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R1. Opening of the Meeting

The meeting was opened by Mr M. Pinak (SH-RSM), who welcomed all participants. Mr Pinak referred to the two important safety guides, both of which are of importance for many member States, which are on the agenda for approval. He also referred to the discussion document on standards for radionuclides in foodstuffs and drinking water, which had been prepared by a working group of international organizations in cooperation with international experts, and asked RASSC for a clear direction on how this work should be further developed. Referring to the implementation of the International Basic Safety Standards, Mr Pinak noted the recent successful workshop for Latin America and the Caribbean held in Montevideo, Uruguay and highlighted the TECDOC on implementation of the new dose limit for the lens of the eye. He thanked all national representatives and International Organizations for their on-going support for, and constructive contribution to, the safety standards programme of the Agency.

R2. Chairman’s Remarks

Mr G. Massera thanked Mr Pinak for his introductory comments. He welcomed new RASSC members Ms Ishikawa from Japan and Ms Tijsmans from the Netherlands (both in attendance) and Ms Iyulim from Malaysia (not in attendance). Apologies were received from Algeria, Bulgaria, Denmark, India, Malaysia, Sweden, IEC and ISO.

R3. Adoption of the Agenda

The agenda was adopted without any change.

R4. Administrative Arrangements

Mr T. Colgan drew attention to the location of the emergency exits, introduced the administrative support staff for the meeting and summarized the administrative arrangements.

R5. Chairman’s Report of RASSC 33

No comments were received on the draft report posted on the RASSC website and there were no additional comments raised from the floor. The report of the RASSC 33 meeting was adopted.

R6. Actions arising from RASSC 33

Mr T. Colgan reported on the action items from the RASSC 33 meeting. The one safety guide and three DPPs approved at RASSC 32 were all endorsed by the CSS at its meeting in October 2012. The one safety requirements document approved for submission to Member States has been issued for
120 day comment and the resolution of comments with a deadline of 31 January 2013. All other action items had been addressed and, where appropriate, will be considered at this meeting.

R7. Control of Foodstuffs Contaminated as a Result of a Nuclear or Radiological Emergency

R7.1 Review of Guideline Values for Radionuclides in Foodstuffs in the Codex Alimentarius

Mr C. Blackburn presented a review of the Guideline Levels for Radionuclides in Foodstuffs in the Codex Alimentarius General Standard for Contaminants and Toxins in Foods and Feed. Guideline Levels have been developed for four sets of representative radionuclides and for two food groups - infant foods and non-infant foods - and assume that 10% of the foodchain is contaminated. He emphasized the difference between Maximum Levels (MLs) and Guideline Levels (GLs) in the Codex System where a GL is maximum level of a substance in a food which is recommended by the Codex Alimentarius Commission to be acceptable for commodities moving in international trade. When a GL is exceeded, governments should decide whether and under what circumstances the food should be distributed within their territory or jurisdiction. When radionuclide levels in food do not exceed the corresponding GL, the food should be considered as safe for human consumption. In contrast an ML is the maximum concentration of a contaminant in food recommended by the Codex Alimentarius Commission to be legally permitted in that commodity and establishing MLs tend to be the preferred format of a Codex Standard.

In July 2012, the Codex Alimentarius Commission approved the establishment of an electronic working group under the Codex Committee on Contaminants in Foods (CCCF) to review the Guideline Levels. At its meeting in April 2013, the CCCF decided to suspend its work pending the outcome of the review initiated by RASSC. The issue will be discussed again by the Codex Alimentarius Commission in July 2013.

R7.2 Report of the RASSC Working Group on Foodstuffs

Based on discussions that took place at the 32nd and 33rd meetings of RASSC, the Secretariat established an Inter-Agency working group of international organizations to document the various international standards that relate to radioactive contamination of food and drinking water, the basis on which they have been derived and the circumstances in which they are intended to be used. The working group, with representation from EC, FAO, OECD/NEA, WHO, Codex Alimentarius and ICRP (as observers) met in May 2013, together with experts from Belarus, Ireland, Japan and the Russian Federation. The discussion paper "International Standards Related to Food and Water Contaminated with Radionuclides" prepared by the working group was presented by its technical officer, Mr I. Gusev.

Mr Gusev described the complexity of the current system of standards, which cover emergency exposure situations, existing exposure situations and international trade. A well-developed framework exists for use in emergencies, but less so in the case of existing exposure situations.

The various international standards that exist can be summarized as follows:
(1) Drinking water standards established by the WHO (Guidelines for Drinking Water Quality, Chapter 9) apply only to existing exposure situations and have been derived primarily to address natural radionuclide concentrations, although Guideline Levels have been developed for some artificial radionuclides such as Cs-137, Cs-134, Sr-90, I-131, Am-241 and Pu-239. The drinking water guidelines are based on lifetime consumption and an individual effective dose of 0.1 mSv in any year;

(2) Guideline Levels for foodstuffs (but not for drinking water) have been developed by the Codex Alimentarius Commission (CODEX STAN 193-1995) and apply to food in international trade contaminated as a result of a radiological or nuclear emergency, without a time limit;

(3) The IAEA has developed Operational Intervention Levels (OILs) for both food and drinking water for use in an emergency exposure situation in areas directly affected following a nuclear or radiological accident. These are documented in the IAEA safety standard "Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency ' (GSG-2). OILs are derived on the basis of an annual effective dose of 10 mSv from the consumption of contaminated food and water;

(4) The International Basic Safety Standards requires Member States "to establish specific reference levels for exposure due to radionuclides in [...] food, feed and drinking water, each of which shall typically be expressed as, or based on, an annual effective dose to the representative person generally that does not exceed a value of about 1 mSv" taking into account the Codex Alimentarius and the WHO Drinking Water Guidelines.

