2006-11-22

Commission on Safety Standards
Nineteenth Meeting
6–7 June 2006
IAEA Headquarters, Vienna
Report of the Meeting

1. Opening

Mr. Taniguchi opened the 19th Meeting of the Commission on Safety Standards, extending a warm welcome to the participants and in particular to Mr. Magugumela from South Africa as a new member of the Commission. He presented an overview of recent activities and informed the Commission of a number of issues relating to the safety standards. including:

- March 2006 Session of the Board of Governors (BoG), review and approval of the Safety Requirements on the Management System for Facilities and Activities and the Nuclear Safety Review for the Year 2005.

- Significant international events, including the WENRA Seminar on a Common approach to Nuclear Safety and Regulations in Europe, the International Conference on Effective Nuclear Regulatory Systems — Facing Safety and Security Challenges and the Second Review meeting of the Joint Convention.

- Activities Beyond the Action Plan: a proposal by the secretariat to consider the overall structure and the total number of safety standards, a timetable for revision of the published standards and the need to provide explanatory material for Member States requesting such information.

- A proposal to postpone consideration of the draft Safety Guide on Borehole Facilities for Disposal of Radioactive Waste (DS335) until generic guidance for conducting safety assessment has been completed.

2. Introduction, Adoption of the Agenda and Report of the 18th Meeting

Mr. Lacoste, the Chairman of the Commission, welcomed the participants and informed them of his meeting with the Director General in connection with the work of the Commission and the second review meeting of the Joint Convention. The Agenda for the 19th Meeting of the Commission was approved. The approved agenda is attached as Annex I. The draft report of the 18th Meeting was approved.

3. Overview of Activities in the Department of Nuclear Safety and Security

3.1. Nuclear Installation Safety

Mr. Brockman presented an overview of recent activities of the Division, including an overview of INSAG's activities, the results of two international conferences on operational experience feedback, safety standards related activities, and the integrated regulatory review services.

3.2. Radiation, Transport and Waste Safety Issues

Ms. Amaral presented an overview of safety standards and related issues, in particular concerns over increasing use of X rays for screening purposes, patient protection, safety and security of radioactive sources, and problems with the denial of shipment of medical and industrial sources.

4. Current Developments

4.1. Beyond the Action Plan

Mr. Lederman presented a report on the implementation of the Action Plan for the Development and Application of IAEA Safety Standards, the feedback of experience in the use safety standards[1] and new challenges in relation to the safety standards, including the perceived need for more Safety Guides, the renaissance of nuclear power (new reactors, international initiatives), and cooperation with COPUOS (Committee on Peaceful Uses of Outer Space) in relation to standards for reactors in outer space. The report also included proposals for meeting these challenges and steps to be taken, including consideration of the overall structure by the Secretariat in consultation with the Safety Standards Committees and reporting of the results at the November 2006 meeting of the Commission.

The Commission took note of the Secretariat's initiative and considered it to be very timely, in particular in relation to the completion of the unified Safety Fundamentals and the start of the revision of the BSS. The Commission decided to prepare a statement on important elements of the review to be conducted by the Secretariat and the Committees.

A draft of the statement was distributed later at the meeting and was reviewed by the Commission. After consideration of the changes proposed, the chairman was given the mandate to finalize the statement (see Annex III). The Secretariat was requested to prepare a report including a revision of the 'blue book' on the overall structure, with priorities assigned to the development of specific standards, for review by the Commission at its next meeting. [Annex II, 19.1].

4.2. Status of the BSS Review

Ms. Amaral informed the Commission of the agreement by the four committees to revise the BSS. In particular RASSC and WASSC at their joint meeting in April agreed that although there have been no major changes in radiation protection practice that require revision of BSS; nevertheless many possible improvements were identified that taken together merit a revision. The Commission was also informed that the revision should ensure that the comprehensive character of the BSS is retained and its links to the new Safety Fundamentals and other Safety Requirements are made clear in the DPP, which will be submitted to the committees for approval in September/October and the Commission in November 2006.

