04 November 2011

Commission on Safety Standards

Twenty-ninth Meeting

25 -27 May 2011

IAEA Headquarters, Vienna

Final report of the Meeting

1. Opening Session

1.1 Opening of the Meeting

Mr Amano, Director General of the IAEA, made some opening remarks. He noted that the CSS meeting was taking place in a very particular environment, following the accident in Japan. He referred to the fact-finding mission in Japan currently taking place and to the forthcoming June Ministerial Conference. Implications of the accident on the safety standards would be a focus of the discussions at the Ministerial Conference. Safety and security have many common elements, and their integration would also be addressed in the context of the accident in Japan, but he expected that the main lessons to be learned would be with regard to safety. Mr Amano was confident that the Commission would play a very important role in post-accident activities, as well as continuing with its usual work.

Mr Gonzalez welcomed and looked forward to the 'new approach' he perceived in the handling of issues relating to addressing the interfaces and synergies of safety and security.

Mr Barakat noted the loss in public confidence in nuclear power, and requested that the Agency declare clearly that the accident in Japan was due to a natural event, rather than a deficiency in systems. Mr Amano emphasized that indeed the accident in Japan had been caused by a natural event. However, lessons remained to be learned and the investigation of the accident would include human activities. He agreed that social acceptance and confidence in nuclear power had been weakened, but reminded the Commission that the accident was still on-going, and it was premature to draw firm conclusions until more precise studies and assessments had been made. There was, however, a need to make tangible, visible progress within a reasonable period of time in order to recover this confidence.

Mr Jammal requested that additional financial resources be allocated to safety activities in the Agency. Mr Amano agreed that financial support was essential, and indicated that the area of safety and security would be among those to receive the highest growth in resources in the forthcoming biennial budget. However, he would also greatly welcome voluntary contributions. He welcomed the raising of the profile of safety, and noted that the Agency with its expertise should be at the centre of all efforts to improve safety and that the support of the Commission was essential in this.

Mr Flory, Deputy Director General of the Department of Nuclear Safety and Security, also made some opening remarks. He noted that this was the first meeting of the CSS since the Fukushima Daiichi accident. He expressed his sympathies to the Japanese people, and he noted that the accident would have an impact on several items of the agenda. As specific agenda items, the Fukushima accident, the IAEA response and future activities would be discussed. He also reported that a fact-finding mission, headed by Mr Mike Weightman, the UK's Chief Inspector of Nuclear Installations, was at present underway in Japan, and that the mission would report to the Ministerial Conference that would be held in June 2011.

However, notwithstanding the accident in Japan, Mr Flory noted that the 20th CSS meeting was an important one with many crucial items on the agenda, including:

- The three year reports of the Safety Standards Committees and their recommendations for the future. Mr Flory also thanked the outgoing Chairs of the four Committees for their work during their tenure, and welcomed the new Committee Chairs;
- The discussion of the results of the Joint AdSec CSS Task Force and its implications, such as the creation of a new Nuclear Security Guidance Committee.

1.2 Introductions, Adoption of the Agenda, Adoption of the 28th CSS meeting report

Mr Lacoste, Chairman of the Commission, welcomed participants. He introduced a new member to the Commission, Mr Bezzubtsev from the Russian Federation, and a new CSS observer from the Advisory Group on Nuclear Security (AdSec), Mr Adnan. He also indicated that apologies had been received from Mr Liu Hua from China (Mr Gang Shen represented China at the meeting), Mr Majer from Germany (Mr Herttrich represented Germany at the meeting), Mr Nakamura from Japan (Mr Tanaka represented Japan at the meeting), Mr Yun from the Republic of Korea (Mr Ha represented the Republic of Korea at the meeting), Mr Weightman from the United Kingdom (Mr Hall represented the UK at the meeting), Mr Faross from the European Commission (Mr Janssens represented the EC at the meeting), Ms Cousins from the International Commission on Radiological Protection (ICRP) (Mr Clement represented the ICRP at the meeting) and Mr Meserve from the International Nuclear Security Group (INSAG) (Mr Laaksonen represented INSAG at the meeting). He also indicated that Mr Paulikas would represent Lithuania at the meeting. A list of participants is provided in Annex I.

Mr Lacoste acknowledged that a meeting of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) was taking place concurrently with the CSS meeting and recognized that some CSS members would need to attend both meetings.

Mr Lacoste informed the Commission that the agenda item on the nature of Safety Guides (item 7.5) would be removed from the agenda at the request of the originator. Agenda item 7.7 would be postponed until a report on barge-mounted nuclear power plants could be made available. 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 28th CSS meeting had been made available. Comments had been received from South Africa, Argentina, USA and the NUSSC Chair. All comments were accepted and the final report had been posted in March for approval. The report of the 28th CSS meeting was approved with these changes and would be uploaded to the CSS website [Annex III, Action 29.1].

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 28th 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.

Mr Gonzalez and Mr Larsson noted the importance of both the CSS meeting and the UNSCEAR meeting, and requested the Secretariat to ensure that in the future these meetings would not take place concurrently. Mr Gonzalez also requested the Commission in its deliberations and pronouncements on implications of the accident in Japan not to pre-empt the decisions of the June Ministerial Conference.

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

Mr Delattre presented the status of the endorsed Safety Standards. He informed the Commission that 4 Safety Guides had been published so far in 2011:

- GSG-2 Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency (DS44)
- SSR-5 Disposal of Radioactive Waste (DS354)
- SSG-13 Chemistry Programme for Water Cooled Nuclear Power Plants (DS388)
- SSG-11 Radiation Safety in Industrial Radiography (DS408)

He provided details on 8 further Safety Standards, endorsed by the Commission, that were being published:

- Geological Disposal of Radioactive Waste (DS334)
- Storage of Spent Fuel (DS371)
- Safety Assessment for Research Reactors and Preparation of the Safety Analysis Report (DS396)
- National Strategy for Regaining Control over Orphan Sources and Improving Control over Vulnerable Sources (DS410)
- Orphan Sources and other Radioactive Material in the Metal Recycling and Production Industries (DS411)
- Safety of Nuclear Power Plants: Commissioning and Operation (DS413)
- Meteorological and Hydrological Hazards in Site Evaluation for Nuclear Installations (DS417)
- Establishing the Safety Infrastructure for a Nuclear Power Programme (DS424)

On the issue of accessibility of the standards: Mr Gonzalez requested that obsolete standards continue be made accessible on the web, but marked as such; that standards be translated into all official languages; and that special emphasis be given to improving the safety standards web site. Mr Vaughan requested that drafts that had been approved by the CSS be made available online in the interim before they are issued as published standards [Annex III, Action 29.2].

