22 June 2010

Commission on Safety Standards

Twenty-seventh Meeting

17 – 19 March 2010

IAEA Headquarters, Vienna

Draft report of the Meeting

1. Opening Session

1.1 Opening of the Meeting

Mr Taniguchi opened the 27th meeting of the Commission on Safety Standards. He intended to provide a brief review of the March 2010 meeting of the Board of Governors, which is often referred to as the "Safety Board," focusing on the Nuclear Safety Review and Safety Standards and to recap on the successful conference held in Cape Town, South Africa in December, 2009.

As mentioned in the Nuclear Safety Review 2009, the global nuclear community is experiencing a period of dynamic change with new and expanding nuclear power programmes, the wider use of radioactive sources, and extensive globalization in general. Therefore, increasing challenges for continued and enhanced international cooperation are being faced. Even though the safety performance of the nuclear industry has remained at a high level over the past decade, it is necessary to avoid complacency and to continuously improve and strengthen the existing global nuclear safety and security regime.

At the Board meeting in March 2010, a few delegations questioned the binding or non-binding character of the Safety Standards as well as the appropriateness of issuing requirements for the legal, governmental and regulatory framework as part of the Safety Standards Series

Mr Taniguchi reconfirmed that the safety standards are, of course, not legally binding. However, he noted the EU Directive approved last year, which is based, inter alia, on the Agency's Safety Fundamentals, thus making these binding on EU member States. In addition, European Commission President Barroso announced at the International Conference on Access to Civil Nuclear Energy in Paris the previous week: "a European initiative to raise international nuclear security and safety standards and make them legally binding worldwide." Mr Taniguchi recalled a similar recommendation to the IAEA by the Commission of Eminent Persons two years ago.

In the opening speech of the same conference, President Sarkozy of France proposed to make safety a common priority and a collective priority. He said: "Each country makes its own choices. But to inform future decision-making, I would like to see an independent body, under the aegis of the lAEA, develop an international scoreboard based on indisputable science and technology for ranking the reactors on the market according to the safety criterion. This is the only way to ensure that each country can make its decisions rationally and transparently."

Mr Taniguchi considered that the CSS discussion and provision of its views regarding these latest initiatives and proposals are very timely and important.

However, he considered what is much more important now, regardless of their legal character—is to make IAEA safety standards the de facto global reference for achieving a high level of safety.

Additionally, at the Board meeting several delegations rightly emphasized that the safety standards provide guidance to Member States on how to meet their international obligations, such as those under the Convention on Nuclear Safety and the Joint Convention. Furthermore, many States find that the peer review mechanism is an increasingly valuable arrangement for promotion of sharing experience and mutual learning. And accordingly, they found the IAEA safety standards to be a necessary tool for promoting objective reviews and effective learning and sharing.

He noted that even though peer reviews are only provided to a Member State upon request, almost all

Member States with nuclear power programmes, as well as many newcomers, have requested peer reviews as a best practice approach for achieving high levels of safety and security.

Furthermore, Mr Taniguchi commented on the appropriateness of issuing safety standards on the legal, governmental and regulatory framework. With the approval of the Safety Fundamentals in 2006, which includes a principle on the role of governments, as well as the Safety Requirements GS-R-1 in 2000 and its revision in 2010, the Board of Governors confirmed the appropriateness of such standards, and the feedback from their extensive use in the IRRS has been highly positive.

The Agency is very committed to establishing and continuously improving, in a transparent and open manner, its safety standards, and implementing peer reviews and various services to better meet the needs of its Member States. Unfortunately, one of the Safety Requirements: *Disposal of Radioactive Waste* had been removed from the agenda of the last Board of Governors meeting in March. For this reason, Mr Taniguchi considered that the CSS should consider ways for approval of these Safety Requirements at the June 2010 Board meeting. The Agency appreciated the CSS for its support and commitment to ensuring that this unfortunate situation is avoided in the future.

The AdSec and CSS Joint Task Force had met on the previous day to discuss short term improvements of the process for preparing safety and security standards and guidance documents as well as the long term objectives of establishing a Series that would cover both nuclear safety and nuclear security. Significant progress had been made at this meeting on exploring the long term vision putting together the safety and security series, and using a review process similar to the one used now for safety standards. It was expected that the Nuclear Security Guidance Committee would be launched and would produce positive results as soon as possible.

At the December 2009 International Conference on Effective Nuclear Regulatory Systems in Cape Town, South Africa, senior nuclear regulators from around the world held, inter alia, intensive discussions on the regulatory challenges associated with introducing a new nuclear power programme. This conference was well-received and was favourably commented upon at the last Board of Governors' meeting. Many delegations commented and indicated that it was very constructive and timely.

Some of the major conclusions from this conference were:

- Firstly, the broader international nuclear safety community should work together more closely to enhance the coordination and collaboration for capacity building to assist new countries as well as those countries with existing programmes. Even the so-called mature countries, with long nuclear power plant experience need further capacity building to meet their challenges. And, in light of the globalization of nuclear development, bringing together the broader network of nuclear regulators from around the world, there is an opportunity to improve safety performance through experience sharing and mutual learning based on the use of the IAEA safety standards. In this connection, the Agency has launched an international initiative entitled the "Regulatory Coordination Forum" to further promote international coordination and collaboration among mature regulators and regulatory bodies of newcomers.

- Secondly, there still remain significant safety and security risks associated with radioactive sources, and they need to be managed under regulatory control throughout their lifetime and even after their useful life is over. Their sustainable management remains a challenge for many countries. The IAEA and its Member States need to focus on broader and better-coordinated international efforts to implement an integrated global system that supports the "cradle to grave" management of radioactive materials.

- Finally, the Forum of Nuclear Regulatory Bodies in Africa (FNRBA) was presented as an effective mechanism to create, share and manage nuclear safety and security knowledge in that region, working in collaboration with other regional networks such as the ANSN and the Ibero-American Forum.

Mr Taniguchi informed the Commission that this was very likely to be his last participation in the CSS as he planned to leave the Agency in summer 2010. For almost nine years, he and the CSS had effectively worked together to steadily establish, revise and improve the IAEA safety standards. Through the excellent work of the CSS and its four Committees, the IAEA safety standards were now considered as the essential reference for nuclear safety worldwide. It was through the dedicated

efforts of the CSS to establish high-quality standards for safety and to provide for their effective use, that the Global Safety and Security Regime had been made reality. He sincerely appreciated and commended the significant achievements of the CSS and wished all the best for the CSS and hoped for its continued success addressing many current and future challenges facing the international safety community.

1.2 Introductions, Adoption of the Agenda, Adoption of the 26th CSS meeting report

Mr Lacoste, Chairman of the Commission, welcomed participants. He introduced a new member to the Commission, Mr. Bajaj from India, who had been recently nominated and was unfortunately not available for this first meeting after his nomination. He also indicated that apologies had been received from Mr Jammal from Canada, Mr Liu Hua from China (Mr Jun Yu represented China at the meeting), Mr Barakat from Egypt, Mr Bajaj from India, Mr Yun from the Republic of Korea (Mr Park represented the Republic of Korea at the meeting), Mr Maksimovas from Lithuania (Mr Paulikas represented Lithuania at the CSS), Mr Rahman from Pakistan, Mr Adamchik from the Russian Federation (Mr Ododov represented the Russian Federation at the meeting), Mr Clapisson from South Africa (Mr Msebenzi represented South Africa at the meeting), Mr. Larsson from Sweden (Mr Moberg represented Sweden at the meeting), Mr Weightman from the UK (Mr Cresswell represented the UK at the meeting), Mr Dung from Vietnam, Mr Faross from the EC (Mr Janssens represented the EC at the meeting), Ms Cousins from the ICRP (Mr Gonzalez represented the ICRP at the meeting) and Mr Meserve from INSAG (Mr Laaksonen represented INSAG at the meeting). A list of participants is provided in Annex I.

The USA had submitted comments on the provisional agenda and a revision of the agenda was included in the folders. Furthermore, Mr Lacoste proposed that the draft Safety Requirements on Disposal of Radioactive Waste, which had been withdrawn from the agenda of the recent Board of Governors meeting, be discussed under agenda item 3.11.

The agenda with the proposed changes was approved. The approved agenda is provided in Annex II.

