98-08-17

Advisory Commission on Safety Standards

Fourth Meeting
2–4 June 1998
IAEA Headquarters, Vienna

Action: Comments by Members of ACSS by 30 October 1998

Mailing list: ACSS and members of NUSSAC, RASSAC, TRANSSAC, WASSAC and INSAG for information (see attached list)

Advisory Commission on Safety Standards
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Report of the Meeting

1. Introduction

Participants were welcomed to the fourth Meeting of the Advisory Commission on Safety Standards (ACSS) by Mr. Z. Domaratzki, Deputy Director General, Head of the Department of Nuclear Safety. Dr. Bishop welcomed the participants, in particular those attending for the first time. The agenda for the fourth meeting of the ACSS was approved (Annex I).

In presenting the activities of the Department of Nuclear Safety, Mr. Domaratzki informed the ACSS about the preparation of the department's programme and budget for 1999-2000, pointing out that emphasis would be placed on standards development and research reactor safety. He also briefed the ACSS on the General Conference Resolution on transport of radioactive material and the consideration of the topic by the Board of Governors, stressing that the Agency is not promoting a convention on the topic. In presenting the activities of Division of Nuclear Installation Safety, Ms. Carnino, Director, pointed out that priority is being given to safety standards, strengthening regulatory infrastructure and safety culture. Safety services, in particular the IRRT (International Regulatory Review Team), and INSARR (Integrated Safety Assessment of Research Reactors) missions offered by the Division, have proven to be very popular with Member States. Mr. Webb presented the activities of Radiation and Waste Safety Division, where the highest priority is given to the development of safety standards and supporting documents.

Comments received from Germany and Spain on the report of the third ACSS meeting were discussed. No amendments were made to said report.

2. Activities of the Advisory Committees

The Chairmen of the four Advisory Committees were invited to participate in the ACSS meeting: Mr. Govaerts (NUSSAC), Mr. Creswell (RASSAC), and Mr. Metcalf (WASSAC) were in attendance, Mr. Collins, Chairman of TRANSSAC, could not attend. The activities of the four Advisory Committees were presented by Messrs. Lacey, Mason, Rawl and Raynal. The scientific secretary presented the Status of the IAEA Safety Standards. ACSS members requested a number of clarifications regarding some activities of the Advisory Committees; these were addressed by the Chairmen and the co-ordinator of the area concerned. The following is a summary of the discussions:

Combining titles of published safety guides: The practice of combining selected number of published safety guides into one revised guide is considered generally appropriate for reducing the large number of guides in each area, but the resultant combined titles should be considered carefully in order to avoid a distorted view of the guidance being provided. However, at least in the case of NS 252 "instrumentation and control for systems important to safety" the combination of the published 50-SG-D3 (protection system) and 50-SG-D8 (instrumentation and control system) into one safety guide was considered inappropriate by one member.

Governmental organization: A new structure proposed by NUSSAC was presented for the development of governmental organization safety guides. The new structure foresees the development of a set of five safety guides dealing with nuclear installations (nuclear power plants, research reactors and waste facilities). The proposed titles are: (i) organization of the regulatory body, (old G1); (ii) information to be submitted in support of licensing application, (old G2); (iii) review and assessment, (old G3); (iv) inspection and enforcement, (old G4); (v) Regulations and guides, (old G8 and G9). NUSSAC and WASSAC will be involved in the review of

the safety guides, with NUSSAC having the lead. RASSAC will consider the development of related safety guides for radiation sources and activities.

Very low level waste: The ACSS discussed the issue of management of materials containing very low level waste; the topic will be considered further at the next WASSAC meeting. It was pointed out that consideration of the topic should be well balanced so as to demonstrate that all types of wastes (from very low level to high level waste) can be properly managed.

Illicit trafficking: A number of ACSS members expressed concern regarding the development of NS 61, safety guide on "prevention, detection of and response to illicit trafficking in radioactive materials". The guide is currently with Member States for comments. One of the concerns expressed was that the topic was related to physical protection rather than radiation protection, and addressed actions by the receiving country and not the country of origin. It was also questioned whether the document is suitable for publication in a Safety Standards Series dealing with radiation safety.