Mr Delattre noted that the total number of standards (published standards and drafts in preparation) had stabilized at around 130 standards. He reported that a discussion had been held at the meetings of the Chairs of the Committees on the length of time taken for standards to be published following their approval by the CSS, and indicated that the Secretariat intend to address this issue [Annex III, Action 29.3].

Mr Delattre informed the Commission of the status of outstanding actions arising from the 28th CSS meeting (see Annex V).

Mr Delattre also informed the Commission of updates to the reference list of Safety Guides for the long term.

2 Possible future implication on IAEA Safety Standards of the recent events in Japan

2.1 Presentation from the Japanese CSS member

Mr Tanaka made a comprehensive presentation based on available information on the accident at the Fukushima Daiichi nuclear power plant, covering safety aspects at the plant, radiological effects on the public and the environment and emergency preparedness and response. Mr Tanaka's full presentation is available on the CSS website.

Mr Tanaka reported that the Japanese cabinet had established a commission to examine the accident, and that all information gained and lessons learned would be shared with maximum transparency. He thanked the international community for the assistance offered until now.

Mr Tanaka also provided responses to various questions raised by members of the Commission:

- The process of interviewing operators was beginning, and further information with respect to human performance was likely to emerge from this process.
- Japanese regulations require consideration of historical and possible tsunamis. Guidelines for addressing seismic issues had been modified following the earthquake that affected the Kashiwazaki-Kariwa plant in 2007, but discussions on modification of tsunami guidelines had only recently begun. For the Fukushima Daiichi plant, a tsunami with a maximum height of only 5.7m had been considered. For the Onagawa plant, however, a higher tsunami level had been adopted.
- The responsibilities of the regulator and of the operator in normal operation are clearly delineated. However, improvements may be necessary in the event of a crisis; this issue remains to be discussed. According to current law, the Prime Minister has overall authority for emergency response.
- It appeared that some electrical distribution systems outside the Fukushima Daiichi plant had

already been damaged by the earthquake on March 11th. No seismic damage had been reported at the Onawaga plant, and in general Japanese nuclear power plants appear to be robust to seismic events.

- Following the accident, the reference level for children had been fixed at 20mSv per year. This is within the range recommended by the ICRP for the protection of people living in long-term contaminated areas after a nuclear accident or radiation emergency, which indicates reference levels for doses to the public of between 1mSv and 20mSv per year; specification of such a reference level is subject to 'utmost efforts' being made to ensure optimization of protection.
- Concerning accident management of Mark-1 BWR, NISA asked all utilities in 1992 to report on their accident management (AM) programme with PSA results for each unit. In 1994 based on the reports from utilities, NISA recommended all utilities to implement AM plans. TEPCO submitted its AM programs, including the measures for Mark-1 BWR such as hardened Containment Venting System, in 2002 after it completed the measures for preventing severe accident.

2.2 IAEA Response

Ms Buglova, Mr Hahn and Mr Lipar provided a presentation on the IAEA response to the accident in Japan, covering the activities of the Incident and Emergency Centre (IEC), the analysis of radiological consequences and nuclear safety. The full presentation is available on the CSS website.

The following responses were provided to various questions raised by members of the Commission:

- The size of releases had been estimated using figures from the Nuclear and Industrial Safety Agency (NISA) and the Nuclear Safety Commission (NSC) of Japan; details are not yet available.
- It appears that water level readings from Unit 1 of the Fukushima Daiichi plant are inaccurate, and so these figures are no longer included in presentations to Member States.
- It appears that the fuel in Unit 4 of the Fukushima Daiichi plant is undamaged.

Mr Gonzalez noted that comparison of the amount of releases from the accident at the Fukushima Daiichi plant and from the accident at Chernobyl is misleading, as the releases are different in nature. He also noted that a major role of the IAEA is to perform radiological assessment and to provide updated information on this.

Mr Flory noted that the figures quoted had also been provided in Mr Tanaka's presentation (agenda item 2.1), on the basis of calculations made by NISA and NSC, and that the difference in dynamics and the thermodynamics of the releases from the accidents in Chernobyl and Fukushima Daiichi had been explained in a number of briefings. He also reminded the Commission that detailed discussions were now underway with the World Health Organization and the Government of Japan on the terms of reference for the analysis of the radiological consequences of the accident.

2.3 Future activities

Mr Delattre provided a short presentation on possible implications of the accident in Japan on the safety standards, including presentation of a disclaimer to be included in newly published standards indicating that lessons to be learned from the accident in Japan will be reflected in standards as they are revised and issued in the future.

Mr Gonzalez considered that many standards, such as those on transport of radioactive material and those on scrap metal, would not be subject to revision following the review of lessons learned from the accident in Japan. In contrast, almost every paragraph of the draft Safety Requirements on Safety of Nuclear Power Plants: Design (DS414, agenda item 5.2) would require review and the standard could be greatly affected. For the revised International Basic Safety Standards (DS379, agenda item 5.1) there were a few aspects, such as the expression of equivalent dose to the thyroid and effective dose to the whole body, and the issue of activity limits for consumer products, that would need to be revisited in the light of certain confusion following the accident in Japan.

Mr Lacoste noted that this was just at the beginning of a long process of analysing the accident and learning the lessons to be incorporated as appropriate into the safety standards and that the work on the safety standards could not be put on hold during that process. He also emphasized that the content of

the proposed revised safety standards are much better than previous versions and already incorporate a number of lessons learned over the last decade. Mr Laaksonen indicated the need for revised safety standards for new nuclear power plants being planned or built. He also informed the Commission that the revised NS-R-1 (DS414, future SSR-2/1) was to be referred to in 'principles of conduct' of the vendors group and that it was therefore necessary to issue it.

Mr Lacoste considered two cases: In the event that consequences for a particular standard were not anticipated, then there was certainly no need to hold up the issue of that standard. In the event that consequences for a particular standard might be anticipated, this could be handled by means of a disclaimer such as that proposed, until the standard would be re-issued. Third, he requested the Secretariat to establish as soon as possible an action plan for the review of standards that might be affected by accident in Japan. He considered that, although the impact on the standards may initially be unclear, the situation could be made clearer by following a step-by-step process to address it.

It was agreed by most members of the Commission that the process of review and approval of standards should not be halted. However, the Secretariat was requested to prepare an action plan for the review of safety standards following the accident in Japan to include an initial listing of those standards that might require review. In the meantime, newly published standards should, on a case by case basis, include the disclaimer discussed [Annex III, Action 29.4].

3 Feedback from the 5th Review Meeting of the Convention on Nuclear Safety (CNS)

Mr Svab provided information on the 5th Review Meeting of the CNS held from 4 to 14 April 2011. He described the various actions relating to the accident in Japan that had taken place before, during and after the Review Meeting. In particular, an Extraordinary Meeting of the CNS would be held in August 2012, to review and share lessons learned and actions in response to the accident in Japan. He also reported on other matters that had arisen at the Review Meeting. Mr Svab's full presentation is available on the CSS website.

