05 September 2008

Commission on Safety Standards

Twenty-third Meeting

21-23 May 2008

IAEA Headquarters, Vienna

Report of the Meeting

1. Opening Session

1.1 Opening of the Meeting

Mr. Taniguchi opened the 23rd meeting of the Commission highlighting that it marks the beginning of the fourth four-year term of the Commission, and that it coincides with the start of the fifth three-year terms of the four Safety Standards Committees. This therefore commences a second 12 year cycle which will take the IAEA Safety Standards up to the year 2020.

Mr. Taniguchi mentioned that Mr. Lacoste, Chair of the French Nuclear Safety Authority, has been reappointed as Chairman of the Commission by the Director General and sincerely thanked him for accepting to continue to chair the Commission at this very important and challenging period. He welcomed new members of the CSS from new countries, Belgium, Finland, Lithuania, Ukraine and Vietnam; and members changed from Canada, China, Pakistan and Sweden. He informed the meeting that an invitation to participate has been extended to the Chair of the International Nuclear Safety Advisory Group (INSAG), Mr. Richard Meserve and that the recently nominated new Chair of AdSec, Mr. Hashmi, is also participating.

Mr. Taniguchi then highlighted two main achievements of the last four year term and three major resulting challenges for the new term.

The first main achievement is the important role the CSS has played towards a much wider interest in; and use of the Safety Standards worldwide as we observe today. This greatly contributes to reinforce the global nuclear safety regime that has evolved since the Tchernobyl accident. The IAEA Safety Standards and their application both at national and international levels are essential elements that support the implementation of international instruments such as the Convention on Nuclear Safety and the development of effective national safety infrastructures.

As the second main achievement he mentioned the adoption of the jointly sponsored unified Fundamental Safety Principles. The common principles of the Safety Fundamentals will form a solid foundation for the global safety regime for ensuring and continuously improving safety and this greatly helps to promote the application of the Safety Standards worldwide.

The resulting three main challenges addressed by Mr. Taniguchi for the new term are the following:

Firstly the continuation of building up on the broad international support and consensus that have been achieved to consolidate the role of the Safety Standards as THE global reference for the high level of safety required for the use of nuclear technology. He urged the CSS members together with those of the four Committees to lead this process particularly in light of increasing large number of new countries planning to launch nuclear power plants as well as rapid internationalization in supply of such plants.

The second challenge is the establishment of an improved structure for the corpus of Safety Standards that better integrates the Safety Requirements in full consistency with the new Fundamental Safety Principles. It involves the update and establishment of all the necessary requirements for a well integrated and consistent structure. It has started actually with the revision of GS-R-1, of the BSS and of the requirements for the design, construction and operation of NPPs, including NS-R-1 and NS-R-2. In doing the revision of the Standards to keep them current, he observed that the need of Member

States for regulatory stability will also pose a challenge to the Committees, the Commission and the Secretariat in the future.

Mr. Taniguchi therefore stressed the need to support an evolution from the establishment of new Safety Standards to the revision of existing Standards more focusing on guides and supporting documents, with a consequent need for effective and systematic mechanisms for the feedback of experience in the use of the Standards and the reflection of good and best practices. This involved the need to investigate how to enhance the role of the Committees and the Commission so as to improve the feedback processes.

In this regard, Mr. Taniguchi mentioned three areas of member States needs, 1- the need for countries embarking on new nuclear power, 2- the issues relating to existing and mature nuclear programme and 3 -the improved coverage of human and organizational factors. He also informed that requests have been made by reactor vendors for compliance reviews of their new designs at their early stages on the basis of the IAEA Safety Standards.

On the technical issues, Mr. Taniguchi listed several areas where there is a need to develop Safety Standards:

- designs and construction of new generations of nuclear reactors

- life extension of existing nuclear reactors and ageing management

- seismic safety of new and existing nuclear plants and the potential consequences of earthquakes

- safety of uranium mining activities

- protection of the public from exposure to natural sources of radiation

Regarding the safety and security interfaces, Mr. Taniguchi informed the meeting of the preparation by the International Nuclear Safety Group INSAG of a report on this subject.

As the third challenge for the future Mr. Taniguchi mentioned the further promotion of the application of the Safety Standards and the related services. An example he mentioned was the Agency's new Integrated Regulatory Review Service (IRRS), which has enjoyed considerable success owing to its firm foundations on the Fundamental Safety Principles and the Safety Requirements No. GS-R-1 on Legal and Governmental Infrastructure. The revision of GS-R-1 is taking into account the feedback from the many valuable lessons learned through the IRRS missions.

In terms of process and with a view to further promote the wider use and application of the Safety Standards, Mr. Taniguchi mentioned the need of increased openness, transparency and rigour of the review process, with greater involvement of users and other stakeholders, including industry. In this regard he observed that interaction between Member States, the Committees and the Commission is now facilitated by the use of modern IT networks and in particular the interactive web site. He also pointed that partnership with the users and stakeholders of the Standards and with other international and regional organizations such as WENRA or the EU high level group need to be continuously pursued. In this context he mentioned that medical applications is a particular area where the promotion of the application of the Safety Standards is crucial.

Mr. Taniguchi then addressed the need for a strategy to be developed on how best promote the application of the Safety Standards within the framework of the Conventions and requested that the CSS discusses if and how it could play a useful role in supporting the implementation of the safety related Conventions review meetings as well as in facilitating of new countries launching nuclear programmes to become contracting parties to these Conventions as full members of the global safety regime

Mr. Taniguchi then summarized the results from the fourth review meeting for the Convention on Nuclear Safety concerning the role of the Safety Standards and mentioned that several Contracting Parties stated that they are using, or intend to use, the IAEA Safety Standards as a basis for their plans for enhancing their legislative framework. He also mentioned that a number of European States reported their harmonization efforts, which are based on IAEA Safety Standards.

Coming back to the new 12 year cycle of the Commission and the Committees that will take the IAEA Safety Standards programme up to the year 2020, Mr. Taniguchi reminded that a 'Commission of

Eminent Persons' was established and has met twice in Vienna this year. He informed the meeting that the Secretariat's background report is available and particularly quoted one important issue:

"Although it has never been invoked for this purpose, the IAEA Statute already authorizes the Agency to provide for the application of Safety Standards, through legally binding undertakings by States. Such an evolution in the 2020 timeframe from voluntary to mandatory international peer reviews could help increase safety worldwide and help increase public confidence."

Mr. Taniguchi also informed the Commission that the recommendations of the Commission of Eminent Persons are expecting soon after the CSS meeting.

Finally, Mr. Taniguchi announced that Mr. Lederman will be retiring in July and thanked him for his long dedication to the Safety Standards programme as well as many other related activities. He highlighted that such a dedication is particularly commendable when realizing that a particular aspect of his coordination activities is that they are not visible when well performed.

1.2. Introductions, Adoption of the Agenda

Mr. Lacoste, Chairman of the Commission, welcomed the participants and introduced new members from new countries represented at the Commission: Mr. Jean-Paul Samain from Belgium, Mr. Yukka Laaksonen from Finland, Mr. Gytis Maksimovas from Lithuania, Ms. Olena Mykolaichuk from Ukraine and Mr.Li Chi Dung from Vietnam (Who apologized).

He also introduced replacements from Canada, Mr. Ramzi Jammal, from China, Mr. Liu Hua, from, Pakistan, Mr Mohammad Shakilur Rahman and from Sweden, Mr. Carl-Magnus Larsson.

He then welcomed the Chairman of INSAG, Mr. Meserve as new observer and the new Chairman of AdSec, Mr. Hashmi

Mr. Lacoste mentioned the chairmanship of the Safety Standards Committees: Mr. Vaughan, new Chair of NUSSC, Mr. Magnusson renominated for RASSC, Mr. Brach new Chair of TRANSSC and Mr. Pather renominated for WASSC.

He finally indicated that apologies were received from Mr. Weightman from UK (Mr. Cresswell represented UK at the meeting), from Mr. Liu Hua from China (Mr. Yu and Mr. Peng represented China at the meeting), from Mr. Lars-Erik Holm from ICRP (Ms Sugier represented ICRP at the meeting) and from Mr. Sharma from India.

This was followed by a round table of introduction by all meeting's participants. A list of participants is provided in Annex I.

With regards to the tentative agenda, Mr. Gonzalez requested that the time dedicated to information in items 2 be restricted so as to ensure enough time being available for the discussion of the following items. The proposed agenda was approved with some slight changes (item 2.6 to be addressed after the arrival of Mr. Meserve and two papers provided by USA to be addressed after item 1.5). The approved agenda is provided in Annex II.

With regard to the draft report of the 22nd CSS meeting, Mr. Delattre informed that the draft was submitted to the participants on the previous Commission's term on 13 March 2008, that the comments posted by the USA had been incorporated and that the final report was issued on 17 April 2008.

1.3. Administrative arrangements for the meeting

Mr. Delattre briefly informed the Commission on administrative arrangements for the meeting. At this occasion he reminded that all material was made available two months in advance to the meeting for an effective review by the Commission and thanked the members for having also provided their comments two weeks in advance of the meeting

1.4 Safety Standards Programme overview: history, hierarchy, structure, status, review and approval process, mandate of the CSS, Management System

Mr. Delattre provided general information on the IAEA Safety Standards, in particular as background

information for new participants. He mentioned that the basis for the preparation of the Safety Standards is laid down in the IAEA' Statute Article III.A.6, where it is stated that the IAEA "establishes or adopts… [in consultation with…] standards of safety for the protection of health and minimization of danger to life and property, and provides for the application of these standards". With regard to the formal status of the IAEA Safety Standards, Mr. Delattre informed the Commission that the Standards are not binding on Member States but may be adopted by them. However, the Safety Standards are binding for the IAEA's own activities (safety reviews, TC missions, training activities), on Member States in relations to operations assisted by the IAEA, and on Member States wishing to enter into project agreements with the IAEA.

