2004-07-02

Commission on Safety Standards
Fifteenth Meeting
7–9 June 2004
IAEA Headquarters, Vienna
Report of the Meeting

1. Opening

Mr. Taniguchi, Deputy Director General, Head of the Department of Nuclear Safety and Security, opened the 15th meeting of the Commission on Safety Standards, extending a warm welcome to all participants. Mr. Taniguchi presented an overview of recent activities of the Department and informed the Commission of the following:

- Development of the programme and budget for the period 2006-2007 and of the medium term strategy for 2006-2011.
- Approval by the Board of Governors of the Action Plan on the development and application of the of IAEA safety standards, the code of conduct for research reactors and the Action Plan for the safety of transport of radioactive material at the March 2004 Session of the Board.
- Recent meetings of the International Nuclear Safety Group (INSAG).
- Programme for the senior regulators' meeting at the General Conference, Tuesday 21 September 2004.
- Preparation for the third review meeting of the Convention on Nuclear Safety, 11-22 April 2005.
- International Conference on Topical Issues in Nuclear Installation Safety, 18-22 October 2004, in Beijing.

2. Adoption of the Agenda and Report of the 14th Meeting

The agenda for the 15th meeting of the Commission was approved. The approved agenda is attached as Annex I. The draft report of the 14th meeting was approved.

3. Issues Related to the Development and Application of the IAEA Safety Standards.

3.1. Safety and Security Coordination Section

Mr. Lederman, Head of SSC Section, presented an overview of the medium term strategy for 2006/2011, including regional safety networks (Asian nuclear safety network and Ibero-American radiation safety network) and the integrated approach adopted by the Department for establishing safety standards, assessing feedback and for providing for the application of safety standards. Mr. Lederman also presented details of strategic issues and changes incorporated into the department's programme and budget for the period 2006-2007.

3.2. Division of Nuclear Installation Safety

Mr. Brockman, Director of NSNI, reported on the activities of the Division with emphasis on preparations for the third review meeting of the Convention on Nuclear Safety, the safety enhancement for research reactors, the relationship between CSS and INSAG, safety services and the International Conference on Topical Issues in Nuclear Installation Safety.

3.3. Division of Radiation, Transport and Waste Safety

Mr. González, Director of NSRW, provided a briefing for the Commission on short-term policy issues, medium-term questioning and long-term scientific challenges covering:

- Short-term policy issues: exclusion, exemption, clearance; basic structure of radiation safety standards (thematic standards and facility specific standards); and the revision cycle for the transport standards.

- Medium-term questioning: questioning the current radiation protection paradigm.

- Long-term scientific challenges to the present epistemology of radiation health effects.

4. Status of the IAEA Safety Standards

The Scientific Secretary informed the Commission that two safety requirements (NS-R-3, WS-R-3) and five safety guides (GS-G-4.1, NS-G-1.5, NS-G-1.6, NS-G-3.5 and RS-G-1.6) have been published since the last meeting of the Commission. An additional five safety standards are in the final stages of production (NS-G-1.7, NS-G-1.8, NS-G-1.9, NS-G-1.10 and TS-R-1, 1996 Edition, as amended 2003) and another six standards (GS-G-1.5, NS-G-1.11, NS-G-1.12, NS-G-3.6, NS-R-4 and RS-G-1.6) are being prepared for publication.

5. Implementation of the Action Plan for the Development and Application of the IAEA Safety Standards

5.1 Progress report on the activities relating to the Action Plan

The Scientific Secretary presented a progress report on the activities relating to the Action Plan, informing the Commission of the status of activities that were due for reporting at this meeting.

Action 1: To complete the development of a corpus of thematic and facility specific safety standards. *(Activity 1.1: To review the current corpus of safety standards to determine which additional Safety Requirements and Safety Guides are needed to complete the corpus, and to report to the June 2004 meeting of the Commission. Activity 1.2: To consider the scope for new draft standards at the June 2004 meeting of the Commission.)*

The revised structure was approved with the following modifications and comments:

- III. Management Systems; integrate DS341 into DS339, the committees are requested to consider further integration of the guides at the time of their review for submission to Member States for comments.

- IV. Assessment and Verification; the last title in the list changed to “Probabilistic safety assessment in safety assessment and decision making for nuclear installations”.