4. Presentations and Discussion of Reports of Safety Standards Committees

4.1 Nuclear Safety Standards Committee (NUSSC)

Mr Vaughan, Chairman of NUSSC, reported on the 30th NUSSC meeting, which had been held partly jointly with WASSC. He informed the Commission that NUSSC had approved three draft Safety Safety Standards (DS351, DS379 and DS414) for submission to the CSS and two draft Safety Standards (DS407 and DS429) for submission to Member States for comment. NUSSC had also approved three DPPs (DS441, DS450 and DS452).

As agreed with the three other Chairs at their meeting, Mr Vaughan presented the common conclusions from the three year reports of all the Safety Standards Committees, in particular the achievement on the long term structure of safety standards and the reference set of safety guides, the establishment of the document on Strategies and Processes for the Establishment of IAEA Safety Standards and its applications manuals, the change of the sequence in order to involve the review by Technical Editors earlier in the review process, the work on establishing a future systematic feedback process and a significant increase in the cooperation between the Committees. Mr Vaughan's full presentation is available on the CSS website.

4.2 Radiation Safety Standards Committee (RASSC)

Mr Magnusson, Chairman of RASSC, reported on the 29th RASSC meeting. RASSC had approved one draft Safety Standard for submission to the CSS (DS414), two draft Safety Standards for submission to Member States for comment (DS357 and DS429) and one DPP (DS450). As part of the three-year report of RASSC, he provided a review of the Agency's programme of work in medical exposures, occupational exposures, scrap metal, consumer products and natural sources, highlighting the priority issues to be considered by the incoming Committee. Mr Magnusson also indicated the need to increase participation from developing countries in the work of RASSC. Mr Magnusson's full presentation is available on the CSS website.

Mr Janssens requested that consideration be given to broadening the scope of the scrap metal work programme to cover contamination by means other than orphan sources.

Mr Virgilio requested that the document Strategies and Processes for the Establishment of Safety Standards (SPESS) be revised, as necessary, to incorporate lessons learned from the revision of the BSS on the involvement of cosponsors [Annex III, Action 29.5].

4.3 Waste Safety Standards Committee (WASSC)

Mr Pather, Chairman of WASSC, reported on the 30th WASSC meeting, which had been held in part jointly with RASSC. He informed the Commission that WASSC had approved two draft Safety Standards (DS379 and DS414) for submission to the CSS, three draft Safety Standards (DS357, DS429 and DS407) for approval for submission to Member States for comment and three DPPs (DS450, DS452 and DS441). As part of the Committee's three year report, he also provided an overview of the current status of waste safety standards and set out suggestions for the work of the sixth term of WASSC. Mr Pather's full presentation is available on the CSS website.

Mr Geoff Williams, the new Chair of WASSC, also noted the usefulness of holding joint committee meetings, and pledged to continue this practice. He also supported improving the synergies between safety and security, and he emphasized the importance of taking into account societal aspects in the development of waste safety standards, the need to encourage stakeholder dialogue in the development of standards and promote the confidence and trust.

4.4 Transport Safety Standards Committee (TRANSSC)

Mr Brach, Chairman of TRANSSC, reported on the 21st TRANSSC meeting. He informed the Commission that TRANSSC had approved two draft Safety Standards (DS379 and DS414) for submission to the CSS and three draft Safety Standards (DS407, DS429 and DS451) for submission to Member States for comment, the last pending approval of the DPP by the CSS. TRANSSC had also approved two DPPs (DS450 and DS451). He summarized TRANSSC's accomplishments over the previous three years and set out some challenges for the future. Mr Brach's full presentation is available on the CSS website.

Mr Jammal requested that consideration be given to the use of the term 'special arrangement' in transport standards [Annex III, Action 29.7].

4.5 Meetings of the Chairs

Mr Delattre informed the Commission of discussions at the meeting of the 2008-2010 Chairs and 2011-2013 Chairs of the Committees and at the meeting of the Chair of the CSS with the Chairs of the Committees, including:

- Preparation of the three-year reports of the Committees;
- The process to manage changes to definitions in standards;
- The use of 'fourth tier' publications (i.e. Safety Reports, TECDOCs);
- A presentation of the pilot feedback project (see agenda item 7.6);
- An initial discussion of the list of topical areas that could require revision following the accident in Japan.

Mr Lacoste warmly thanked the 2008-2010 Chairs of the Safety Standards Committees for their work over the previous term. He further noted that it has been possible to achieve significant progress due to the fact that the Committees and their Chairs had well worked together.

5. Approval of draft publications and DPPs

5.1 Draft Safety Requirements on Radiation Protection and Safety of Radiation Sources, revised International Basic Safety Standards (BSS) (DS379)

Mr Clement presented the ICRP statement on tissue reactions, which had been issued in April 2011, and indicated the revised equivalent dose limit for the lens of the eye for occupational exposure in planned exposure situations (20mSv in a year, averaged over defined periods of 5 years, with no single year exceeding 50 mSv). He noted that the equivalent dose limit for the lens of the eye was now aligned with the whole body dose limit, and also that no statement on dose limits for students or

apprentices had been issued. There was furthermore no change to the dose limits for the public. The limits are to apply generally, not only for the medical profession. No further revisions of the ICRP statement on tissue reactions were currently planned.

Mr Magnusson noted that the ICRP statement had been made in response to a request by the IAEA

Ms Czarwinski presented the draft Safety Requirements DS379 for endorsement by CSS and submission to the Board of Governors and indicated the Secretariat's proposal to address comments made by South Africa, Japan and Germany. She indicated the Secretariat's proposal to address the ICRP statement on tissue reactions in Schedule III of DS379:

- In para. III-1(b): dose limit for workers: equivalent dose to lens of eye of 20 mSv in a year averaged over defined periods of 5 years, with no single year exceeding 50 mSv;
- In para. III-2(b): dose limit for apprentices: equivalent dose to lens of eye of 20 mSv in a year;
- In para. III-3(c): dose limit for public: equivalent dose to lens of eye of 15 mSv in a year.

Ms Czarwinski also noted that the BSS Secretariat (potential sponsoring organizations) currently considered there was no real urgent need to revise the BSS in the light of implications of the accident in Japan. Mr Tanaka pointed out that the issues which would be raised from the practices in the Fukushima accident should be taken into account in the drafting safety guides under the revised BSS.

Mr Clapisson raised the question of how the various sections of DS379 relate to one another. Ms Czarwinski noted there was overlapping and dovetailing in the text, but that guidance would be provided on how to apply the requirements. Mr Samain considered that clear guidance needed to be provided on how to use Table IV-I of DS379. Ms Czarwinski and Ms Buglova pointed out the importance of this table, and noted that explanations of the development of a protective strategy and of the difference between projected dose and residual dose were contained in the text of DS379. The table had been inserted on request of the Safety Standards Committees.