Mr Gusev reported that the working group had identified a number of gaps and inconsistencies in the existing standards. Guidance material should be developed to better explain the existing standards and how they should be applied, but overall it does not appear that new values of activity concentration need to be developed. The working group also identified that successful implementation relies on effective coordination between the different official bodies responsible for food, health, trade and radiological safety, there is therefore a need for greater cooperation at national level between the various responsible organizations.

R7.3 Discussion

RASSC thanked the Secretariat and the members of the working group for preparing the discussion document, which was considered a good first step towards a more uniform and harmonized approach by Member States. It was noted that, food safety is a very sensitive issue in the public mind. However, there is no immediate priority to finalize work on these issues and the appropriate time should be given to ensuring a balanced and comprehensive approach.

RASSC recognized the different issues that will need to be considered in the accident State, affected States and non-affected States in the aftermath of a nuclear or radiological emergency and that different approaches might be necessary. However, there should a harmonized framework in place that would allow Member States establish an appropriate national approach. It was noted that such an approach was possible without the need to establish maximum permissible concentrations in foodstuffs, but that these were clearly required for international trade. RASSC also considered that a similar approach should apply to the control of drinking water as to the control of foodstuffs in existing exposure situations.
Japan noted a small number of typographical and syntax errors in the document and Belgium suggested that additional tabular resumes of data would improve clarity. There was general agreement that a new set of activity concentrations to be used in existing exposure situations was not needed. Some RASSC members underlined the difficulty they were having in establishing an appropriate national framework and the associated communication problems with the public.

RASSC underlined the importance of agreement between the various international organizations responsible for the establishment of standards as the best means of ensuring uniform interpretation and application by Member States. As such, RASSC asked the Secretariat to undertake further work on the discussion document to improve its clarity, to include additional material comparing the approaches of the various international organizations (dose criteria, grouping of radionuclides, food groups etc.) and to bring forward specific recommendations to address the gaps already identified in the international standards. It was agreed that RASSC members would provide any additional comments on the current document by 31st July 2013.

In addition, RASSC asked the Secretariat to consider the need to develop international standards for radionuclides in feedstuffs and medicinal plants, and to bring forward a proposal for control of non-food commodities contaminated as a result of a nuclear or radiological emergency.

**Action:** The Secretariat to finalize the discussion document "International Standards Related to Food and Water Contaminated with Radionuclides" for discussion at the next RASSC meeting in November 2013.

**Action:** The Secretariat to develop a proposal for developing guidance on the control of non-food commodities contaminated as a result of a nuclear or radiological emergency.

### R8. Safety Standards for Approval


Mr T. Boal reviewed the development of the document. As agreed at RASSC 33, the text of para. 2.5 on alternative technologies was amended to make it consistent with similar text in DS458 and Annex 1 was revised. Subsequent comments received through the RASSC website were also accepted.

Late comments were received from Australia to the effect that the use of transmission scanners for the identification of drugs being carried within a person should be included in the safety guide as both a category 1 and a category 2 practice. Belgium supported this change as it is consistent with trials currently being undertaken.

The ILO asked that para. I-16 of Annex 1 be amended to reflect the current situation in the United States whereby backscatter devices are no longer used for the screening of airport passengers. The United States pointed out that this decision was based on a direction from Congress to employ technology that afforded greater privacy to individuals being screened. The ILO also noted the concerns of drivers who were required to remain in vehicles while the vehicles were being screened and asked that a footnote to this effect be added to Annex 3.

RASSC agreed to all these changes being made and approved DS401 for submission to the CSS for endorsement.
Action: The Secretariat to submit DS401 to the Commission on Safety Standards for endorsement

R8.2 Draft Safety Guide: Protection of the Public against Exposure Indoors due to Natural Sources of Radiation (DS421)

Mr T. Boal reviewed the 236 comments received from 12 Member States and two International Organizations, as well as a further 76 comments received from Germany through the RASSC website. Mr Boal also discussed the editorial changes proposed by the technical editors. The main changes accepted were (1) to include the word "radon" in the title of the document; (2) to base the document on the activity concentration of radon and to refer to the dose conversion factor only as a footnote in the introduction; and (3) for consistency and clarity, to use “corrective action” when referring to existing buildings and “preventive action” when referring to new buildings. Some proposed changes that were inconsistent with the wording in the BSS and a request from the technical editor to remove some explanatory material were not accepted.

Japan referred to section 4 and Annex 6 dealing with the control of building materials and considered that the flexibility afforded by the wording in the BSS (which refers to a reference level "of about 1 mSv") was not adequately reflected in the text; Japan felt that the approach in DS421 was more akin to a limit of 1 mSv rather than a reference level. Mr Boal agreed to meet separately with the representative from Japan to make the necessary adjustments to the text.

The WHO indicated its intention to cosponsor the document and indicated that this could only be considered once the final text to be forwarded to the CSS was available. The WHO also asked for a change to the text of para. 3.17 that refers to the interaction between radon reduction policies and tobacco cessation programmes.

RASSC agreed to the changes requested and approved DS421 for submission to the CSS for endorsement.