- C. Research Reactors; the last title in the list changed to “Application of graded approach concept to research reactors”.

- E. Radiation Related Facilities and Activities; the Commission considered the proposal from RASSC to delete the five titles from the list of planned safety guides. However, a number of members felt that there was a need for guidance in the IAEA safety standards for these facilities. The Secretariat was therefore requested to review the regulatory guidance provided in the Safety Guides developed under the Basic Safety Standards, to determine whether there were gaps in the guidance provided in the IAEA safety standards. As a result of this review the Secretariat should prepare a report on the need for guidance on these five titles, and any other topic identified, which require guidance in

the IAEA safety standards, for consideration by RASSC and the Commission at their next meetings [Annex II, 15.1]. The five titles will remain in the list pending the result of the review by the Commission at its next meeting.

Action 2: To review and revise as necessary those safety standards that are under development so as to introduce the new structure efficiently. *(Activity 2.1: To identify standards, current and under development, that need to be modified to be in accordance with the new structure, and to submit to the June 2004 meeting of the Commission a list of actions to be taken for each of these standards and draft standards and a timetable for these actions. Activity 2.2: To revise the document on the structure of the standards to reflect the decisions made by the Secretariat and the Commission, for presentation at the 2004 General Conference.)*

The Commission was informed that the committees have not proposed any change to the current draft safety standards and would like to complete their current drafts before embarking on the development of new standards. The Commission was also informed that the Secretariat will prepare a revised "Blue Book" on the basis of the structure approved by the Commission at this meeting, in time for distribution at the General Conference.

Action 3: To undertake the thorough review within the Secretariat of all draft standards and related publications for technical and terminological consistency with current standards and other safety related publications before they are submitted to the committees for review. *(Activity 3.1: Progress to be reported to the June 2004 meeting of the Commission.)*

The Commission was informed that an Internal "Steering Committee on Safety and Security Publications" was established in early 2003. The Steering Committee's focus has been on safety standards, reviewing draft DPPs and standards prior to their submission to the committees and the Commission.

Action 5: To put in place a process for the rigorous internal review of Safety Reports and TECDOCs. *(Activity 5.1: For Safety Reports and TECDOCs, to give priority to those that complement and are directly related to safety standards.)*

The Commission was informed that the focus of the Steering Committee is now broadening to cover all safety and security related publications. The priority given to the safety standards and safety related publication has been also reflected in the Department's programme and budget for 2006-2007.

Action 9: To develop a promotion and outreach strategy for communicating on all aspects of safety standards to potential users and others. *(Activity 9.1: To put in place a process for providing Member States with the safety standards (and authoritative translations) in a timely manner and to submit a report to the June 2004 meeting of the Commission.)*

The Commission was informed that the Agency's Publication Section has managed to clear the backlog and has recently published about twenty translated texts of the safety standards. Arrangements are being put in place to expedite the process of translations and their publication.

Action 10: To request members of the Commission and the committees to play a more active part in communicating on and promoting the use of the IAEA safety standards and to share experience in the use they have made of the safety standards. *(Activity 10.1: Members of Commission and the committees to share their experience in the use of safety standards regularly at their meetings.)*

The Commission requested the Secretariat to prepare a proposal for the implementation of this action for consideration at the November meeting [Annex II, 15.2].

6. Presentation and Discussion of Regulatory Issues

The members of the Commission presented recent regulatory issues of significance.

7. Activities of the Committees on Safety Standards

7.1. Nuclear Safety Standards Committee (NUSSC)

Mr. Reiman informed the Commission that at its April meeting NUSSC reviewed the activities related to the Action Plan. Mr. Bevington reported on the progress made since the last meeting and informed the Commission that about half the time of the April meeting was devoted to the structure of the standards. The Commission expressed appreciation for the thorough review of the structure by NUSSC. The proposals of NUSSC were approved with some modifications (see Section 5.1 of this report).

7.2. Radiation Safety Standards Committee (RASSC)

Mr. Robinson reported on the activities of RASSC, including the review of safety standards under development, review of DPPs, structure of the standards and related activities of the Action Plan.

The issue of the development of safety standards for radiation related facilities is addressed under Item 5.1 of this report. The views of RASSC on actions relating to co-sponsorship, periodic review of the standards, consultation with the stakeholders and feedback on the use of standards will be taken into account by the Secretariat upon implementation of the related actions.

