization of the Safety Requirements publications on Fuel Cycle Facilities and on Safety Assessment as well as to the preparation for the revision of the Safety Requirements publications on Legal and Governmental Infrastructure (GS-R-1), on the design of Nuclear Power Plants (NS-R-1) and on the operation of Nuclear Power Plants (NS-R-2).

Mr. Jamet then presented the changes to the review services, which are now better integrated and adopt a modular approach so as to better answer to the needs of Member States.

Mr. Jamet finally summarized the activities of INSAG on safety infrastructure, operating experience feedback, safety/security synergies and fusion safety.

With regard to operating experience feedback, Mr. Smocker mentioned that there are a number of on-going activities and asked for information on the co-operation in place for these activities. Mr. Lipar summarized the co-operation in place with INSAG and with the NEA/CNRA.

Mr. Virgilio requested information on the status of the INSAG work on safety and security synergies. Mr. Viktorsson reported that the issue had already been addressed at two INSAG meetings, in November 2006 and March 2007. The work had started on the basis of paragraph 1.10 of the Safety Fundamentals. Work was being done on identification of the challenges in both areas and on interfaces. Small working groups had been established to further develop the material. A first draft report focused on nuclear installations is to be ready in September or October 2007. The preparation of the report is done in cooperation with ADSEC and INSAG. Mr. Virgilio requested that the outline of the report be made available. A report on progress will be presented at the 22nd meeting of the CSS. [Annex II, 21.2].

3.2 Radiation, Transport and Waste Safety, *E. Amaral, DIR-NSRW*

Ms. Amaral presented an overview of the situation with regard to the set of Safety Requirements and Safety Guides in radiation, waste and transport safety. She highlighted the cooperation in place with NSNI for the revision of GS-R-1, the Integrated Regulatory Review Services and the international conference on the Challenges faced by Technical and Scientific Support Organizations.

Ms Amaral then presented in detail the schedule of meetings held or to be held for the preparation of the first draft of the revised BSS with the objective of having a first complete draft ready for discussion at a Technical Meeting to be organized from 16 to 20 July 2007. She mentioned the strong involvement of the co-sponsors in the drafting process as well as through the co-organization of drafting meetings. The progress will be reported at the next CSS meeting.

Mr. Tanaka confirmed the full commitment of the NEA to contribute effectively and efficiently in the revision of the BSS and in particular in the area of emergency preparedness and response. He highlighted the unique position of the BSS as a stand alone document. He suggested maintaining close co-operation with the secretariats of the co-sponsoring organizations in order to ensure that there remains a strong international consensus and indicated that sufficient time would be needed to assess the changes made in the revision of the BSS against the Safety Fundamentals and the new ICRP recommendations.

Mr. Gonzalez supported the NEA position and requested further discussion on the revision of the BSS (see item 4 below).

With regard to the protection of the environment, Ms Amaral indicated that so far it is not expected that specific requirements would be drafted in the revised BSS and that the related section would rather introduce general considerations. Mr. Virgilio mentioned the need for a technical basis prior to further elaboration of safety requirements in this area.

With regard to NORM residues, Ms Amaral reported on initiatives with the Uranium Mining Group and the phosphate industry: A meeting of regulators and producers from the uranium mining industry was organized in March 2007, whose purpose was to establish what guidance would be required to help regulators and producers and to see where the IAEA and the new working group could fill in gaps. For the phosphate industry, the issues of possible re-use, disposal and better management of NORM residues have raised many questions internationally. [The Florida Institute of Phosphate Research (FIPR) is to hold a meeting to discuss these topics in June 2007 and the IAEA has agreed to support the meeting whose intent is to bring together regulators and producers involved with NORM residues in the phosphate industry.]

3.3 Office of Nuclear Security, *A. Nilsson, DIR-NSNS*

Ms. Nilsson made a presentation for the information of the Commission on the activities of the Office

of Nuclear Security. The presentation included information to answer the request sent in advance to the meeting by Mr. Virgilio for broad information on the Nuclear Security Series to be provided at the meeting.

Ms Nilsson provided information on the history of this area, indicating that a key milestone was the open-ended Technical Meeting which was convened to decide as to whether there was a need to revise the CPPNM. Before that meeting, the only existing document had been INFCIRC/225, which was not an IAEA document but rather a document from the Member States. The discussion at the open-ended meeting led to the establishment of the Physical Protection Objectives and Fundamental Principles, endorsed by the Board of Governors and the General Conference in September 2001. This was the first IAEA publication in this field. The events of September 11 2001 led to further development and in particular to the creation of the Nuclear Security Series.

Ms Nilsson then described the architecture of the Nuclear Security Series and provided details of the objectives, scope and content of the Nuclear Security Fundamentals, whose publication is expected in 2008 after a Technical Meeting planned for the second half of 2007. She distributed the status of the documents existing or planned within the Nuclear Security Series and explained the review and approval process for these publications. She further clarified that there would in fact be four recommendations instead of three as in the document distributed. Recent discussions on revision 5 of INFCIRC/225 involving Member States and AdSec suggested that there is a need to prepare one recommendation for nuclear material and nuclear facilities and another recommendation for non fissile radioactive substances in order to ensure that the first recommendation would be consistent with revision 5 of INFCIRC/225.

Mr. Gonzalez expressed concerns based on both political and technical grounds about the parallel development of the Safety Standards Series and the Nuclear Security Series. He questioned whether the Nuclear Security Series is developed as an activity derived from article III of the Statute of the IAEA and considered that, if this was the case, the Nuclear Security Series publications should be reviewed by the CSS.

Mr. Lacoste noted that the presentation from Ms. Nilsson was part of an information exchange with a view to ensuring compatibility between safety and security. Mr. Taniguchi further clarified that the matter had already been addressed some years ago and that the Nuclear Security Series publications are not within the CSS mandate, which does not mention the article III of the statute but does mention explicitly the safety standards. He further indicated that there was nevertheless a need to enhance the synergies between safety and security and to review at the CSS security issues related to safety.

Mr. Virgilio suggested that although the USA believes that the CSS should be involved in the review of the Security Series publications, the broader issues are beyond the mandate of the CSS and should be addressed by the Board of Governors and the General Conference. Mr. Virgilio also expressed his appreciation to the presentation made by Ms. Nilsson and suggested that the Commission should be more involved in the safety/security interface. To this end Mr. Virgilio welcomed the proposal discussed at RASSC that when draft security publications are submitted to Member States for 120 day comment, a copy be sent to the members of the Committees and the Commission.