Mr Lacoste informed the Commission that the draft report of the 26th CSS meeting had been made available and that comments from the USA and Japan had been accepted and would be incorporated into the final report. The report of the 26th CSS meeting was approved with these changes and would be uploaded to the CSS website [Annex III, Action 27.1].

1.3 Administrative arrangements for the meeting, status of the main topics for the 4th CSS term, status of endorsed Standards, response to actions from the 26th Meeting and update of the reference list of Safety Guides

Mr Delattre briefly informed the Commission of administrative arrangements for the meeting. He noted that all material had been made available two months in advance of the meeting for effective review by the Commission.

In respect of the issues raised by Mr Taniguchi in his opening address, Mr Lacoste requested the Secretariat to prepare a report for presentation at the 28th CSS meeting on the discussion at the March 2010 Board of Governors on the appropriateness of establishing standards on the legal, governmental and regulatory framework; and the record of the Board in this respect to be attached to this report of the 27th CSS meeting [Annex III, Action 27.2 and Annex IV]. He further requested that a report be presented at the 28th CSS meeting on the legal nature of the standards [Annex III, Action 27.3].

Mr Delattre presented the status of the main topics for the 4th CSS term (see Annex V).

Mr Delattre presented the status of the endorsed Safety Standards. He informed the Commission that 11 Safety Standards had been published so far in 2009:

The first two General Safety Requirements publications:

- Safety Assessment for Facilities and Activities (DS348) GSR Part 4
- Predisposal Management of Radioactive Waste (DS353) GSR Part 5

One Specific Safety Requirements publication:

- Regulations for the Safe Transport of Radioactive Material, 2009 Edition (DS345) TS-R-1

Eight Safety Guides :

- Ageing Management for Nuclear Power Plants (DS382) NS-G-2.12
- Compliance Assurance for the Safe Transport of Radioactive Material (DS327) TS-G-1.5
- Evaluation of Seismic Safety for Existing Nuclear Installations (DS383) NS-G-2.13
- Severe Accident Management Programmes for Nuclear Power Plants (DS385) NS-G-2.15
- The Management System for Nuclear Installations (DS349) GS-G-3.5
- Classification of Radioactive Waste (DS390) GSG-1
- Deterministic Safety Analysis for Nuclear Power Plants (DS395) SSG-2
- Borehole Disposal Facilities for Radioactive Waste (DS335) SSG-1

He also noted that the Safety Framework for Nuclear Power Source Applications in Outer Space, A/AC.105/934, had been published.

He provided details on 14 further Safety Standards, endorsed by the Commission, that were being published:

- Safety of Nuclear Fuel Cycle Facilities: Uranium Fuel Fabrication Facilities (DS317)
- Safety of Nuclear Fuel Cycle Facilities: Uranium and Plutonium Mixed Oxide Fuel Fabrication Facilities (DS318)
- Safety of Conversion and Enrichment facilities (DS344)
- Disposal of Radioactive Waste (DS354), to be re-submitted to the BoG
- Chemistry Programme for Water Cooled Nuclear Power Plants (DS388)
- Development and Application of Level 2 Probabilistic Safety Assessment for Nuclear Power Plants (DS393)
- Development and Application of Level 1 Probabilistic Safety Assessment for Nuclear Reactors (DS394)
- Deterministic Safety Analysis for Nuclear Power Plants (DS395)
- Radiation Safety in Industrial Radiography (DS408),
- Radiation Safety of Gamma, Electron and X ray Irradiation Facilities (DS409)
- Ageing Management for Research Reactors (DS412)
- Governmental, Legal and Regulatory Framework for Safety (DS415)
- Licensing Process for Nuclear Installations (DS416)
- Seismic Hazards in Site Evaluation for Nuclear Installations (DS422)

Mr Delattre informed the Commission of the status of actions arising from the 26th CSS meeting (see Annex VI).

Mr Gonzalez questioned the situation regarding translations of Standards. He considered that there were no clear criteria for carrying out translations, and long delays in the issue of translations. Furthermore, translation added value as it tended to reveal difficulties with the English version of a standard. He requested the Secretariat to report on the current situation and practices regarding the translation of standards into official languages [Annex III, Action 27.4].

Mr Gonzalez referred to point 8 of the main topics for the 4th CSS term (see Annex V). He considered that guidance on public exposures to natural sources of ionizing radiation, particularly radon, was urgently needed. In relation to the International Conference on Control and Management of Inadvertent Radioactive Material in Scrap Metal in Tarragona, Spain and the International Conference on Remediation of Land Contaminated by Radioactive Material Residues held in Astana, Kazakhstan in 2009 (see Annex VI, Action 26.9), he noted that the conferences had had as outcomes very clear actions on the Agency.

Mr Delattre also informed the Commission of the update to the reference list of Safety Guides for the long term. The changes to the reference list of Safety Guides for the long term would be incorporated and the updated list made available on the Safety Standards website.

2. Presentations and Discussion of Reports of Safety Standards Committees

2.1 Nuclear Safety Standards Committee

Mr Vaughan, Chairman of NUSSC, reported on the 28th NUSSC meeting. He informed the Commission that NUSSC had approved three draft Safety Standards (DS44, DS371 and DS413) for submission to the CSS and four draft Safety Standards (DS379, DS351, DS417 and DS426) for submission to Member States for comment. NUSSC had also approved four DPPs for submission to the CSS (DS432, DS433, DS436 and DS437), while one DPP (DS435 on Safety of Small and Medium, Transportable and Floating Nuclear Power Plants) had been put on hold. Mr Vaughan also reported NUSSC's review of the BSS and on other presentations and discussions held at NUSSC. (Mr Vaughan's full presentation is available on the CSS website.)

Mr Gonzalez considered that putting DS435 'on hold' was not a solution to the problem of how to address such transportable reactors. Mr Jamet informed the Commission of two forthcoming initiatives: a summary of all safety issues for transportable reactors would be presented to the 28th CSS (see Annex VI, Action 26.7), and an expert meeting would be held to determine if NS-R-1 is sufficient to address such reactors, the results of which would be presented at the June 2010 meeting of NUSSC.

Mr Gonzalez queried whether the concept of 'graded approach' was in conflict with the mandate of the Agency, and considered that a description of the meaning of the term 'grading' was necessary. Mr Vaughan noted that the graded approach had to relate to the magnitude of the risks, and not just to the power level.

2.2 Radiation Safety Standards Committee

Mr Magnusson, Chairman of RASSC, reported on the 27th RASSC meeting, which had been held jointly with WASSC. He summarized RASSC's discussions of justification of medical exposures, the ICRP statement on radon and the revision of the BSS (DS379), on which over 1000 comments had been received from RASSC members. RASSC had approved two draft Safety Standards for submission to the CSS (DS413 and DS334), three draft Safety Standards for submission to Member States for comment (DS356, DS379 and DS426) and three DPPs (DS433, DS434 and DS437). (Mr Magnusson's full presentation is available on the CSS website.)

Mr Virgilio noted the challenges faced in 'backfitting' the BSS to the new format of Safety Requirements with overarching and associated requirements.

Mr Gonzalez noted that the European BSS would be quite different in format from the IAEA BSS, although the same experts had worked on both texts and the EU was cosponsoring the IAEA BSS. He hoped that the secretariats responsible for both BSS would do their utmost to ensure that both BSS are the same in content and in format. He suggested that, to avoid problems of public perception, a statement be made that the technical content of both BSS was the same. Mr Janssens considered that the differences should not be overemphasized and that the technical content was much more important. Ms Amaral recalled that the RASSC had decided in 2007 that the IAEA BSS should follow the structure of the ICRP recommendations. She noted that there were also other more challenging issues to be faced.

2.3 Waste Safety Standards Committee

Mr Pather, Chairman of WASSC, reported on the 28th WASSC meeting, which had been held jointly with RASSC. He informed the Commission that WASSC had approved two draft Safety Standards (DS413 and DS334) for submission to the CSS, five draft Safety Standards (DS356, DS379, DS405, DS417 and DS426) for approval for submission to Member States for comment and three DPPs (DS433, DS434 and DS437). He also reported on other presentations and discussions at WASSC. (Mr Pather's full presentation is available on the CSS website.)

2.4 Transport Safety Standards Committee

Mr Brach, Chairman of TRANSSC, reported on the 19th TRANSSC meeting. He reported on the results of TRANSSC's two-year review cycle initiated in 2009, on the time schedule for revision of TS-R-1 and TS-G-1.1 and on progress made on the outstanding technical issues of fissile exceptions and NORM. He also outlined the mechanisms in place for gathering feedback on the transport standards. (Mr Brach's full presentation is available on the CSS website.)