7.3. Waste Safety Standards Committee (WASSC)

Mr. Baekelandt reported on the activities of WASSC, including the development of the Safety Guide on Application of the Concepts of Exclusion, Exemption and Clearance (DS161) and the Safety Requirements on Geological Disposal of Radioactive Waste (DS154). Mr. Baekelandt also informed the Commission that WASSC is in general agreement with the structure, but has some concerns regarding integration of DS154 into WS-R-1, the grouping of waste disposal and waste treatment facilities into one area, and the development of the combined safety fundamentals. Mr. Baekelandt also reported that WASSC requested the Secretariat to create links to the Safety Reports and TECDOCs on the website for the Safety Standards for the purpose of Activity 5.1 under Action 5 of the Action Plan.

7.4. Transport Safety Standards Committee (TRANSSC)

Mr. Young presented an overview of the TRANSSC membership and agenda for the recent meeting, including the views of TRANSSC regarding actions provided in the Action Plan.

The Commission was informed that on the advice of the Agency's Office of Legal Affairs (OLA) the Transport Regulations Edition 1996 (as amended 2003) has been submitted to the June 2004 Session of the Board of Governors for approval, OLA is also of the opinion that under current circumstances any change to the regulations must be approved by the Board.

The Commission again expressed concern regarding the suitability of two-year review cycle and the lack of progress with the publication of transport regulations approved in June of 2002. The Commission discussed the implication of the two-year review cycle and agreed to a number of actions relating to the approval process and publication of transport regulations including:

- Publication of the Transport Regulations Edition 1996 (as amended 2003), after the Board approval in June 2004.
- Submission of Transport Regulations Edition 1996 (as amended 2005) to the Board of

Governors in September 2004, for approval for publication as Transport Regulations Edition 2005. In this connection, the Secretariat is requested to draft a preamble to the regulations stating that there are no changes to the design of packages as outlined in the 1996 Edition.

- Publication of results of the next two review cycles (2007 and 2009) as corrigenda under the authority of the Director General (without requiring Board's approval).

- Submission of 2011 edition of transport regulations to the Board of Governor for approval and seek the Board's approval every six years thereafter, unless there is a change to the design of packages in the intervening years.

See also Item 8.1 of this report.

8. Safety Standards

8.1. Regulations for the Safe Transport of Radioactive Material, TS-R-1, 1996 Edition (As Amended 2005), Safety Requirements

Mr. Dicke, Technical Officer for the development of the 2005 transport regulations presented the document and outlined its development. The regulations had been subject to review by TRANSSC.

The Commission endorsed the submission of the regulations to the Board of Governors for approval in September 2004. The Commission also considered preparation of a policy paper that could also be submitted to the board of Governors in September 2004 (see Item 7.4 of this report) [Annex II, 15.3].

8.2. Application of the Concepts of Exclusion, Exemption and Clearance (DS161), Safety Guide

Mr. D. Reisenweaver, Technical Officer for the development of the Safety Guide, presented the document and outlined its development. The Safety Guide had been subjected to review by RASSC, WASSC and TRANSSC. The document has been subject of intense discussion over the past few years; the Commission thanked all those involved for their contribution to the safety guide and for the consensus reached. The Commission endorsed the publication of the Safety Guide with the following change:

- The first sentence of paragraph 4.1 was changed to indicate that a graded approach may be used when using the values of activity concentration and included a reference to paragraphs 5.11 - 5.13. The first sentence now reads "This section provides the values of activity concentration that may be used, taking into account a graded approach (see para. 5.11 - 5.13), for exclusion, exemption and clearance pertaining…"

9. Document Preparation Profiles

9.1. Safety Assessment and Verification (DS348), Safety Requirements

Mr. Metcalf, Technical Officer[1], presented the DPP for the preparation of the Safety Requirements. The DPP had been approved by NUSSC (lead committee), RASSC, WASSC and TRANSSC. The Commission considered the DPP and had before it the written comments of Mr. Abe. Several members pointed out that the scope of the document is too broad and may affect its proper development. The Secretariat was requested to prepare a detailed table of contents for consideration by the Commission at its next meeting in November [Annex II, 15.4].