Emergency preparedness and response: Mr. Crick presented the plans for the development of a single requirement document on emergency preparedness and response (NS 43). The DPP for the development of the requirements has been considered by RASSAC, TRANSSAC and NUSSAC. WASSAC is yet to review the DPP in June. After this review the DPP will be sent to ACSS members for any final comments. All Advisory Committees will be involved in the review of the requirements with RASSAC having the lead. A plan for development of safety guides in support of the requirement should be prepared by RASSAC and submitted to ACSS for discussion and acceptance.

Exclusion, exemption and clearance: Mr. Mason informed the Commission that a Consultants meeting was in progress, concurrently with the ACSS meeting, to develop the draft safety guide (NS 33) on application of principles for exclusion, exemption and clearance from regulatory control. Understandably, there has been a great deal of interest in this subject and the Secretariat will proceed as rapidly as possible, consistent with an emerging consensus on criteria for regulation. A technical committee meeting to review the draft safety guide is scheduled for 10-14 August 1998.

Radiation and the environment: A discussion paper on protection of the environment was presented to both WASSAC and RASSAC at their most recent meetings. The advice was similar on both occasions, namely that there is a recognition of the need to continue to evaluate the issues in this area, but caution should be exercised in developing guidance material, as an international consensus has yet to develop. The ACSS concurred with this view and recommended that it is too early at present to proceed with a DPP for a safety guide.

DPP's: It was agreed that the DPP's for all safety requirements would come to the ACSS after having been accepted by the appropriate Advisory Committee.

3. Meeting of Chairpersons of ACSS, NUSSAC, RASSAC, TRANSSAC, and WASSAC

Dr. Bishop informed the Commission that a meeting of the Chairs was held on the morning of Tuesday 2 June, in the course of which a number of policy issues in relation to the development of standards were discussed. The issues were also raised at the ACSS; the following is a summary of the issues raised and the result of the discussions:

Interim publication of safety requirements: The Chairmen of the Advisory committees requested ACSS to reconsider a decision made at the third meeting of ACSS regarding interim publication of safety requirements as TECDOC's (report of the 3rd ACSS meeting, section 4, 3rd para.). ACSS agreed and advised the secretariat to proceed with full publication of all approved safety standards. If there are changes to be made to published requirements arising from the development of safety guides, the Advisory Committees should bring these to the attention of ACSS for a decision on early revision.

3

Common glossary: The need for a common glossary of terms for safety standards was underscored by the Chairmen of the Advisory Committees. The ACSS reinforced this necessity and emphasized that the glossary should be compatible with terms used in related conventions. The secretariat informed the Chairmen and the ACSS that a draft Glossary has been prepared and recently submitted to all members of the Advisory Committees and technical staff of the Secretariat involved in the development of safety standards. Comments have been requested by the end of November 1998. A revised draft of the glossary will be prepared on the basis of the comments received. The new draft will be submitted to the ACSS in the spring of 1999.

Availability of safety standards: The issue was raised of making the IAEA safety standards more easily available to experts in Member States (particularly in developing Member States). The secretariat was urged to arrange for free and electronic distribution of the safety standards to requesting experts in the Member States. The secretariat should explore other options for free distribution of safety standards and report back to the ACSS at an appropriate time.

Preparation of safety related documents: The issue was raised as a direct result of the discussion at the 5th meeting of NUSSAC of a draft TECDOC on Application of Quality Assurance to Licensing by the Regulatory Body. ACSS questioned the status and development of such a document, particularly outside the Department of Nuclear Safety. The ACSS was informed that, while the topic of quality assurance falls within the scope of the programme of the Department of Nuclear Energy, the preparation and revision of safety standards on the topic (currently one safety requirement and 14 safety guides) have to undergo the same review process as any other safety standard (i.e., the Advisory Committees and the ACSS). In response to questions, the ACSS was informed that, with the exception of the safety standards, there is neither an external nor an internal Agency-wide review of IAEA publications before they are introduced in the budget and the programme. The ACSS decided to bring the matter to the attention of the Director General (see Section 13).