Mr Gonzalez requested that when the next edition of TS-R-1 is presented to the Board of Governors for approval in 2012 that the translations into all official languages of the entire draft, and not only of the table of changes, be submitted for approval too. Mr. Brach commented that TRANSSC also supports the need for timely translation of TS-R-1 into the official languages to support implementation and use. Mr. Brach informed the Commission that translations of the 2009 edition of TS-R-1 into all official languages are now available [Annex III, Action 27.10].

2.5 Meetings of the Chairs

Mr Lacoste then informed the Commission of the topics discussed at the meeting of the four Chairs and the meeting of the five Chairs:

- The results of the Joint AdSec-CSS Task Force (to be addressed under item 5.1 of this meeting);
- The draft Terms of Reference of the Safety Standards Committees (to be addressed under item 5.6 of this meeting)
- Nuclear Energy Series publications (to be addressed under item 5.5 of this meeting)

3. Approval of draft publications and DPPs

3.1 Safety of Nuclear Power Plants: Commissioning and Operation (DS413)

Mr Kearney presented the draft Safety Requirements for approval for submission to the Board of Governors and indicated the Secretariat's proposal to address comments made by Japan, South Africa and UK.

Mr Pather repeated South Africa's comment, namely that DS413 contained guidance statements mixed with requirements.

Mr Gonzalez noted that the last edition of this Safety Requirements had been published in 2000, and considered that it should be clarified how the user is to manage the transition from application of one edition of a Safety Requirements publication to application of the next edition; this issue is addressed explicitly within the Transport Regulations and the BSS but is not set out in other Safety Requirements. He further noted that the IAEA safety standards are de facto binding in certain circumstances.

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

3.2 Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency (DS44)

Ms Buglova presented the draft Safety Guide for approval for publication and indicated the Secretariat's proposal to address comments made by South Africa.

Mr Virgilio praised the draft as an excellent reference presenting good guidance, which had been developed by means of a systematic, thoughtful approach. Mr Gonzalez also indicated his appreciation of a standard that was cosponsored, as required in the Statute, and quantitative, and so could be checked by peer review. Mr Vinhas also praised the draft, but noted that Table 2.3 could be presented in a more user-friendly manner.

The Commission endorsed the draft for publication.

3.3 Geological Disposal of Radioactive Waste (DS334)

Mr Bruno presented the draft Safety Guide for approval for publication and indicated the Secretariat's

acknowledgement of the comment made by Japan in relation to consistency in the titles of the various Requirements and Guides on disposal facilities. He further indicated that changes agreed for DS354 (see item 3.11) would not affect the content of DS334.

The Commission endorsed the draft for publication.

3.4 Storage of Spent Fuel (DS371)

Mr Metcalf presented the draft Safety Guide for approval for publication and indicated the Secretariat's proposal to address comments made by Japan.

The Commission endorsed the draft for publication.

3.5 DPP for a new safety guide on Radiation Protection of the Public and the Environment (DS432)

Mr Boal presented the DPP for approval and indicated the Secretariat's proposal to address comments made by the India, Japan and South Africa.

Mr Laaksonen noted that there were accepted criteria for radiation protection in normal operation, but that the approach for accident conditions was different in different States. Mr Gonzalez urged the Secretariat to ensure that the guidance presented in DS432 would address the practical solution of problems and to follow the work of ICRP on protection of the environment.

The Commission approved the DPP, with account to be taken of the remarks made by the Commission.

3.6 DPP for a new safety guide on Site Survey and Site Selection for Nuclear Installations (DS433)

Mr Sollogoub presented the DPP for approval. No comments had been received from CSS members.

Mr Vaughan requested the Secretariat to take note of the difference in site survey and site selection for 'green field' sites and siting of new plants on existing sites, noting that many new nuclear installations would now be built on existing sites.

In response to Mr Laaksonen's queries, Mr Sollogoub noted that emergency planning was covered in NS-G-3.1, and that some aspects of public acceptance could be addressed in publications of the Department of Nuclear Energy.

Mr Gonzalez considered that the Safety Guide should address both siting of installations on new sites and extension of the capacity of current sites, and should also provide recommendations on optimizing the size of site through consideration of the resources required for siting and for emergency planning.

Mr Jamet warned on the importance for newcomers to consider siting as an important aspect since the design cannot always compensate for failings in siting.

Mr Stern noted that there are no quantitative guidelines on how close or how dense surrounding populations may be, but believed that Member States preferred a more general approach.

The Commission approved the DPP, with account to be taken of the remarks made by the Commission.

3.7 DPP for a new safety guide on Radiation Safety of Radioisotope Production Facilities (DS434)

Mr Reber presented the DPP for approval and indicated the Secretariat's proposal to address comments made by the USA.

Mr Lacoste requested that NUSSC and TRANSSC also be involved in the review of this Guide. Mr Gonzalez noted that the issues of the safety of reactors, of production facilities and accelerators all needed to be addressed in the Guide.

Mr Vinhas requested that the issue of record keeping for long-lived radionuclides be addressed too.

Mr Virgilio requested that the comment by the USA, namely to include a section on safety evaluation for regulatory management of radioisotope production facilities, be indeed accepted, in view of the fact that the target audience of the safety standards is the regulatory body, and not the operator. Mr Lacoste reinforced this statement, and referred to the Roadmap on the Long-Term Structure of Safety

Standards, in which it is stated "in most cases the national authorities and in particular the regulators are the principal users of the standards" recognizing nevertheless that the Safety Standards are also de facto used by many organizations that design, manufacture and operate facilities as well as organizations involved in the use of radiation related technologies.

The Commission approved the DPP, subject to the amendments as discussed.

3.8 DPP for a new safety guide on Instrumentation and Control and Software Important to Safety for Research Reactors (DS436)

Mr Boogaard presented the DPP for approval and indicated the Secretariat's proposal to address comments made by the India and South Africa.

Mr Vaughan requested the Secretariat to develop this Guide in parallel with its 'sister' Guide on instrumentation and control systems important to safety in nuclear power plants (DS431), and to ensure consistency between the two.

Ms Mykolaichuk noted the difference between research reactors and nuclear power plants in this respect, and offered Ukraine's assistance with the drafting in view of Ukraine's recent experience in this area.

Mr Virgilio requested that the subjects of research and test facilities and isotope production facilities, as considered in DS434 on Radiation Safety of Radioisotope Production Facilities (see item 3.7), be addressed in the Guide, along with quality assurance, and that security, including cyber-security, be addressed in collaboration with NSNS. Furthermore, Mr Park requested that mitigation systems be included. M. Boogaard clarified that radio isotope production and the to the reactor related facilities are regarded as an experiment and will be treated in this way, but that Test facilities and isotope production facilities, not directly connected to the research reactor"are not part of the scope of the document

The Commission approved the DPP, with account to be taken of the remarks made by the Commission.

3.9 and 3.10 DPP for the revision of TS-R-1, Regulations for the Safe Transport of Radioactive Material (DS437) and DPP for the revision of TS-G-1.1, Advisory Material for the IAEA Regulations for the Safety Transport of Radioactive Material (DS425)

Mr Stewart presented the DPPs for approval. No comments had been received from CSS members.

Mr Vinhas requested that both DS425 and DS437 be issued in all official languages.

The Commission approved both DPPs.

3.11 Safety Requirements on Disposal of Radioactive Waste (DS354)

Mr Metcalf presented the draft Safety Requirements, which had been withdrawn from the agenda of the meeting of the Board of Governors in March 2010 at the request of the Russian Federation. He indicated the concerns of the Russian Federation, which related to paras 1.7 and 1.17 concerning the practice of deep well injection of liquid radioactive waste, and set out the Secretariat's proposal to resolve these concerns: that text would be removed from para 1.7 and para. 1.17 would be deleted, and that the Russian Federation would agree to a peer review being made of its practices of deep well injection of radioactive waste.

The Russian Federation delegation's agreed to the Secretariat's proposal and stated that the Russian Federation would, within one month, make a formal request for such a peer review mission.

Mr Lacoste noted that no representative from the Russian Federation had been present at the previous meeting of the CSS.