Mr. Delattre summarized the last 50 years history of the IAEA Safety Standards after the first Safety Series issued in 1958. He observed that there were 20 years milestones in the evolution of the programme with the first structured programme (NUSSC) established in 1974, the establishment of the Department and of the harmonized process with the Safety Standards Committees and the Commission on Safety Standards in 1996. The issuance of the Safety Fundamentals in 1996 marks the middle of the following 20 year period, which would achieve a completely integrated set of consistent Safety Standards toward the years 2015.

Mr. Delattre then explained the hierarchy of the Safety Standards: safety fundamentals, safety requirements, and safety guides.

The safety fundamentals set out principles for protecting people and the environment, whereas the Safety Requirements establish requirements on what has to be done to apply these principles in meeting objectives ('shall statements'). The safety guides set out recommended ways of meeting the requirements ('should statements').

Mr. Delattre then focussed on the process flow for the development of IAEA Safety Standards (new Standards or revision of existing ones) and summarized the Terms of Reference of the Committees and the Commission.

Mr. Delattre introduced the draft Management System for the Planning, Development, Review/Revision, Approval and Establishment of the IAEA Safety Standards (MANSYS). He informed that the draft 0.1 of this manual was distributed to the Committees and the Commission via the website. At the highest level, the manual reminds the mandate of the IAEA. It then highlights the vision for the IAEA Safety Standards, followed by the collection of policies and strategies that needs to be articulated in a comprehensive manner to achieve the vision. He informed the Commission that the intent is to further develop the draft with elements from the CSS statement issued in June 2006 and the roadmap and its annexes. Moreover, the draft MANSYS also describes the overall process and associated responsibilities and functions. It is complemented by a detailed step by step description of the various processes, with the actions by the different actors and their contribution to the added value of each step, as well as an estimation of the time and resources necessary for each of these steps.

Finally, Mr. Delattre drew the attention of the CSS to a document with the title "Status of the Safety Standards". The document is frequently updated and can be found on the website under http://www-ns.iaea.org/standards/status.pdf. The document includes hyperlinks to the published versions of the Safety Standards in official languages, as well as general information and links to the IAEA Safety Glossary.

Mr. Laaksonen requested clarification on the processes for submission to the Committees, to the Member States, once more to the Committees for final approval before the submission to the CSS. One of the issues addressed was to better identify which text is actually approved by the Committees for submission to the CSS, knowing that text approved by one Committee may be modified afterward by another Committee. Mr. Gonzalez agreed that there was a need for further clarification on this aspect and on other strategic aspects. This was further discussed under agenda item 1.5 below.

1.5. Status of the endorsed Standards and Response to Actions from the 22nd Meeting

Mr. Delattre mentioned that 10 draft publications endorsed by the Commission are being published and provided details on the status as follows:

- Operational Limits and Conditions and Operating Procedures for Research Reactors

(DS261) composition

- The Management System for Technical Services in Radiation Safety (DS315) composition
- Safety of Nuclear Fuel Cycle Facilities (DS316) approved by the PC, being edited
- The Operating Organization and the Recruitment, Training and Qualification of Personnel for Research Reactors (DS325) composition
- Management System for the Safe Transport of Radioactive Material (DS326) still to be approved by the PC
- The Management System for Processing, Handling and Storage of Radioactive Waste (DS336) composition
- The Management System for the Disposal of Radioactive Waste (DS337) composition
- Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (DS346) composition
- Conduct of Operations at Nuclear Power Plants (DS347) editing
- Core Management and Fuel Handling for Research Reactors (DS350) composition

Mr. Delattre then reported on the status of the actions listed following the 22nd CSS meeting, which was attached to the tentative agenda for information. The final status is provided in Annex III.

Mr. Loy asked how the drafts are being finalized by the Secretariat after final endorsement by the Commission, in particularly with regards to editorial review. Mr. Delattre clarified that the review by editors is performed before submission to the CSS to avoid editorial changes after endorsement by the CSS. Mr. Delattre also clarified that should changes be requested by the Publication Committee, they would be discussed with the Chairman of the CSS.

Considering the discussion on processes for the review and approval of the Safety Standards Mr. Jammal suggested that it might be timely at the beginning of this fourth term to update if necessary the Terms of Reference (TOR) of the Commission with a view to maintaining compatibility between the TOR and the activities the CSS is actually performing. Mr. Taniguchi indicated that, from the Secretariat point of view, no specific need to revise the TOR was identified and Mr. Lacoste indicated that the TOR are established in broad terms allowing flexibility to perform the overview of the IAEA Safety Standards programme and review of draft publications. Mr. Gonzalez suggested that it might be necessary to update the TOR to better reflect the role of Member States representation at the CSS. Mr. Lacoste noted the flexibility of the TOR and noted that no specific issues have been identified so far on the TOR. Therefore, Mr. Lacoste concluded that, should CSS members identify a specific need to propose to the IAEA DG amendments to the TOR, this should be sent to the Secretariat for discussion at the next meeting. [Annex IV, 23.1]

Mr. Virgilio presented two letters sent to Mr. Taniguchi, one on the involvement of the industry in the IAEA Safety Standards development process and one on the use of the term “best practices” and “continuous improvement” in the IAEA Safety Standards. It was agreed that the two presentations address policy issues that needed to be discussed in detail. In addition, the CSS members and the Secretariat agreed that there is a clear role and added value to stakeholder participation in the safety standards development process. Discussions regarding a graded approach for stakeholder participation yielded additional comments. However, it was clarified that this graded approach does not prevent participation in the development process but provides a formal route for their participation. With respect to Mr. Virgilio’s presentation on the use of the term “best practices” and continuous improvement, Mr. Virgilio was emphasized that the key in the development of safety standards is to identify the provisions necessary and sufficient for adequate safety. It was agreed that the role of stakeholders and the use of the term “best practices” would be codified in the standards development process. The MANSYS provides an appropriate and effective vehicle to capture these processes. With a view to preparing the discussion, the Secretariat was requested to present at the next meeting the current situation with regards to the involvement of different stakeholders and to propose a revision of a general presentation of the IAEA Safety Standards programme addressing the objective

and level of the Safety Standards. [Annex IV, 23.2 and 23.3].

Mr. Fukushima asked what was the timeline for the development of the Management system for Safety Standards (MANSYS). Mr. Delattre replied that one of the key element for its further development was the CSS task force draft roadmap. It was agreed that an updated version incorporating the results of this 24th meeting be prepared and submitted to the Safety Standards Committees for comments and that a report of progress be presented at the next CSS meeting. [Annex IV, 23.4]

Another comment on the planning aspects described in the MANSYS document was that the incorporation of the revised methodology, rationale, prioritization and justification for the list of safety guide in MANSYS was strongly supported and it was therefore requested to prepare an updated long-term list of safety guides applying the new criteria with involvement of the chairpersons of the Safety Standards Committees. [Annex IV, 23.5].

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

All presentations made under agenda item 2 are kept available in the CSS web page in an archive file on the web page (http://www-ns.iaea.org/committees/css/) in the folder "Presentations provided by the Secretariat for information"

2.1 Nuclear Installation Safety

Mr. P. Jamet presented recent activities of the Division of Nuclear Installation Safety. He summarized the results of the fourth review meeting of contacting parties to the Convention on Nuclear Safety. He particularly highlighted the following nine issues emphasized in the summary report:

- Legislative and Regulatory Framework
- Independence of the Regulatory Body
- Safety Management and Safety Culture
- Staffing and Competence
- Probabilistic Safety Assessment
- Periodic Safety Review
- Ageing Management and Life Extension
- Emergency Management
- New NPPs

Mr. Jamet then mentioned as priorities for the Safety Standards the on-going revision of the safety requirement on governmental and regulatory framework, the revision of the BSS, the finalization of the safety requirement on safety assessment and the revision of the requirement for the design and operation of nuclear power plants.

He provided up-to-date information on safety review services requested by Member States and mentioned in particular the request from countries considering the launch of a nuclear power programme.

During the discussion, Mr. Virgilio noted that during the Convention on Nuclear Safety the contracting parties reported that maintaining adequate staffing and competence levels for nuclear safety is a significant challenge. The participants also requested to be informed on the feedback from the safety services to the Safety Standards. It was agreed to present these feedback services by services and that following the workshop to be held in Spain, an overall assessment of the IRRS feedback would be presented at the CSS. In the meantime, Mr. Hashmi proposed to present at the next CSS meeting feedback from AdSec on the security module of the IRRS missions. [Annex IV, 23.6]

2.2 Radiation, Transport and Waste Safety

Ms. Amaral presented recent developments in the areas of radiation, waste and transport safety.

In the radiation safety area she summarized the progress of the Safety Standards being drafted. She highlighted the status of the International Action Plan on the protection of workers indicating that 50% of the actions have been carried out and that the remaining actions will be addressed in close collaboration with ILO. She reported that for the Expert Group on occupational exposure, the first case study on analysis of operational experience/radiation protection for new build is expected to be finalized in October 2008. She informed the Commission on the launch in February 2008 of an information system on occupational exposure in medical, industrial and research areas. It was also stressed the need to extend this to decommissioning, rehabilitation and waste processing activities.

Then Ms. Amaral updated the Commission with a number of on-going and planned activities on the protection of patient. She provided the main results of the steering panel meeting held in February 2008 and informed on coming events including the international conference on radiation safety in radiotherapy to be organized in France in June 2009 as well as a TM to be organized in Argentina in conjunction with the meeting of IRPA.