Should safety guides be written to stand alone: In response to a question in this context, it was pointed out that safety guides should be linked to the requirements and should not interpret or paraphrase the text of the requirements. If there was a need, then a direct quote from the requirement was the preferred solution.

Recommendations to national regulatory bodies: The appropriateness of safety standards making direct recommendations to national regulatory bodies was raised by one of the Advisory Committees. The ACSS expressed the view that if the recommendations were derived from general principles and were not prescriptive, there should not be a problem. Nonetheless, members of ACSS would raise objection to recommendations that are deemed too prescriptive.

Response to comments from Member States: It was pointed out that Member States generally put a lot of effort into preparing comments on the various standards and it was considered inappropriate that no response from the secretariat was forthcoming on any of their comments. The secretariat was requested to prepare a standard acknowledgment letter to individuals from countries which had made comments on the standards.

In addition to the above points, a number of other policy issues were raised, i.e., quality assurance and co-sponsorship of the standards by other international organizations. These will be considered along with other policy issues (see Section 6).

The meeting of Chairs and the presence of the Chairmen of the Advisory Committees at the ACSS meeting was very much appreciated by the members. It was agreed that such a meeting should take place at least once a year, preferably in connection with the June meetings of ACSS.

4. Submission of documents for comments

Due to some problems regarding the flow of documents from the secretariat to the members of ACSS and misunderstandings regarding the action required from the members, the ACSS requested the secretariat to further improve the means of communicating with the members. The following is a set of actions to be

4

initiated by the secretariat for improving the flow of documents with the ACSS, Advisory Committees and the Member States:

- the action requested from the members and the date by which the action is to be completed should be clearly indicated on the cover of each document;
- each document should be accompanied by a list of all of its recipients;
- the secretariat should be able to confirm that the documents sent to the ACCS members have actually been received by them.

5. Endorsement of safety standards by the ACSS

Mr. Vovk, Technical Officer for the development of the Safety Requirements (NS 153) on Near Surface Disposal of Radioactive Waste, presented the document and its development. There were a few written comments from ACSS members which were resolved outside the meeting. ACSS endorsed the submission of the safety requirement to the Board of Governors for approval. The document will now be edited (edited text to be reviewed by Dr. Bishop and the Chairman of WASSAC) and sent for translation into Arabic, Chinese, French, Russian and Spanish before consideration by the Board of Governors for approval.

Eight safety guides approved by the Advisory Committees, were sent to ACSS members (letters of 1998-02-04 and 1998-04-01) for information and comments according to the established procedure. Since the deadline for comments on the safety guides had elapsed prior to the ACSS meeting, comments from a few members of the ACSS were received which were resolved by the technical officers, in consultation with the Chairmen of the Advisory Committees. The safety guides are currently being edited. After clearance of the edited text by the Chairman of the lead Advisory Committee, the safety guides will be sent for publication. The following is the list of the safety guides endorsed by the ACSS for publication:

- Safety assessment for near surface disposal, (NS 166)
- Occupational radiation protection: Application of principles, (NS 69);
- Occupational radiation protection: Assessment of exposure from intakes of radionuclides, (NS 85);
- Occupational radiation protection: Assessment of exposure from external sources of radiation; (NS 12);
- Commissioning of research reactors, (NS 259);
- Maintenance, periodic testing and inspection of research reactors, (NS 260);
- Operational limits and conditions of research reactors, (NS 261);
- Design, operation and safety assessment of spent fuel storage for research reactors, (NS 262).

6. Policy Issues

Owing to the changes in the membership of ACSS since the last meeting, the subgroup in charge of policy issues (see Section 5 and Annex III of the 3rd ACSS report) could not meet. A new subgroup will be established to consider the policy issues and report back to the next meeting. The subgroup will also consider the mandate of the ACSS.