The Commission requested the Secretariat and RASSC to ensure that the DPP includes criteria for assessing the merit of proposed changes and a discussion on practicability of changes to be introduced. [Annex II, 19.2].

4.3. Status of the Endorsed Standards and Response to Actions from the 18th Meeting

The Scientific Secretary informed the Commission that the Safety Requirements on Geological Disposal of Radioactive Waste (WS-R-4) and the Safety Guide on A System for the Feedback of Experience from Events in Nuclear Installations (NS-G-2.11) are scheduled for publication during this week. The Safety Requirements on the Management System for Facilities and Activities (GS-R-3) and five Safety Guides are in the final stages of production.

The Commission was provided with information in connection with actions 18.1 and 18.2 from the last meeting and was informed that all remaining actions from the last meetings have now been completed.

[1] A compact disk containing information feedback on the use of safety standards reported by the Commission members at the last three meetings (16th, 17th and 18th meetings) was distributed.

5. The Use of Safety Standards and Related Regulatory Issues

Contributions on the use of Safety Standards and related regulatory issues provided by the members of the Commission were distributed. The contributions are an essential input to the feedback on the use of safety standards. A number of members chose to present topics of particular interest during the meeting. The process of distributing the written text in advance and limiting the presentation to the significant issues is considered more efficient than an around-the-table presentation.

6. Programme for the Senior Regulators' Meeting during the General Conference

The Secretariat presented a provisional programme for the Senior Regulators' Meeting to be held during the General Conference on 21 September. The programme was prepared on the basis of the findings and conclusions of the Moscow Conference on Effective Nuclear Regulatory Systems — Facing Safety and Security. There were no comments on the programme.

7. Presentations and Discussion of Reports of Safety Standards Committees

7.1. Nuclear Safety Standards Committee (NUSSC)

Mr. Reiman informed the Commission that NUSSC at its 21st meeting reviewed a draft paper by the Secretariat on the strategy for future development of safety standards; NUSSC will further discuss the topic at its next meeting. NUSSC also approved the Safety Fundamentals and the Safety Requirements for Decommissioning for submission to the CSS and reviewed four other safety standards. Seven draft DPPs were also reviewed by NUSSC.

7.2. Radiation Safety Standards Committee (RASSC)

Mr. Magnusson informed the Commission that RASSC at its 20th meeting held joint sessions with WASSC and a one day working group meeting to review a set of papers prepared in connection with the review of the BSS. There were also presentations from the Secretariat, from 12 Member States on experience in applying the BSS and from several international organizations. RASSC also approved the submission of the Safety Fundamentals and two Safety Guides for submission to the CSS and five draft standards for submission to the Member States for comment. RASSC also approved seven draft DPPs for submission to the Commission; however, a number of members expressed concerns regarding the large number of new DPPs, in particular given the workload in relation to the revision of the BSS.

7.3. Waste Safety Standards Committee (WASSC)

Mr. Pather informed the Commission that WASSC at its 21st meeting held joint sessions with RASSC and approved the Safety Fundamentals and the Safety Requirements for Decommissioning and the Safety Guide on Remediation Process for Past Activities and Accidents for submission to the CSS and reviewed seven other safety standards. Six draft DPPs were approved for submission to CSS. WASSC also reviewed a draft Safety Report on long-term storage and considered the use of the safety standards website for submission and review of comments by the members of WASSC. The Commission was also informed that the process of submitting draft standards to WASSC members two months in advance and requesting written comments ten days in advance of the meeting has proved efficient.

The Commission requested the Secretariat to consider the feasibility of adopting a similar process for the submission of draft standards (two months in advance of the meetings, requesting written comments ten days before the meeting) to the members of CSS and to report at the next meeting. [Annex II, 19.3].