In the waste safety area, Ms. Amaral reported on the current Safety Standards being drafted, stressing the need to address challenges due to uranium mining development. She also informed the Commission on important international conferences and workshops to be organized in 2008 and 2009.

Ms. Amaral summarized the expectations from the Open Ended Meeting on ”Lessons learned from implementing the supplementary guidance on Import and Export Controls to be held from 26 to28 May 2008. The meeting is expected to provide a forum for States to share experiences and lessons learnt in applying the supplementary Guidance. She reported that already 167 participants are expected from 87 Member States.

Finally Ms. Amaral summarized the recent activities on transport safety and particularly the organization of regional workshops on denial of shipments of radioactive material in the Mediterranean basin as well as for the African and Asia and Pacific regions to create regional networks to allow a better exchange of information and solve or minimize denials. She emphasized the need of the commitment of Member States with IAEA actions, particularly the nomination of focal points. She also informed on the progress on a CRP on naturally occurring radioactive material with an expectation for its results to be available in November 2009.

Mr. Virgilio asked what the situation was with regard to possible gaps in the Safety Standards on the protection of patients. Ms. Amaral answered that as was already reported in previous meetings, there was no identified gaps in the current collection of requirements and guides. The revised BSS would also cover the protection of patients. She stressed the importance of developing more awareness in the Member States on the application of the Safety Standards with particular needs for training and improvement of the regulatory control.

2.3 Office of Nuclear Security

Ms. A. Nilsson presented the hierarchy of the nuclear security series publications and the status of the development. She indicated that emphasis is now shifted toward a top-down approach, which would generate a structure consistent with the Safety Standards series. In particular, she reminded the Commission on the three following recommendations being prepared, in addition to *nuclear security fundamentals*, and provided the respective timeline for their finalization:

- Recommendations for the physical protection of nuclear material and nuclear facilities (including for transport) being also revision 5 of INFCIRC225
- Recommendations for the physical protection of radioactive materials and associated facilities, including transport
- Recommendations for Detection and Response

Several questions were related to the interface between safety and security and were addressed together with the discussion on the INSAG activities under agenda item 2.6, with the discussion on future CSS activities under agenda item 3, and the proposed revision of two Document Preparation Profiles to take into consideration the security implications under agenda item 6.

In addition, the CSS members noted the National Academy of Science report and its recommendations on alternative technologies for radioactive sources. Mr. Virgilio noted that a U.S. representative

would be participating in the May 2008 Code of Conduct on the Safety and Security of Radioactive Sources and will discuss NRC's efforts in this area. The Secretariat indicated that the IAEA will be addressing this topic in the future.

During the discussion the mention of the report of the Commission of Eminent Persons expected to be available soon after the meeting led to the request that this report be distributed to the CSS members for information as soon as it is available. [Annex IV, 23.7]

2.4 Incident and Emergency Centre

Mr. W. Stern presented the recent activities of the Incident and Emergency Center, particularly on the following topics:

- Contribution to the revision of the BSS on Emergency Exposure Situations
- Manual, web-site and other material for First Responders
- EPR-Extended Response Manual
- EPR-Lessons Learned from the Response to Past Radiation Emergencies
- RANET Progress
- Safety Guides being considered
- INES manual and establishment of a unified, secure and reliable system for Incident and Emergency Communication.

Then Mr. Stern summarized the recommendations from the meeting of competent authorities with regard to the Safety Standards development and review process with a view to improving the involvement of emergency experts in the preparation and review of the relevant IAEA Safety Standards. Mr. Stern reported that the option recommended for consideration by the competent authorities was the establishment of a specific Safety Standards Committee. He also pointed out that there were other options, including the establishment of a new temporary working group of experts on emergency preparedness and response.

During the discussion, the Chairmen of WASSC and RASSC indicated the strong concerns of both Committees on the proposal for the creation of a new Committee indicating that expertise was already available within the Committees to review Emergency Preparedness and Response draft Safety Standards. Mr. Lachaume commented that not all countries represented at the meeting of competent authorities supported the reported recommendation and that the establishment of a specific group could be a weakness in the future since it would remove the benefit of the integrated approach that is today possible with the current Committees. Mr. Stern pointed out that the experts identified by governments in the area of emergency preparedness are currently not integrated and that the proposal was in fact an attempt to integrate them.

Mr. Lacoste commented that the issues mentioned could better be addressed through the involvement of the relevant experts in the drafting process than through the establishment of a specific review and approval group.

The CSS concluded that at this stage it was important to ensure appropriate representation of the relevant experts in the drafting meetings. The CSS also concluded not initiate efforts towards the establishment of a new Safety Standards Committee while recognizing that consideration may be given in the future to the formation of an ad hoc group to support emergent work. [Annex IV, 23.8]

2.5 Coordination on Safety Infrastructure

Mr. L. Lederman focussed the presentation of recent development in the Safety and Security Coordination Section on activities related to the support to Member States on the establishment of the necessary safety infrastructure for nuclear power programmes. He mentioned the high number of requests for assistance received and summarized the main response activities of the Agency. He particularly stressed the importance of an early political commitment to safety and engagement into the global nuclear safety regime.

Mr. Lederman highlighted the established framework for the IAEA safety activities composed of the main following elements:

- Implementation of International Safety Instruments (legally binding safety conventions, codes of conduct)
- Application of Safety Standards (peer review safety services and capacity building)
- Knowledge and Experience Sharing (issues and trends, regional and global networks)

Mr. Lederman informed the Commission on the status of recent activities. These include the preparation of the INSAG report on safety infrastructure (see here below item 2.6), the preparation of a safety guide (see here below item 6.13), the coordination mechanisms within the Agency and in particular the Nuclear Power Support Group, the promotion of the engagement in the Safety Conventions and the adaptation of existing services for the review of the establishment of the nuclear safety infrastructure.

The discussion focussed on the Agency assistance activities. In particular the Commission commented that it is necessary to avoid too much reliance on the IAEA assistance. Mr. Jamet agreed and insisted on the need for a long-term commitment from the candidate countries on their national responsibilities. He also indicated that the Agency should not be involved for example in the preparation of safety analysis reports.

2.6 Information on INSAG activities

This CSS meeting being the first meeting with representation of the International Nuclear Safety Group (INSAG), INSAG Chairman R. Meserve presented the role of INSAG, its current membership, an historical perspective of INSAG and its reports, the scope of its current activities and a status of current projects.

He informed the Commission that INSAG was established in 1986 just before the Chernobyl accident and that it is a group of experts with high professional competence in the field of safety working in regulatory organizations, research and academic institutions and the nuclear industry. He indicated that INSAG is convened under the auspices of the International Atomic Energy Agency (IAEA) with the objective to provide authoritative advice and guidance on nuclear safety approaches, policies and principles. In particular, INSAG provides recommendations and opinions on current and emerging nuclear safety issues to the IAEA, the nuclear community and the public.

Mr. Meserve mentioned the following functions of INSAG:

- To identify important current and emerging safety issues and aim to draw conclusions on the basis of results of safety activities worldwide, and other information such as research and development results;
- To provide a forum for the exchange of information on generic safety issues of international significance relevant to nuclear installations;
- To recommend the underlying principles upon which appropriate Safety Standards and measures should be based;
- To identify issues on which an exchange of information and/or additional international efforts would be required; and
- To address generic safety issues of international importance, at the request of the Director General of the IAEA

Mr. Meserve referred to the recently published report on Stakeholder Involvement in Nuclear Issues (INSAG 20) and on Strengthening the Global Nuclear Safety Regime (INSAG 21). He then provided the status of, and main issues addressed in the current projects on Improving the International System for Operating Experience Feedback (OEF) on Nuclear Safety Infrastructure for a National Nuclear Energy Programme, based on the IAEA Fundamental Safety Principles and on the Relationship between Safety and Security in Nuclear Installations.

Finally on the coordination between the CSS and INSAG, Mr. Meserve observed that the coordination will benefit both groups and that there are a number of common topics of great importance of both INSAG and the CSS such as the nuclear safety infrastructure and the safety/security interface.

Mr. Gonzalez welcomed the representation of INSAG at the CSS, referred to the origin of the establishment of INSAG and stressed the importance of integrating safety and security issues.

Mr. Hashmi indicated the need to remove artificial barriers to move towards better integration of safety and security. He also noted that most INSAG activities relate to the safety of Nuclear Power Plants only and suggested they cover other installations as well.

Ms. Sugier noted the difference in the approval process for an INSAG report and the Safety Standards. Mr Merserve confirmed the difference and clarified that the objective of both sets of publications are different. An INSAG report focusses on forward thinking and on emerging issues, while the Safety Standards represent consensus requirements and guides.

Mr Virgilio informed the Commission that the USA is issuing guidance and requirements on the safety and security interface. He then asked what complementary activity the CSS could initiate on operational experience feedback to be consistent with INSAG activities. On OEF, Mr. Meserve observed that the main weaknesses appear to be in the international exchange mechanisms and in the lack of an appropriate feedback mechanism for actions taken following the receipt of a report.

Mr. Lacoste thanked Mr. Meserve for his presentation and indicated that this marks the start of fruitful cooperation between the activities of INSAG and the CSS.