Mr. Hashmi referred to the need in the Member States, in particular by the regulatory body, for nuclear security publications prepared by an international organization and indicated that the IAEA is the only such international source. He therefore welcomed the presentation made by Ms. Nilsson on this series. He also mentioned examples of interfaces between safety and security and welcomed the work of INSAG in this area.

Mr. Lacoste concluded that there is an issue to be further addressed in determining the responsibility of the CSS when receiving information on nuclear security publications. He considered that the presentation was provided for information in order to improve the compatibility between the two series. He also noted the parallels between the architecture and processes of the Nuclear Security Series and of the Safety Standards Series, which indicates recognition of the quality of the work being done for the safety standards.

3.4 Incident and Emergency Centre, *W. Stern, IEC*

Mr. Stern presented an overview of the activities of the Incident and Emergency Centre. He informed the Commission of the status of the related safety standards, with the publication of the Safety Requirements GS-R-2 and the Safety Guide GS-G-2.1, and approval for submission to Member States for comment of the Safety Guide DS44 on Criteria for Use in Planning Response to Nuclear and Radiological Emergencies. He then informed the Commission of a number of other related publications in the Emergency Preparedness and Response Series. He described the Response Assistance Network (RANET) and the recent developments with regard to the International Nuclear Events Scale. Finally he informed the CSS of the situation with regard to the request from the TM of Competent Authorities for the development of a Code of Conduct on the International Emergency Management System for Nuclear and Radiological Incidents and Emergencies.

Mr. Lacoste noted that the purpose of the INES scale is the communication to the media and the public; another tool, the IRS, is intended to the technical community. Mr. Gonzalez shared this view..

Mr. Gonzalez questioned the need for the development of a Code of Conduct for emergency preparedness and response. Mr. Taniguchi informed the Commission that the issue is being discussed internally taking into account different views from the Member States.

Mr. Lacoste indicated that he is personally against the development of a Code of Conduct for emergency preparedness and response as Conventions are already implemented in this field; furthermore, he is concerned about the potential proliferation of Codes of Conduct.

4. Beyond the Action Plan. Long-term Structure for Safety Standards

Overall presentation

Mr. Lederman highlighted firstly the history of the safety standards, beginning with the very early days of the IAEA with the publication in 1958 of the Safety Series No. 1 on the Safe Handling of Radioisotopes. The historical evolution over the last 50 years and particularly the Action Plan approved in 2004 demonstrate a clear move from the recognition of individual publications to the recognition of the system as a whole with a complete overall structure for safety standards.

He presented the current structure established in 2003 and referred to the CSS statement in June 2006 which called for further rationalization of the Safety Standards Programme with a logical relationship between the new unified Safety Fundamentals and the set of Safety Requirements and for a manageable number of publications.

He then summarized the activities of the CSS Subgroup established at the 20th meeting of the CSS. The CSS Subgroup, composed of the CSS bureau, the chairpersons of the four Safety Standards Committees and managers in the Department of Nuclear Safety and Security, worked in January 2007 on the basis of background material prepared by the Secretariat and issued a report in two parts for submission to the Safety Standards Committees and the Commission on Safety Standards.

Mr. Lederman highlighted the main content of the CSS Subgroup report parts A and B and explained in detail the methodology adopted to derive from the Safety Fundamentals, using a top-down approach, a proposal for a long-term structure for the Safety Standards.

It involved three steps: the first step identifies in the Safety Fundamentals publication the main topics for developing safety requirements; the second step verifies the coverage of these topics in the current set of Safety Requirements (published or in preparation): this actually demonstrated that the current set of Safety Requirements addresses indeed all the fundamental safety principles but with a number of overlaps and repetition; the third step proposes a logical way of grouping the identified topics to avoid duplication and benefit as much as possible from the current set of Safety Requirements.

Mr. Lederman mentioned also that key elements of part B of the CSS Subgroup report were: the establishment of a rigorous process for the introduction of proposals for new Safety Guides with a clear preference given to the incorporation of newly identified topics on the occasion of the revision of existing Safety Guides; a list of a manageable number of Safety Guides for the long-term structure;

and a proposal for the transition from the current collection of existing and planned Safety Guides to the long-term collection.

Mr. Lederman reported that the result of the consultation of the Safety Standards Committees would be presented in detail by the respective chairs (see below) and summarized briefly the main issues discussed as follows:

- There is some support expressed for the long-term structure but more time is needed to fully assess the proposal;
- There is a need to justify the changes proposed to the structure and style of the Safety Standards and to better assess how these changes would improve safety and efficiency;
- The place of the BSS in the proposed structure and beyond needs to be further clarified. Some Committee members requested that the BSS should be maintained beyond the first phase;
- There are opportunities to harmonize safety and security; and
- The Committees have just started the detailed review of the proposed list of Safety Guides and their comments are expected by August 1st.

With a view to helping decision making on the next steps, Mr. Lederman proposed the following key elements for consideration:

- The complete set of Safety Requirements planned under the current structure will be finalized soon and will address all the fundamental safety principles;
- The Member States seem satisfied with the current structure and coverage of the Safety Standards;
- There is a wide utilization of the safety standards in the Member States both for establishing the national regulations and for benchmarking;
- Regulatory stability is essential, particularly at a time such as the present where there is renewed interest in nuclear power generation;
- The development of Safety Guides needs to proceed with due consideration given to identifying gaps;
- Step one of the proposal is based on the current structure (thematic requirements and facilities/activities specific requirements);
- The Safety Requirements define with clarity “what” while the Safety Guides deal with “how” in a flexible manner;
- The safety requirements are universally applicable; and
- There is a need to improve efficiency and timeliness in the preparation and review process.

Summary of the review by the Safety Standards Committees

Mr. Pather presented a summary of the discussions at the joint NUSSC, RASSC and WASSC session, essentially on part A of the CSS Subgroup report, with part B needing further consideration in detail by the Committees. He reported that the main comments from the Committees were to review the list of chapters for the General Safety Requirements (GSR) and include additional chapters on radiation protection and siting; to seek harmonization between safety and security; to develop the application of a graded approach in the GSR; to combine the three NPP specific requirements; to broaden the scope of the proposed activity specific Safety Requirements publication on mining so as to include NORM issues; to identify how the proposal would actually result in improvements in safety in the Member States and improvement of the efficiency of the Safety Standards preparation process; and to clarify the place of the BSS in the future structure, highlighting that some members considered that the revised BSS should remain beyond phase 1 of the transition process. With regard to the proposed new format, he reported that the comments related mainly to the need for justification of the change of format and style, while recognizing that it had already been used for the Safety Requirements GS-R-3 and for two Safety Requirements being prepared in the waste safety area. He also indicated concerns expressed by the Committee members on the difficulty of handling in parallel three major projects: the

long-term structure for Safety Standards, the new ICRP recommendations and the revision of the BSS. He concluded by informing the CSS that the Committee members were given more time to review the proposal, with a deadline for comments established for 1st August 2007.