Although Mr Gonzalez agreed with the Secretariat's proposal, he worried that a precedent had been set in the withdrawal of an item from the Board's agenda, and was concerned that this may be used again in the future.

Mr Lacoste summarized the Commission's agreement to the proposed changes to DS354, taking into account the promise of the delegation of the Russian Federation to request, within one month, the Agency to provide for application of the standards in respect of the practice of deep well injection of radioactive waste [Action 27.5, Annex III].

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

4. Progress reports on safety standards and other safety related publications

4.1 Information on ICRP activities

Mr Gonzalez provided a presentation the new ICRP recommendations on radon. In particular, recognizing and accepting the scientific evidence that active smokers are at a much higher risk from radon than non-smokers or ex-smokers, he raised the question of whether the Commission should judge it appropriate to establish radon-related radiation protection requirements on the basis of a single nominal risk coefficient for a population of all ages that includes smokers, ex-smokers and non-smokers. (Mr Gonzalez's full presentation is available on the CSS website.)

4.2 Information on the status of the revision of the BSS (DS379)

Ms Amaral provided a presentation of the status of the revision of the BSS (DS379). In particular, she made reference to how protection of the environment is treated and the interface between safety and security. She informed the Commission that the closing date for receipt of Member State comments was 31 May 2010. She expected that the BSS would be sent to the CSS for endorsement in March 2011. (Ms Amaral's full presentation is available on the CSS website.)

Mr Virgilio noted the ambitious schedule set forth for the coming work. He supported the grouping of comments, and requested the Secretariat to carry out the disposition of Member State comments thoughtfully and comprehensively and in a very visible manner.

4.3 Information on AdSec activities

Mr Hashmi reported on the discussions at the meeting of the Joint AdSec CSS Task Force held the previous day, where many long term and short term issues had been discussed. He thanked Mr Lacoste, Mr Taniguchi and the members of AdSec and CSS.

He spoke about the importance of the democratic process and building consensus, and felt that the short term issues should be settled first before dealing with the feasibility of long term issues.

He noted that AdSec was in agreement with the CSS about the importance of preparing, reviewing and approving documents in a transparent manner, with the involvement of Member States. And he considered that the Committees for approval of safety and security related documents should be looked at as a whole, to determine if any rationalization was necessary.

Finally, on behalf of AdSec, Mr Hashmi extended an invitation to Mr Lacoste to attend the next AdSec meeting as an observer.

4.4 Information on INSAG activities

Mr Laaksonen presented information on INSAG activities, including recent and forthcoming publications and proposals for new reports, and indicated that CSS members were welcome to propose new topics for discussion by INSAG. (Mr Laaksonen's full presentation is available on the CSS website.)

Mr Gonzalez addressed the issue of internationalization of operating organizations, where he feared that safety concepts (responsibilities, safety culture issues, etc.) were being neglected. He noted that such situations were not addressed in the safety related conventions. Mr Laaksonen noted that many plants in Europe have foreign ownership, and that both the operator's and the regulator's responsibilities are always inside the country where the plant is located. Mr Taniguchi noted, for fuel cycle facilities and waste disposal facilities, that there were emerging complex issues relating to multinationalization, and Mr Gonzalez, referring to an expert meeting that had taken place a few months earlier, agreed that this was an unresolved issue and encouraged INSAG to address it.

Mr Park proposed that INSAG discuss the safety approach for beyond the design life and for new generation reactor designs with new safety features. Mr Laaksonen noted that other forums such as WENRA were addressing this issue, and expected that INSAG may wait until the finalization of the WENRA process.

Mr Taniguchi reminded the Commission of the independence of INSAG from the IAEA programme, noting that INSAG addresses not only the IAEA Director General, but also the global community.

4.5 Other information on recent activities from the Secretariat

a) Mr Jamet provided a short presentation on recent activities in NSNI, particularly peer reviews and expert missions, knowledge sharing and training, and collaboration with Norway and the EC. Mr Jamet's presentation is available on the CSS website.

Mr Gonzalez, referring to the earthquake in Chile on February 27 2010, questioned whether siting design and tsunami design are properly correlated, and considered that the Agency could gain valuable lessons from this event.

b) Ms Amaral presented the outcomes of two recent conferences: the International Conference on Control and Management of Inadvertent Radioactive Material in Scrap Metal, held in Tarragona in February 2009 and the International Conference on Remediation of Land Contaminated Radioactive Material Residues, held in Astana in May 2009. Ms Amaral also provided a short presentation on recent activities in NSRW. Both of Ms Amaral's presentations are available on the CSS website.

Mr Lacoste considered that there was insufficient investment in two radiation protection areas: radon and medical exposures.

c) Ms Nilsson provided a short presentation on latest developments in relation to the Nuclear Security Series. Ms Nilsson's presentation is available on the CSS website.

Ms Nilsson also informed the Commission of the main areas of the nuclear security programme: information exchange and collection, including the International Trafficking Database; the production of guidance documents; the provision of services, including assessment evaluations and peer reviews and education and training programme; and risk reduction, by increasing the capacity of Member States.

d) Mr Stern provided a short presentation on recent activities in the IEC, including capacity building publications and tools, training and missions, the Response Assistance Network (RANET) and the ShipEx-1 exercise held in September 2009. Mr Stern's presentation is available on the CSS website.

c) Mr Mrabit provided a short presentation on recent activities of the Safety and Security Coordination Section, including activities relation to Safety Standards and Security Guidance, the Board of Governors, international conferences and the Senior Regulators' Meeting, to be held during the General Conference in September 2010. He requested the Commission to consider as possible topics for discussion at the Senior Regulators' Meeting: i) Challenges for regulating radiation protection in the medical field; ii) Effective safety and security feedback mechanisms; and iii) Effective and sustainable capacity building and infrastructure in safety and security. Mr Mrabit's presentation is available on the CSS website.

Following some discussion, the Commission agreed that topics i) and ii) should be addressed at the Senior Regulators' Meeting.

Mr Nakamura encouraged CSS members to attend the International Conference on Challenges Faced by Technical and Scientific Support Organizations in Enhancing Nuclear Safety and Security, to be held in Tokyo in October 2010.

5. Policy discussion

5.1 Report from the activities of the joint AdSec CSS Task Force

Mr Lacoste reported on the recent meeting of the Joint AdSec CSS Task Force, which had been held on Tuesday, March 16th 2010 and at which the legal basis for standards in the area of nuclear security, the short term vision and the long term vision had been discussed.

He indicated that he and Mr Hashmi had agreed on the outcome of the meeting in relation to the legal basis, namely that there were no impediments to establishing nuclear safety and security standards, including one set of standards that would cover both nuclear safety and nuclear security. Furthermore, in the short term, the draft Nuclear Security Fundamentals (Essential Elements) document would be sent informally to the CSS for comment, on the understanding that this should not result in a delay in its publication and that comments would be taken into account at the discretion of the responsible technical officer. Mr Lacoste encouraged Messrs Delattre, Moore and Mrabit to work together to achieve consensus on the report of the meeting as soon as possible.

Mr Hashmi agreed that these points presented a way forward. He mentioned the proposed Nuclear Security Guidance Committee, which would soon be established. The new Committee would operate in cooperation with the existing Safety Standards Committees, perhaps holding joint meetings as necessary. He felt that the new Committee would add to the transparency and consistency of Nuclear Security Series publications.

Mr Nilsson presented the process flow for the Nuclear Security Series (this is provided on the CSS website) and the ideas behind the proposed Nuclear Security Guidance Committee, which, as an interim solution, would initially have the function of approval of Nuclear Security Series publications, although it would report to the Deputy Director General as the Safety Standards Committees do. She reinforced this idea that a common vision of the future was necessary, and that the process ultimately developed should be predictable and solid. In the long term the entire system for review and approval of drafts should be reconsidered.

Mr Lacoste indicated that an analysis should be made of the various thematic and operational areas of the nuclear security and nuclear safety domains, in order to determine the areas in which each may be unique or where they may overlap.

There was lively discussion on the proposed interim solution, and CSS members requested clarification on a number of technical and practical issues. Mr Lacoste agreed that the situation was far from perfect, but felt that these complicated steps were necessary in preparation for an eventual merger of the two domains.

Mr Gonzalez felt that there is de facto no separation between safety and security. He felt little progress had been made despite many years' effort. However Mr Virgilio now felt that some progress had been made, and requested the Secretariat to keep the Commission informed of progress of the Joint AdSec CSS Task Force [Annex III, Action 27.6].