Action: The Secretariat to amend the title of the safety guide and submit DS421 to the Commission on Safety Standards for endorsement

Action: The Secretariat to formally invite WHO to cosponsor DS421.

R9. Control of Medical Exposures

R9.1 Report of the International Conference "Radiation Protection in Medicine: Setting the Scene for the Next Decade"

Mr O. Holmberg reported on the International Conference "Radiation Protection in Medicine: Setting the Scene for the Next Decade" which took place in Bonn, Germany in December 2012 and was co-sponsored by the WHO. In recent years, medical exposures have been overtaking natural background radiation as the largest contributor to collective dose, in particular in developed States. In addition, it is estimated that up to 40% of exposures may be unjustified and, in recent years, there has been an increasing frequency of early health effects and deaths compared with other exposure pathways.
The Conference was attended by 536 participants from 77 member States and 16 International Organizations and had the following objectives

(1) To indicate gaps in current approaches to radiation protection in medicine;
(2) To identify tools for improving radiation protection in medicine;
(3) To review advances, challenges and opportunities in the field of radiation protection in medicine; and
(4) To assess the impact of the International Action Plan for the Radiation Protection of Patients, in order to prepare new international recommendations, taking into account newer developments.

All presentations are currently available at www.rpop.iaea.org. The Conference Proceedings are presently being finalized and will be published in due course.

A "Bonn Call-for-Action" has been developed based on the report prepared by the Conference President. It contains 10 main actions and 48 sub-actions considered essential for strengthening radiation protection in medicine with the ultimate aims to

(1) strengthen the radiation protection of patients and health professionals overall;
(2) attain the highest benefit with the least possible risk to all patients by the safe and appropriate use of ionizing radiation in medicine;
(3) aid the full integration of radiation protection into health care systems;
(4) help improve the benefit/risk-dialogue with patients and the public; and
(5) enhance the safety and quality of radiological procedures in medicine.

The Bonn Call-for-Action will be integrated into the existing International Action Plan and will guide the work of the Agency, and others, in this area for the foreseeable future.

**R9.2 Patient Perspective on Radiation Protection in Medicine**

"Patients for Patient Safety" is global network with approximately 270 members in 52 States which aims to incorporate the views of the patient in all levels of healthcare to empower and facilitate patients and their families to improve patient care and safety. Many members have personal experience of serious illness themselves, or among their close family and friends, which could have been better managed by the healthcare system.

Ms K. Kirk related her personal experience of being diagnosed with cancer and the subsequent treatments received over several years. Ms Kirk noted that healthcare is a human system dealing with human beings; patients are vulnerable in that they lose the ability to cope, they don't understand the technical language used by medical professionals and they don't question.

Ms Kirk summarized the current situation as follows

(1) There is a low level of patient understanding – which contributes to overuse and underuse;
(2) We need effective methods to communicate risks and benefits;
(3) Knowledge gaps prevent patients from assessing options;
(4) Patients and the wider public unaware of the risks associated with imaging;
(5) Communication gaps: the professionals don’t know what the patients don’t know; and
(6) The patients don’t know what to ask.
Educated patients have a higher survival rate from serious illness and their personal experiences give a unique insight into the healthcare system that can be used as an instrument for improvement. In addition, when accidents occur it is important that an adequate safety culture is in place so that appropriate lessons are learnt. Ms Kirk urged all regulators to put procedures and regulations in place to ensure that the views of patients are taken into account in the delivery of healthcare.

**R9.3 Patient Safety Learning and Strengthening in Medical Uses of Radiation – IAEA Resources available for Member States**

Ms D. Gilley summarized the work programmes managed by the Protection of Patients Unit, covering the following issues

1. the Radiation Protection of Patients website, which receives approximately 320,000 visits annually;
2. training material relevant to regulators, healthcare professionals, patients and the public;
3. development of the safety guide "Radiation Protection and safety in the Medical Uses of Ionizing radiation", which is being developed jointly with PAHO and WHO;
4. the "10 pearls" series of posters for professionals and patients on fluoroscopy and CT examinations are available in 18 languages;
5. the ISEMIR international database of interventional cardiology, which provides information on doses per procedures and allows individual facilities to identify best practices and to benchmark their own operations;
6. The SAFRAD (SAFety in RADiological procedures) voluntary reporting system where patient’s dose report and relevant data are included in an international database when these patients are submitted to defined trigger levels or events in fluoroscopically-guided diagnostic and interventional procedures;
7. SAFRON, the safety reporting and learning system for safety-related events in radiotherapy has the purpose to enable learning from incidents and "near-misses" through sharing of knowledge and corrective actions with other radiotherapy centres, in anticipation that this can reduce future errors.

Full details can be found on the website www.rpop.iaea.org.

**R10. Implementation of the International Basic Safety Standards**

**R10.1 Draft TECDOC: New Dose Limit for the Lens of the Eye**

Mr T. Boal reminded RASSC of the new occupational dose limit for the lens of the eye that is included in the International BSS and of the Technical Meeting held in October 2012 to discuss the implications and implementation of the new limit. It was subsequently decided to summarize the outcome of the Technical Meeting in a TECDOC, a draft of which was developed in cooperation with consultants and circulated to all participants. A total of 310 comments were received from 21 individuals and organizations; the resolution table was posted on the RASSC website in June 2013.