Mr Virgilio considered it was important that Member States be provided with an opportunity to review the changes resulting from the new ICRP statement. Several members of the Commission supported publishing the revised BSS without delay, including the new ICRP recommendations, noting too that the scientific evidence in support of the ICRP statement was overwhelming. However Mr Lacoste pointed out that not all Member States might be aware of the proposed change.

Various possible solutions were discussed as to the procedural issue of how to allow Member States to review the proposed changes. Although several members of the Commission felt that it was unnecessary to initiate a special procedure of Member State comment, it was eventually agreed that the revised Schedule III of DS379 would be submitted to Member States for official comment.

Therefore, the Commission endorsed on 26 May 2011 the draft 5.0 of the draft Safety Requirements for submission to the Board of Governors. The Commission also indicated its intent to incorporate the revised equivalent dose limit to the lens of the eye into Schedule III of the BSS only after a Member States consultation of 30 days to be initiated as soon as possible in June 2011. Member States comments would then be reviewed by the outgoing and incoming Chairs of RASSC, and Mr Lacoste would adjust the text of Schedule III in accordance with their recommendation. This procedure would still allow DS379 to be considered at the Board of Governors in September 2011 [Annex III, Action 29.6].

5.2 Draft Safety Requirements on Safety of Nuclear Power Plants: Design (DS414)

Mr Gasparini presented the draft Safety Requirements DS414 for approval for publication and indicated the Secretariat's proposal to address globally detailed comments made by Japan and South Africa.

The detailed additional changes proposed by Japan were further discussed and Mr Laaksonen noted that indeed these are de facto incorporated globally in the overarching requirements number 6. Mr Tanaka added that the point of Japanese comment was to seek consistency of description among three fundamental safety functions.

Mr Clapisson accepted the proposed comments resolution noting however that the process did not allow for changes to be made at this late approval stage.

Mr Virgilio felt that the term 'practically eliminated' was unclear and requested that it be clarified in a

Safety Guide. Mr Laaksonen noted that WENRA has established a working group to address clarification of this term.

Ms Mykolaichuk questioned the use of the term 'design extension conditions', and sought a clear answer to whether the accident in Japan would be considered to be among such conditions. She requested that the action plan for the review of safety standards (see Annex III, Action 29.4) include a flexible process to incorporate gradually feedback from the accident in Japan in future revisions of standards.

Mr Gonzalez stated that Argentina could not approve DS414, as he considered the requirements of DS414 to be ambiguous and it could not be determined whether the Fukushima Daiichi nuclear power plant met them. Furthermore, he considered approval of DS414 at this time would pre-empt the work of the Ministerial Conference in June.

However, the other members of the Commission agreed to endorse DS414, subject to the inclusion of the disclaimer at the beginning of the standard and the initiation of the action plan to identify those standards that may require revision following the accident in Japan (see agenda item 2.2).

The Commission endorsed the draft for publication, but without full consensus.

5.3 Draft Safety Guide on The Use of a Graded Approach in the application of the Safety Requirements for Research Reactors (DS351)

Mr Winfield presented the draft Safety Guide DS351 for approval for publication. No comments had been received from CSS members.

The Commission endorsed the draft for publication.

5.4 Draft Safety Guide on The Safety Case and Safety Assessment for Radioactive Waste Disposal (DS355)

Mr Bruno presented the draft Safety Guide DS355 for approval for publication and indicated the Secretariat's proposal to address comments made by Japan and South Africa.

Mr Virgilio requested the Secretariat to be more rigorous in the process for addressing comments.

Following a question from the Chairman of the CSS and in relation with the publication of the Safety Requirements on Disposal of Radioactive Waste, Mr Bezzubtsev confirmed the commitment of the Russian Federation to host an IAEA peer review mission in 2012 to verify that the practice of deep well injection of radioactive waste in the Russian Federation is in line with the IAEA safety standards (see Action 27.5 of the 27th CSS meeting held in March 2010).

The Commission endorsed the draft for publication.

5.5 Draft Safety Guide on Volcanic Hazards in Site Evaluation for Nuclear Installations (DS405)

Mr Mahmood presented the draft Safety Guide DS405 for approval for publication. No comments had been received from CSS members.

The Commission endorsed the draft for publication.

5.6 Draft DPP for a Safety Requirement on Decommissioning and Termination of Activities, revision of WS-R-5 (DS450)

Ms Wong presented the DPP for approval and indicated the Secretariat's proposal to address comments made by India and the USA. DS450, together with DS452, were being used as a pilot project for elaboration of the feedback process (see agenda item 7.6).

Mr Virgilio requested that lessons learned from the accident in Japan be taken into account in the draft Safety Requirements.

The Commission approved the DPP.

5.7 Draft DPP for a Safety Guide on Decommissioning of Nuclear Installations, combination of DS402 and DS404 (DS452)

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

The Commission approved the DPP.

5.8 Draft DPP for a Safety Guide on Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (2009 Edition), addendum to the 2005 Edition (DS451)

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

The Commission approved the DPP.

5.9 Draft DPP for a new Safety Guide on Construction of Nuclear Installations (DS441)

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

Mr Bajaj requested that the draft should emphasize organizational and management issues over technical issues, since the latter are adequately addressed in industry standards.

The Commission approved the DPP, subject to inclusion of the changes discussed.

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

6.1 Information on ICRP activities

Mr Clements provided a presentation on the International Commission on Radiological Protection (ICRP) and its programme of work, recent publications and upcoming consultations. He provided information on the programme for the ICRP Symposium on the International System of Radiological Protection, to be held in Bethesda in October 2011, which will include both a policy part and a technical part. The programme for the symposium was still under development. Mr Clements's full presentation is available on the CSS website.

6.2 Information on AdSec activities

Mr Moore provided a presentation on the meeting of the Advisory Group on Nuclear Security (AdSec) held in March 2011, and on ongoing activities. Mr Moore's full presentation is available on the CSS website.

Mr Mrabit indicated that a chart of all publications and drafts of the Nuclear Security Series would be made available [Annex III, Action 29.8]. He noted that much of the funding for the Office of Nuclear Security was still from voluntary contributions. He also informed the Commission that the Senior Regulators' Meeting, to be held during the IAEA General Conference in September 2011, would address safety and security interfaces and synergies.

6.3 Information on INSAG activities

Mr Laaksonen presented information on activities of the International Nuclear Safety Group (INSAG), including on its forthcoming reports on licensing a country's first nuclear power plant and on safety goals for the 21st century. Mr Laaksonen indicated that INSAG reports provide practical guidance based on real experiences of users, and could be used as input to the development of safety standards. Mr Laaksonen's full presentation is available on the CSS website.