[1] Two technical officers, one from the Nuclear Safety area and one from the Waste Safety area, have been assigned for the development of the Safety Requirements.

9.2. Management Systems for Nuclear Facilities (DS349), Safety Guide

Mr. Pieroni, Technical Officer, presented the DPP for the preparation of the Safety Guide. The DPP had been approved by NUSSC (lead committee), RASSC and WASSC. The Commission approved the DPP.

9.3. Radiation Protection and Radioactive Waste Management in the Design and Operation of Research Reactors (DS340), Safety Guide

Mr. Hargitai, Technical Officer[2], presented the DPP for the preparation of the Safety Guide. The DPP had been approved by NUSSC, RASSC and WASSC. It was pointed out that appropriate cross-referencing with the Basic Safety Standards and the relevant safety guides in the area of radiation safety should be added. The Commission approved the DPP.

9.4. Core Management and Fuel Handling for Research Reactors (DS350), Safety Guide

Mr. Deitrich, Technical Officer, presented the DPP for the preparation of the Safety Guide. The DPP had been approved by NUSSC. The Commission approved the DPP.

10. Letter to the Director General

The Chairman will write to the Director General informing him of the progress made in connection with DS161 and the concerns of the Commission regarding the approval and publication process of the transport regulations.

11. International Nuclear Event Scale (INES)

Ms. Spiegelberg-Planer informed the Commission of activities over the last two years in connection with INES and the additional guidance for radiation and transport events.

12. Dates and Agenda for the next Meeting

The schedule of the meetings of the Commission and committees for 2004 is:

Commission

15–17	November 2004
6–8	June 2005
28–29	November 2005

Committees

NUSSC:	27–29 October 2004
RASSC:	18–22 October 2004
WASSC:	18–22 October 2004
TRANSSC:	27 September–1 October 2004

The tentative lists of standards to be reviewed at the next meeting of the Commission include DS62, DS154 and DS313.

[2] Three technical officers, one from the Research Reactor area, one from the Radiation Safety area and one from the Waste Safety area, have been assigned for the development of the Safety Guide.

ANNEX I
AGENDA
Fifteenth Meeting of the
COMMISSION ON SAFETY STANDARDS
7-9 June 2004

Meeting Room CO7-IV, IAEA Headquarters, Vienna

1. Opening of the Meeting (14:00)
   T. Taniguchi, DDG-NS

2. Adoption of the Agenda and Report of the 14th Meeting
   L.G. Williams

3. Issues Related to the development and Application of Safety Standards
   - 3.1 Safety and Security Coordination Section; *L Lederman*
   - 3.2 Nuclear Installation Safety Division; *K.E. Brockman, DIR-NSNI*
   - 3.3 Radiation, Transport and Waste Safety Division; *A. J. Gonzalez, DIR-NSRW*

4. Statuses of the IAEA Safety Standards; *A. Karbassioun*

5. Implementation of the Action Plan for the Development and Application of Safety Standards
   - 5.1 Progress Report on the activities relating to the Action Plan; *A. Karbassioun*

6. Presentation and Discussion of Regulatory Issues
   (CSS Members)

7. Presentations and Discussion of Reports of Safety Standards Committees
   - 7.1. Nuclear Safety Standards Committee
     L. Reiman, Chairman/L. Bevington, Scientific Secretary - NUSSC
   - 7.2. Radiation Safety Standards Committee
     I. Robinson, Chairman/T.J. Boal, Scientific Secretary - RASSC
   - 7.3. Waste Safety Standards Committee
     L. Baekelandt, Chairman/K. Hioki, Scientific Secretary – WASSC
   - 7.4. Transport Safety Standards Committee
     C. Young Chairman/M. Wangler, Scientific Secretary - TRANSSC

8. Safety Standards
   - 8.1. Regulations for the Safe Transport of Radioactive Material, TS-R-1, 1996 Edition (As Amended 2005), Safety Requirements
     G. Dicke, Technical Officer
   - 8.2. Application of the Concepts of Exclusion, Exemption and Clearance (DS161), Safety Guide, *D. Reisenweaver, Technical Officer*