2.7 Information on ICRP activities

Ms Sugier, representing the Chairman if ICRP Mr. Lars-Eric Holm summarized the recent development within the ICRP. She firstly focussed on the publication 103 indicating its major features and main changes in the approaches compared to the publication 60. She summarized the framework for dose constraints and reference levels and detailed the scope of the three categories of exposures as follows:

- Planned exposure: involve deliberate introduction and operation of sources. May give rise both to exposures that are anticipated to occur (normal) and to exposure that are not anticipated to occur (potential).
- Emergency exposure: may occur during the operation of a planned situation or from malicious act or from any other unexpected situation requiring urgent action.
- Existing exposure: situations that already exist when a decision on control has to be taken, including prolonged exposure situations after emergencies.

Ms Sugier then provided up-to-date information on the activities of the 5 Committees on radiation effects, doses from radiation exposure, protection in medicine, application of ICRP recommendations and protection of the environment.

Mr. Tanaka mentioned the cooperation with the NEA member countries and indicated the high appreciation of the ICRP efforts for openness and cooperation.

To answer a question from Mr. Loy on the situation with regards to the protection of the environment, Ms. Sugier indicated the activities of the Committee 5. She particularly summarized the situation indicating that there is no evidence that the current system of protection is not adequate for the protection of the environment and that the work is focussed on actually establishing the set of evidence that will be needed to either confirm the relevance of the current system or prepare its evolution as appropriate.

2.8 Status report on the revision of the BSS

Ms. Amaral presented the status of the revision of the BSS. She mentioned that a draft 0.7 was available, based on initial drafting meetings held in May 2007, recommendations of a Technical Meeting held in July 2007, additional advice from a meeting of Cosponsoring Organizations in September 2007, the recommendations from RASSC/WASSC in their meeting in October 2007 and four drafting meetings with co-sponsoring organizations held since the last CSS meeting. She reported

on the general support from RASSC to the direction being taken and detailed the progress achieved through the drafting meting with the co-sponsors.

Ms. Amaral then presented the outline of the current draft highlighting how consistency is achieved with the other safety requirements and particularly GS-R-1 and GS-R-3. Finally, she informed the Commission that a draft 1.0 is expected to be issued in July 2008 for consultation of the Committees in October and November that will be followed by a dedicated workshop on the revision of the BSS to be held in Qatar in December 2008.

Ms. Amaral answered a question from Mr. Virgilio on the mechanism for tracking and justifying changes to the BSS, by clarifying that the identification of and rationale for the changes will be visible in one document.

The discussion then focussed on two particular topics introduced by Mr. Lacoste: the definition of terms and the implementation of the new format for Safety Requirements.

With regards to the glossary of terms, Mr. Gonzalez commented that the 2007 safety glossary is a collection of different definitions from different sources and Mr. Delattre indicated that most of the definitions are now used in a harmonized manner. Mr. Laaksonen highlighted the great benefit of the 2007 safety glossary and mentioned that its use was very helpful for the drafting of the revision of GS-R-1. For the definition of terms used in the revised BSS, already discussed at the previous CSS meeting, Mr Delattre clarified that the glossary is a living document and that there is a process established for its revision. Through the revision of the BSS, where existing definitions need to be revised, the new proposed definitions would be incorporated in a revised safety glossary. The Commission thus suggested to use this process as an opportunity to establish a new glossary based on all the requirements and that a working group involving the Chairpersons of the Safety Standards Committee should be established for that purpose.[Annex IV, 23.09]

With regard to the implementation of the new format, several views were expressed from the members of the Commission, some supporting the implementation of the new format and some other highlighting that it might be difficult to change the current text. Mr. Lacoste reminded that the proposed new format is intended to ensure user-friendliness of the Safety Requirements and to prepare the stability of the future safety requirements. He therefore suggested that the new format should be implemented during the revision of the BSS and before its final submission for approval to the Committees and the Commission. Ms Amaral agreed to try the implementation of the new format and suggested that this could be done after an agreement is reached on the substance of the revised BSS with the co-sponsors. [Annex IV, 23.10]

3. Future CSS activities: Transition from the third to the fourth CSS term

3.1 22nd CSS meeting report and the CSS four-year report

Mr. Lacoste summarized the main results of the 22nd CSS meeting held in November 2007 and the resulting actions' list (see above agenda item 1.5 and the status in Annex III). He then presented the main recommendations from the CSS four-year report and listed the endorsed draft publications and DPPs.

The discussion then focussed on the review of items recommended by the previous Commission with a view to establishing a list of topics to be addressed as priorities during the starting fourth term of the Commission.

One important additional item identified through the discussion was the need to ensure a better coverage of the human and organizational factors in the Safety Standards. Another additional topic mentioned by Mr. Loy was the need for guidance on the safety of Uranium exploration and mining.

Mr. Gonzalez stressed the importance of addressing several issues including the importance of co-sponsorship of the Safety Standards, the need to better define the scope of the collection and in particular that its should include natural sources of exposures, including NORM, the interface safety/security, the mechanisms to avoid proliferation of safety guides and the need for regulatory stability. The commission supported the proposal and Mr. Lacoste indicated that those important issues being addressed by the CSS task force draft roadmap (discussed under agenda item 3.3 below) would not need to be duplicated in the topical issues list.

Mr. Virgilio highlighted the importance of these main topics and the need to define a plan that delineates how the Commission will achieve and measure the success of each topic.

The list of topics to be addressed during the fourth CSS term is provided in Annex V of this report.

Mr. Gonzalez stressed the need to adopt a strategic approach and to prepare a report to the Board of Governor on strategies for the future Safety Standards programme and the relevant list of important topics to be covered in the future with a view to addressing the identified new challenges. Mr. Lacoste indicated that the CSS doesn't report directly to the Board of Governors but to the IAEA Director General and suggested the preparation of a letter to the IAEA DG highlighting the two different types of challenges, one being the long-term structure and format of the Safety Standards and the second one being the list of issues to be addressed in the future. It was also commented that the letter to the DG could suggest that the DG should provide the letter to the Board of Governors. [Annex IV, 23.11]

3.2 Support to countries considering to launch a nuclear power programme on the progressive application of the Safety Standards

This item was addressed together with the presentation from Mr. Lederman under agenda item 2.5 above and further with the discussion under agenda item 6.13 below on the proposed DPP on Establishing a National Nuclear Installations Safety Infrastructure, new Safety Guide (DS424).

3.3 Long-term structure for Safety Standards (draft roadmap from the CSS task force)

Mr. Lacoste introduced the agenda item reminding that the activities in this area started at the time of the finalization of the unified safety fundamentals with a CSS statement issued in June 2006 requesting the preparation of a revised overall structure for the Safety Standards, which should:

- develop a vision on what the entire series would comprise in the future (the concept of a 'closed set' of Safety Standards);
- establish a logical relationship between the unified Safety Fundamentals and the various Safety Requirements, as well as logical relationships between the Safety Requirements and the subsequent Safety Guides;
- maintain a manageable number of publications and take into account the need for efficiency and timeliness for the future development of the Series.

He then referred to the discussion at the June 2007 meeting where he was mandated by the Commission 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".

He informed the Commission on the CSS task force composition, involving the informal CSS bureau (Mr. Pereira and Mr. Holm), volunteers from the CSS and/or their representatives (Mr. Virgilio, Ms. Astwood and Mr. Vaughan representing Mr. Weightman), the four chairs of the Safety Standards Committees and the management of the Nuclear Safety and Security Department.

He reported that a first draft roadmap was prepared and sent for consultation of the CSS task force on 21 June 2007. A revised draft roadmap taking into account the comments received was distributed on 12 July 2007 and was the main input for the first meeting of the CSS task force held on 13 September 2007. The meeting conclusions were provided to the Safety Standards Committees members, to the CSS members as well as to the potential co-sponsors of the revised BSS. A second meeting of the CSS task force was held on Monday 26 November 2007 before the CSS meeting where, after incorporation of additional clarification the revised draft received general support from all the CSS task force participants. The draft CSS roadmap was then submitted to the Safety Standards Committees for their review at the beginning of their new term in 2008.

Mr. Lacoste then presented in a comprehensive manner all 11 items of the draft roadmap on the long-term structure for the Safety Standards and its three annexes on Safety Standards user friendliness, format for the safety requirements and strategy for dealing with the set of safety guides.

The Chairpersons of the Safety Standards Committees reported overall support to the CSS task force draft roadmap. Mr. Pather indicated that the view of WASSC was that it is now important to start implementing it and thus to reach an approval of the proposal.

Mr. Delattre mentioned the proposal for improvement received in advance to the meeting from Mr. Virgilio and suggested that they should be included in the final version of the roadmap.

Several members referred to the need to better integrate in the future the safety and security related issues. The case of a number of regulatory bodies dealing with both safety and security issues was mentioned. Currently, these regulatory bodies need to use two different set of publications and to integrate themselves the recommendations. The case of source related applications was also mentioned and was further discussed under agenda items 6.10 and 6.11. Therefore, with a view to reinforcing this message of the item 6 of the draft roadmap, it was agreed to keep only the main message on the integration of safety and security and to thus indicate that "Safety measures and security measures must be designed and implemented in an integrated manner." [Annex IV, 23.12]

Finally, Mr. Virgilio noted that the proposed list of safety guides for the year 2015 should be reviewed for consistency with the main topics to be covered during the Commission's fourth term and to better focus the Commission's goals and efforts. Therefore, it was agreed that, with the assistance from the Chairs of the SSCs and the Commission, the long-term list of safety guides will be revised and rationale, justification, and prioritization for such list will be discussed at the next Commission meeting.

The roadmap was approved with this modification. The approved roadmap is provided in Annex VI of the present report.