Mr. Reiman complemented the presentation made by Mr. Pather on the joint session, with information on the detailed review at the NUSSC session. He reported that the comments from the NUSSC members had essentially been on the list of chapters for the GSR, on the potential loss of regulatory stability, on the need for clear relationship between the Safety Requirements and the Safety Guides based on a gap analysis and on the need for a more detailed table for the transition from the current collection to the future set of Safety Standards.

Mr. Magnusson further complemented the presentation on the joint session, by mentioning that at the RASSC session some support to the proposal was received with, however, general concerns expressed on the future role of the BSS, on the justification for the new format, on the time needed to allow for an in-depth discussion, on the need for regulatory stability, in particular for developing countries, and on the need for the involvement of co-sponsors.

Mr. Duffy finally informed the Commission that TRANSSC members have provided comments to the Secretariat and are currently reviewing part B on the proposed set of Safety Guides. He summarized the comments from the members, which were very similar to the comments from the other Committees, particularly on the time necessary for in-depth discussion, on the need to consider the feedback from the Member States, on the need for justification for the changes of both the structure and the format, on the future place of the BSS and on identifying how the changes would result in improvements in safety in the Member States.

Proposal from the Secretariat for the next step

Considering the views expressed at the Safety Standards Committee meetings, Mr. Lederman presented the Secretariat's proposal to continue with phase one of the CSS Subgroup Report, to adopt as far as possible the new format for the future Safety Requirements and to postpone the decision of the establishment of the proposed General Safety Requirements publication until after the completion of the whole set of Safety Requirements at the end of phase one. Mr. Lederman insisted in particular on the importance of carrying out phase one with a view to finalizing the current set of Safety Requirements and Guides and avoiding further delay in their development.

Mr. Lederman also referred to the establishment of a management system for the planning, preparation, review and publication of the Safety Standards with a view to improving the effectiveness and efficiency of these processes.

Discussion

Mr. Lacoste introduced the discussion with four general remarks:

- The changes being proposed do not represent a revolution but an important evolution from the current structure (with a view to continuous improvement taking into account the unified Safety Fundamentals);

- The Commission should keep strictly in mind the final objective but may adopt a flexible step by step process to achieve it;

- There is a need for a strong involvement of the Committee and the Commission members in addition to the Secretariat; and

- The concept of user friendliness should be clarified, considering that, in the Member States, the principal users of the safety standards are the regulators.

The Commission discussed in depth the presentation made. Most of the comments from the Commission members are similar to those reported from the Committees.

In addition, the following comments and suggestions were made:

- Mr. Pereira suggested that the future BSS could be one chapter of the future GSR;

- Mr. Gonzalez supported the proposal for strong involvement and leadership by the Commission, and added that the Safety Standards should not be seen as tutorial material but rather should provide

material in a regulatory style. He also commented that the main issue to be addressed is the place of the revised BSS in the final structure. He further commented that in the current structure much effort is dedicated to facilities that result in a small fraction of the total exposure of workers and the public;

- Mr. Schmocker insisted on the need now for a vision for the future and argued that a clear structure will help avoiding gaps and overlaps while establishing a clear relationship between the Safety Fundamentals and the Safety Requirements and between the Safety Requirements and the Safety Guides;

- Mr. Hashmi mentioned the particular need of developing countries for stability and considered that the current structure and style for the NPP related Safety Standards was satisfactory.

- Mr. Lacoste suggested that one possible approach for the development of the future GSR could be to expand the scope of the revised BSS;

Mr. Gonzalez proposed that a short paper on key issues be prepared by the chair of the CSS;

After discussion on whether the option of expanding the scope of the BSS should be addressed by the Technical Meeting in July 2007 to review the first complete draft of the BSS, it was agreed that the TM should focus only on the first phase and the option of expanding its scope would be addressed later in the second phase of the development of the long-term structure.

Conclusion

In conclusion, Mr. Lacoste recommended the establishment of a task force involving volunteers from the CSS, the four Chairpersons of the Committees and the management of the Department of Nuclear Safety and Security to study the most efficient and effective approach to the structure of the Safety Standards with a view to achieving the ultimate objective. He proposed to prepare a short paper to be used as an input for the work of the task force and to be first submitted for comments to the Commission members. The date for the meeting of the task force was fixed for September 13, 2007.

Mr. Lacoste indicated that the short paper [Annex II, 21.3] would include the six following general considerations:

- The changes being proposed do not represent a revolution but an evolution for continuous improvement of the current structure;

- The Commission should keep strictly in mind the final objective but may adopt a flexible step by step process to achieve it;

- There is a need for a strong involvement of the Committee and the Commission members in addition to the Secretariat;

- TheSafety Standards should be user-friendly and there is a need to define this concept of user friendliness;

- There is a need to clarify the role of the revised BSS in the long-term structure, with one option being to expand its scope so as to build the GSR; and

- There is a need to better address medical applications and exposures to NORM, including radon;

Furthermore the Commission supported the proposal made by the Secretariat to proceed with the first phase of the CSS Subgroup report with a view to finalizing the collection of Safety Standards foreseen in the current structure, keeping in mind the preparation for the long-term structure.

NOTE: Following the meeting, a draft roadmap was sent for consultation of the CSS members. A revised draft taking into consideration the comments received was distributed on 12 July 2007 [Annex 4].

5. Status of the endorsed Standards and Response to Actions from the 20th Meeting

Mr. Delattre informed the Commission of the publication of Safety Standards endorsed by the CSS. He informed the members of improvements made to the 'Status of Safety Standards' file available on the Safety Standards web page at http://www-ns.iaea.org/downloads/standards/status.pdf. The file includes now direct links to the electronic versions of the published Safety Standards and the translations available. He then listed the recently published Safety Standards:

- **SF-1** Fundamental Safety Principles (Nov. 2006)
- **WS-G-6.1** Storage of Radioactive Waste (Nov. 2006)
- **WS-G-5.1** Release of Sites from Regulatory Control upon the Termination of Practices (Nov. 2006)
- **NS-G-4.1** Commissioning of Research Reactors (Nov. 2006)
- **NS-G-4.2** Maintenance, Periodic Testing and Inspections of Research Reactors (Nov. 2006)
- **RS-G-1.10** Safety of Radiation Generators and Sealed Radioactive Sources (Dec. 2006)
- **WS-G-3.1** Remediation Process for Areas affected by Past Activities and Accidents (March 2007)
- **GS-G-2.1** Arrangements for Preparedness for a Nuclear or Radiological Emergency (May 2007)

Mr. Delattre also informed the Commission that one remaining endorsed Safety Guide is in the final phase of publication after improvement of the quality of one figure (DS377: Radiation Protection Programmes for Transport of Radioactive Material).