7.4. Transport Safety Standards Committee (TRANSSC)

Mr. Duffy informed the Commission that TRANSSC at its 12th meeting reviewed the draft of the Safety Fundamentals and was given the mandate to consider the draft on behalf of TRANSSC after review by the other committees. The commission was also informed that TRANSSC decided that publication of TS-R-1 (2007 Edition) would not be warranted since proposals for change were considered to be not sufficiently significant to safety, and recommended that the review cycle for the 2011 edition may be commenced in June 2007. Until then, TRANSSC should focus on issues such as the BSS as applied to transport harmonization with UN regulations and preparation of the next review process.

8. Safety Standards

8.1. Fundamental Safety Principles (DS298); Safety Fundamentals

Mr. Karbassioun, technical officer for the development of the Safety Fundamentals, presented the draft and outlined its development. The Safety Standards committees had reviewed and approved the draft for submission to the Commission. The Commission was informed that the draft has been submitted[2] to the Office of Legal Affairs (OLA). Comments received from OLA and from several members of the Commission were considered by the special subgroup, the chairmen of the committees and Messrs. Delves and Mason prior to the CSS meeting.

A revised draft of the Safety Fundamentals was distributed at the meeting and reviewed in detail by the Commission and various changes agreed, including a change in the title of Principle 3 to 'Leadership and Management for Safety' and in Principle 8 to add “and mitigate” after to prevent. Subject to the incorporation of such changes, the Commission endorsed the submission of the revised Safety Fundamentals to the BoG for approval. The Secretariat noted that the paper would still be subject to further review by the cosponsors and by the internal clearance process before submission to BoG. The Commission agreed that any proposed further changes arising from these reviews should be considered by the special group and if significant brought forward for the attention of all members of the Commission.

8.2. Decommissioning of Facilities using Radioactive Material (DS333); Safety Requirements

Ms. Batandjieva, technical officer for the development of the Safety Requirements, presented the draft and outlined its development. This draft had been reviewed by WASSC and NUSSC. The Commission endorsed the submission of the Safety Requirements to the BoG for approval.

8.3. Remediation Process for Past Activities and Accidents (DS172); Safety Guide

Ms. Batandjieva, technical officer for the development of the Safety Guide, presented the draft and outlined its development. This draft had been reviewed by WASSC and NUSSC. The Commission was informed that comments received from the United States had been taken into account. In response to the comments the Secretariat proposed to remove footnote 5 of the Safety Guide. The Commission endorsed the publication of this Safety Guide.

8.4. Safety of Radiation Generators and Sealed Radioactive Sources (DS114); Safety Guide

Mr. Mason, technical officer for the development of the Safety Guide, presented the draft and outlined its development. This draft had been reviewed by RASSC. The Commission was informed that comments had been received from the United States. The comments concerned Section 4 of the Safety Guide dealing with transport of radioactive sources. It was decided that the section on transport of radioactive sources and the comments from the United States should be reviewed by the chairmen of

[2] All documents submitted to the Board of Governors are cleared by the Agency’s Office of Legal Affairs.

RASSC and TRANSSC. The results of the review should be sent to the Chairman of the Commission for a decision on approval of the Safety Guide. [Annex II, 19.4].

8.5. Commissioning of Research Reactors (DS259); Safety Guide

Mr. Shokr, technical officer for the development of this Safety Guide, presented the draft and outlined its development. This draft had been reviewed by NUSSC. The Commission endorsed the publication of this Safety Guide.

8.6. Maintenance, Periodic Testing and Inspection of Research Reactors (DS260); Safety Guide

Mr. Shokr, technical officer for the development of this Safety Guide, presented the draft and outlined its development. This draft had been reviewed by NUSSC. The Commission endorsed the publication of this Safety Guide.

8.7. Borehole Facilities for the Disposal of Radioactive Waste (DS335); Safety Guide

Mr. Jova Sed, technical officer for the development of this Safety Guide, presented the draft and outlined its development. This draft had been reviewed by WASSC. In view of the proposal made by the Mr. Taniguchi and in consultation with the chairman of WASSC, it was decided to postpone consideration of the draft Safety Guide until guidance for conducting generic safety assessment had been completed.