Mr Lacoste added that he expected that, following the 2010 Nuclear Security Summit to be held in Washington DC in April, the Agency would be requested to enhance its guidance in the area of nuclear security.

5.2 Final review of the draft policy paper on Stakeholder involvement and finalization of the draft document on Strategies and Processes for the Establishment of IAEA Safety Standards (SPESS)

Mr Delattre provided a presentation on SPESS, including the step-by-step manual for application of SPESS and the paper on stakeholder involvement in the development of safety standards. He indicated that other detailed guidelines, instructions and examples were being prepared by the Secretariat. He noted that comments had been received from Japan, which had been accepted, and from the USA, but requested the members of CSS to discuss the changes proposed by the USA, as they related to aspects of the development and review of standards that had already been agreed by the CSS. Mr Delattre's presentation is available on the CSS website.

Mr Virgilio considered it should be specified in SPESS that Safety Guides should provide an acceptable approach to meeting the requirements, and queried what was 'necessary and sufficient' to meet the requirements. Furthermore, the guidance ought to demonstrate that the approach was derived from international good practices. And the guidance should present an approach that is informed by operating experience and lessons learned. Mr Lacoste considered that these issues deserved in depth discussion, and should be addressed at the 28th CSS meeting [Action 27.7, Annex III].

Mr Virgilio praised the diagram used by Ms Buglova to explain the development of DS44 (see item 3.2), and requested that the flow chart be generalized and included in the guidance for drafters [Action 27.8, Annex III].

Mr Virgilio also noted that recent developments in approaches to the safety-security interface, particularly the outcome of the recent Joint AdSec CSS Task Force meeting, would inform the future direction and vision for the standards programme, perhaps involving new security requirements, new Committees and a new series of documents called standards. He considered that the 'roadmap' in SPESS would require considerable revision, along with the Terms of Reference for the existing Committees [Action 27.9, Annex III].

Mr Lacoste agreed that SPESS was a living document and should be revised whenever necessary.

Ms Amaral requested that the step-by-step manual be altered to indicate that, in accordance with Mr Gonzalez's request (see item 2.4), in future TS-R-1 should be presented in full to the Board of Governors for approval in all official languages.

5.3 Feedback on safety standards. Overview report on how operational experience is collected by the IAEA and fed back into the standards development process

Ms Asfaw provided a presentation on the mechanisms by which operational experience is collected and fed back into the standards development process. Mr Lipar followed this presentation with a more detailed presentation on how feedback from IRS topical studies and IRS reports was used during the revision of NS-R-2, Safety Requirements on Safety of Nuclear Power Plants: Operation. The presentation is available on the CSS website.

Mr Gonzalez noted that feedback systems were more efficient for the more quantitative, concrete standards, such as standards in the area of transport, medical exposure and seismic safety.

Mr Lipar noted that the analysis of IRS reports for feedback from incidents into the development of safety standards was now being carried out in a systematic manner. He also encouraged CSS members to attend the forthcoming International Conference on Operational Safety Experience and Performance of NPPs and Fuel Cycle Facilities, to be held in Vienna from 21 to 25 June 2010.

5.4 Information on measures for the relationship between the Safety Standards Series and the Nuclear Energy Series

Mr Delattre provided a presentation on measures put in place for managing the relationship between the Safety Standards Series and the Nuclear Energy Series. Mr Delattre's presentation is available on the CSS website.

Mr Pather noted the need to track which Safety Standards were referred to in publications of the Nuclear Energy Series.

5.5 Information on the process for the review of draft Nuclear Energy Series publications

Mr Forsström provided a presentation on the structure of the Nuclear Energy Series and process for the review of draft Nuclear Energy Series publications. Mr Forsström's presentation is available on the CSS website.

Mr Gonzalez agreed to the need for a report series structure and congratulated the development of the Nuclear Energy Series. He also noted that the promotional part of the Agency's work was not so clearly laid out in the Statute. The main purpose of the Department of Nuclear Energy was to "foster the exchange of scientific and technical information", and this should be made clear in the IOM setting out the relationship between the Safety Standards Series and the Nuclear Energy Series. Furthermore, he commented on the 'aesthetic issue', namely the fact that the structure of Nuclear Energy Series publications was so similar to that of the Safety Standards Series, which could create a risk of confusion for the Member States. He, however, accepted that a structure was needed and that the difference between the documents in the Nuclear Energy Series and the Safety Standards Series was clearly described in the foreword of the first.

Mr Virgilio felt that the mission of the Nuclear Energy Series publications remained unclear, and questioned how the advice provided in Nuclear Energy Series publications was distinct from, and yet complemented the safety standards. Mr Delattre and Forsström explained that the NE Series publications provide for practical application of the safety standards. Mr Vigilio accepted the explanation.

5.6 Revision of the Terms of Reference of the Safety Standards Committees and of the Commission on Safety Standards

Mr Mrabit provided a presentation on the revision of the Terms of Reference of the Safety Standards Committees and of the Commission on Safety Standards. Mr Mrabit's full presentation is available on the CSS website.

He furthermore indicated that at the Meeting of the Four Chairs, held on morning of Wednesday March 17th it had been agreed that there was no need for a Vice-Chair for the SSCs; rather a member of the Committee could be appointed by the Chair to step in, were he or she unavailable for a particular meeting.

Mr Virgilio initiated the discussion with a number of open questions: Did the Committees have the optimum balance? Was the workload balanced among Committees? If combined meetings, such as those of RASSC and WASSC were generally felt to be successful, could perhaps RASSC and WASSC be combined? Was it appropriate for NUSSC, as a single Committee, to have the large workload associated with addressing both current and new reactor designs?

Mr Gonzalez reminded the Commission that the current structure of the Committees was such for historical reasons and for reasons of importance of the standards they were to consider. Mr Magnusson requested guidance and encouragement from the CSS on whether and how to adjust the structure and composition of Committees for the future in order to improve their efficiency and effectiveness.

A wide ranging discussion then followed on how the structure and composition of the Committees could be adjusted to meet future needs.

In respect of expected changes in workload, the following ideas were raised:

- The structure and composition of Committees should be guided by the work (Mr Virgilio and Mr Pather)
- The workload in the area of medical applications and radon will increase (Mr Lacoste and Mr Gonzalez)
- The outcomes of the Astana and Tarragona conferences could be used as a starting point to determine the future workload (Mr Gonzalez)
- The Secretariat should consider the planned workload for the next several years and roadmap in this respect (Mr Virgilio)
- Members of the Committees and Commission should consider where there may be gaps in the standards or a need for specific updates in standards, e.g. new inherently safe features for LWR, non-LWR reactors, small modular reactors, ‘life beyond 60’ for existing reactors, long term storage of HLW, reprocessing, medical exposures (Mr Virgilio)

In respect of possible lack of expertise on certain topics on Committees, the following ideas were raised:

- There is a lack of expertise in the current composition of NUSSC on fuel cycle facilities and non-LWR plants (Mr Vaughan)
- Members of Committees should ensure appropriate consultation with experts in their countries (Mr Magnusson)
- In TRANSSC several experts from each member country are sent, who act on working groups as necessary, yet it is clear that there is only a single representative on the Committee (Mr Brach)
- New CSS members should be sought who have expertise in the area of nuclear security (Mr Virgilio)

Yet caution was urged in respect of splitting or merging Committees:

- Synergies in the review of drafts on various types of installations, or various types of exposure might be lost if Committees were to split (Mr Vaughan and Mr Gonzalez)
- Several subjects addressed by individual Committees may be of limited interest to other Committees (Mr Magnusson)

In respect of practical arrangements for improving the efficiency and effectiveness of Committee work, a brainstorming of various ideas took place:

- Committees should have more representation from developing countries, as these countries are the users of the standards (Mr Magnusson)
- European countries are over-represented on the Committees and Commission, and a solution should be found to redress this (Mr Gonzalez)