Mr. Delattre reported on the status of the actions listed following the 20th CSS meeting, which was attached to the tentative agenda for information. The final status is provided in Annex III.

Mr. Delattre briefly presented the initiative taken by the Secretariat on the establishment of a management system for the planning, preparation, review and publication of the Safety Standards with a view to improving effectiveness and efficiency of these processes.

Referring to action 20.6, Mr. Virgilio requested the Secretariat to further report to RASSC and the CSS on gap analysis for the Safety Standards on medical applications in order to ensure that issues identified as root causes of incidents and accidents are addressed. [Annex II, 21.4]

Mr. Virgilio also congratulated the Secretariat on the initiative of establishing such a management system. Mr. Delattre informed the Commission that its development would continue in the second half of 2007 and would involve review by the Committees and the Commission. [Annex II, 21.5]

Mr. Gonzalez also welcomed a number of improvements of the web site.

With regard to the report on the consideration of involvement of interested parties in decision making (action 20.11), Mr. Gonzalez requested the revision of the Safety Requirements GS-R-3. Mr Loy mentioned that the content of GS-R-3 with regard to involvement of interested parties is more a good practice than a strict requirement. Mr. Reiman mentioned that this Safety Requirements publication was found very useful in Finland in the context of the construction of Olkiluoto 3.

Mr. Delattre finally presented the tentative programme of the Senior Regulators' Meeting to be held on September 20 2007, during the General Conference. The Commission suggested restricting the number of items so as to allow for more in-depth discussion. It was suggested in particular to expand the duration of the proposed session on regulatory control of medical applications.

6. Developments in Member States

Following the request at the 20th CSS meeting, this item is now split into two items, the first one being dedicated to the use of safety standards and the feedback for their continuous improvement.

6.1 The Use of Safety Standards

Almost all presentations had been sent in advance to the meeting and were posted on the CSS web page. Several members summarized their presentations, highlighting the most important aspects. The material will remain available for all members on the web page.

6.2 National Events and Regulatory Issues

As with item 6.1, almost all presentations on recent national events and related regulatory issues had been provided in advance and were posted on the CSS web page, where the material will remain available. From the various oral presentations by the members, Mr. Lacoste noted the increasing demand for IRRS review missions.

7. Presentations and Discussion of Reports of Safety Standards Committees

The result of the discussion at the Committees' meetings on the long-term structure for the Safety Standards was provided following the presentation by Mr. Lederman under agenda item 4 (see above) and therefore the complementary presentations under item 7 focused on other achievements and in particular on the result of the review by the Committees of proposed DPPs and manuscripts. Additionally, the summary by Mr Duffy TRANSSC included items on Legal Liability, Denial of Shipments and the Integrated Regulatory Review Services programme.

The latest meetings of the Committees included a triple NUSSC/RASSC/WASSC session as well as NUSSC/WASSC and RASSC/WASSC joints sessions. These joint review sessions were considered useful considering the common interest of several committees to a number of draft publications. A representative of the TRANSSC Secretariat also attended the joint NUSSC/RASSC.WASSC meeting.

8. Safety Standards for approval

8.1 Safety of Fuel Cycle Facilities (DS316); Safety Requirements

Mr. Nocture presented the history of the development and review by the Safety Standards Committees of the draft Safety Requirements. He also provided answers to the comments received in advance from Japan and the USA.

Mr. Hiroaka from Japan queried the status of the relevant set of Safety Guides and suggested adding appendices corresponding to all types of fuel cycle facilities. Mr. Nocture replied that this could delay significantly the publication since the Safety Guides for the other facilities are still being prepared. It was agreed not to delay the publication and to include the additional appendices at the next revision of the Safety Requirements.

Mr. Hasmi noted that most of the draft is composed of extracts from other Safety Requirements. Mr. Nocture explained that this was the option chosen at the very beginning of the discussion on the set of Safety Standards for the fuel cycle facilities in order to improve user friendliness through self-standing publications.

To answer a question from Mr. Gonzalez on where the specific requirements are in the draft publication, Mr. Nocture clarified that they are detailed for all specific facilities in the corresponding appendices. Mr. Delattre added that the appendices are part of the Safety Requirements; this is in contrast to annexes, which are for additional information or examples.

Mr. Gonzalez also regretted the absence of numerical criteria.

The draft was endorsed by the Commission for submission to the Board of Governors.

8.2 Management Systems for Technical Services in Radiation Safety (DS315)

Mr. Zeger presented the purpose and scope of the draft, its relationship with other Safety Standards Series publications and ISO publications, its content and application, including to the IAEA's own

activities. No comments had been received prior to the meeting.

Several members questioned the need for this Safety Guide and its added value to the existing publications (e.g. GS-G-3.1 and ISO publications). The CSS also wondered whether it could be integrated with other Safety Guides. At this occasion, the CSS mentioned its concern on the possible proliferation of Safety Guides in the management system area.

Mr. Zeger clarified that this Safety Guide would help the organizations involved in calibration/testing or consulting/advisory services for radiation safety to obtain certification or accreditation and would contribute therefore to the quality of these services important for safety.

The CSS endorsed the draft.

8.3 Management Systems for the Safe Transport of Radioactive Material (DS326)

This item was in fact removed from the agenda. The secretariat is incorporating the comments resulting from editorial review in cooperation with TRANSSC before its final submission to the CSS at a subsequent meeting.

8.4 The Management System for the Processing, Handling and Storage of Radioactive Waste (DS336); and

8.5. The Management System for the Disposal of Radioactive Waste (DS337)

Considering their strong interaction, Mr. Bannai made a joint presentation for both drafts. He presented the history of their development, their relationship with other Safety Standards in the waste safety area and in the management system area and the main content of both drafts. No comments had been received prior to the meeting.

Mr. Lacoste observed a proliferation of proposals in this area and reminded the members of the CSS of the necessary vigilance to prevent such situations at the DPP stage rather than at the final endorsement stage.

Mr. Loy asked as to whether it was possible to combine the two documents together now. Looking at the history, Mr. Delattre reminded the Commission that this had been the initial proposal from the Secretariat and the Committees, but that the Commission had requested that the proposed DPP be split into two separate publications. Mr. Delattre also informed the Commission that in the proposal for the long-term structure for the Safety Standards, one of the options for consideration is the incorporation of the material in a harmonized manner into the facility specific guides. Such incorporation is seen as being more user friendly and has the potential to limit the proliferation of thematic guides for different facilities and activities.