It was agreed that any specific comments from members should be submitted in writing to Mr Boal by 31 July. RASSC noted the importance of the TECDOC to Member States and agreed that the TECDOC should be published as soon as possible and be disseminated widely.
**Action:** The Secretariat to take into account any comments received and proceed with finalization and publication of the TECDOC on the new dose limit for the lens of the eye.

**R10.2 Report on Meeting of the Inter-Agency Committee on Radiation Safety (IACRS)**

Mr T. Colgan reported on the meeting of the Inter-Agency Committee on Radiation Safety (IACRS) that had taken place the previous day and, specifically, on the work of the IACRS Task Group on the Implementation of the International Basic Safety Standards.

The Chair of IACRS is presently with UNSCEAR and will pass to FAO in mid-2014. UNSCEAR is prioritizing the review of the IACRS Terms of Reference and the restructuring of the IACRS website. The recent meeting also discussed the joint work to review standards for control of foodstuffs and drinking water in the event of a nuclear or radiological emergency and identified the need to develop criteria for the control of non-food products.

The IACRS Task Group has decided to develop a strategy to assist Member States with the implementation of the International BSS. A draft document will be prepared by the IAEA covering issues such as (1) regional and national workshops; (2) online training materials; (3) information pamphlets; and (4) experts. IAEA will circulate the draft to TG members by mid-September.

The IACRS Task Group also confirmed the potential co-sponsorship of a number of safety guides supporting the BSS as follows:

1. DS421: Protection of the Public against Exposure Indoors due to Natural Sources of Radiation (WHO). DS421 has been submitted to RASSC for approval at its meeting from 2-5 July 2013;
2. DS453: Occupational Radiation Protection (ILO). DS453 is expected to be submitted to RASSC for review at its meeting in November/December 2013;
3. DS458: Radiation Protection and Regulatory Control for Consumer Products (EC and NEA/OECD). DS458 will be submitted to RASSC for approval at its meeting in November/December 2013;
4. DS399: Radiation Safety in Medical Uses of Ionizing Radiation (ILO, PAHO and WHO). It is expected that DS399 will be submitted to RASSC for review at its meeting in June 2014;
5. DS427: Radiological Environmental Impact Assessment for Facilities and Activities (UNEP). DS427 is expected to be submitted to NUSSC, TRANSSC, RASSC and WASSC for review at their meetings in the 4th quarter of 2013;
6. DS432: Radiation Protection of the Public and the Environment (UNEP). DS432 is expected to be submitted to NUSSC, TRANSSC, RASSC and WASSC for review at their meetings in the 4th quarter of 2013; and
7. DS442: Regulatory Control of Radioactive Discharges to the Environment (UNEP). DS442 is expected to be submitted to RASSC and WASSC for review at their meetings in June 2014.

**R10.3 Report on BSS Workshop in Uruguay**

Mr T. Colgan reported on the Second Regional Workshop for Latin America and the Caribbean on the Implementation of the International Basic Safety Standards that took in Montevideo, Uruguay from
26 to 31 May 2013. The workshop was attended by 52 participants from 17 IAEA Member States and three non-IAEA Member States.

The topics covered in the workshop were (1) control of medical exposures (1.5 days); (2) regulatory control of NORM (1.0 days); (3) new dose limit to the lens of the eye (0.5 days); (4) national radon strategies (0.5 days); (5) dose constraints (0.5 days); (6) consumer products (0.5 days); and (7) emergency preparedness and response (0.5 days). The format, which was highly interactive, was very successful and will be followed in future regional workshops.

A full report is available on the RASSC website.

**R11. Development of the Metal Recycling Code of Conduct**

**R11.1 Update on Technical Meeting to Develop the Code of Conduct on Metal Recycling**

The accidental melting of a Cs-137 source in 1998 in Spain resulted in an airborne release, the production of 270 t of contaminated dust and an estimated $26M in clean-up costs. Subsequently, a voluntary agreement (referred to as the “Spanish Protocol”) was established between national authorities, relevant private companies, and trade unions to minimize the possibility of future similar events. Scrap metal is widely traded internationally and many States feel that radioactive material that has been incorporated into imported scrap metal is a significant and recurrent problem. Furthermore, there are no legal instruments in place that address issues such as notifications that radioactive material has been discovered, radiation monitoring and return of the consignment to the country of origin. Such issues were discussed at an international conference held in Tarragona in 2009, which called for a “binding international agreement between governments to unify the approach to trans-border issues concerning metal scrap containing radioactive material”.

The third Open-Ended Meeting to develop a Code of Conduct on Metal Recycling was held in Vienna from 25 February to 1 March 2013. Consensus was agreed, except for the general objections of the Russian Federation and two suggested text changes from the United States. The Board of Governors and the 2013 General Conference will be informed of the outcome and further work is dependent on the wishes of Member States, as expressed in the General Conference Safety Resolution that is presently being prepared.

**R12. End of Term Report**

**R12.1 Three Year Report of RASSC 2011-2013**

Mr T. Colgan reviewed the 2008-2010 three-year report and proposed that the 2010-2012 report should follow a similar structure. Specifically, he recommended the following topics should be covered:

1. New administrative procedures adopted for the term;
2. Work undertaken in response to the Fukushima accident;
3. Implementation of the International BSS;
4. Cooperation with other Safety Standards Committees and with the Nuclear Security Guidance Committee;
5. An annex summarizing the status of all safety standards dealt with during the term (the same annex should be used by the other Safety Standards Committees);
6. Progress in addressing the key issues identified by the previous RASSC; and
(7) A list of key issues for the incoming RASSC.