8.8. Radiation Protection Programmes for Transport of Radioactive Material (DS377); Safety Guide

Mr. Nandakumar, technical officer for the development of this Safety Guide, presented the draft and outlined its development. This draft had been reviewed by TRANSSC, RASSC and WASSC. The Commission endorsed the publication of this Safety Guide.

9. Document Preparation Profiles for Approval

9.1. ~~Safe~~ Storage of Spent Fuel (DS371); Safety Guide

Mr. Jones, technical officer, presented the DPP for this Safety Guide. The DPP had been approved by NUSSC and WASSC. The Commission was informed that the Safety Guide will replace three separate publications on design, operation and safety assessment of spent fuel storage facilities published in 1994 as Safety Series Nos. 116, 117 and 118. The Commission decided to delete 'Safe' from the title. The Commission approved the DPP.

9.2. ~~Safety of~~ Reprocessing Facilities (DS360); Safety Guide

Mr. Nocture, technical officer, presented the DPP for this Safety Guide. The DPP had been approved by NUSSC, RASSC and WASSC. The Commission decided to delete 'Safety of' from the title. It was suggested to broaden the scope of the Safety Guide to include reprocessing facilities implementing non PUREX processes. Mr Nocture stated that such processes have not reached an industrial scale; however, annexes specific to non PUREX facilities could be developed as part of the Safety Guide. To this end the United States will nominate appropriate experts for drafting of the Safety Guide. The Commission approved the DPP with the changes proposed.

9.3. ~~Safety of~~ Fuel Cycle R&D Facilities (DS381); Safety Guide

Mr. Nocture, technical officer, presented the DPP for this Safety Guide. The DPP had been approved by NUSSC, RASSC and WASSC. The Commission decided to delete 'Safety of' from the title and approved the DPP.

9.4. Safety Classification of Structures, Systems and Components in NPPs (DS367); Safety Guide

Ms. Toth, technical officer, presented the DPP for this Safety Guide. The DPP had been approved by NUSSC. The Commission approved the DPP.

9.5. Justification of Practices, (DS401); Safety Guide

Mr. Boal, technical officer, presented the DPP for this Safety Guide. The DPP had been approved by RASSC. It was suggested RASSC should reconsider the title to reflect the 'practices' that are being justified. The Commission approved the DPP with the changes proposed. [Annex II, 19.5].

9.6. Radiation Safety of Gamma, Electron and X ray Irradiation Facilities (DS409); Safety Guide

Ms. Mac Kenzie, technical officer, presented the DPP for this Safety Guide. The DPP had been approved by RASSC. The Commission was informed that the Safety Guide will replace an existing publication on 'Radiation Safety of Gamma and Electron Irradiation Facilities' published in 1992 as Safety Series No. 107. RASSC was requested to consider deleting 'Radiation Safety' from the title to bring the title in line with other safety standards publications, a section on generic justification should be included in the draft and a section covering transport should be reviewed by the Chairman of TRANSSC to decide whether TRANSSC should be involved in the review of the draft Safety Guide. The Commission approved the DPP with the changes proposed. [Annex II, 19.6].

9.7. Radiation Safety in Industrial Radiography (DS408); Safety Guide

Mr. Wheatley, technical officer, presented the DPP for this Safety Guide. The DPP had been approved by RASSC. RASSC was requested to consider deleting 'Radiation Safety' from the title to bring the title in line with other safety standards publications, a section on generic justification should be included in the draft, some aspect of design should be included in the main text and in an appendix, and a section covering transport should be reviewed by Chairman of TRANSSC to decide whether TRANSSC should be involved in the review of the draft Safety Guide. The Commission approved the DPP with the changes proposed. [Annex II, 19.7].