4. Feedback on the Application of Safety Standards and Regulatory Issues

4.1 Topical discussion on 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 in an archive file on the web page (http://www-ns.iaea.org/committees/css/) in the folder "Presentations provided by the CSS members"

4.2 Regulatory Issues in the Member States

As for item 4.1, almost all presentations on related regulatory issues had been provided in advance. The material will also remain available for all members in an archive file on the web page (http://www-ns.iaea.org/committees/css/) in the folder "Presentations provided by the CSS members"

5. Presentations and Discussion of Reports of Safety Standards Committees

5.1 Nuclear Safety Standards Committee

Mr Vaughan, Chairman of NUSSC, reported on the first meeting of the fifth term of NUSSC (25th NUSSC meeting). He informed the Commission that NUSSC had approved six draft Safety Standards (DS345, DS348, DS349, DS382, DS383 and DS385) for submission to the CSS, four draft Safety Standards (DS388, DS413, DS415 and DS416) and one draft Safety Framework for submission to Member States for comment, and three DPPs (DS422, DS424 and DS426). Mr Vaughan highlighted the main issues raised at NUSSC in the discussion of the long term structure of the Safety Standards. He noted that NUSSC was generally concerned about the specificity of draft Standards and the need to be more technologically neutral. (Mr Vaughan's full presentation is available on the CSS website.)

In the discussion that followed the NUSSC presentation, Mr Vaughan indicated that one member of NUSSC still had questions with regards to the status of 'explanatory text' in the proposed new format for Safety Requirements publications. Mr Delattre confirmed that the explanatory text was intended to be at the level of requirements.

In addition, Mr. Virgilio recommended that the IAEA consider enhancing the operational and event information collection and exchange, which can be used to identify potential gaps within the safety standards.

5.2 Radiation Safety Standards Committee

Mr Magnusson, Chairman of RASSC, provided the Commission with information on the 24th RASSC meeting. Mr Magnusson reported that RASSC had addressed the following issues in its meeting:

- the long term structure of the Safety Standards, whereby there was general support for the Secretariat's proposed list of safety guides on radiation safety;
- a proposal for a new Safety Standards Committee on emergency preparedness and response, for which RASSC expressed serious concern;
- topical issues:
    - the protection of pregnant workers; and
    - safety in hospital radiopharmacy.

He informed the Commission that RASSC had held a short discussion on the revision of the BSS (DS379) and expect to receive the draft 1.0 for review in early July 2008. RASSC approved four draft Safety Standards (DS345, DS348, DS349 and DS390) for submission to the CSS, five draft Safety Standards (DS388, DS409, DS413, DS415 and DS416) for submission to Member States for comment, and three DPPs (DS419, DS420 and DS424). (Mr Magnusson's full presentation is available on the CSS website.)

In the discussion that followed the RASSC presentation, Mr Gonzalez highlighted the urgent need for recommendations on protection of pregnant workers and female workers, in particular in relation to the participation of women in emergency response actions.

5.3 Waste Safety Standards Committee

Mr Pather, Chairman of WASSC, presented the report of the first meeting of the fifth term of WASSC (25th WASSC meeting), which had been held as a joint session with RASSC. He informed the Commission that WASSC had approved four draft Safety Standards (DS345, DS348, DS349 and DS390) for submission to the CSS, four other drafts (DS388, DS413, DS415 and DS416) for submission to Member States for comment, and two DPPs (DS422, DS424). WASSC also reviewed a Safety Guide on Geological Disposal of Radioactive Waste (DS334). In addition to the points discussed at the joint RASSC/WASSC meeting (the revision of the BSS and the establishment of a new Safety Standards Committee on emergency preparedness and response; see under item 5.2), highlights of WASSC included:

- the long term structure of the Safety Standards, in the context of which WASSC considered that further rationalization of the suite of Safety Guides was necessary and that no new DPPs for Safety Guides should be approved prior to completion of this process;
- the three year report of the previous term of WASSC, in which WASSC recommended that Safety Standards in draft and for which DPPs had been approved by the CSS should be completed as soon as possible;
- discussions on topical and emerging issues, including a Safety Report on long term storage of radioactive waste and spent nuclear fuel, security of radioactive waste, and uranium mining.

(Mr Pather's full presentation is available on the CSS website.)

In the discussion that followed the WASSC presentation, Mr Gonzalez noted the logistical challenge associated with obtaining the agreement of all Committees on the final text of a draft Safety Standard. The Commission agreed that there was a need for an improved coordination among the Committees and Mr. Lacoste suggested that the task of approving the final draft could be delegated to the Chairs of the Committees.

5.4 Transport Safety Standards Committee

Mr Brach, Chairman of TRANSSC, provided the Commission with a report of the 16th TRANSSC meeting. He informed the Commission that TRANSSC had approved one Safety Standard (DS348) for submission to the CSS, four Safety Standards (DS409, DS 413, DS415 and DS416) for submission to Member States for comment and three DPPs (DS419, DS420 and DS424). TRANSSC's main activity was the review and approval of the 2009 edition of the Transport Regulations, TS-R-1, for which over 700 comments by Member States had been resolved. TRANSSC also considered the report of the Steering Committee on Denial of Shipments. Among future TRANSSC activities, Mr Brach reported

on a planned consultancy to examine the TS-R-1 review process and experiences. (Mr Brach's full presentation is available on the CSS website.)

In the discussion that followed the TRANSSC presentation, Mr Jammal raised concerns about quality assurance in relation to errors in the draft Transport Regulations. Mr Brach confirmed that editorial issues will be addressed before its publication and that a process will be established to improve the quality of future draft revisions.

6. Draft publications and DPPs

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

Mr N. Bruno presented the draft Safety Requirements publication for approval for submission to the Board of Governors and indicated the Secretariat's proposal to address comments that had been received from Australia and Canada. The Secretariat agreed to make available the set of changes from the 2005 edition and to check cross references before publication. Mr Gonzalez suggested that the entire document should be submitted to the Board of Governors, and not only the table of changes. [Annex IV, 23.13]. Mr Barceló Vernet requested the Secretariat to translate the draft publication into Spanish as soon as possible.

Approval of the draft Safety Requirements publication for submission to the Board of Governors was delegated to the Chairman, Mr Lacoste, in consultation with the Chairman of TRANSSC, Mr Brach..

6.2 Compliance Assurance for the Safe Transport of Radioactive Material (DS327)

Mr N. Bruno presented the draft Safety Guide for approval for publication. No comments had been received prior to the meeting. Mr Loy considered some of the guidance presented in the draft rather obvious and requested that, in the future, Safety Standards avoid such tutorial guidance, which was less readable or useful.

The Commission endorsed the draft for publication.

6.3 Predisposal Management of Radioactive Waste (DS353)

Mr P. Metcalf presented the draft Safety Requirements publication for approval for submission to the Board of Governors and indicated the Secretariat's proposal to address comments that had been received from the USA and Japan. Following Mr Levanon's request for clarification of the term 'safety case' and Mr Gonzalez's comment that the term was difficult to translate, Mr Metcalf replied that countries used different terms but that the concept was well understood. Mr Delattre noted that the term 'safety case' appeared in the IAEA Safety Glossary, which existed already in five of the six official languages.

The Commission approved the draft for submission to the Board of Governors.

6.4 Safety of Uranium Fuel Fabrication Facilities (DS317)

6.5 Safety of MOX Fuel Fabrication Facilities (DS318)

6.6 Safety of Conversion and Enrichment Facilities (DS344)

Mr P. Nocture presented the three draft Safety Guides for approval for publication and indicated the Secretariat's proposal to address comments that had been received from Japan. Following Mr Vinhas's proposal to consider combining DS317 and DS318 into a single Safety Guide, Mr Nocture replied that there would be a risk of confusion as the safety concerns for each facility were different. In reply to Mr Gonzalez's request the secretariat to speed the development of the Safety Standard on criticality, Mr Nocture noted that DS407 will address criticality safety but that the corresponding recommendations related to Uranium fuel fabrication, MOX fuel fabrication, conversion and enrichment facilities are already stated in the DS317, DS318 and DS344 .

The Commission endorsed the three drafts for publication.

6.7 Radiation Protection and Radioactive Waste Management in the Design and Operation of Research Reactors (DS340)

Mr A. Shokr presented the draft Safety Guide for approval for publication and indicated the Secretariat's proposal to address two editorial comments that had been received prior to the meeting.

Mr Vaughan queried whether the graded approach could be applied to the subject, thereby reducing the need for a Safety Guide specifically for research reactors. Mr Metcalf replied that particular considerations were necessary owing to the variety of types of waste originating from research reactors. Mr Gonzalez noted that the ICRP had already published its work on the concept of 'representative individual' (the draft Safety Guide used 'critical group') and that the corresponding footnote should be updated accordingly.

The Commission endorsed the draft for publication with the condition that footnote 2 be updated.

6.8 Safety Assessment for Decommissioning of Facilities Using Radioactive Material (DS376)

Ms B. Batandjieva presented the draft Safety Guide for approval for publication and indicated the Secretariat's proposal to address a comment from the USA. The Secretariat's proposal was to leave the draft as it had been approved by WASSC. Mr Pather endorsed this proposal, as an addition of the phrase "if required by the Member State" would lessen the impact of the recommendation that the safety assessment be reviewed by the regulatory body. Mr Gonzalez noted with approval the manner in which the draft had been first developed, namely in response to a discussion at an international conference.

The Commission endorsed the draft for publication.

6.9 Safety Framework on the Safety of Nuclear Power Source Applications in Outer Space

Mr D. Delattre presented the draft Safety Framework for agreement. In response to Mr Loy's question as to the nature of the publication, Mr Delattre reminded the CSS that it had been agreed at the DPP stage that the draft Safety Framework is not to be a publication in the IAEA's Safety Standards Series. Following discussion on the scope of the publication, Mr Delattre clarified that protection of astronauts was not in the scope of the draft and the Safety Framework would complement the Safety Standards on the issues related to the launch, outerspace operation and end of service.