In relation to future challenges and key issues to be taken up by the new RASSC, the following topics were recommended

(1) finalization and implementation of the safety guide on radiation protection in medicine (DS399);
(2) review and revision of safety guides in the light of the Fukushima accident;
(3) the need for a roadmap to better integrate safety and security;
(4) control of non-food commodities contaminated as a result of a nuclear or radiological emergency;
(5) transition from an emergency exposure situation to an existing exposure situation;
(6) application of the principle of optimization to remediation;
(7) the management of finished products manufactured from contaminated scrap metal; and
(8) addressing individual radiosensitivity within the system of radiological protection.

RASSC accepted the proposals on the structure of the three-year report and agreed to consider a draft text at its next meeting.

Action: The Secretariat to prepare a draft three-year report for the sixth term to be discussed at RASSC 35.

R13. Reports from International Organizations

Written submissions were received from International Organizations in advance of the meeting and were made available on the RASSC website. No oral presentations were made and there were no specific questions on the available reports.

Mr J. Loy noted that the ICRP Second International Symposium on the System of Radiological Protection will take place in Abu Dhabi, UAE 22 to 24 October 2013 and is supported by the Federal Office for Nuclear Regulation (FANR).

Mr A. Janssens reported that discussions at the Working Party on Atomic Questions on the EU BSS have concluded with a high degree of unanimity achieved. The Directive has been forwarded to the European Parliament for its opinion. After approval by the Council, Member States will have four years within which to transpose the Directive into national legislation.

R14. Any Other Business

There was no other business.

R15. Dates of Future Meetings

The next RASSC meeting (RASSC 35), which will include a joint session with WASSC, will take place during the week 18-22 November 2013.

R16. Closing of the Meeting

The meeting was closed by the Chairman, Mr G. Massera.
REPORT OF THE JOINT SESSION

Waste Safety Standards Committee (WASSC) - Thirty-fourth Meeting
and
Radiation Safety Standards Committee (RASSC) – Thirty-third Meeting
3-5 July 2013

RW1. Opening of the Meeting

The meeting was opened by Mr P-S. Hahn (DIR-NSRW) who welcomed all participants to Vienna. Mr Hahn noted the highly successful between the two Committees over several years and expressed the thanks of the Agency for the high quality of advice and direction received from both RASSC and WASSC.

Mr Hahn referred to the two International Experts Meetings "Decommissioning and Remediation after a Nuclear Accident" (IEM4) which was held in January 2012 and "Radiation Protection after the Fukushima Daiichi Nuclear Power Plant Accident" (IEM6) which will take place in February 2013. One innovative aspect of IEM6 is the emphasis on capacity-building by encouraging maximum participation by young radiation protection professionals from all parts of the world. Both meetings are organized under the Nuclear Safety Action Plan and the outputs will make an important contribution to the work of the Agency in both radiation protection and waste management for the foreseeable future. While NSRW will continue to support work in responding to the Fukushima accident, it is important that this does not inhibit NSRW’s ability to discharge its on-going responsibilities in the area of radiation, transport and waste safety.

Finally, Mr Hahn referred to the imminent departure of Magnus Vesterlind, Head of the Waste and Environmental Safety Section. He thanked Mr Vesterlind for his dedication and professional contribution to the work of the Agency involvement in this position and wished him success in his future personal and professional endeavours.

RW2. Chairmen’s Remarks

The joint Chairmen, Mr G. Massera (RASSC) and Mr G. Williams (WASSC) welcomed all participants and thanked Mr Hahn for his opening remarks. They also referred to the important issues to be addressed during the meeting.

Mr Williams highlighted some of the recommendations that emerged from IEM4 and where there is a strong interface between both RASSC and WASSC, namely

(1) the need to strengthen the Agency's work programme to establish criteria to allow affected areas return to normal conditions. Defining "normality" requires both objective and subjective decisions and needs to take account of societal aspirations;
(2) communication of what is "safe", as well as what is "clean" in terms of remediation;
(3) while not compromising a high level of safety and a strong regulatory framework, to be pragmatic in finding solutions for communicating with the public, and to involve interested parties at early stages of development of the activities;
(4) to avoid the apparent relaxation of dose limits in the aftermath of an accident;
(5) early engagement with interested parties and the public to provide evidence that remediation plans are in place before an accident occurs; and
(6) consistency in dose criteria for the "return to normality", especially in relation to standards for food, drinking water and external dose rates.

RW3. Adoption of the Agenda for the Joint Session

The agenda was adopted with a change in the title of item RW10.1 to “Current Issues of Radioactive Waste Management in Japan”, to be presented by Mr Oue and Ms Moritani.

RW4. Administrative Arrangements for the Meeting

There were no additional administrative arrangements in addition to the ones mentioned in each committee meeting.

RW5. General Safety Standards and Related Issues

RW5.1 Feedback from the Commission on Safety Standards (CSS 33)

Mr D. Delattre reported on the 33rd meeting of the Commission on Safety Standards and noted that four safety standards and three DPPs were approved. Other items related to the CSS meeting are addressed elsewhere in the minutes.