- Chairpersons of particular regional forums could attend Committee meetings, as representatives from such countries (Mr Lacoste)
- European countries could perhaps pay to attend meetings, with the funds permitting more representatives from Latin America and Africa to attend (Mr Taniguchi)
- A successful combined RASSC/Technical Meeting took place in 2008, which TC recipient countries attended (Mr Magnusson)
- TC funds could be used in support of regular attendance of TC recipient countries at Committees (Mr Magnusson)
- An interregional TC project for 2012/2013 would be presented for consideration by the management of the Technical Cooperation Department to support participation of developing countries in the Committees (Mr Mrabit)
- Regional meetings of Committees and regional workshops should be encouraged (Mr Brach and Ms Amaral)
- Committee meetings could be held in conjunction with, or on the margins of, other conferences taking place in various places around the world (Mr Lacoste)
- Video conferencing can be used to good effect, but face-to-face meetings are also very important (Mr Lacoste and Mr Johnston)

Yet caution was urged as follows:

- Member States do not want theme-oriented application of TC funding, rather wish TC funding to be directed at the priorities of the Member States (Mr Taniguchi)
- Although financial issues are indeed the real constraint, the Agency should not pay for people to come to Committee meetings (Mr Gonzalez and Ms Amaral)
- There are difficulties associated with obtaining visas and sometimes humiliating treatment at the hands of airport officials when travelling to Europe (Mr Msebenzi)
- There can be practical difficulties for the Agency associated with hosting Committee meetings outside Vienna; clear guidelines would be necessary (Ms Amaral, Mr Magnusson and Mr Vaughan)

Mr Lacoste requested the Secretariat to prepare a summary of the discussion on the revised Terms of Reference for the Safety Standards Committees and the CSS and send it to CSS members for information [Annex III, Action 27.11].

It was also noted that, as the new term for the Committees would begin at the end of 2010, discussions would take place on these topics at the June meetings of the Committees. It was agreed that the four Safety Committees should review the proposed revisions of the Terms of Reference at their June 2010 meetings, and present the proposed revisions to the 28th CSS meeting for review/approval, with the goal of having the revised Terms of Reference in place for the new SSC terms that begin January 2011 [Annex III, Action 27.12]. Mr Virgilio was requested to provide, within two months, the US Member State paper suggesting possible gaps in the standards based on the future needs of the USA, such that the paper could be used as an example/template for other Member States [Annex III, Action 27.13].

6. Feedback from the Commission on the Use of IAEA Safety Standards and Regulatory Issues

6.1 Topical discussion on the Use of Safety Standards and National Practice on Involvement of Stakeholders

Ms Asfaw provided a summary of the contributions sent in advance by Australia, Germany, India, Lithuania, South Africa and Spain. The contributions were posted on the CSS web page and 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".

6.2 Regulatory Issues in the Member States

As for item 6.1, many 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".

Mr Moberg informed the Commission of recent proposals for changes in Swedish law: A licence for building and operating a nuclear power plant can be granted if it replaces an existing reactor and is built on an existing site (thus there would never be more than 10 reactors on 3 sites, as at present). These changes would enter into force on August 1st 2010. The nuclear phase-out act would be rescinded. Periodic review of the nuclear safety directive would be mandatory. Sweden would accede to the 2004 amendments to the 2004 Paris Convention and the Supplementary Convention on Liability, and a new law on liability would be developed. An owner of a nuclear facility would have an unlimited liability. Owners of nuclear reactors should finance this liability up to 120 million Euro, while owners of other nuclear facilities should finance liabilities up to a minimum of 700 million Euro. The Government would be empowered to decide when the new legislation on liability would enter into force.

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

Mr Lacoste informed the Commission that a detailed list of actions resulting from the meeting would be issued within two weeks for comment [Annex III, Action 27.14].

He also informed the Commission that a draft report of the meeting would be prepared and sent for comment to the members [Annex III, Action 27.15].

Mr Lacoste reminded CSS members that they should provide timely and appropriate comments on the draft Nuclear Security Fundamentals (Essential Elements) document, which would be sent informally to the CSS for comment.

Mr Park encouraged members of the CSS to attend the International Forum on Nuclear Safety Challenges in the Flat, Mixed and Open World, to be held from April 19-20 2010 in Seoul, Republic of Korea.

Mr Lacoste and members of the CSS thanked Mr Taniguchi for their effective work together over the past 9 years, and wished him well for the future. Mr Lacoste also thanked Mr Stern and wished him well for the future.

The next meetings are planned to be held:

- from 30 September to 1 October 2010 and

- in the week from 28 March to 1 April 2011

ANNEX I

PARTICIPATION AT THE 27TH CSS MEETING

The Commission

A.J. González, Argentina

P. Johnston, Australia

J.-P. Samain, Belgium

L.A. Vinhas, Brazil

R. Jammal, Canada (sent apologies – unable to attend)

Liu Hua, China (sent apologies – unable to attend)

M. B. F. Barakat, Egypt (sent apologies – unable to attend)

Y. Laaksonen, Finland

A-C. Lacoste, (Chairman) France

D. Majer, Germany

S. S. Bajaj, India (sent apologies – unable to attend)

I. Levanon, Israel

K. Nakamura, Japan

C. H. Yun, Republic of Korea (sent apologies – unable to attend)

G. Maksimovas, Lithuania (sent apologies – unable to attend)

M. S. Rahman, Pakistan (sent apologies – unable to attend)

S. Adamchik, Russian Federation (unable to attend)

G. Clapisson, South Africa (sent apologies – unable to attend)

A.D. Gurguí Ferrer, Spain

S.M. Larsson, Sweden (sent apologies – moved to another position)

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

P. Faross, EC (sent apologies – unable to attend)

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

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

U. Yoshimura, OECD NEA

Chairpersons of Committees

G. Vaughan, NUSSC

S. Magnusson, RASSC

E. W. Brach, TRANSSC

T. Pather, WASSC

Representatives and associated experts

Mr Bryunin, Ms Collet i Campo, Mr Cresswell, Ms Forest, Mr Janssens, Ms Khaperskaya, Mr Lachaume, Mr Moberg, Mr Msebenzi, Mr Muranaka, Mr Nomoto, Mr Ododov, Mr Ogiso, Mr. Park, Mr Paulikas, Mr Peng, Mr Reiman, Mr Shpinkov, Mr Ugayama, Mr Williams, Mr Yllera Sánchez, Mr Yu

IAEA Staff Members

T. Taniguchi, Deputy Director General, Department of Nuclear Safety and Security

E. Amaral, Director, Division of Radiation, Transport and Waste Safety (NSRW)

A. Nilsson, Director, Office of Nuclear Security (NSNS)

P. Jamet, Director, Division of Nuclear Installation Safety (NSNI)

K. Mrabit, Head, Safety and Security Coordination Section (SSCS)

W. Stern, Head, Incident and Emergency Centre (IEC)

A. Al Khatibeh, H. Abou Yehia, G. Caruso, R. Czarwinski, P. Colgan, M. El Shanawany, A. Godoy, M. Gregoric, M. Lipar, D. Louvat

K. Asfaw, T. Boal, J. Boogaard, G. Bruno, E. Buglova, H. Forsström, M. Kearney, P. Metcalf, E. Reber, P. Sollogoub

Safety Standards coordinators

G. Feige, Policy and Programme Support Section (NSNI), NUSSC

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

J. Stewart, Regulatory Infrastructure and Transport Safety Section (NSRW), TRANSSC

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

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

ANNEX II

AGENDA

Twenty seventh Meeting of the

COMMISSION ON SAFETY STANDARDS

17 – 19 March 2010

VIC – Boardroom A M0237, 2nd floor in the M Building

1. Opening Session

   1.1 Opening of the Meeting (14:00); *T. Taniguchi; DDG*-NS

   1.2 Introductions, Adoption of the Agenda, Adoption of the 26th CSS meeting report; *A.-C. Lacoste*

   1.3 Administrative arrangements for the meeting, Status on the main topics for the 4th CSS term, Status of the endorsed Standards and Response to Actions from the 25th Meeting; *D. Delattre*

2. Presentations and Discussion of Reports of Safety Standards Committees

   2.1 Nuclear Safety Standards Committee

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

   2.2 Radiation Safety Standards Committee

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

   2.3 Waste Safety Standards Committee

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

   2.4 Transport Safety Standards Committee

   E.W. Brach, Chairman/J.Stewart, Scientific Secretary – TRANSSC

3. Approval of draft publications and DPPs

   3.1 Safety of Nuclear Power Plants: Commissioning and Operation (DS413), *M. Kearney*

   3.2 Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency (DS44), *E. Buglova*