Mr. Gonzalez informed the meeting that he had provided detailed comments directly to the technical officer. He also recalled his previous comments on the Safety Requirements GS-R-3, suggesting that it be promptly revised.

The Commission endorsed both drafts and requested the Secretariat to present at the next meeting a description of the full collection of Safety Requirements and Safety Guides in the Management System area. [Annex II, 21.6]

Moreover, the Commission requested the Secretariat to prepare for the next meeting a report on the best way of achieving user friendliness. [Annex II, 21.7]

8.6 Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (DS346)

Mr. Wangler presented the draft. It constitutes a revision of the Safety Guide TS-G-1.1 and implements the 2005 edition of the Safety Requirements TS-R-1. No comments had been received prior to the meeting.

Mr. Hall requested clarification of a paragraph added after the review by TRANSSC. Mr. Wangler explained that the additional text answers a comment received at WASSC and RASSC and that this addition had been carried out in cooperation with TRANSSC members.

The publication of the Safety Guide was strongly supported by Mr. Gonzalez and Mr. Hiroaka.

Mr. Lacoste questioned the use of 'Advisory Material' in the title as this is not usual for other Safety Guides. Mr. Wangler explained that this Safety Guide has retained this title for a long time already through earlier revisions.

The draft was endorsed by the Commission for publication, with a request to reconsider the title at a later revision.

8.7 Core Management and Fuel Handling for Research Reactors (DS350)

Mr. Shokr presented the history of the draft, its purpose and content. No comments had been received prior to the meeting.

The commission endorsed the proposed Safety Guide.

9. Document Preparation Profiles for Approval

9.1 Regulations for the Safe Transport of Radioactive Material (DS345), revision of TS-R-1

Mr. Wangler presented the proposed DPP. The purpose is to publish in 2009, if approved by TRANSSC and endorsed by the CSS, a revision of the Transport Regulations. No comments had been received prior to the meeting.

Mr. Wangler informed the Commission on the need for harmonization with the UN model regulations and referred to the General Conference resolution GC(50)/RES/10B. He indicated that according to the criteria established by TRANSSC to decide on the revision of Safety Requirements, the need for harmonization warrants a new edition. This new edition would also incorporate the changes made for the 2007 edition, which was not published.

Mr. Gonzalez further informed the Commission of agreements between costal and shipping states on maintaining the regulations up-to-date.

Mr. Lacoste pointed out that Member States have serious difficulties with a high frequency for the changes to the Transport Regulations. Ms Amaral also indicated that due to these difficulties different Member States implement different editions of the regulations, thus resulting in less harmonization among Member States.

Mr. Wangler anticipated that the harmonization with the UN regulations would facilitate the incorporation of the revised TS-R-1 in the UN Model Regulations, which later on would provide for harmonization among Member States.

The Commission approved the DPP.

9.2 Chemistry Programme for Nuclear Power Plants (DS388)

Mr. Renev presented the proposed DPP. He mentioned in particular a number of chemistry related events reported through the International Reporting System (IRS) and the feedback from OSART missions. The Safety Guide is intended to provide guidance and recommendations on how to maintain high standards in chemistry programmes in NPP operation based on internationally recognized good practices. Comments from India had been received in advance of the meeting.

Mr. Delattre explained that the proposal for this new Safety Guide illustrates the new rigorous process for the establishment of new Safety Guide described in the CSS Subgroup Report part B on the long-term structure for Safety Standards.

Mr. Pather suggested that the chemistry issues might better be addressed in Safety Reports. Mr. Gonzalez recommended maintaining the proposal as a Safety Guide. He also requested that exposure

situations that could result from chemically induced degradation be covered. In this regard, he requested the involvement of RASSC and WASSC in the review process.

Mr. Gordon informed the Commission of the support of the Russian delegation for the proposal.

In order to answer to the comment from Mr. Pather that there is currently no Safety Requirements in NS-R-2 on the topic, Mr. Lipar informed the Commission that the Safety Requirements NS-R-2 is being revised and will address the issue following feedback from OSART missions (the DPP for the revision of NS-R-2 has been approved by the Safety Standards Committee and is to be submitted to the next CSS meeting).

Mr. Sharma suggested adding annexes with the detailed information necessary to implement the recommendations.

Mr. Abdel Hamid asked as to whether it was either possible to expand the proposed scope to cover research reactors or to propose another Safety Guide addressing the same issues for research reactors.

The commission approved the DPP for a Safety Guide for power reactors with a title that reflects that its scope is restricted to water cooled reactors, keeping in mind the possibility of later merging the proposed Safety Guide with other Safety Guides for the operation of power reactors. The Commission requested that consideration of occupational exposure related issues be added and that RASSC and WASSC be involved in the review process. The Commission also requested NUSSC to investigate the coverage of chemistry issues for research reactors and to report to the Commission at its next meeting.

9.3 Deterministic Safety Analyses and their Application for Nuclear Power Plants (DS395 to combine previous DS395 and DS398)

Mr. Lee presented on behalf of Mr. Dusic the proposed DPP. He reported that a DPP for the DS395 project on verification and validation of computational tools for accident analyses had already been approved by the CSS in 2005. He indicated that the initial plan had been to produce other Safety Guides on estimating the source term and on deterministic analyses, but that it was now proposed to combine these projects into one single publication. Comments from India had been received in advance of the meeting.

Mr. Gonzalez commented on the proposed table of contents and requested that the section on dose evaluation be revised by removing references to critical groups and collective dose. Mr. Virgilio agreed on these comments and suggested that RASSC be involved in the review process.

Mr. Gonzalez and Mr. Virgilio indicated that there was a further need to prepare a comprehensive publication to cover in a comprehensive manner the use of the various safety analysis tools.

The Commission approved the DPP with a request to revise the content on dose evaluation in consultation with the chairman of NUSSC.

9.4 Monitoring and Surveillance of Disposal Facilities (DS357)

Mr. Rowat presented the proposed DPP. The draft will cover the monitoring and surveillance activities in the preoperational, operational and post-closure phases and will address all types of disposal facilities (near surface, geological, borehole and mining residues). It will also incorporate material from existing TECDOCs and Safety Reports (TECDOC 1208, Safety Reports 27 and 35). Comments from the USA had been received in advance of the meeting.

The need for this Safety Guide was questioned by Mr. Virgilio considering the existing TECDOCs and Safety Reports. Its incorporation into the set of facility specific guides was also discussed. Mr. Delattre clarified that this incorporation was one of the options presented for the set of Safety Guides in the long-term structure, thus minimizing the number of thematic guides.