RW5.2 Feedback from the Meeting of the Five Chairs

Mr G. Williams noted three items discussed at the meeting of the Chairs of the four Safety Standards Committees and the Chair of the Nuclear Security Guidance Committee (NSGC) that took place on 18 March 2013, as follows

(1) The discussion at the NSGC in relation to the safety guide "Radiation Safety in Well Logging" (DS419) resulted in a conclusion from NSGC to remove all text describing the interface between safety and security. The Chairs of RASSC and WASSC considered that restricting the management of safety/security interfaces by making only cross-references to the relevant publications in the Nuclear Security Series was not consistent with the views of both Committees. In the Meeting of the Five Chairs it was agreed to refer the document for a second time to the NSGC with a proposal on how to describe the nature of the safety/security interface but to refrain from the use of "should" statements in relation to security matters. Mr Delattre confirmed that this has been agreed to by the NSGC; the appropriate text will now be prepared and the draft of DS419 can be considered by the NSGC at its next meeting in October 2013 and by RASSC and WASSC at their next meeting in November 2013;

(2) The concerns raised by ENISS in relation to the safety requirements document "Addendum to Safety Requirements NS-R-5" (DS439) have been resolved through discussion with the NUSSC Chair. It was noted that the practice of bringing significant late comments is not to be encouraged and comments should be submitted two months in advance of the meeting of the first Committee to review the document;

(3) The NSGC has indicated that it feels uncomfortable in being asked to "approve" safety standards. Consequently it has been agreed that the NSGC will "clear" safety standards and the Safety Standards Committees will "clear" documents in the Nuclear Security Series. All
four Safety Standards Committees will continue to "approve" safety standards and the lead Committee will be responsible for addressing any areas of disagreement between the Committees.

**RW5.3 Feedback from the Interface Group**

Mr D. Delattre reminded the Committees that all documents are *a priori* regarded as interface documents, unless it can be justified otherwise. Since September 2012, a further nine documents have been identified as having a safety/security interface: these are DS472, DS473, DS475 and DS477 in the Safety Standards Series and NST020, NST041, NST043, NST005 and NST009 in the Nuclear Security Series. All five Nuclear Security Series documents have interfaces with both RASSC and WASSC.

Canada noted that existing safety standards may be inconsistent with planned safety standards in the way in which they address the safety/security interface. Mr Delattre acknowledged that this is indeed the case but stated that this cannot be addressed until the documents in question are reviewed.

**RW5.4 Report of the Nuclear Security Guidance Committee**

The Nuclear Security Guidance Committee (NSGC) was established in March 2012 and held its first meeting in June 2012. Two further meetings were held in December 2012 and May 2013. The fourth meeting will take place in October 2013.

The workload of the NSGC to date has involved clearance of 33 safety standards and approval of 13 Nuclear Security Series documents. SPESS B and SPESS C have been updated so that they now apply also to nuclear security documents. A new SPESS A is being developed for nuclear security documents. In addition, a decision has been taken to develop a nuclear security glossary, to ensure a good interface between safety and security. In addition, a decision has been taken to develop a nuclear security glossary. This will ensure a good interface between safety and security, in particular when the same term is used, but with a different meaning, in safety standards and security documents.

**RW5.5 Status of the CSS/Secretariat Plan for the Review of Safety Standards after Fukushima**

Mr D. Delattre summarized the review process presently underway to review the safety requirements documents. Work has now commenced to review and revise NS-R-4 and NS-R-5. At this stage it would appear that the safety requirements related to waste management and transport will not require revision. A final decision on the need to revise the BSS (GSR Part 3) will be taken only when all other safety requirements have been updated.

In the case of safety guides, several of these will need to be updated to take account of the new requirements. This is a major challenge for those safety guides that deal with nuclear safety, of which there are approximately 30. NUSSC has already undertaken a pilot review of three safety guides: NS-G-2.15, NS-G-1.9 and NS-G-1.10. At its most recent meeting, NUSSC approved the methodology applied in the review and three further safety guides (NS-G-1.5, NS-G-1.6 and SSG-2) are undergoing a similar review.
In addition, priority will be given to updating GS-G-3.1 and GS-G-2.1 to reflect the changes made in DS456 and DS457 respectively.

**RW6. Review of Documents for Approval**

**RW6.1 Draft Safety Requirements: Decommissioning of Facilities (DS450)**

Mr V. Ljubenov described the development of the document and its structure within the safety standards dealing with decommissioning. He also reviewed the comments received from Member States and from the Committees and described how these were addressed.

A total of 395 comments were received from 14 Member States and one International Organization. These were resolved in a Consultants’ Meeting in February 2013. From all comments received, 216 were accepted in full or with minor modifications. The main points raised in the comments and the changes made were related to (1) five-year period for revision of the initial decommissioning plan; (2) two year period after shutdown to submit a final decommissioning plan; (3) authorization during transition from operation to decommissioning (operational authorization remains or modified operational authorization issued); (4) more attention to disposal of decommissioning waste; (5) more attention to non-radioactive hazards and waste; (6) allowing for different practices in Member States in relation to review and approval of the decommissioning plan and supporting documents; and (7) termination of authorization with restrictions.

Following posting on the website, a further 112 comments were received from members of the Committees, of which 78 were accepted and 34 were rejected. A number of comments were rejected on the basis that they were too detailed for a safety requirements document but the material will be considered for inclusion in the supporting safety guides. The document had already been approved by NUSSC and TRANSSC and cleared by the NSGC.

France asked about the scope of the document and whether or not it applies to facilities that are being decommissioned following an accident, as such situations are very different both in terms of the radiological criteria to be applied and the technology that may need to be considered. Mr Ljubenov clarified that DS450 was written primarily for facilities being decommissioned following termination of normal operation, but most of the requirements can also be applied to facilities being decommissioned following an accident. In such circumstances, entombment may need to be considered.