9.8. Risk Informed Decision Making (DS365); Safety Guide

Mr. El-Shanawany, for the technical officer, presented the DPP for this Safety Guide. The DPP had been approved by NUSSC. The Secretariat was requested to ensure the draft Safety Guide is more thematic in nature and not related only to 'reactors' as indicated in the DPP, references to 'reactors' to be deleted from the DPP and the scope broadened. Consideration should also be given to the review of the draft Safety Guide by other Safety Standards Committees. The Commission approved the DPP with the changes proposed. [Annex II, 19.8].

9.9. Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (DS387); Safety Guide

Mr. Nandakumar, for technical officer, presented the DPP for this Safety Guide. The DPP had been approved by TRANSSC. The Commission was informed that the 'Schedules of Requirements for the Transport of Specified Types of Radioactive Material Consignments' which were published as part of the 1996 Edition of the IAEA Regulations for the Safe Transport of Radioactive Material had been withdrawn from the current edition of the Regulations and therefore, it was necessary to publish the Schedules now as a Safety Guide. The Commission approved the DPP.

10. Other Business

No topics were proposed for discussion under this agenda item.

11. Dates of Meetings in 2006 and Agenda for the next Meeting

The schedule of the remaining meetings of the Commission and the committees for 2006 is:

Commission: 21–22 November; TRANSSC: 4-8 September

NUSSC: 25–27 September RASSC and WASSC: 9–13 October

ANNEX I

AGENDA

Nineteenth Meeting of the
COMMISSION ON SAFETY STANDARDS
6–7 June 2006

Meeting Room CO7-IV, IAEA Headquarters, Vienna

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

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

3. Overview of the Activities in the Department of Nuclear Safety and Security

   3.1. Nuclear Installation Safety, *K.E. Brockman, DIR-NSNI*

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

4. Current Developments

   4.1. Beyond the Action Plan (including information on request from COPUOS and an update on feedback mechanism); *L. Lederman*

   4.2. Status of the BSS review; *E. Amaral*

   4.3. Status of the endorsed Standards and Response to Actions from the 18th Meeting; *Karbassioun*

5. The Use of Safety Standards and Related Regulatory Issues; *(CSS Members)*

6. Programme for the Senior Regulators' Meeting during the General Conference

7. Presentations and Discussion of Reports of Safety Standards Committees

   7.1. Nuclear Safety Standards Committee
   L. Reiman, Chairman/G. Feige, Scientific Secretary - NUSSC

   7.2. Radiation Safety Standards Committee
   S. Magnusson, Chairman/T.J. Boal, Scientific Secretary – RASSC

   7.3. Waste Safety Standards Committee
   T. Pather, Chairman/K. Hioki, Scientific Secretary – WASSC

   7.4. Transport Safety Standards Committee
   J. Duffy, Chairman/M. Wangler, Scientific Secretary – TRANSSC

8. Safety Standards for Approval

   8.1. Fundamental Safety Principles (DS298); Safety Fundamentals
   A. Karbassioun, technical officer

   8.2. Decommissioning of Facilities using Radioactive Material (DS333); Safety Requirements
   B. Batandjieva, technical officer

   8.3. Remediation Process for Past Activities and Accidents (DS172); Safety Guide
   B. Batandjieva, technical officer

   8.4. Safety of Radiation Generators and Sealed Radioactive Sources (DS114); Safety Guide
   C. Mason, technical officer

   8.5. Commissioning of Research Reactors (DS259); Safety Guide

A. Shokr, technical officer

8.6. Maintenance, Periodic Testing and Inspections of Research Reactors (DS260); Safety Guide; *A. Shokr, technical officer*

8.7. Borehole Facilities for the Disposal of Radioactive Waste (DS335); Safety Guide *L. Jova Sed, technical officer*

8.8. Radiation Protection Programmes for Transport of Radioactive Material (DS377); Safety Guide; *A.N. Nandakumar, technical officer*