The Commission agreed on the draft Safety Framework for submission to Member States for comment.

6.10 DPP for a new safety guide on Radiation Safety in Well Logging (DS419)

6.11 DPP for a new safety guide on Radiation Safety for Nuclear Gauges (DS420)

Mr T. Boal presented the two DPPs and informed the CSS that comments received from India and the USA prior to the CSS meeting had been accepted. Mr Magnusson felt that it was important that the two Safety Guides be kept separate. The Commission felt that it would be appropriate to apply item 6 of the roadmap previously agreed on, namely that "Safety measures and security measures must be designed and implemented in an integrated manner". The AdSec was supportive of this proposal. Mr Virgilio noted that the language used for security should be in line with that of the Code of Conduct on the Safety and Security of Radioactive Sources.

The two DPPs were approved with these comments to be considered. The Secretariat was requested to present the modified DPPs to the 24th CSS meeting for information. [Annex IV, 23.14]

6.12 DPP on Evaluation of Seismic Hazards for Nuclear Installations, revision of NS-G-3.3 (DS422)

Mr A. Godoy presented the DPP. He summarized the comments from WASSC and NUSSC and informed the CSS that four comments had been received from the USA prior to the CSS meeting and that these had been accepted. Mr Fukushima offered Japan's assistance in drafting the Safety Guides. Mr Godoy informed the CSS that drafting was already underway, and that a first draft would be complete in July 2008.

The DPP was approved.

6.13 DPP on Establishing a National Nuclear Installations Safety Infrastructure, new Safety Guide (DS424)

Mr L. Lederman presented the DPP. He summarized the comments received most of which had been resolved at the meetings of the Safety Standards Committees. The remaining comments were accepted and will be taken into account in the drafting of the document. Mr Vaughan noted that all requirements

must be met in establishing a nuclear power programme, and Mr Taniguchi reinforced the Agency's message that investment of considerable time and effort were needed to carry through the immense challenge of developing a nuclear power programme and its associated safety infrastructure. Mr Meserve indicated the strong support from INSAG to the preparation of this safety guide.

The DPP was approved.

6.14 Information on the preparation of a DPP for a new safety guide on Technical and Scientific Support for the Regulatory Bodies, new safety guide

Mr G. Philip presented information on the preparation of a DPP for a new safety guide on technical and scientific support for the regulatory bodies. In response to Mr Vaughan's query as to the need to develop a separate Safety Guide on this topic, Mr Philip responded that the international conference on Challenges Faced by Technical and Scientific Support Organizations in Enhancing Nuclear Safety held in April 2007 in Aix-en-Provence had specifically requested this and that guidance was needed especially in the context of a large number of countries considering the introduction of nuclear power for the first time. Mr Gonzalez felt that development of this Safety Guide would be unavoidable. Mr Laaksonen commented that technical support is generally available within the regulatory body and that the separation of TSO is only the situation of a few countries.

The CSS requested the Secretariat to study and submit to the SSCs two options for the presentation of recommendations for technical support organizations: integrated into the revision of GS-G-1.1; or as a separate Safety Guide. [Annex IV, 23.15]

6.15 DPP on Periodic Safety Review of Nuclear Power Plants, revision of NS-G-2.10 (DS426)

Ms C. Toth presented the DPP. Following discussion on knowledge management, Mr Virgilio proposed that the Safety Guide should include a recommendation to promote the dissemination of operational experience feedback to other plants and to other countries. In response to Mr Majer's query, Ms Toth responded that the Safety Guide will generally recommend the present approach whereby the review be carried out by the operating organization and then reported to the regulatory body.

The DPP was approved, under the condition that a recommendation on dissemination of experience feedback be included in the Safety Guide, and with the request that RASSC and WASSC also be involved in review of the draft. [Annex IV, 23.16]

7. Report of the Meeting, Date of the next Meetings

Mr. Lacoste summarized the main findings of the meeting. It was agreed that a detailed list of main conclusions and actions resulting from the meeting will be posted on the CSS web site for comments as well as a list of topics identified as priority for the fourth CSS term.

After consideration of the comments, they will form the basis for the letter to be sent by Mr. Lacoste to the Director General of the IAEA.

Mr. Delattre also 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 IV, 23.17]

The next meetings are planned to be held from: **3 to 5 September 2008** and from **22 to 24 April 2009**.

ANNEX I

PARTICIPATION

The Commission

A.J. González, Argentina
J. Loy, Australia
J.-P. Samain, Belgium
L.A. Vinhas, Brazil
R. Jammal, Canada
Liu Hua, China (sent apologies – unable to attend)
Y. Laaksonen, Finland
A-C. Lacoste, (Chairman) France
D. Majer, Germany
S. K. Sharma, India (sent apologies – unable to attend)
I. Levanon, Israel
A. Fukushima, Japan
G. Maksimovas, Lithania
M. S. Rahman, Pakistan
S. Adamchik, Russian Federation
M.T. Magugumela, South Africa (unable to attend)
J. Barceló Vernet, Spain
C.-M. Larsson, Sweden
O. Mykolaichuk, Ukraine
M. Weightman, United Kingdom (sent apologies – unable to attend)
M. Virgilio, United States of America
L. C. Dung, Vietnam (sent apologies – unable to attend)

Observers

J. A. Hashmi, AdSec
C. Waeterloos, EC
A. Sugier, representing L-E. Holm, ICRP
R. Meserve, INSAG
T. Tanaka, OECD NEA

Chairmen of Committees

G. Vaughan, NUSSC
S. Magnusson, RASSC
E. W. Brach, TRANSSC
T. Pather, WASSC

Representatives and associated experts

Mr.Yu, Mr. Peng, Mr. Lachaume, Ms. Andersin, Ms. Forest, Mr. Konishi, Mr. Nunota, Mr. Ogisi, Ms. Collet Campo, Mr. Khalenko, Mr. Cresswell, Ms. Toro and Ms. Astwood

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

H. Abou Yehia, G. Caruso, R. Czarwinski, P. Colgan, M. El Shanawany, A. Godoy, M. Gregoric, R. Hoskins, M. Lipar, D. Louvat, K. Mrabit, C. Viktorsson

B. Batandjeiva, T. Boal, A. Godoy, P. Metcalf, P. Nocture, G. Philip, A. Shokr, C. Toth,

Safety Standards coordinators
G. Feige, Policy and Programme Support Section (NSNI), NUSSC
G. Siraky, Waste Safety Section (NSRW), WASSC
N. Bruno, 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

ANNEX II

AGENDA

Twenty third Meeting of the
COMMISSION ON SAFETY STANDARDS
21 – 23 May 2008

VIC – Boardroom C04

1. Meeting kick-off

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

   1.2 Introductions, Adoption of the Agenda; *A.-C. Lacoste*

   1.3 Administrative arrangements for the meeting; *D. Delattre*

   1.4 Safety Standards Programme overview: history, hierarchy, structure, status, review and approval process, mandate of the CSS, Management System; *D. Delattre*

   1.5 Status of the endorsed Standards and Response to Actions from the 22nd Meeting; *D. Delattre*

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

   2.1 Nuclear Installation Safety*; P. Jamet, DIR-NSNI*

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

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

   2.4 Incident and Emergency Center*; W. Stern, IEC*

   2.5 Coordination on Safety Infrastructure; *L. Lederman, SSCS*

   2.6 Information on INSAG activities; *R. Meserve*

   2.7 Information on ICRP activities*; A. Sugier*

   2.8 Status report on the revision of the BSS*; E. Amaral*

3. Future CSS activities: Transition from the third to the fourth CSS term

   3.1 22nd CSS meeting report and the CSS four-year report; *A.-C. Lacoste and CSS members*

   3.2 Support to countries considering to launch a nuclear power programme on the progressive application of the Safety Standards

   3.3 Long-term structure for safety standards (draft roadmap from the CSS task force); *A.-C. Lacoste and CSS members*

4. Feedback on the Application of Safety Standards and Regulatory Issues

   4.1 Topical discussion on the Use of Safety Standards; *(CSS Members)*

   4.2 Regulatory Issues in the Member States; *(CSS Members)*

5. Presentations and Discussion of Reports of Safety Standards Committees

   5.1 Nuclear Safety Standards Committee

   G. Vaughan, Chairman/G. Feige, Scientific Secretary - NUSSC

   5.2 Radiation Safety Standards Committee

   S. Magnusson, Chairman/T.J. Boal, Scientific Secretary - RASSC

   5.3 Waste Safety Standards Committee

   T. Pather, Chairman/G. Siraky, Scientific Secretary – WASSC

5.4 Transport Safety Standards Committee

E.W. Brach, Chairman/ N. Bruno, Acting Scientific Secretary – TRANSSC

6. Draft publications and DPPs

6.1 Regulations for the Safe Transport of Radioactive Material, revision of TS-R-1 (DS345); *N. Bruno*

6.2 Compliance Assurance for the Safe Transport of Radioactive Material (DS327)*; N. Bruno*

6.3 Predisposal Management of Radioactive Waste (DS353); *P.Metcalf*

6.4 Safety of Uranium Fuel Fabrication Facilities (DS317)*; P. Nocture*

6.5 Safety of MOX Fuel Fabrication Facilities (DS318)*; P. Nocture*

6.6 Safety of Conversion and Enrichment Facilities (DS344)*; P. Nocture*

6.7 Radiation Protection and Radioactive Waste Management in the Design and Operation of Research Reactors (DS340); *A. Shokr*

6.8 Safety Assessment for Decommissioning of Facilities Using Radioactive Material (DS376); *B. Batandjeiva*

6.9 Draft Safety Framework on the Safety of Nuclear Power Source Applications in Outer Space, for agreement for submission to Member States for comments; *D. Delattre*

6.10 DPP for a new safety guide on Radiation Safety in Well Logging (DS419); *T. Boal*

6.11 DPP for a new safety guide on Radiation Safety for Nuclear Gauges (DS420); *T. Boal*

6.12 DPP on Evaluation of Seismic Hazards for Nuclear Installations, revision of NS-G-3.3 (DS422); *A. Godoy*

6.13 DPP on Establishing a National Nuclear Safety Infrastructure, new Safety Guide (DS424); *L. Lederman*

6.14 Information on the preparation of a DPP for a new safety guide on Technical and Scientific Support for the Regulatory Bodies, new safety guide; *G. Philip*

6.15 DPP on Periodic Safety Review of Nuclear Power Plants, revision of NS-G-2.10 (DS426); *C. Toth*

7. Report of the Meeting, Date of the next meetings

- 3 to 5 September 2008

- 22-24 April 2009

ANNEX III

STATUS ON ACTIONS ARISING FROM THE 22nd MEETING OF THE COMMISSION

22.1. Issue the final report of the 21st meeting of the Commission. **[Action: Secretariat]**. Done. The final report was made available on the Safety Standards web-page on November 30, 2007.