A proposal that the scope of the document be restricted to facilities being decommissioned after the end of normal operation was not accepted. However, in order to accommodate the views of the meeting, it was agreed to change the text of paragraph 1.18 to read: “However, most many of the requirements established in this publication can also be applied to decommissioning after an accident has occurred...”.

The Committees had no further comments and RASSC and WASSC approved DS450 for submission to the CSS for endorsement.

**Action:** The Secretariat to submit DS450 to the CSS for endorsement.
**RW6.2 Draft Safety Requirements: Management Systems (revision of GS-R-3) (DS456)**

Mr P. Gest described the process for the development of the document, which is applicable to nuclear facilities, activities using sources of ionizing radiation, radioactive waste management, the transport of radioactive material, radiation protection activities and any other practices or circumstances in which people may be exposed to radiation from naturally occurring or artificial sources.

To the extent possible, the document maintains the same structure as GS-R-3. The revised version contains 85 requirements, 22 of which are new, compared with 74 requirements in GS-R-3. Of the 207 comments received from the Committees, 181 were accepted and 26 were rejected.

There were no comments from the Committees. RASSC and WASSC approved DS456 for submission to Member States for comment.

**Action:** The Secretariat to submit DS456 to Member States for comment.

**RW6.3 Draft Safety Requirements: Preparedness and Response for a Nuclear or Radiological Emergency (revision of GS-R-2) (DS457)**

Ms E. Buglova provided a detailed overview on the revision process of GS-R-2, reminding the Committees that the proposed revisions are based on direct feedback from Member States, the outcome of emergency exercises and experience in responding to emergencies since 2002. The Agency held eight Consultants’ Meetings, one workshop, one Technical Meeting and two Meetings of Inter-Agency Committee for Radiological and Nuclear Emergencies (IACRNE) to review, discuss and/or develop specific components of the document.

Comments were received from eight members of RASSC and four members of WASSC, as well as from two International Organizations. The majority of comments were accepted. Ms Buglova gave a detailed overview of the reasons why certain comments were not accepted, normally because they were inconsistent with the practical experience gained in recent years or were contrary to decisions reached in the Technical Meeting.

There was some discussion about whether the limitation for emergency workers should be 50 mSv, as in the BSS, or 100 mSv, consistent with the range of up to 100 mSv for members of the public. RASSC and WASSC recommended that this issue be brought to the attention of Member States.

The ILO, NEA and WHO thanked the Agency for the opportunity to contribute to the drafting of the text and indicated that their organizations intended to cosponsor the final document. The NEA and the WHO expressed their intention to review the use of the term "safe" in the document and particularly, how this term is defined. UAE questioned the need for four emergency planning zones and distances when only two emergency planning zones were identified in the past. NEA stated that it would provide detailed comments on the document during 120 days commenting period and during the same time period ILO committed to establish a position in relation to 50 mSv or 100 mSv limitation for emergency workers.

The importance of the document was acknowledged by the Committees and a number of members referred to its quality and thoroughness. RASSC and WASSC approved DS457 for submission to Member States for comment.
**Action:** The Secretariat to submit DS457 to Member States for comment.

**RW6.4 Revision through Addenda of GSR Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4 (DS462)**

Mr D. Delattre reviewed the process that had been followed in identifying the issues that needed to be addressed in the five safety requirements in question. No important omissions were noted and therefore the proposed amendments relate to clarification and strengthening of existing requirements rather than new requirements. Only changes related to the Fukushima accident were considered in the review.

A total of 308 comments were received from ten countries represented on the Safety Standards Committees and from two International Organizations. Of these, 197 were accepted and 111 were rejected. Approximately 40% of the comments received related to SSR-2/1. Mr Delattre also reported that the draft revised text had been discussed for one full day at the most recent meeting of NUSSC before being approved.

The United States noted that the revised text of SSR-2/1 deals with the concept of a Technical Support Centre and underlined the importance of ensuring consistency with the revision of GSR-R-2 (DS457). RASSC and WASSC also recommended that the Secretariat proceed quickly to update the guidance material in the safety guides supporting these revised safety requirements.

RASSC and WASSC approved submission of DS462 to Member States for comment.

**Action:** The Secretariat to submit DS462 to Member States for comment.


Ms M. Kinker presented the safety guide which has been revised in line with comments received from the Committees. The DPP was approved by the CSS in October 2010 and the safety guide provides guidance on how to comply GSR Part 5 in the predisposal management of radioactive waste from fuel cycle facilities, including centralized radioactive waste management facilities. Reactors, mining operations and spent fuel storage facilities are outside the scope of the document.

A total of 275 comments were received on the draft text, of which 260 were accepted, 12 were rejected and three required further consideration. The majority of comments (246) were received from WASSC. Ms Kinker confirmed that security aspects have been addressed to the satisfaction of the NSGC and noted that a number of important issues had been raised in the comments received from the Safety Standards Committees; these will be drawn to the attention of Member States in the Note Verbale.

RASSC and WASSC agreed to change the title of the safety guide by including the word "nuclear" before "fuel cycle facilities" and approved DS447 for submission to Member States for comment.

**Action:** The Secretariat to submit DS447 to Member States for comment.

Ms M. Kinker introduced the document, which has been developed in parallel with DS447 on nuclear fuel cycle facilities. The safety guide provides guidance on how to comply with GSR Part 5 in the predisposal management of radioactive waste from both power and research reactors.