7. Co-ordination with INSAG

The minutes of the thirty-fifth, thirty-sixth and thirty-seventh INSAG meetings were made available to members of ACSS. Dr. Bishop will contact the Chairman of INSAG asking for confirmation regarding the opportunity for ACSS to comment on INSAG reports before they are sent for publication, particularly in connection with the top-level document and update of INSAG-3, as they have reached an advanced stage of development. The letter from Dr. Bishop to the Director General may also touch on the ACSS/INSAG interaction and other aspects of co-ordination (see Section 13).

5

8. "Communication of Nuclear, Radiation, and Waste Safety: a Practical Handbook"

Ms. Wieland presented the report and informed the ACSS of the possibility of preparing a safety guide or a safety report on the topic in the future. It was pointed out that the report did not specify who, between the regulators and the public, the target audience was. It was generally agreed that a document on how regulators should communicate with the public on safety, particularly in case of emergency or incidents would be appropriate. However, discussions on how safe nuclear power or a given facility is or other information which could be considered of a promotional nature, must be avoided.

9. Developing safety culture

Mr. Zhong provided an update of the report on safety culture. The first time the report was presented to the ACSS (Section 3.2, report of the 3rd ACSS meeting) it dealt with the development of safety culture in an organization. The scope of the report was expanded on the basis of the comments from ACSS, to include also consideration of evaluation of safety culture within an organization. The report will be published in the Safety Report Series.

10. Enhancing the effectiveness of peer discussion groups and senior regulators meeting

The effectiveness of the senior regulators meeting held during the general conference depends largely on the speakers, the topics to be presented and the audience. The practice of consulting ACSS for selection of topics to be presented has proven to be very effective. The practice should continue. However, it would be more appropriate to select topics during the November ACSS meetings, rather than in June. Presentation of the results of peer discussion groups should also be considered as a topic for the senior regulators meeting.

11. Topics for Senior Regulators Meeting

A list of topics was proposed by the ACSS Members for consideration for the Senior Regulators Meeting. Each topic proposed was discussed and a 'short list' drawn up. A complete list of the topics proposed is attached hereto as Annex II for future reference. The general theme of the meeting will be "Regulatory Challenges". Following is the list of topics selected:

- Future of regulatory practices (one presentation based on report prepared by CSNI);
- Status of IAEA Safety Standards Programme (one presentation);
- Assessing regulatory effectiveness (3 presentations);
- Research facilities (3 presentations).

Mr. Domaratzki will send out a request for presentations.

12. Reporting of ACSS activities

It was generally agreed that ACSS should prepare an annual report. The first report will cover a two-year period.

13. Letter to the Director General

ACSS decided to inform the Director General of its views on the following topic:

6

- co-ordination with INSAG;
- concerns over the development of the quality assurance document and the lack of an Agency-wide review process of proposed titles for IAEA publications; and
- free distribution of published standards to requesting experts in member states.

A letter will be drafted by Dr. Bishop and circulated by the secretariat to the members of ACSS for comments in early July.

14. Dates and agenda for the next meeting

The next meeting of ACSS is scheduled for 23-25 November 1998, the meeting will start at 2 p.m. on Monday 23 November. The dates of the ACSS and the Advisory Committee meetings for the remainder of 1998 are as follows:

ACSS	23-25 November
RASSAC	7–10 September
NUSSAC	12–14 October
WASSAC	30 November–4 December

7

ANNEX I

AGENDA

Fourth Meeting of the
ADVISORY COMMISSION ON SAFETY STANDARDS
2 - 4 June 1998
Meeting Room CO7-VI, IAEA Headquarters, Vienna

1. Opening of the Meeting (14:00)
   Z. Domaratzki DDG-NS

2. Introduction, Adoption of the Agenda and Summary Record of the Third ACSS Meeting
   Dr. Bishop

3. Overview of the Activities in the Department of Nuclear safety
   Z. Domaratzki DDG-NS, A Carnino DIR-NSNI, G. Webb, Acting DIR-NSRW,