   3.3 Geological Disposal of Radioactive Waste (DS334), *G. Bruno*

   3.4 Storage of Spent Fuel (DS371), *P. Metcalf*

   3.5 DPP for a new safety guide on Radiation Protection of the Public and the Environment (DS432), *T. Boal*

   3.6 DPP for a new safety guide on Site survey and Site Selection for Nuclear Installations (DS433), P. Sollogoub

   3.7 DPP for a new safety guide on Radiation Safety of Radioisotope Production Facilities (DS434), *E. Reber*

   3.8 DPP for a new safety guide on Instrumentation and Control and Software Important to Safety for Research Reactors (DS436), *J. Boogaard*

   3.9 DPP for the revision of TS-R-1, Regulations for the Safe Transport of Radioactive Material (DS437), *J. Stewart*

   3.10 DPP for the revision of TS-G-1.1,Advisory Material for the IAEA Regulations for the Safety Transport of Radioactive Material (DS425), *J. Stewart*

   3.11 Safety Requirements on Disposal of Radioactive Waste (DS354); *P. Metcalf*

4. Progress reports on safety standards and other safety related publications

   4.1 Information on ICRP activities; *A. Gonzalez*

   4.2 Information on the status of the revision of the BSS*; E. Amaral*

   4.3 Information on AdSec activities; *J. Hashmi*

   4.4 Information on INSAG activities, *J. Laaksonen*

   4.5 Other information on recent activities from the Secretariat

5. Policy discussion

   5.1 Report on the activities of the joint AdSec CSS Task Force; *co chairs of the task force*

   5.2 Final review of the draft policy paper on Stakeholder involvement and finalization of the draft document on Strategies and Processes for the Establishment of IAEA Safety Standards (SPESS); *D. Delattre*

   5.3 Feedback on safety standards. Overview report on how operational experience is collected by the IAEA and fed back into the standards development process, *K..Asfaw and M. Lipar*

   5.4 Information on measures for the relationship between the Safety Standards Series and the Nuclear Energy Series; *D. Delattre*

   5.5 Information on the process for the review of draft Nuclear Energy Series publications; *H. Forsström*

   5.6 Revision of the Terms of Reference of the Safety Standards Committees and of the Commission on Safety Standards; *K. Mrabit*

6. Feedback from the Commission on the application of safety standards and regulatory issues

   6.1 Topical discussion on the Use of Safety Standards; *(K. Asfaw)*

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

7. Miscellaneous, Report of the Meeting, Dates of the next meeting

ANNEX III

ACTIONS ARISING FROM THE 27th MEETING OF THE COMMISSION

27.1. The final report of the 26th CSS meeting to be posted on the safety standards web site. **[Action: Secretariat]**

27.2. A report to be presented at the 28th CSS meeting on the discussion at the March 2010 Board of Governors on the appropriateness of establishing standards on the legal, governmental and regulatory framework; and the record of the Board in this respect to be attached to the report of the 27th CSS meeting. **[Action: Secretariat]**

27.3. A report to be presented at the 28th CSS meeting on the legal nature of the standards **[Action: Secretariat]**

27.4. A report to be presented at the 28th CSS meeting on the current situation and practices regarding translations of standards into official languages. **[Action: Secretariat]**

27.5. DS354 (draft Safety Requirements on Disposal of Radioactive Waste) to be modified in accordance with the proposal from the Russian Federation and it to be resubmitted to the Board of Governors for approval at its next meeting. **[Action: Secretariat]**

27.6. The CSS to be kept informed of progress of the Joint AdSec CSS Task Force. **[Action: Secretariat and co-Chairs of Joint Task Force]**

27.7. A discussion on the objectives of a Safety Guide to be included as an agenda item for the 28th CSS meeting. **[Action: Secretariat]**

27.8. As a follow-up to action item 27.7, a guidance manual for drafters of Safety Standards to be developed, to include guidance for drafters, including a flow chart to assist drafters **[Action: Secretariat]**

27.9. The SPESS document to be updated, according to the progress of the Joint AdSec CSS Task Force, so as to include the interface between nuclear safety and nuclear security **[Action: Secretariat]**

27.10. Future draft editions of the Transport Regulations to be provided in full in all official languages for approval at the Board of Governors. **[Action: Secretariat]**

27.11. The discussion on the revised Terms of Reference for the Safety Standards Committees and the CSS held under agenda item 5.6 to be summarized and sent to CSS members for information **[Action: Secretariat]**

27.12 The four Safety Committees to review the proposed revisions of the Terms of Reference at their June 2010 meetings, and to present the proposed revisions to the 28th CSS meeting for review/approval, with the goal of having the revised Terms of Reference in place for the new SSC terms that begin January 2011. **[Action: SSC Chairs]**

27.13 Each CSS member to provide a paper, based on the needs of their Member State, suggesting new or revised Safety Standards and future areas of work, to be used as input for the end of term report of the SSCs and the main topics to be addressed during the 5th CSS term. **[Action: CSS members]**

27.14. A list of actions resulting from the 27th meeting to be provided for comment to the CSS members. **[Action: Secretariat].**

27.15. The draft report of the 27th CSS meeting to be posted for comment to the CSS web site **[Action: Secretariat].**

ANNEX IV

From the record of the 1261st Meeting of the Board of Governors

From the record of the statement of Mr Curia (ARGENTINA):

"[He] wondered how Member States could be expected to approve the draft safety requirements publication contained in document GOV/2010/3. The draft publication was acceptable as a set of guidelines, but not as a legally binding safety standard that created obligations in areas that should be governed by countries' domestic legislation.

"Within the global safety regime, safety requirements were confusing as they did not distinguish clearly between what was and was not mandatory." (paras 54 and 55).

From the record of the statement of Mr Taniguchi (Deputy Director General for Nuclear Safety and Security):

"[He] said that it was up to Member States to decide whether — and, if so, how — to incorporate Agency safety standards into domestic legislation and regulations. Agency safety standards became mandatory for Member States only after incorporation into their domestic legislation and regulations. He added, with reference to Article III.A.6, that the Agency is mandated "to establish or adopt, ... standards of safety ... and to provide for the application of these standards to its own operations as well as to the operations ... under its control or supervision;"." (para. 56).

From the record of the 1262nd Meeting of the Board of Governors

From the record of the statement of Mr VALLIM GUERREIRO (Brazil):

"Regarding the draft safety requirements publication before the Board, his delegation believed that Agency safety requirements publications should focus exclusively on objective technical requirements, as had been the practice to date. However, the draft contained detailed recommendations relating to the establishment of States' internal regulatory control structures. The responsibility for establishing internal regulatory control structures rested entirely with States, and the Secretariat should refrain from making recommendations relating to their establishment in Agency safety standards documents. Such matters should be addressed only in safety guides." (para. 53)

From the record of the statement of Mr DAVIES (United States of America):

"His delegation was pleased with the work done by the Secretariat and experts from Member States in producing the draft safety requirements publication entitled "Governmental, Legal and Regulatory Framework for Safety" that was before the Board at its current series of meetings." (para. 63)

From the record of the statement of Mr NAKANE (Japan):

"The Secretariat was to be commended for the work done by it in preparing the draft safety requirements publication entitled "Governmental, Legal and Regulatory Framework for Safety". In Japan's view, that document would be particularly useful for countries new to nuclear power and for experts participating in Agency safety review missions. His country would like to see the experience gained during such missions reflected in future revisions of the document." (para. 72)

From the record of the statement of Mr BARRETT (Canada):

"Canada had participated in the development of the draft safety requirements publication entitled "Governmental, Legal and Regulatory Framework for Safety", and the Canadian nuclear regulatory framework drew upon internationally accepted principles such as those stated in it. In the view of his country, implementation of the safety requirements would help to strengthen the global nuclear safety framework." (para. 80)

From the record of the statement of Mr Curia (ARGENTINA):

"The draft safety requirements publication entitled "Governmental, Legal and Regulatory Framework for Safety" not only covered technical — quantitative and objective — safety requirements but also contained detailed suggestions and recommendations for governments regarding national regulatory control arrangements. Argentina's position was that Agency standards should concentrate on technical requirements, in accordance with the traditional understanding of the Statute, and that the Secretariat should be mindful of that when developing safety standards. In future, suggestions and recommendations regarding matters within the jurisdiction of States should be made only in guidance documents or in documents for promoting information exchange. The comment on the issue made during the Board's previous meeting by the Deputy Director General for Nuclear Safety and Security had not allayed his delegation's concerns about the draft publication, but Argentina did not object to the content that was strictly technical." (para. 117)