6.4 Information on WENRA's activities

Mr Gupta presented information on the Western European Nuclear Regulators' Association (WENRA) and on the development of the WENRA safety objectives for new nuclear power plants, including the methodology, review of the documentation, the link with the Fundamental Safety Principles, and why no quantitative safety targets were set. Mr Gupta's full presentation is available on the CSS website.

Mr Lacoste considered that the WENRA work could be used as input for the development of safety standards for new reactors.

6.5 Other information on recent activities from the Secretariat

a) Mr Lipar provided a short presentation on recent activities in the Division of Nuclear Installation Safety (NSNI), including the development of safety standards and recent and forthcoming safety review missions and meetings. He also encouraged the submission of reports to the Incident Reporting System (IRS) and the Fuel Incident Notification and Analysis System (FINAS). Mr Lipar's presentation is available on the CSS website.

b) Mr Hahn provided a short presentation on recent activities in the Division of Radiation, Transport and Waste Safety (NSRW) in the various areas of regulatory infrastructure and transport, control of radioactive sources, radioactive waste management, decommissioning and remediation, environmental releases and assessment, radiation protection of patients and radiation protection of workers and the public. Mr Hahn's presentation is available on the CSS website.

c) Mr Mrabit provided a short presentation on goals and priorities for nuclear security in 2011, including information management, services, nuclear security guidance, research and development and education and human resource development. He also noted that safety would be in the scope of the Nuclear Security Summit 2012. Mr Mrabit's presentation is available on the CSS website.

d) Ms Buglova provided a short presentation on recent activities in the Incident and Emergency Centre (IEC), including publications in preparation, training and missions, growing capabilities of the IAEA Response and Assistance Network (RANET) and the Unified System for Information Exchange (USIE). (Activities of the IEC related to the accident in Japan were presented under agenda item 2.2.) Ms Buglova's presentation is available on the CSS website.

e) Mr Woodhouse provided a short presentation on recent activities of the Safety and Security Coordination Section (NS-SSCS), including the three main objectives of the section: to contribute to the production of high-quality standards, to raise awareness of standards, and to foster synergies between safety and security. He informed the Commission that three topics were proposed for the Senior Regulators' Meeting to be held during the General Conference in September 2011:

- Safety and security of radiation sources, with a particular focus on denial of shipment;
- Management of high level waste and spent fuel: safety and security aspects;
- First lessons learned from the accident in Japan in terms of safety and security.

Mr Lacoste suggested to the Secretariat to address the last two of these topics at the Senior Regulators' Meeting.

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

f) Mr Vaughan provided a short presentation on a technical meeting on safety goals and application to nuclear installations, held in April 2011. He set out some overall conclusions and general agreements of the meeting, including the fact that clear definitions are needed, and provided some recommendations for future work of the IAEA. Mr Vaughan's presentation is available on the CSS website.

7. Policy discussion

7.1 Report from the Joint AdSec CSS Task Force meeting held on 24 May 2011

Mr Lacoste provided a short summary of the Joint AdSec CSS Task Force meeting:

- The Task Force had agreed on some principles on which to base the process for review and approval of nuclear safety publications and nuclear security publications.
- Most members of the Task Force had also agreed on
    - A long-term vision for the overall commission and committee structure, involving various committees with technical expertise in safety and security reporting to a new Safety and Security Series Commission; and
    - An intermediate committee structure, involving a new Nuclear Security Guidance Committee and an 'interface group', whose composition was yet to be determined.

Mr Lacoste had already reported informally on the outcome of the Task Force meeting to the Director General; a short report of the meeting would soon be made available, and it would be at the discretion of the Director General as to whether to implement the Task Force's suggestions.

7.2 Topical discussion on future areas of work (follow-up to the agenda item 6.1 of the 27th CSS meeting)

Mr Delattre reported that a table setting out input from CSS members for future areas of work had been posted to the website. The United States had also uploaded to the website some additional input

on areas that the US Nuclear Regulatory Commission had decided to review following the accident in Japan.

Mr Lacoste and other members of the Commission noted that a new initiative need not necessarily lead to a new standard, and there was still broad support for the long-term structure and SPESS.

Mr Solomon urged the Commission to consider the effectiveness of processes for urgent measures and long-term measures following an accident, and noted that feedback from this could be incorporated in revisions of safety standards. He also suggested that the final report on the International Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological Emergencies, prepared in January 2010, could be revisited to see if any actions would be applicable now.

Mr Lachaume reported that France had launched an initiative in 2005 to review post accidental long term response arrangements, including zoning, population issues and economic consequences. The results were undergoing testing and would be shared with other States.

Mr Jammal suggested that a gap analysis of the standards should be carried out, and considered that information on the emergency response arrangements of other industries should be included in emergency response planning by nuclear facilities.

Several CSS members raised the issue of nuclear installations situated on national borders, and the need for consistent global response arrangements.

Mr Lacoste requested that the Secretariat classify the ideas raised and that the matter be addressed at the next CSS meeting, taking into account input from the Ministerial Conference to be held in June (see Annex III, Action 29.4).

7.3 Preparation of the CSS four year report

Mr Delattre reported that a draft report would be prepared for approval at the next CSS meeting, setting out the achievements of the last four years and the main ideas for the future.

Aspects mentioned by CSS members for inclusion in the report were:

- The joint work between CSS and AdSec;
- The roadmap for the long term, with the new structure and format for Safety Requirements;
- The long-term list of Safety Guides;
- The document Strategies and Processes for the Establishment of Safety Standards (SPESS);
- The expected completion of the General Safety Requirements by 2013;
- The progress on topics identified by the CSS as priorities;
- The productive working relationship between the Chairs of the Commission and the CSS;
- The role of the standards in the global nuclear safety regime;
- The need to promote the use of the standards by the IAEA and by Member States and other organizations, including the need for more appealing titles of standards;
- The need for feedback to be provided to the IAEA on use of the standards;
- The preparation of DS424 (draft Safety Guide on Establishing the Safety Infrastructure for a Nuclear Power Programme);
- The role of the CSS in ensuring the consistent treatment of safety in all IAEA publications;
- The new, expanded Terms of References for the Safety Standards Committees.

Mr Lacoste requested the Secretariat to prepare a first list of items to be addressed in the CSS four year report and to consult the CSS members for additional suggestions [Annex III, Action 29.9].

7.4 Revision of the Terms of Reference of the Commission on Safety Standards

Mr Delattre reported that the Terms of Reference of the Safety Standards Committees had been changed, and that the revised Terms of Reference of the CSS could also reflect similar elements: the

increasing need for feedback on the standards; the relationship between the five Chairs; the need for a Vice-Chair of the Commission; recent practices such as the production of a mid-term report.