Mr. Gonzalez requested that the relation between the proposed Safety Guide and the existing Safety Guide RS-G-1.8 on Environmental and Source Monitoring for Purposes of Radiation Protection be highlighted. He also recommended that the parts relating to safeguards issues be removed.

The Commission approved the DPP with the request that the relationship between the proposed Safety Guide and the existing RS-G-1.8 and related TECDOCs and Safety Reports be better described. [Annex II, 21.8].

9.5 Arrangements for Dealing with Orphan Radioactive Sources and Radioactively Contaminated Material in the Metal Recycling Industry (DS411)

Mr. Friedrich presented the proposed DPP. The intent of the Safety Guide is to provide recommendations to Member States on the management of orphan sources and radioactively contaminated material discovered in the scrap metal supply chain with the intention of establishing or improving the capabilities of regulatory authorities and the metal recycling industry to bring orphan radioactive sources and radioactively contaminated material that has entered the metals recycling supply chain back under control. Comments from India and the USA had been received in advance of the meeting.

Mr. Hall noted that the UNECE has published a document with nearly the same title. Mr Ulbak suggested that the scope be broadened, so as to consider all waste streams. Mr Friedrich replied that it would not be feasible to broaden the scope to cover all waste streams such as municipal waste or other industrial waste.

Mr. Gonzalez strongly recommended that the DPP be approved, considering the importance of the issue. He also recommended that the focus be kept on the metal recycling industry while acknowledging that the problem is certainly wider. He proposed that the reference made to the published safety guide RS-G-1.7 be complemented by referring to the resolution of the General Conference on this issue.

It was also suggested that a section on the safety related security issues be added.

The Commission approved the DPP subject to consideration of the comments made and further suggested that its title be improved.

10. Other business

10.1 DPP for the development of a Safety Framework on the Use of Nuclear Power Source Applications in Outer Space

Ms. Caponiti, representing the Working Group on Nuclear Power Sources established by the Scientific and Technical Sub-Committee (STSC) of the Committee on the Peaceful Use of Outer Space, presented the proposed DPP and reported on the comments made at its review by the four Safety Standards Committees.

The DPP is proposed for agreement by the CSS and not for formal approval, since the final publication is not expected to be published as part of the Safety Standards Series. It is expected to be a joint STSC/IAEA publication with involvement of all the Committees and the Commission for its review.

Ms. Caponiti also clarified that terrestrial activities involving space nuclear power sources are covered by the IAEA Safety Standards Series and therefore the proposed framework would focus on the relevant safety aspects of the launch and subsequent phases of space NPS applications.

Questions were raised about the status of the proposed framework. While recognizing that it would not fit easily within the collection of Safety Standards, the Secretariat was requested to further investigate the process for jointly publishing the framework with the STSC. [Annex II, 21.9].

Mr. Gonzalez requested particular emphasis in the proposed document on low orbits.

The Commission agreed to the proposed DPP.

10.2 Preparation of the Four-year Report

Mr. Lacoste informed the Commission of the need to prepare a report on the current four year term that will end at the end of 2007. Mr. Delattre made available the previous report as an example for the new report to be prepared and asked for advice on items to be included in the draft.

Mr. Lacoste recommended the preparation of a report as short as the previous one, with focus on policy and strategy discussions and achievements. An appendix would include the details on endorsed DPPs and drafts.

A number of detailed suggestions for the content of the report were provided to the Scientific Secretary. Mr. Lacoste requested that a structure for comment be first submitted to the members by correspondence and that a draft report be then submitted for the next meeting. [Annex II, 21.10]

11. Report of the Meeting, Date of the next Meeting

Mr. Delattre informed the Commission that a draft report of the meeting would be prepared by the Scientific Secretary of the Commission and sent for comment to the members with a view to its approval at the next meeting. [Annex II, 21.11]

The next meetings of the CSS are planned from 26 to 28 November 2007 and from 30 June to 2 July 2008.

ANNEX I

AGENDA

Twenty first Meeting of the
COMMISSION ON SAFETY STANDARDS
5 – 6 June 2007

Meeting Room CO7-IV, IAEA Headquarters, Vienna

1. Opening of the Meeting (10:00)
   T. Taniguchi; DDG-NS

2. Introductions, Adoption of the Agenda and Approval of the Report of the Twentieth Meeting
   A-C. Lacoste

3. Activities Related to Safety Standards and other Safety and Security Related Publications
   - 3.1 Nuclear Installation Safety, *P. Jamet, DIR-NSNI*
   - 3.2 Radiation, Transport and Waste Safety, *E. Amaral, DIR-NSRW*
   - 3.3 Office of Nuclear Security, *A. Nilsson, DIR-NSNS*
   - 3.4 Incident and Emergency Center, *W. Stern, IEC*

4. Beyond the Action Plan. Long-term Structure for Safety Standards, *L. Lederman, Chairs of NUSSC, WASSC, RASSC and TRANSSC*

5. Status of the Endorsed Standards and Response to Actions from the 20th Meeting, *D. Delattre*

6. Developments in Member States
   - 6.1 The Use of Safety Standards; *(CSS Members)*
   - 6.2 National Events and Regulatory Issues; *(CSS Members)*

7. Presentations and Discussion of Reports of Safety Standards Committees
   - 7.1 Nuclear Safety Standards Committee
     L. Reiman, Chairman/G. Feige, Scientific Secretary - NUSSC
   - 7.2 Radiation Safety Standards Committee
     S. Magnusson, Chairman/T.J. Boal, Scientific Secretary - RASSC
   - 7.3 Waste Safety Standards Committee
     T. Pather, Chairman/K. Hioki, Scientific Secretary – WASSC
   - 7.4 Transport Safety Standards Committee
     J. Duffy, Chairman/M. Wangler, Scientific Secretary – TRANSSC

8. Safety Standards for Approval
   - 8.1 Safety of Fuel Cycle Facilities (DS316); Safety Requirements
   - 8.2 Management Systems for Technical Services in Radiation Safety (DS315)
   - 8.3 ~~Management Systems for the Safe Transport of Radioactive Material (DS326)~~
   - 8.4 The Management System for the Processing, Handling and Storage of Radioactive Waste (DS336)
   - 8.5 The Management System for the Disposal of Radioactive Waste (DS337)
   - 8.6 Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (DS346)
   - 8.7 Core Management and Fuel Handling for Research Reactors (DS350)

9. Document Preparation Profiles for Approval

   9.1 Regulations for the Safe Transport of Radioactive Material (DS345), revision of TS-R-1

   9.2 Chemistry Programme for Nuclear Power Plants (DS388)

   9.3 Deterministic Safety Analyses and their Application for Nuclear Power Plants (DS395 to combine previous DS395 and DS398)