22.2. Include IRS in the feedback mechanism for the Safety Standards. **[Action: Secretariat]**. Information was distributed under agenda item 1.5. A complete description of the existing feedback mechanisms is being established with the Steering Committee involvement. A paper was distributed for information on enhancing the feedback from the Incident Reporting Systems to the revision of the Safety Standards

22.3. Review the structure of the Safety Standards Committees and evaluate the option of creating a new Committee for the Emergency Preparedness and Response area. **[Action: Secretariat]**. Information was provided under agenda 2.4.

22.4. Present at the next CSS meeting information on the INSAG work on nuclear safety infrastructure and DPPs for safety guides on progressive application of the IAEA Safety Standards and on Member States self assessment of their infrastructure development. **[Action: Secretariat]**. A presentation from INSAG was provided under agenda item 2.6. The DPP on nuclear safety infrastructure was submitted under agenda item 6.13.

22.5. Enhance the methodology for tracking the changes to the BSS. **[Action: Secretariat]**. This was addressed in the presentation of the status report for the revision of the BSS under agenda item 2.8.

22.6. Consider the invitation of the Chair of INSAG Chair at the CSS. **[Action: Secretariat in liaison with INSAG]**. The Chairman of INSAG was invited to participate at the CSS meeting.

22.7. Enhancing Safety Security interface: cross-verification. **[Action: Secretariat]**. The Steering Committee, composed of all Section Heads (safety and security) reviews of all safety standards and security related draft publication. This was addressed together with the presentation from INSAG under agenda item 2.6 on the report on the relationship between safety and security in nuclear installations.

22.8. Review and adjust as necessary the sequence of the meeting of the Committees and the Commission to allow for a 4 to 5 months period between the Committees and the CSS meetings. **[Action: Secretariat]**. Information was provided under agenda item 1.5. The dates for the second CSS meeting in 2008 take into account this request. Further optimization of the process flow was also proposed under agenda item 1.5.

22.9. Review the involvement of the industry in the Safety Standards Committees to maintain appropriate representation of the Member States. **[Action: Secretariat]**. Information was provided under agenda item 1.5. The issue was addressed through the re-establishment of the Committees. The members States are the main participants at the Committees' meeting. During the meeting, the floor is given firstly to the member States members and then to the observers. A Discussion paper proposed by Mr. Virgilio on industry involvement at different steps of the preparation and review process was introduced under agenda item 1.5.

22.10. Long-term structure for the Safety Standards: further general development of the outline of the GSR, establishment of a project management structure, evaluation of the workload and resources needed, evaluation of the impact in the Member States, updated list of Safety Standards in the long-term and transition phase. **[Action: Secretariat]**. Information was provided under agenda item 3.3. An ad hoc working group was established within the Steering Committee for the preparatory work by the Secretariat on the long-term structure related issues. It is currently establishing a final consolidation of the list of Safety Guides. With regard to the impact analysis, it was indicated that the impact would be limited if the adoption of the new format is implemented together with a revision justified from the content point of view

22.11. Study the possibility of implementing modern publication techniques for the Safety Standards that would include hyperlinks to the safety glossary and facilitate access to cross-references. **[Action: Secretariat]**. Information was provided under agenda item 1.5. Firstly, for the Safety Glossary, a. Wikipedia tool is being established. This may be exported as web pages, which would allow direct hyperlinks from the electronic pdf Safety Standards publications to the Safety Glossary definitions web pages. Cross-reference tracking is also being studied for the interface between the revised BSS and other General Safety Requirements.

22.12. Finalize the Chairman four year report for presentation to the IAEA Director General an distribution to the CSS and the Committees members. **[Action: Secretariat]**. The draft four-year report was presented to the IAEA Director General on 28 November 2007. The final report was issued on 31 January 2008.

22.13. Prepare the draft report of the CSS 22nd meeting and submit for approval to the member of the 3rd CSS term. **[Action: Secretariat]**. The draft report was submitted to the CSSIII members on 13 March 2008. After incorporation of comments, the final report was issued on 17 April 2008.

ANNEX IV

ACTIONS ARISING FROM THE 23rd MEETING OF THE COMMISSION

23.1. Submit to the Secretariat, in time for the next meeting of the CSS, suggestions for amending the Terms of Reference of the CSS (*ref. Item 1.5*) **[Action: CSS members]**

23.2. Codify in the process for establishing Safety Standards the involvement of stakeholders (Member States, regulators, industry, and others) and describe this in the Management System Document for the Planning, Development, Review/Revision, Approval, and Establishment of the IAEA Safety Standards MANSYS. Review with the SSCs the structure of the Safety Standards Committees to prepare for the next term (*ref. Item 1.5*) **[Action: Secretariat, SSCs and CSS members]**

23.3. Prepare a draft updated generic text on the IAEA Safety Standards that addressed the recent developments on the long-term structure of Safety Standards. Include also considerations on the aim of the Safety Standards (best practices, the practices 'necessary and sufficient' to achieve safety, etc.) in the revised text as well as in the above mentioned revision of the MANSYS Document (*ref. Item 1.5*) **[Action: Secretariat, SSCs and CSS members**]

23.4. Submit to the SSCs for comment an update of the Safety Standards management system MANSYSS and report to the 25th CSS meeting. A presentation on the MANSYSS will be provided during the 24th CSS meeting (*ref. Item 1.5*) **[Action: Secretariat]**

23.5. Reconsider, with the involvement of the Chair of the SSCs, the long-term list of Safety Guides, using input from the SSCs and the CSS, and present the revised list as well as the methodology, rationale, prioritization, and justification for such revised list to the SSCs and the CSS, using a visual aid such as a matrix layout (*ref. Item 1.5*) **[Action: Secretariat]**

23.6. Provide the CSS with information on findings, recommendations, and best practices including both safety and security from the IRRS missions (*ref. Item 2.1*) **[Action: Secretariat and ADSec Chair]**

23.7. Inform the CSS members on the availability of the report from the Commission of Eminent Persons (*ref. Item 2.3*) **[Action: Secretariat]**

23.8. Involve in the preparation of Safety Standards on emergency preparedness and response experts from relevant competent authorities. Consideration may be given in the future to the formation of an ad hoc group to support emergent work but do not initiate efforts to establish a new Safety Standards Committee at this time. (*ref. Item 2.4*) **[Action: Secretariat]**

23.9. Establish a working group consisting of the Chair of the SSCs and the Secretariat to develop a new Safety Glossary, using as a basis the existing Safety Glossary and new definitions from the BSS, still tracking the historical development of definitions. The review and revision of the Safety Glossary will be processed through the Safety Standards Committees and then submitted for CSS review and approval. (*ref. Item 2.8*) **[Action: Secretariat]**

23.10. After agreement on the content has been reached with the co-sponsors, implement the new format and style in the current revision of the BSS (DS379), in close consultation with the co-sponsors and before its final submission to the Committees and the CSS for approval (*ref. Item 2.8*) **[Action: Secretariat]**

23.11. Send to the IAEA DG a letter of information setting out the policy on the long-term structure of the Safety Standards and the main topics (updated list of priority items from the CSS Chairman's report of the last 4-year term) that will be addressed by the 4th term of the CSS. A copy of the letter to be provided to the INSAG Chair (*ref. Item 3.1*) **[Action: CSS Chairman with CSS members]**

23.12. Amend Item 6 of the draft roadmap to read: "Safety measures and security measures must be designed and implemented in an integrated manner", and include amendments for clarification to the annexes as provided by USA. The approved roadmap to be distributed to the SSCs, the CSS and the BSS cosponsors (*ref. Item 3.3*) **[Action: Secretariat]**

23.13. Submit the revision of TS-R-1 (DS345) to the CSS Chair for final approval before its submission to the Board of Governors; Recommendation to submit to the Board of Governors the full text of the revision of TS-R-1 instead of the table of changes (*ref. Item 6.*1) **[Action: Secretariat]**

23.14. Present for information to the 24th CSS meeting the DPPs of Safety Guides on Radiation Safety in Well Logging (DS419) and on Radiation Safety for Nuclear Gauges (DS420), completed to incorporate security recommendations. The provisions in the Code of Conduct on Safety and Security of Radioactive Sources should be a relevant source of information for the safety and security considerations. (*ref. Items 6.10 and 6.11*) **[Action: Secretariat]**