Mr Vaughan requested that the Terms of Reference address the composition and size of the CSS. The Commission discussed the advantages of including as observers representatives from industry and from non-governmental organizations. Ideas were also raised of how more Member States could become involved in the CSS.

Mr Lacoste requested the Secretariat to prepare a first list of items to be addressed in the revised Terms of Reference of the CSS for its next four year term and to consult the CSS members for additional suggestions [Annex III, Action 29.10].

7.5 Report on the nature of the Safety Guides

This item was removed from the agenda at the request of the originator.

7.6 Feedback on safety standards. Progress report

Mr Jeannin presented a progress report on the proposed feedback process. He addressed the comments from the 28th CSS meeting and introduced the results of a pilot study covering the 'information management' sub-process in the revision of WS-R-5, the Safety Requirements on decommissioning. Information had been collected and organized using the SharePoint tool; Committee members would have access to this, and could submit comments and take part in discussion groups. Mr Jeannin's presentation is available on the CSS website. The next step in the pilot project would be to assess the capability of reviewers to make comments and to discuss trough SharePoint. Then the future steps will be to address the 'review' and 'revision' sub-processes. The assessment of the needs in terms of resources could only be determined more accurately later in the project.

The Commission requested the Secretariat to continue to provide progress reports on the feedback mechanism, including the perspective from the users [Annex III, Action 29.11].

7.7 Report on issues related to barge mounted NPPs

This item was postponed.

7.8 Discussion on the Nuclear Energy Series draft publication on Nuclear Fuel Cycle Objectives

Mr Delattre reported that the draft Nuclear Energy Series publication on Nuclear Fuel Cycle Objectives was not yet ready for review.

Mr Lacoste requested the Secretariat to submit to the Chairs of the Safety Standards Committees when available the draft Nuclear Energy Series publication on Nuclear Fuel Cycle Objectives and the comments by the Chairs of the Safety Standards Committee to be provided to the CSS Chair for final review [Annex III, Action 29.12].

8. Feedback from the Commission on the use of safety standards and regulatory issues

8.1 Use of IAEA Safety Standards

Mr Delattre reported that contributions had been provided by Australia, India, the Russian Federation, South Africa, Ukraine and the USA on the use of IAEA safety standards. The material would 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 Clapisson reported that the Department of Health and the National Nuclear Regulator of South Africa had carried out a self-assessment using the IAEA self-assessment tool, in the framework of a technical cooperation regional project.

8.2 Regulatory Issues in the Member States

Again, contributions had been provided in advance by Canada, France, Germany, India, the NEA, the Russian Federation, South Africa, Sweden, the UK, Ukraine and the USA. The material would 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 Laaksonen and Mr Lacoste reported on the recent agreement by the European Commission and the European Nuclear Safety Regulators' Group (ENSREG) to carry out a comprehensive and transparent

risk and safety assessment ('stress test') of all nuclear power plants in the EU. Initial conclusions were expected by the end of 2011, and part of the process would be made public.

Mr Mykolaichuk, Mr Clapisson and Mr Virgilio reported that their countries also intended to carry out their own equivalent evaluation. It was recognized that there was a need for criteria so that consistency could be ensured.

Mr Herttrich raised the issue of whether the IAEA safety standards could be made legally binding. Members of the Commission generally felt that a cautious approach was necessary, and that, rather than a legal commitment, a 'political will' to meet the standards, together with greater stringency, would further enhance safety.

The Commission requested the Secretariat to include a standard agenda item at future CSS meetings on the feedback from the Fukushima accident. At the 30th meeting, this would include the first results of the stress tests conducted in the EU as well as other national initiatives [Annex III, Action 29.13].

9. 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 and that a draft report of the meeting would be prepared and sent for comment to the members [Annex III, Action 29.14]. All presentations made at the 29th CSS meeting would be posted to the CSS web site [Annex III, Action 29.15].

Mr Lacoste also indicated that he would send a letter to the Director General on the action plan for the review of safety standards in the light of the Fukushima accident on the one hand and on the progress of the joint AdSec and CSS Task Force on the other hand [Annex III, Action 29.16].

The next meeting of the CSS is planned to be held:

- from 1 to 3 November 2011

ANNEX I

PARTICIPATION AT THE 29TH CSS MEETING

The Commission

A.J. González, Argentina

C.-M. Larsson, Australia

J.-P. Samain, Belgium

L.A. Vinhas, Brazil

R. Jammal, Canada

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

M. Barakat, Egypt

J. Laaksonen, Finland

A.-C. Lacoste, (Chairman) France

D. Majer, Germany (sent apologies – unable to attend)

S. S. Bajaj, India

I. Levanon, Israel

K. Nakamura, Japan (sent apologies – unable to attend)

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

TBD, Lithuania

M. S. Rahman, Pakistan

V.S. Bezzubtsev, Russian Federation

G. Clapisson, South Africa

A. Gurguí Ferrer, Spain

L. Moberg, Sweden

O. Mykolaichuk, Ukraine

M. Weightman, United Kingdom (sent apologies – unable to attend)

M. Virgilio, United States of America

L. C. Dung, Vietnam

Observers

A. Raja Adnan, 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 2008-2010

G. Vaughan, NUSSC

S. Magnusson, RASSC

E. W. Brach, TRANSSC

T. Pather, WASSC

Chairpersons of Committees 2011-2013

F. Feron, NUSSC

G. Massera, RASSC

E. W. Brach, TRANSSC

G. Williams, WASSC

Representatives and associated experts

Mr Ashraf, Ms Canoba, Mr Clement, Ms Collet i Campo, Ms Forest, Mr Gang Shen, Mr Gupta, Mr Gurgui, Mr Ha, Mr Hall, Mr Hashmi, Ms Hellström, Mr Herttrich, Mr Janssens, Mr Khamaza, Mr Konoplev, Mr Kuznetsov, Mr Lachaume, Mr Ogiso, Mr Paulikas, Mr Pinak, Mr Reiman, Mr Slutsker, Mr Solomon, Mr Tanaka, Mr Williams

IAEA DG and Staff Members

Y. Amano, Director General

D. Flory, Deputy Director General, Department of Nuclear Safety and Security

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

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

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

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

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

A. Al Khatibeh, H. Abou Yehia, G. Caruso, R. Czarwinski, P. Colgan, M. Gregoric, S. Samaddar, Mr Lipar, M. Vesterlind

K. Asfaw, G. Bruno, M. Gasparini, Y. Inoue, B. Jeannin, H. Mahmood, G. Moore, J. Rowat, D. Winfield, Y. Zhao

Coordinators of Safety Standards Committees and of the Commission on Safety Standards