9. Document Preparation Profiles for Approval (Safety Guides)

9.1. Safe Storage of Spent Fuel (DS371); *G. Jones and E. Warnecke, technical officers*

9.2. Safety of Reprocessing Facilities (DS360); *P. Nocture, technical officer*

9.3. Safety of Fuel Cycle R&D Facilities (DS381); *P. Nocture, technical officer*

9.4. Safety Classification of Structures, Systems and Components in NPPs, (DS367); *C. Toth*

9.5. Justification of Practices, (DS401); *T. Boal, technical officer*

9.6. Radiation Safety of Gamma, Electron and X ray Irradiation Facilities (DS409) C. *Mac Kenzie, technical officer*

9.7. Radiation Safety in Industrial Radiography (DS408); *J. Wheatley*, *technical officer*

9.8. Risk Informed Decision Making (DS365); *M. Reinhart, technical officer*

9.9. Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (DS387); *N. Bruno, technical officer*

10. Other business

11. Report of the Meeting, Date of Meetings

ANNEX II

ACTIONS ARISING FROM THE MEETINGS OF THE COMMISSION

19.1. The Secretariat was requested to prepare a report including a revision of the 'blue book' on the overall structure, with priorities assigned to the development of specific standards, for review by the Commission at its next meeting. (Ref. *Item 4.1.).* **[Action: Secretariat]**.

19.2. The Commission requested the Secretariat and RASSC to ensure that the DPP for revision of the BSS includes criteria for assessing the merit of proposed changes and a discussion on practicability of changes to be introduced. (Ref. *Item 4.2.).* **[Action: Secretariat, RASSC]**

19.3. The Commission requested the Secretariat to consider the feasibility of adopting a similar process for the submission of draft standards (two months in advance of the meetings, requesting written comments ten days before the meeting) to the members of CSS and to report at the next meeting. (Ref. *Item 7.3.).* **[Action: Secretariat]**.

19.4. It was decided that the section on transport of radioactive sources and the comments from the United States should be reviewed by the chairmen of RASSC and TRANSSC. The results of the review should be sent to the Chairman of the Commission for a decision on approval of the Safety Guide. (Ref. *Item 8.4.).* **[Action: Secretariat, chairmen of RASSC and TRANSSC]**.

19.5. It was suggested RASSC should reconsider the title to reflect the 'practices' that are being justified. The Commission approved the DPP with the changes proposed. (Ref. *Item 9.5.)* **[Action: RASSC]**.

19.6. RASSC was requested to consider deleting 'Radiation Safety' from the title to bring the title in line with other safety standards publications, a section on generic justification should be included in the draft and a section covering transport should be reviewed by the Chairman of TRANSSC to decide whether TRANSSC should be involved in the review of the draft Safety Guide. (Ref. *Item 9.6.)* **[Action: Chairmen of RASSC and TRANSSC]**.

19.7. RASSC was requested to consider deleting 'Radiation Safety' from the title to bring the title in line with other safety standards publications, a section on generic justification should be included in the draft, some aspect of design should be included in the main text and in an appendix, and a section covering transport should be reviewed by Chairman of TRANSSC to decide whether TRANSSC should be involved in the review of the draft Safety Guide. (Ref. *Item 9.7.)* **[Action: Chairmen of RASSC and TRANSSC]**.

19.8. The Secretariat was requested to ensure the draft Safety Guide is more thematic in nature and not related only to 'reactors' as indicated in the DPP, references to 'reactors' to be deleted from the DPP and the scope broadened. Consideration should also be given to the review of the draft Safety Guide by other Safety Standards Committees. (Ref. *Item 9.8.)* **[Action: Secretariat]**.

ANNEX III

STATEMENT BY THE CSS

(Beyond the Action Plan on the Development and Application of Safety Standards)

The CSS recognizes that the quality of the safety standards in the new IAEA Safety Standards Series has been significantly enhanced, considering in particular that their content increasingly reflects good international practices and some of the best international practices.