From the record of the statement of Mr MPAY (Cameroon):

"With regard to the draft safety requirements publication contained in document GOV/2010/3, Cameroon was well aware of the significant role that governments were expected to play in providing for the effective regulatory control of nuclear facilities and activities, by — inter alia — elaborating safety policies and laws and establishing and maintaining regulatory bodies with the power to ensure the implementation of those policies and laws. However, the governments of many developing countries, especially in Africa, needed Agency technical assistance in order to be able to play that role." (para. 150)

From the record of the statement of Mr MOON Byung-Ryong (Republic of Korea):

"The Republic of Korea, which attached great importance to the IRRS, believed that, if established as an Agency safety standard, the draft safety requirements publication contained in document GOV/2010/3 would prove very useful as a basis for IRRS missions, particularly to countries wishing to establish nuclear power programmes." (para. 165)

From the record of the statement of Mr MONDOLONI (France):

"Since the publication of Safety Standards Series No. GS-R-1, in 2000, that safety standard had been applied successfully in IRRS missions. France, as the first country to host a full IRRS mission, in 2006, welcomed its updating in the light of the experience accumulated since its publication." (para. 171)

From the record of the 1263rd Meeting of the Board of Governors

From the record of the statement of Mr FERNÁNDEZ RONDÓN (Cuba):

"In the draft safety requirements publication contained in document GOV/2010/3, use was made of terms that implied obligations. That was not acceptable. Agency safety requirements were not legally binding and compliance with them could therefore not, under any circumstances, be regarded as a prerequisite for international cooperation." (para. 30)

From the record of the statement of the CHAIRMAN:

"Some members had expressed the view that the Agency's safety requirements documents should focus on objective technical requirements and should not make detailed recommendations relating to Member States' internal structures for regulatory control." (para. 70)

ANNEX V

STATUS OF MAIN TOPICS OF THE 4TH CSS TERM

#	Main topics	Reference set of SG	Status/action
1	Guidance and assistance to countries considering the launch of a nuclear programme and in particular to provide guidance on the establishment of the necessary safety infrastructure	Item 1	DS424 submitted to MS consultation. Draft for the SSCs in June 2010
2	Guidance related to a new generation of nuclear reactor designs, the manufacturing of components, the quality of construction and commissioning of new plants	Items 22, 42 and 43	DS349 published (GS-G-3.5). Construction: DPP for the SSCs in June 2010 Commissioning: DPP for the SSCs in 2010
3	Guidance and assistance related to the new applications of radiation sources	Items 68 to 76	DS408 and 409 approved by the CSS in October 2009 DS410 and 411 back from MS consultation DS419 and 420 expected for the SSCs end 2010 before MS consultation DPP DS434 for a safety guide on radioisotope production facilities submitted to the CSS in March 2010
4	Guidance on the extension of the operating lifetime of NPPs beyond their planned design life, while preserving the safety margins and the issues relating to the ageing management of structures, systems and components	Items 40 and 45	DS 426 submitted to MS for comments. It includes the LTO aspects NS-G-2-12 on ageing management recently published
5	Guidance on seismic safety that considers the potential consequences of earthquakes in new designs and ageing management of operating NPPs' structures, systems and components	Item 18 and Item 41	DS422 approved by the CSS in October 2009 DS383 published
6	Question on how best to design and implement safety measures and security measures in an integrated manner	NA	Joint AdSec/CSS session in April 2009 and joint AdSec/CSS task force established in June 2009 First meeting in October 2009 and second meeting 16 March 2010
7	Assistance and additional safety guidance to countries dealing with expanded uranium exploration and mining	Item 83	DPP waiting for DS421 (see below) to assess the need
8	Guidance on public exposures to natural sources of ionizing radiations (radon, NORM residues, aircrew…) and for the safety of uranium mining activities	Item 5	Draft DS 421 waiting for the revision of the BSS (radon)
9	Crucial need to further improve promotion of the application of the safety standards on medical applications including recommendations that will reduce the frequency of over or under exposures related to nuclear medicine, and to enhance these standards as appropriate	NA. Relates to the application of SS, in particular of item 68	DS399 waiting for the revision of the BSS.
10	Improvement on the coverage of human and organizational factors in the safety guides	Item 6 and 42	DS349 published (GS-G-3.5)

ANNEX VI

STATUS OF ACTIONS ARISING FROM THE 26th MEETING OF THE COMMISSION

26.1. The final report of the 25th CSS meeting to be posted on the safety standards web site. **[Action: Secretariat]** Done. Final report posted in October 2009

26.2. A representative from the Department of Nuclear Energy to provide a presentation to the 27th CSS meeting on the process NE intends to use to involve Member States in the review of Nuclear Energy Series draft publications. **[Action: Secretariat (NE)]** Presented under agenda item 5.5 of 27th CSS meeting

26.3. A report to be provided to the 27th CSS meeting on the measures to implement the joint NE/NS interoffice memorandum, also clarifying the respective roles of the Safety Standards Series and the Nuclear Energy Series. **[Action: Secretariat (NS and NE)]** Presented under agenda item 5.4 of 27th CSS meeting

26.4. The CSS Chair to meet with and send a letter to the IAEA Director General setting out the Commission's views on the NE Series and on the interface between the programmes of the Department of Nuclear Energy and the Department of Nuclear Safety and Security. **[Action: CSS Chair]** Done. Letter sent on 10 December 2009

26.5. A comprehensive report on IAEA feedback mechanisms for the safety standards to be provided to the 27th CSS meeting. **[Action: Secretariat]** As requested, a presentation was done under item 5.3 of the 27th CSS meeting on feedback from operational experience. A more comprehensive report will be prepared for the 28th meeting.

26.6. Revise Draft Standard DS415 (Safety Requirements on Governmental, Legal and Regulatory Framework for Safety) to improve the clarity around what are the requirements, submit it to the Board of Governors and issue as an IAEA Safety Standard. Conduct a review within 2 years to further improve the clarity, incorporate feedback from IRRS missions, and to reflect progress on the interface between safety and security. **[Action: Secretariat]** Draft revised and approved by the IAEA Board of Governors in March 2010.

26.7. Safety Standards Committees to put together a list of safety issues relevant to DS435 (Safety Guide on Small/Medium, Transportable and Floating Nuclear Power Plants) for the 28th CSS meeting. **[Action: Members of the SSCs]** Draft paper prepared and discussed at a meeting of the 4 SSCs Chairs in January 2010. Revised draft to be submitted for the June 2010 meeting of the SSCs before submission to the 28th CSS meeting

26.8. To specify in Section I of the SPESS document the different sources for feedback. SPESS document to be provided at the 27th CSS meeting, after consultation of the Safety Standards Committees. **[Action: Secretariat]** Done in Section 2.I and Section 3.C. Discussed under agenda item 5.2 of the 27th CSS.

26.9. The results of the recent international conferences on Control and Management of Inadvertent Radioactive Material in Scrap Metal, held in February 2009 in Tarragona, Spain, and on Remediation of Lands Contaminated by Radioactive Material Residues, held in May 2009 in Astana, Kazakhstan, and actions arising from these conferences to be provided for information to the CSS. **[Action: Secretariat]** Presented under agenda item 5.4 of the 27th CSS/

26.10. Update and provide the "Reference Set of Safety Guides for the Long Term" document at each CSS. As a standing CSS agenda item, present any changes to the set of safety guides and safety requirement documents. **[Action: Secretariat].** Included in the revision 3.0 of SPESS (Annex X) and provided under agenda item 1.3 of the 27th CSS

26.11. Provide suggestions for updating the Terms of Reference for the Committees and the Commission with the goal of having approved Terms of Reference in place at the start of the new terms. **[Action: Members of the CSS and SSCs].** Draft TOR prepared for the SSCs. To be reviewed in June 2010 by the SSCs and in October 2010 by the CSS. No suggestions received from the CSS members for the next term.

26.12. A list of actions resulting from the 26th meeting to be provided for comment to the CSS members. **[Action: Secretariat].** Done

26.13. The draft report of the 26th CSS meeting to be posted for comment to the CSS web site and the draft mid-term report to be finalized and provided to the Director General [**Action: Secretariat**]. Done. Final report addressed under agenda item 1.2.