M. Svab, Regulatory Activities 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 ninth Meeting of the
COMMISSION ON SAFETY STANDARDS
25 – 27 May 2011

VIC – Meeting Room M3, 1st floor in the M Building

1. Opening Session

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

1.2 Introductions, Adoption of the Agenda, Adoption of the 28th 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 28th Meeting; *D. Delattre*

2 Possible future implication on IAEA Safety Standards of the recent events in Japan

2.1 Presentations from the Japanese CSS member

2.2 IAEA Response

2.3 Future activities

3 Feedback from the CNS review meeting

4 Presentations and Discussion of Reports of Safety Standards Committees (report of the last meetings and three year reports of the Committees)

4.1 Nuclear Safety Standards Committee

G. Vaughan, Chairman 2008-2010/M. Svab, Scientific Secretary - NUSSC

4.2 Radiation Safety Standards Committee

S. Magnusson, Chairman 2008-2010/T.Colgan, Scientific Secretary - RASSC

4.3 Waste Safety Standards Committee

T. Pather, Chairman 2008-2010/G. Siraky, Scientific Secretary – WASSC

4.4 Transport Safety Standards Committee

E.W. Brach, Chairman 2008-2010/J. Stewart, Scientific Secretary – TRANSSC

4.5 Summary of the meeting of the 2008-2010 Chairs and 2011-2013 Chairs of the Committees and the meeting of the Chair of the CSS with the Chairs of the Committees

5. Approval of draft publications and DPPs

5.01 Draft Safety Requirements on Radiation Protection and Safety of Radiation Sources, revised International BSS (DS379), *R. Czarwinski*

5.02 Draft Safety Requirements on Safety of Nuclear Power Plants: Design (DS414), *M. Gasparini*

5.03 Draft Safety Guide on The Use of a Graded Approach in the application of the Safety Requirements for Research Reactors (DS351), *D. Winfield*

5.04 Draft Safety Guide on The Safety Case and Safety Assessment for Radioactive Waste Disposal (DS355), *G.Bruno*

5.05 Draft Safety Guide on Volcanic Hazards in Site Evaluation for Nuclear Installations (DS405), *H. Mahmood*

5.06 Draft DPP for a Safety Requirement on Decommissioning and Termination of Activities, revision of WS-R-5 (DS450), *J. Rowat*

5.07 Draft DPP for a Safety Guide on Decommissioning of Nuclear Installations, combination of DS402 and DS404 (DS452), *J. Rowat*

5.08 Draft DPP for a Safety Guide on Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (2009 Edition), addendum to the 2005 Edition (DS451), *Y. Zhao*

5.09 Draft DPP for a new Safety Guide on Construction of Nuclear Installations (DS441), *Y. Inoue*

6. Progress reports on safety standards related activities

6.1 Information on ICRP activities, *C. Clements*

6.2 Information on AdSec activities, *G. Moore*

6.3 Information on INSAG activities, *J. Laaksonen*

6.4 Information on WENRA's activities, *O. Gupta*

6.5 Other information on recent activities from the Secretariat

7. Policy discussion

7.01 Report from the Joint AdSec CSS task Force meeting held on 24 May 2011; *co-chairs of the task force*

7.02 Topical discussion on future areas of work (follow-up to the agenda item 6.1 of the 27th CSS meeting), *CSS Members*

7.03 Preparation of the CSS four year report, *CSS Members*

7.04 Revision of the Terms of Reference of the Commission on Safety Standards, *D.Delattre, CSS Members*

7.05 Report on the nature of the safety guides, *D. Delattre, CSS Members [removed from agenda]*

7.06 Feedback on safety standards. Progress report, *B. Jeannin, CSS Members*

7.07 Report on issues related to barge mounted NPPs, *M. Gasparini, CSS Members [postponed]*

7.08 Discussion on the Nuclear Energy Objectives draft publications on Nuclear Fuel Cycle Objectives, *CSS Members*

8. Feedback from the Commission on the use of safety standards and regulatory issues

8.1 Use of IAEA Safety Standards; *(CSS Members)*

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

9. Miscellaneous. Report of the meeting, Date of the next meeting (1-3 November 2011)

ANNEX III

ACTIONS ARISING FROM THE 29th MEETING OF THE COMMISSION

29.1. The final report of the 28th CSS meeting to be posted on the safety standards web site. **[Action: Secretariat, Scientific Secretary CSS]**

29.2. The Secretariat to investigate how to make available on the web site the drafts endorsed by the CSS while being published. **[Action: Secretariat, Scientific Secretary CSS]**

29.3. The Secretariat to investigate how the duration of the publication process could be significantly reduced. **[Action: Secretariat, Scientific Secretary CSS]**

29.4. The Secretariat to prepare an action plan for the review of safety standards following the Fukushima accident that includes a first identification of those standards that might need a review in the future and describes a flexible process to incorporate gradually the feedback in the future revisions of safety standards. In the meantime, the draft standards approved for publication would also include, on a case by case basis the disclaimer discussed at the meeting. **[Action: Secretariat]**

29.5. The Secretariat to revise as necessary the SPESS A document in order to incorporate lessons learned from the revision of the BSS on the involvement of co-sponsors. **[Action: Secretariat (SSCS) with the Chairs of the Safety Standards Committees]**

29.6. The Secretariat to launch the 30 days consultation of Member States on a revised Schedule III of DS379 that incorporates the new dose limit for the lens of the eye, and the Chair of the CSS to endorse the final text of Schedule III after consultation of the outgoing and incoming RASSC Chairs on their assessment of the Member States comments. **[Action: Secretariat, NSRW, Chairs of RASSC and CSS Chair]**

29.7. The Secretariat to address the issue raised by Canada on the use of the term "special arrangement" in the safety standards on transport safety. **[Action: Secretariat, TRANSSC coordinator and TRANSSC]**

29.8. The result of the mapping exercise for the Nuclear Security Series to be posted on the joint AdSec-CSS Task Force web page. **[Action: Secretariat, NSNS and Scientific Secretary CSS]**

29.9. The Secretariat to prepare a first list of items to be addressed in the CSS four year report and to consult the CSS members for additional suggestions. **[Action: Secretariat, Scientific Secretary CSS and the Commission]**

29.10. The Secretariat to prepare a first list of items to be addressed in the revised Terms of Reference of the CSS for its next four year term and to consult the CSS members for additional suggestions. **[Action: Secretariat, Scientific Secretary CSS and the Commission]**

29.11. The Secretariat to continue to provide progress reports on the feedback mechanism, including the perspective of the users. **[Action: Secretariat, SSCS]**

29.12. The Secretariat to submit to the Chairs of the Safety Standards Committees when available the draft Nuclear Energy Objectives document on Nuclear Fuel Cycle Objectives and the Committee Chairs comments to be provided to the CSS Chair for final review. **[Action: Secretariat, Scientific Secretary CSS with the Chairs of the Safety Standards Committees and the CSS Chair]**