With the aim of maintaining a continuous improvement, the CSS welcomes the report prepared by the Secretariat, which describes the achievements under the Action Plan, identifies new challenges and presents ways to respond to these in the future.

The CSS agrees that there are challenges giving rise to a need for further rationalization of the safety standards programme, including:

- the approval for publication of the unified Safety Fundamentals publication as the primary standard for the Safety Standards Series, which calls for a review of the relationship between the Safety Fundamentals and the various Safety Requirements;

- the increasing use of the IAEA safety standards by the Member States, which calls for greater stability;

- the strategic interest of achieving better international recognition and use of the safety standards as a reference and in particular of seeking joint sponsorship of the standards with other international organizations.

The CSS therefore supports the proposals from the IAEA Secretariat and requests it to elaborate on them further and to propose at its next meeting in November 2006 a policy paper together with a revised overall structure for the safety standards, which should:

- propose a vision on what the entire series would comprise in the future (the concept of a 'closed set' of safety standards);

- establish a logical relationship between the unified Safety Fundamentals and the various Safety Requirements, as well as logical relationships between the Safety Requirements and the subsequent Safety Guides;

- maintain a manageable number of publications and take into account the need for efficiency and timeliness for the future development of the Series.

For the transition period, an analysis of the differences between the proposed future set and the current set should be presented, together with a proposal for prioritization of the work to be done.

Moreover, the CSS requests the Secretariat to analyse the potential need for more detailed publications to assist the Member States in implementing the recommendations of the Safety Standards. The CSS, in view of the link with the safety standards publications and the actual use of these technical documents by a number of Member States, is of the opinion that it may be useful to consider identifying a dedicated category for these publications as well as a dedicated, clear and flexible process for their review.

The CSS considers that continuous improvement relies on a strong commitment by, and shared responsibilities between, the CSS, the safety standards committees and the IAEA Secretariat, and is looking forward to considering the proposal from the Department of Nuclear Safety and Security management team after discussion at the Committees.

PARTICIPATION

The Commission

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

Participants from International Organizations

C. Waeterloos, European Commission
L.-E. Holm, International Commission on Radiological Protection
T. Tanaka, OECD Nuclear Energy Agency

Chairmen of Committees

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

Representatives and associated experts

Y. Zhao, D. Delattre, Ms. C. Feltin, M. Kuroki, T. Nishiyama, T. Konishi, H. Kawagoshi, Z. Ogiso, S. Rahman, Ms. I. Kaliberda, J. Barcelo, L. Santoma, P. Meyer, D. Tiktinsky.

IAEA Staff Members

T. Taniguchi, Deputy Director General, Department of Nuclear Safety and Security
K.E. Brockman, Director, Division of Nuclear Installation Safety (NSNI)
E. Amaral, Director, Division of Radiation, Transport and Waste Safety
L. Lederman, Head, Safety and Security Coordination Section (SSCS)
G. Feige, Safety Assessment Section (NSNI)
K. Hioki, Waste Safety Section (NSRW)
M. Wangler, Radiation and Transport Safety Section (NSRW)
T. Boal, Radiation and Transport Safety Section (NSRW)
B. Batandjieva, Waste Safety Section (NSRW)
C. Mason, Radiation and Transport Safety Section (NSRW)
D. Delves, Safety and Security Coordination Section (SSCS)

A. Shokr, Research Reactor Safety Section (NSNI)
L Jova Sed, Waste Safety Section (NSRW)
G. Jones, Regulatory Activities Section, (NSNI)
P. Nocture, Research Reactor Safety Section (NSNI)
A.N. Nandakumar, Radiation and Transport Safety Section (NSRW)
C. Toth, Engineering Safety Section (NSNI)
C. Mac Kenzie, Radiation and Transport Safety Section (NSRW)
J. Wheatley, Radiation and Transport Safety Section (NSRW)
M. El-Shanawany Head, Safety Assessment Section (NSNI)
A. Karbassioun, Scientific Secretary, Safety and Security Coordination Section (SSCS)