   9.4 Monitoring and Surveillance of Disposal Facilities (DS357)

   9.5 Arrangements for Dealing with Orphan Radioactive Sources and Radioactively Contaminated Material in the Metal Recycling Industry (DS411)

10. Other business

   10.1 DPP for the development of a Safety Framework on the Use of Nuclear Power Source Applications in Outer Space; *A. Caponiti, representative of the Working group on Nuclear Power Sources applications of the COPUOS/STSC (Committee on the Peaceful Uses of Outer Space)*

   10.2 Preparation of the Four-year Report

11. Report of the Meeting, Date of the next Meeting

ANNEX II

ACTIONS ARISING FROM THE 21st MEETING OF THE COMMISSION

21.1. Issue the final report of the 20th meeting of the Commission (ref. *Item 2*). **[Action: Secretariat]**. **Done**

21.2. Provide at the 22nd CSS meeting information on the work from INSAG on the safety/security interface (ref. *Item 3.1*). **[Action: Secretariat]**

21.3. The Chair to prepare a two-page paper as an input for a task force (CSS bureau, Chairs of the SSCs, Secretariat) to study the feasibility of achieving integration of the thematic requirements for the long-term structure of Safety Standards by extending the scope of the BSS. Date for the meeting of the task force to be determined. Report to be provided at the 22nd CSS meeting (ref. *Item 4*). **[Action: CSS Chair and the Secretariat]**. **Date confirmed 13 September 2007. Draft roadmap sent for consultation on 21 June 2007. Revised draft roadmap taking into account the comments received distributed on 12 July 2007**

21.4. Further report to RASSC and the CSS on gap analysis for the Safety Standards on medical applications to ensure that they address issues identified as root causes of incidents and accidents (ref. *Item 5*). **[Action: Secretariat]**

21.5. Progress report and first review at the 22nd CSS meeting of the management system for the planning, preparation, review/revision, approval and publication of Safety Standards (ref. *Item 5*). **[Action: Secretariat]**

21.6. Report for the 22nd CSS meeting on the set of Safety Requirements and Guides on the Management System (ref. *Items 8.4 and 8.5*). **[Action: Secretariat]**

21.7. Report for the 22nd CSS meeting on the meaning and implications of the concept of user friendly safety standards (ref. *Items 8.4 and 8.5*). **[Action: Secretariat]**

21.8. Report to WASSC and to the 22nd CSS meeting on the relationship between the draft DS357 on Monitoring and Surveillance of Radioactive Waste Disposal Facilities and the collection of associated Safety Reports and TECDOCs (ref. *Item 9.4*). **[Action: Secretariat]**

21.9. The Safety Standards Committees and the CSS to continue to be involved in the review of the draft safety framework for the use of nuclear power source applications in outer space. The process for approving and jointly publishing the framework with STSC to be further investigated (ref. *Item 10.1*). **[Action: Secretariat]**

21.10. Prepare a proposal for the structure of the 4-year report for submission for comments by correspondence to the CSS and prepare a draft 4-year report for submission for approval at the 22nd CSS meeting (ref. *Item 10.2*). **[Action: Secretariat]**

21.11 Prepare the draft report of the 21st CSS meeting to be submitted for approval at the 22nd CSS meeting (ref. *Item 11*). **[Action: Secretariat]. Done**

ANNEX III

STATUS ON ACTIONS ARISING FROM THE 20th MEETING OF THE COMMISSION

20.1. To give further consideration of TECDOCs and the important role they play for information and knowledge exchange on various topics as part of the discussion of beyond the action plan and report to CSS in June 2007 (Ref. *Item 2, bullet 3).* **[Action: Secretariat]. A report was presented under agenda item 5**.

20.2. CSS requested the Secretariat to prepare a report on Codes of Conduct, including their status, added value and development process for consideration at the next meeting. (Ref. *Item 2, bullet 4).* **[Action: Secretariat]**. **A report was presented under agenda item 5**.

20.3. To discuss whether the Safety Requirements for design of nuclear power plants serve for existing Gen II plants and for the next generation of Gen III plants and new reactor designs. This should be considered in detail when the DPP for the design Safety Requirements publication is prepared and presented for review to NUSSC and the Commission. (Ref. *Item 2, bullet 6).* **[Action: Secretariat]**. **This action is kept for the November 2007 meeting when a DPP on the revision of NS-R-1 will be submitted to the CSS.**

20.4. To revise and issue the report of the 19th meeting of the Commission (ref. *Item 2, last paragraph*) **[Action: Secretariat]**. **Done: The minutes of the meetings were sent on December 15, 2006. A revision taking into account the comments received was sent to all members on March 9, 2007 and posted on the CSS members' area web page.**

20.5. To prepare and present at the next meeting a report on the results of the subgroup on the structure and related issues and on the results of the consultation of the Committees (ref. *Item 4, last paragraph*) **[Action: Secretariat]. A first report (CSS Subgroup Report part A) on the set of Safety Requirements was prepared at a meeting of the Subgroup on January 15. It was complemented by a second report (CSS Subgroup Report part B) and a proposed list of Safety Guides. The three parts were submitted to the Safety Standards Committees on March 9, 2007. The reports and the results from the discussions at the Committees were presented under agenda item 4.**

20.6. Frequent incidents and accidents in the medical application of radiation sources is considered to be of particular importance requiring special attention by the Commission at a future meeting to discuss in detail Safety Requirements and Safety Guides to be developed on the topic. (Ref. *Item 7).* **[Action: Secretariat]. A report was presented under agenda item 5**.

20.7. The item on "use of Safety Standards" to be split into two separate items in the agenda for the next meetings of the Commission. (ref. *Item 7, last paragraph*) **[Action: Scientific Secretary]. Implemented with now agenda items 6.1 and 6.2.**

20.8. Progress reports on the development of the draft DS379 to be presented at future meetings of the Commission. (Ref. *Item 9.1).* **[Action: Secretariat]. This was presented as part of the presentation from NSRW under agenda item 3.2.**

20.9. The results of the meeting of the COPUOS/STSC and a DPP for a framework to be presented at the next meeting. (Ref. *Item 10.1).* **[Action: COPUOS/STSC/working group in co-operation with the IAEA Secretariat] This was addressed under agenda item 10.1.**

20.10. Comments on the revised generic text for the Safety Standards to be sent to the Scientific Secretary. (Ref. *Item 10.2).* **[Action: CSS members]. At the meeting of the CSS Subgroup on January 15, the CSS Subgroup concluded that this item should be postponed until after the establishment of the future structure for Safety Standards. Moreover, no comments from the CSS members were received by the Secretariat.**

20.11. A report on the consideration of stakeholder involvement in decision making to be presented at the next meeting. (Ref. *Item 10.3).* **[Action: Secretariat]. A report was presented under agenda item 5**.