4. Presentation and discussion of reports of Safety Standards Advisory Committees

   4.1 Nuclear Safety Standards Advisory Committee
   P. Govaerts/D. Lacey - NUSSAC
   4.2 Radiation Safety Standards Advisory Committee
   L. Creswell/C. Mason - RASSAC
   4.3 Transport Safety Standards Advisory Committee
   R. Rawl - TRANSSAC
   4.4 Waste Safety Standards Advisory Committee
   P. *Metcalf/M. Raynal - WASSAC*
   4.5 Status of the IAEA Safety Standards
   A. Karbassioun

5. Safety Requirements - Near Surface Disposal of Radioactive Waste
   P. Metcalf WASSAC Chairman/I. Vovk, Technical Officer

6. Policy Issues

7. Co-ordination with INSAG

8. Communication of Nuclear, Radiation, Transport and Waste Safety: A Practical Handbook
   P. Wieland

9. Developing Safety Culture
   W. Zhong

10. Presentation and Discussion of Regulatory Issues (*ACSS Members)*

11. General Discussion on Enhancing the Effectiveness of Peer Discussion Groups and the Senior Regulators Meeting

12. Topics for Senior Regulators Meeting (GC, September 1998)

13. Reporting of ACSS Activities (Annual or biannual)

14. Any other business

15. Report of the Meeting and Recommendations

16. Date of next meeting and closing

8

ANNEX II
Proposed topics for the Senior Regulators' Meeting

- Maintenance of licensing and design basis when facilities are being modified;
- General safety management (safety culture vague and quality assurance concrete);
- Computers and year 2000;
- Nuclear safety policy in 21st century: future direction, regulatory practices, resources, regulatory process and techniques;
- Research reactors and research facilities in general (from pure research to commercial activities);
- Future process for safety standards (1999), what has been achieved, where are we heading and the effort required;
- OECD/NEA Committee on Nuclear Regulatory Activities, recent report on future of regulatory practices;
- Integration of radiation and nuclear safety within the plant (radiation protection of workers versus plant renovations; how to balance)
- Growing use of contractors and how it is handled by regulators;
- How to maintain the expertise in with the nuclear organization;
- Assessment and effectiveness of regulatory process;
- Aging reactors and pressure vessel embrittlement;
- Safety culture how to establish and evaluate;
- ICRP and national recommendation (high cost of backfitting for existing equipment), optimization.

9

PARTICIPATION

D. Beninson, Argentina
P. Burns, Australia
A. Bishop (Chair), Canada
R.M. Duncan, Canada
B. Xiong, China
M. Asty, France
R.D. Wendling, Germany
F.W. Krüger, Germany
K. Sumita, Japan
M. Hirano, Japan
Y. K. Lim, Korea, Republic of
A. Alonso, Spain
P. Trueba-Bellido, Spain
L-E. Holm, Sweden
L.G. Williams, United Kingdom
P.W. Dickenson, United Kingdom
J. Callan, United States of America
D. Lange, United States of America
J. Valentin, ICRP
P. Govaerts, Chairman of NUSSAC
L. Creswell, Chairman of RASSAC
P.E. Metcalf, Chairman of WASSAC

IAEA Staff Members

Z. Domaratzki, Deputy Director General, Department of Nuclear Safety
A. Carnino, Director, Division of Nuclear Installation Safety (NSNI)
G. Webb, Acting Director, Division of Radiation & Waste Safety (NSRW)
D. Lacey, Safety Assessment Section
C. Mason, Radiation Safety Section
M. Raynal, Waste Safety Section
R. Rawl, Radiation Safety Section
M. Crick, Division of Radiation & Waste Safety (NSRW)
I. Vovk Waste Safety Section
P. Wieland, Safety Co-ordination Section
W. Zhong, Safety Co-ordination Section
A. Karbassioun, Scientific Secretary, Safety Co-ordination Section

10