29.13 The Secretariat to include a standard agenda item in future CSS meetings on the feedback from the Fukushima accident. At the 30th meeting, this would include the first results of the 'stress tests' conducted in the EU as well as other national initiatives. **[Action: Secretariat, Scientific Secretary CSS].**

29.14. A list of actions resulting from the 29th CSS meeting to be provided for comment to the CSS members and the draft report of the 29th CSS meeting to be posted for comment to the CSS web site **[Action: Secretariat, Scientific Secretary CSS and the Commission]**

29.15. All presentations made at the 29th CSS meeting on the CSS web site. **[Action: Secretariat, Scientific Secretary CSS].**

29.16. The CSS Chair to send a letter to the IAEA Director General on the action plan for the review of safety standards in the light of the Fukushima accident on the one hand and on the progress of the joint AdSec and CSS Task Force on the other hand. **[Action: CSS Chair].**

ANNEX IV

STATUS OF MAIN TOPICS OF THE 4TH CSS TERM

#	Main topics	Reference set of SG	Status/action
1	Guidance and assistance to countries considering the launch of a nuclear programme and in particular to provide guidance on the establishment of the necessary safety infrastructure	Item 1	DS424 endorsed by the CSS, being published
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: Revised DPP DS441 for this CSS meeting Commissioning: Draft DS446 for review by the SSCs before MS consultation
3	Guidance and assistance related to the new applications of radiation sources	Items 68 to 76	DS409 published (SSG-8) DS408 published (SSG-11) DS419 and 420 expected for the SSCs in 2012 before MS consultation DS434 for a safety guide on radioisotope production facilities being drafted. DPP approved by 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	Final draft DS 426 on periodic safety reviews approved by the Committees. Draft to be submitted to CSS in November 2011. 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 published (SSG-9) DS383 published (NS-G-2.13)
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 Meetings in October 2009, March 2010, September 2010 and 24 May 2011
7	Assistance and additional safety guidance to countries dealing with expanded uranium exploration and mining	Item 83	DS 421 being drafted Consideration for re-assessing with the SSCs how to adequately cover all aspects in a few guides
8	Guidance on public exposures to natural sources of ionizing radiations (radon, NORM residues, aircrew…) and for the safety of uranium mining activities	Item 5	
9	Crucial need to further improve promotion of the application of the safety standards on medical applications including recommendations that will reduce the frequency of over or under exposures related to nuclear medicine, and to enhance these standards as appropriate	NA. Relates to the application of SS, in particular of item 68	DS399 being drafted
10	Improvement on the coverage of human and organizational factors in the safety guides	Item 6 and 42	DS349 published (GS-G-3.5)

ANNEX V

STATUS OF ACTIONS ARISING FROM THE 28th MEETING OF THE COMMISSION

28.1. The final report of the 27th CSS meeting to be posted on the safety standards web site. **[Action: Secretariat]** Done. Final report posted on 4 October 2010.

28.2. The Secretariat to prepare a note clarifying issues relating to a recent proposal made to establish a safety ranking of reactors on the market and to provide it to the CSS members. **[Action: Secretariat]** Expected to be addressed in the DDG speech. Agenda item 1.1.

28.3. The Secretariat to assess whether the current process provides for a sufficient degree of independent review of the draft safety standards and to present the result at the 29th CSS meeting. **[Action: Secretariat with the Chairs of the Safety Standards Committees]** Discussed at the meeting of the Chairs of the SSCs. It was concluded that the wide consultation of Member States, which should involve many stakeholders not involved in the drafting or even in the Committees review, as well as the CSS itself, whose members are not normally involved in the drafting, does provide for sufficient independent review.

28.4. The Secretariat to consider seeking co-sponsorship of the World Meteorological Organization for the Safety Guide on Meteorological and Hydrological Hazards in Site Evaluation for Nuclear Installations (DS417). **[Action: Secretariat]** Done. Co-sponsorship accepted.

28.5. WASSC to be involved for the review and approval of the draft Safety Guide DS446 on Commissioning for Nuclear Power Plants. **[Action: Secretariat]** Done. Indicated in the final DPP. DS446 is currently submitted to NUSSC and WASSC for comments before MS consultation

28.6. The Secretariat to select an area for a pilot implementation of the proposed feedback mechanism and to report at the 29th CSS meeting. **[Action: Secretariat]**

28.7. The Secretariat to further collect technical information and acquire more knowledge on technical, legislative and institutional issues relating to barge-mounted nuclear power plants and to present a synthesis at the 29th CSS meeting. **[Action: Secretariat, NS and OLA]** Draft revised within NE. Still need review by OLA. Postponed to a future CSS meeting

28.8. The Secretariat to discuss with the Permanent Mission of Argentina the concerns raised by the Argentinean representative at the CSS on the report on the appropriateness of establishing IAEA Safety Requirements on the governmental, legal and regulatory framework for safety. **[Action: Secretariat]** Discussed separately with the Argentinean representative.

28.9. The draft Nuclear Energy Objectives to be submitted for comment to the relevant Safety Standards Committees at their next meeting in 2010. The Chair of the Committees and the Chair of the CSS to prepare a report for DDG NS on the result of the review. **[Action: Secretariat, Safety Standards Committees, Chairs of the Committees and the Commission]** Done. Draft reviewed by the Committees and the CSS. Report sent to DDG NS. Proposal for a paragraph in the foreword of the NE Series publication approved.

28.10. The Safety Standards Committees to discuss the Member State contributions to the item 6.1 of the agenda of the 28th meeting suggesting new or revised safety standards. The Chairs to review the presentation from UK on the future work on safety standards. The Chairs will include the results of the Committees' and Chairs review in the respective three year reports to be discussed at the 29th CSS meeting. **[Action: Secretariat, Safety Standards Committees, Chairs of the Committees]** Done. Table with Committees input prepared as a result and posted for the agenda item 7.02 of this meeting.

28.11 The proposal from the USA on the nature of Safety Guides to be added as an agenda item to be discussed at the 29th CSS meeting. **[Action: Secretariat]** Initially done, but subsequently removed from the agenda following the USA proposal that this can be postponed to a future CSS meeting.

28.12. A list of actions resulting from the 28th CSS meeting to be provided for comment to the CSS members. **[Action: Secretariat].** Done. Proposed actions list sent 15 October 2010. Comments received and incorporated. Revised actions list incorporated in the draft report of the 28th CSS meeting.

28.13. The draft report of the 28th CSS meeting to be posted for comment to the CSS web site. **[Action: Secretariat].** Done. Draft report posted in January 2011. Comments received and agreed. Revised draft report posted for final approval at 29th meeting.