Additional actions not requested but implemented at the initiative of the Secretariat:

1. A dedicated web page for the members of the Commission was established in March 2007, were the members can follow the activities of the Safety Standards Committees, access all documents submitted to the meeting of the Commission and upload comments.

2. The presentation of the 'Status of Safety Standards' was improved in March 2007 with now direct hyperlinks to the published Safety Standards in all available languages.

3. A management system for the preparation, review, approval, publication and review/revision processes is being established. A first skeleton was established in March 2007.

4. A policy on the use of the IAEA Safety Glossary was established in March 2007.

ANNEX IV

Follow-up Actions in Connection with Agenda Item 4

DRAFT ROADMAP for the CSS Task Force on the Long-Term Structure for Safety Standards

(12 July 2007)

1) The fundamental safety objective is to protect people and the environment from harmful effects of ionizing radiation.

2) Ten Safety Principles have been formulated that form the basis upon which Safety Requirements are developed and safety measures are to be implemented in order to achieve the fundamental safety objective.

3) Arriving at a unified set of Safety Fundamentals has been a difficult task. It constitutes an important evolution, and not a revolution, and must be considered as a key milestone in a continuous improvement process.

4) There is now a unique opportunity to draw the inferences from the publication of the single set of Safety Fundamentals and use a combination of a top-down approach and a Requirements gap analysis for the identification of the most efficient and effective structure for the set of Requirements needed to ensure their implementation. The long-term structure should keep the current hierarchy with three levels and take into account the need for stability in regulatory approaches.

5) The intention is to establish a General Safety Requirements integrating in one or more publications all thematic areas, complemented by a series of facilities and activities specific Safety Requirements. The complete set of Safety Requirements should address all radiation exposure situations (actual and potential). Integration of safety related security issues should also be considered. The General Safety Requirements should apply to any facility/activity (as defined in the footnote of the paragraph 1.9 of the Fundamental Safety Principles SF-1), whereas the others should apply to specific facilities/activities.

6) The treatment of NORM, radon and medical activities needs to be carefully considered and enhanced as appropriate.

7) The future documents should be user friendly; therefore, the concept of "user friendliness" must be clarified, keeping in mind that in most cases the national authorities and in particular the regulators are the principal users of the Standards. The future collection of Safety Standards should also be manageable and therefore consist of a manageable number of publications each of them being as concise as possible and addressing the essence of the safety issues.

8) The final aim of the process is a clear and complete set of Safety Requirements. But the process itself should be stepwise and flexible. Sufficient time must be devoted to achieving a consensus on the long-term structure. A rigorous process must be in place to ensure a strong consensus and a clear benefit for all changes from the current structure.

9) The work to be done cannot just be given to the Secretariat. There must be a personal involvement of the members of the Committees and the Commission, as it was the case for the Safety Fundamentals.

10) The BSS is being revised. The result will be a key element among the thematic requirements. It will integrate the new ICRP recommendations. It is important that the development of the revised BSS is done in collaboration with co-sponsoring organizations, according to the IAEA Statute. The revision of the BSS should be pursued according to the approved DPP. The possibility of further extending its scope in a second step should be considered so that it can serve as the basis for the future General Safety Requirements.

11) The Task Force (involving the CSS and Committees chairmen as well as the NS managers) should further study how to achieve the ultimate objective of establishing the General Safety Requirements deriving logically from the unified Safety Fundamentals and integrating in a coherent and harmonized

manner the set of thematic Safety Requirements, including the revised BSS. This will involve close consultation of, and collaboration with co-sponsoring organizations about the relationship between the revised BSS and the General Safety Requirements. One of the options could be to test the feasibility of expanding the scope of the "revised BSS" to address all general requirements.

ANNEX V

PARTICIPATION

The Commission

A.J. González, Argentina
J. Loy, Australia
A. Souza de Assis, Brazil (sent apologies – unable to attend)
J.K. Pereira, Canada
G. Li, China (sent apologies – unable to attend)
D. Drabova, Czech Republic
K. Ulbak, Denmark
S.B. Abdel-Hamid, Egypt
A-C. Lacoste, (Chairman) France
D. Majer, Germany
S. K. Sharma, India
I. Levanon, Israel
E. Hiraoka, Japan
Y-S. Eun, Korea, Republic of (sent apologies – unable to attend)
J. Hashmi, Pakistan
A. Yurasov, Russian Federation (deceased)
M.T. Magugumela, South Africa (sent apologies – unable to attend)
G.A. Azuara, Spain (sent apologies – unable to attend)
L-E. Holm, Sweden (sent apologies – unable to attend)
U. Schmocker, Switzerland
M. Weightman, United Kingdom (sent apologies – unable to attend)
M. Virgilio, United States of America

Participants from International Organizations

C. Waeterloos, European Commission
L-E. Holm, International Commission on Radiological Protection (sent apologies – unable to attend)
T. Tanaka, OECD Nuclear Energy Agency

Chairmen of Committees

L. Reiman, NUSSC
S. Magnusson, RASSC
J. Duffy, TRANSSC
T. Pather, WASSC

Representatives and associated experts

M.H. Maréchal, J. Peng, J.-L. Lachaume, Ms. C. Feltin, D. Majer, T. Nishiyama, Z. Ogiso, M. Shibata, K. Chayka, A. Khamaza, B. Gordon, Ms. S. Sidorchuk, J. Barceló Vernet, A. Reyes, A. Hall, Ms. A. Kock.

Committee on the Peaceful Uses of Outer Space

Ms. Caponiti

IAEA Staff Members

T. Taniguchi, Deputy Director General, Department of Nuclear Safety and Security
E. Amaral, Director, Division of Radiation, Transport and Waste Safety
A. Nilsson, Director, Office of Nuclear Security
P. Jamet, Director, Division of Nuclear Installation Safety (NSNI)
L. Lederman, Head, Safety and Security Coordination Section (SSCS)
W. Stern, Head, Incident and Emergency Centre

Safety Standards coordinators
G. Feige, Policy and Programme Support Section (NSNI), NUSSC
K. Hioki, Waste Safety Section (NSRW), WASSC
M. Wangler, Radiation and Transport Safety Section (NSRW), TRANSSC
T. Boal, Radiation and Transport Safety Section (NSRW), RASSC
D. Delattre, Scientific Secretary of the CSS, Safety and Security Coordination Section

P. Nocture, J. Zeger, T. Bannai, A. Shokr, A. Renev, S. Lee, J. Rowat, V. Friedrich