9. Document Preparation Profiles

   9.1. Safety Assessment and Verification (DS348), Safety Requirements
   P. Metcalf, Technical Officer

   9.2. Management Systems for Nuclear Facilities (DS349), Safety Guide
   N. Pieroni, Technical Officer

   9.3. Radiation Protection and Radioactive Waste Management in the Design and Operation of Research Reactors (DS340), Safety Guide
   T. Hargitai, Technical Officer

   9.4. Core Management and Fuel Handling for Research Reactors (DS350), Safety Guide, *L.W. Deitrich, Technical Officer*

10. Letter to the Director General

11. International Nuclear Event Scale; *R. Spiegelberg-Planer*

12. Date of the Next Meetings

ANNEX II

ACTIONS ARISING FROM

THE 15th MEETING OF THE COMMISSION

15.1. The Secretariat was therefore requested to review the regulatory guidance provided in the Safety Guides developed under the Basic Safety Standards, to determine whether there were gaps in the guidance provided in the IAEA safety standards. As a result of this review the Secretariat should prepare a report on the need for guidance on these five titles, and any other topic identified, which require guidance in the IAEA safety standards, for consideration by RASSC and the Commission at their next meetings. (Re*f. Item 5.1, 4th bullet under action 1).* **[Action: Secretariat, RASSC]**

15.2. The Commission requested the Secretariat to prepare a proposal for the implementation of action 10 for consideration at the November meeting (Re*f. Item 5.1, under action 10).* **[Action: Secretariat]**

15.3. The Commission endorsed the submission of the regulations to the Board of Governors for approval in September 2004. The Commission also considered preparation of a policy paper that could also be submitted to the board of Governors in September 2004 *(Ref. Item 8.1).* **[Action: Secretariat]**

15.4. The Secretariat was requested to prepare a detailed table of contents (DS348) for consideration by the Commission at its next meeting in November *(Ref. Item 9.1)* **[Action: Secretariat]**

PARTICIPATION

The Commission

A. Oliveira, Argentina
J. Loy, Australia
A. Souza de Assis, Brazil
J.K. Pereira, Canada (sent apologies – unable to attend)
G. Li (sent apologies – unable to attend)
D. Drabova (sent apologies – unable to attend)
K. Ulbak, Denmark
S.B. Abdel-Hamid, Egypt
A-C. Lacoste, France
D. Mayer, Germany
S. Sukhatme, India
K. Abe, Japan
Y-S. Eun, Korea, Republic of
J. Hashmi, Pakistan
A. Malyshev, Russian Federation (sent apologies – unable to attend)
G.A. Azuara, Spain
L-E. Holm, Sweden
U. Schmocker, Switzerland (sent apologies – unable to attend)
L.G. Williams, (Chair), United Kingdom
M. Virgilio, United States of America (sent apologies - unable to attend)

Participants from International Organizations

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

Chairmen of Committees

L. Reiman, NUSSC
I. Robinson, RASSC
C.N. Young, TRANSSC
L. Baekelandt, WASSC
L. Biro, AdSec (sent apologies – unable to attend)

Representatives and associated experts

P. Hawley, J. Gauvain, H. Mizuma, Y. Norihiko, S. Akimoto, Ms. I. Kaliberda, A. Khamaza, O. Romenkova, L. Santoma, H. Pfeiffer, A. Hall, W.D. Travers, I. Schoenfeld

IAEA Staff Members

T. Taniguchi, Deputy Director General, Department of Nuclear Safety and Security
K.E. Brockman, Director, Division of Nuclear Installation Safety (NSNI)
A.J. González, Director, Division of Radiation, Transport & Waste Safety (NSRW)
L. Lederman, Head, Safety and Security Co-ordination Section
L. Bevington, Safety Assessment Section (NSNI)
K. Hioki, Waste Safety Section (NSRW)
M. Wangler, Radiation Safety Section (NSRW)
T. Boal, Radiation Safety Section (NSRW)
G. Dicke, Radiation Safety Section (NSRW)
D. Reisenweaver, Waste Safety Section (NSRW)
P. Metcalf, Waste Safety Section (NSRW)
N. Pieroni, Nuclear Power Engineering Section (NENP)
T. Hargitai, Engineering Safety Section (NSNI)
W. Deitrich, Engineering Safety Section (NSNI)
R. Spiegelberg-Planer, Safety Assessment Section (NSNI)
A. Karbassioun, Scientific Secretary, Safety and Security Co-ordination Section