23.15. Study and submit to the SSCs two options for the presentation of recommendations for technical support organizations: integrated into the revision of GS-G-1.1; or as a separate Safety Guide (*ref. Item 6.14*) **[Action: Secretariat]**

23.16. Include in the Safety Guide on Periodic Safety Review of Nuclear Power Plants, revision of NS-G-2.10 (DS426) a recommendation that insights from the reviews be treated as Operational Experience feedback and that this information be shared internationally; include WASSC and RASSC in the review of DS426 (*ref. Item 6.15*) **[Action: Secretariat]**

23.17. Prepare the draft report of the CSS 23rd meeting to be submitted for approval at the 24th CSS (*ref. Item 7*) **[Action: Secretariat]**

23.18. Include in the Status document DPPs that have already been approved by the Steering Committee (*ref. meeting of the Chairs*) **[Action: Secretariat]**

23.19. Circulate items for discussion in advance of the 'meeting of the Chairs' (*ref. meeting of the Chairs*) **[Action: Secretariat]**

23.20. Address at each CSS meeting, in addition to the Standards, one major safety related topic (*ref. meeting of the Chairs*) **[Action: CSS Chair and Secretariat]**

ANNEX V

MAIN TOPICS TO BE ADDRESSED DURING THE FOURTH CSS TERM

In addition to items covered by the CSS roadmap dated 23 May 2008, the 23rd CSS meeting, building from the four-year report of the CSS third term identify the following topics as priorities to be covered during the fourth term.

- 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
- Guidance related to a new generation of nuclear reactor designs, the manufacturing of components, the quality of construction and commissioning of new plants
- Guidance and assistance related to the new applications of radiation sources
- 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
- Guidance on seismic safety that considers the potential consequences of earthquakes in new designs and ageing management of operating NPPs' structures, systems and components
- Question on how best to design and implement safety measures and security measures in an integrated manner
- Assistance and additional safety guidance to countries dealing with expanded uranium exploration and mining
- Guidance on public exposures to natural sources of ionizing radiations (radon, NORM residues, aircrew…) and for the safety of uranium mining activities
- 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
- Improvement on the coverage of human and organizational factors in the safety guides

ANNEX VI

ROADMAP from the CSS on the Long-Term Structure for Safety Standards (23 May 2008)

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

2) Ten Safety Principles presented in SF-1 form the basis upon which Safety Requirements are developed and safety measures are 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 all thematic areas in a coherent and harmonized set of publications, 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). 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) Safety measures and security measures must be designed and implemented in an integrated manner.

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

8) 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.

9) 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. This should include an evaluation of the overall impact for the Member States and the Secretariat and of the resources needed for the implementation of the process.

10) The work to be done cannot just be given to the Secretariat. There must be a personal involvement and leadership of the members of the Committees and the Commission, as it was the case for the Safety Fundamentals. The Task Force (involving the CSS and Committee chairmen as well as the NS managers) should further study how to achieve the ultimate objective of establishing the General Safety Requirements.

11) The BSS is being revised. The result will be a key element among the thematic requirements. It will integrate the new ICRP recommendations. 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. Like for the revision of the BSS, it will involve close consultation of, and collaboration with co-sponsoring organizations about the relationship between the revised BSS and the General Safety Requirements.

ANNEX A to the ROADMAP from the CSS on the Long-Term Structure for Safety Standards (23 May 2008)

Safety Standards User-Friendliness

With a view to facilitating the use of the Safety Standards by the Member States, the Safety Standards should be user-friendly. This involves the following main aspects:

- The users of Safety Standards in the Member States differ depending on the category of Safety Standards. In any case, the principal users are the regulatory bodies and other relevant national authorities. The Safety Standards are de facto also used by co-sponsoring organizations, many organizations that design, manufacture and operate nuclear facilities as well as organizations involved in the use of radiation related technologies;

- The structure of Safety Standards should be such that the users may easily identify among the whole collection of Safety Standards those that are particularly applicable to the specific facility or activity they are dealing with. The application of this concept is reflected by a Safety Standards Structure with thematic safety requirements and guides applicable to all facilities and activities complemented by a set of facility/activity specific safety requirements and guides;

- The overall number of Safety Standards should be manageable. The application of this concept is reflected through the proposal for the long-term collection of Safety Standards;

- The format and style of the Safety Standards and particularly the Safety Requirements should facilitate their use for the establishment of the regulatory framework in the Member States. The Safety Requirements in the future will therefore be written in regulatory style (shall statements) with a discrete set of requirements followed, when necessary by short explanations. To the extent practicable the structure and layout of the Safety Standards Series documents should be uniform;

- The use of cross-references should be optimized. When small parts of other Safety Standards publications are to be used, it will be preferred to copy these. When large parts of other Safety Standards are to be referenced, the cross-referencing without duplicating the text will be the preferred option. The application of this concept will be facilitated with the long-term structure through the integration of all the thematic Safety Requirements into one publication which will then prevent the need for many cross-references. It will also be facilitated by the use of a numbering system for each individual discrete requirement and modern IT techniques such as hyperlinks so as to help building a logical relationship between the set of safety requirements and the set of safety guides. Thus, after completion of the set of Safety Requirements, the subsequent revision of Safety Guides will refer to these numbers. There are also other user-friendly techniques that can be used to facilitate the use of the safety standards, such as frequently asked questions, pictures and diagrams, and electronic media;

- The terminology used should be harmonized throughout the Safety Standards Series and such that the terms can be easily translated in different languages also considering the legal aspects involved; and

- The Safety Guides are currently complemented by TECDOCs and Safety Reports. Part of this material could be incorporated as annexes to the future Safety Guides.

ANNEX B to the ROADMAP from the CSS on the Long-Term Structure for Safety Standards (23 May 2008)

Format for the Safety Requirements

As indicated in the CSS Subgroup report part A, it is proposed to adopt for all Safety Requirements a format similar to the one used for the Fundamental Safety Principles with a discrete set of requirements followed by explanatory text, as necessary. When a compelling justification drives changes to a Safety Requirements the revision should include the adoption of this new format. The status of the explanatory text and the expectations for its use will be made clear. It is also expected that the level of detail in each chapter will be similar (annex IV of the CSS subgroup report par A elaborates on a better definition of the level of the Safety Requirements with some examples). The main reasons are as follows:

- In term of user-friendliness, the format and style of the Safety Standards should facilitate their use for the establishment of the regulatory framework (see annex A to the roadmap on user-friendliness). The Safety Requirements should be short enough to encourage their reading and actual use in the Member States;

- In the current set of Safety Requirements, references are often made to specific concepts but their explanation is given in many cases in the subsequent Safety Guides. In the future, it is expected that the explanation of the concepts will be provided in the Safety Requirements so as to facilitate their interpretation for use in establishing national regulatory requirements. The purpose of the Safety Guides will not be to explain these concepts but to focus on the recommendations on how the requirements can be implemented;

- In addition, each individual discrete requirement will be allocated a number which, by appropriate references in the Safety Guides, will help building a logical relationship between the set of safety requirements and the set of safety guides. Thus, after completion of the set of Safety Requirements, the subsequent revision of Safety Guides will refer to these numbers; and

- Requirements must address what must be achieved/done while the guides will address how this could be achieved/done.

ANNEX C to the ROADMAP from the CSS on the Long-Term Structure for Safety Standards (23 May 2008)

Strategy for work on Safety Guides

The following strategy has been established to guide work on Safety Guides. It was described in the CSS Subgroup report part B:

Goals:

• To be responsive to the needs of Member States;

• To limit the burden to the Secretariat, the members of the Committees, the Commission and the Member States as well as ensuring stability in the set of Safety Guides, the complete set proposed is established on the basis of recently published Safety Standards and those in development;

• To have a manageable number of standards by:
- Limiting the number of Safety Guides in the thematic areas to those of a generic nature;
- Developing Safety Guides in the facility specific areas that cover the whole lifetime of the facility (site evaluation, design, commissioning, operation and decommissioning);
- Identifying among the facility specific guides those that may be applicable to several types of facilities so as to avoid the establishment of guides addressing the same topical issue for different types of facilities/activities;
- Including, wherever possible, additional topics as part of the revision of existing Safety Guides, rather than by developing new Safety Guides.

Strategy:

Therefore, in terms of process for the decision to work on safety guides, separate consideration will be given to the revision of existing guides and to the proposal for of new guides. In the later case:

A report should be prepared to justify the need of additional topics to be addressed in Safety Guides. It should indicate to which Safety Requirements the proposed additions relates and presents the overall coverage (scope and issues addressed) of the current set of Safety Guides implementing these requirements.

The report should also review the status of these safety guides and indicate the time-frame expected for their next revision. In most cases, it will be possible to address the additional need by expanded the scope of an existing guide at its next revision or through the production of addendum pages.

Therefore, a proposal for the establishment of a new Safety Guides in the whole collection, together with a “SPECIAL DPP FOR ADDITIONAL PUBLICATION” will be considered by the Secretariat, the Committees and the Commission only if there is a justification for an urgent need and either:

1- This need cannot be achieved by expanding the scope of an existing Safety Guide; or

2- This need could be addressed by expanding the scope of an existing Safety Guide, but it is not expected to revise this Guide sufficiently soon to address the urgent need. In this case, the Special DPP will contain an additional line in the production section indicating to which Safety Guide the material will be later integrated and the related target date for integration so as to maintain as far as possible the initial closed set of Safety Guides.

A section should be added to each DPP on justification of the proposed publication in terms of member states need, result of gap analysis, expected safety improvements, overall cost/benefit. This should apply equally to documents being revised as well as new documents being proposed.