A total of 259 comments were received from the Committees, of which 244 were accepted, 12 were rejected and three required further consideration. The majority of comments (225) were received from WASSC.

ENISS noted the large degree of overlap that existed between DS447 and DS448 and recommended that the texts of both documents be merged. The Secretariat pointed out that this had been considered when the DPPs were approved and it was agreed at that time that the development of separate safety guides was appropriate.

RASSC and WASSC agreed to change the title of the safety guide by including the word "nuclear" before "reactors" and approved DS448 for submission to Member States for comment.

**Action:** The Secretariat to submit DS448 to Member States for comment.

**RW7. DPPs for Approval - Safety Standards**

**RW7.1 Draft Safety Guide: Organization, Management and Staffing of a Regulatory Body (to review and combine the following Safety Guides: GS-G-1.1, GS-G1.5, DS113, GSG-4 and DS460) (DS472)**

**RW7.2 Draft Safety Guide: Regulatory Body Functions and Processes (to review and combine the following Safety Guides: GS-G-1.2, GS-G1.3, GS-G-1.4, GS-G1.5, SSG-12 and part of WS-G-5.1) (DS473)**

Given the complementary nature of both safety guides, the Chair agreed to allow the presentations on both DPPs to be made in advance of discussion by the Committees. Ms J. Parlange introduced the DPP for DS472 and Mr G. Jones the DPP for DS473. Both documents apply to all facilities and all activities and, together, they will provide guidance on the implementation of the requirements on the Governmental, Legal and Regulatory Framework for Safety (GSR Part 1) published in 2010. Both documents will be developed in parallel to ensure consistency. Because of the range of issues to be covered, it was the view of the Secretariat that these should be divided between two separate safety guides.

A total of 31 comments were received on DS472, of which 22 were accepted and nine were rejected. In the case of DS473, 27 comments were received of which 23 were accepted and four were rejected. Tables of responses to the comments were posted on the RASSC and WASSC websites in advance of the meeting.

There was considerable discussion about the status of DS460 and why it was intended to incorporate this into DS472. The Secretariat noted that this had always been the intention and a statement to this effect had been included in the DPP at the time of its approval. The Chairman noted that this had not been made clear in the presentation made by the technical officer at the time, and there was strong support from a number of members that the DPP of DS460 had been approved as a stand-alone safety guide. A review of the minutes of RASSC 32 and WASSC 33 confirmed this position. It
was also noted that a production timetable had been provided with the DPP of DS460 and this seemed at odds with an intention to prepare material for inclusion in a different safety guide.

RASSC and WASSC considered that DS460 should be retained as a stand-alone safety guide and that appropriate parts should be referenced in both DS472 and DS473. Committee members suggested the possibility of postponing the decision of merging DS460 into DS472 or issuing DS460 as a stand-alone document pending a review by the Safety Standards Committees of DS460. As the DPP had already been approved by NUSSC and TRANSSC, the Secretariat was asked to discuss this matter with the Chair of NUSSC (lead Committee) and develop a clear view in relation to DS460 and DS472 at the next meeting of the chairs. RASSC and WASSC agreed that the DPPs for DS472 and DS473 could be submitted to the CSS for endorsement once this issue was resolved.

**Action:** The Secretariat to consult with the chair of NUSSC (lead Committee) regarding the outcome of discussions on the DPPs for DS472 with the recommendation of RASSC and WASSC that the decision to merge DS460 with DS472 be postponed until the Safety Standards Committees review a draft of DS460.

**Action:** The Secretariat to submit the DPP for DS472 to the CSS for endorsement, taking into account comments by RASSC and WASSC.

**Action:** The Secretariat to submit the DPP for DS473 to the CSS for endorsement.

**RW7.3 Draft Safety Guide: Arrangements for the Termination of a Nuclear or Radiological Emergency (DS474)**

Ms S. Nestoroska Madjunarova introduced the DPP for DS474, which will provide guidance on the relevant requirements in GS-R-2 (currently under revision as DS457) and requirement 46 in GSR Part 3 (BSS). The ending of the emergency exposure situation involves either a return to a planned exposure situation or a start of an existing exposure situation. The safety guide will apply to all nuclear and radiological emergencies, regardless of their cause. The development of a safety guide on these issues was requested by Member States at several meetings, including the Technical Meeting held in November 2012 to review the draft safety requirements DS457.

A total of 21 comments were received from Japan and Germany, of which 19 were accepted and two were rejected. Ms S. Nestoroska Madjunarova explained the technical reasons why some comments could not be accepted.

RASSC and WASSC strongly supported the development of the document and WHO indicated its interest in the proposed safety guide. Japan asked for clarification on the use of operational criteria in the proposed contents of the safety guide. As part of the general discussion it was confirmed that, consistent with the approach advocated by the ICRP and with GSR Part 3 (BSS), the "transition phase" will be addressed as a part of the emergency exposure situation.

RASSC and WASSC approved the DPP of DS474 for submission to the CSS for endorsement.

**Action:** The Secretariat to submit the DPP for DS474 to the CSS for endorsement
**RW7.4 Draft Safety Guide: Arrangements for Communications in Preparedness and Response for a Nuclear or Radiological Emergency (DS475)**

In introducing the DPP for DS475, Ms L. Berthelot noted that a number of tools have been developed to assist Member States with communication in the event of a nuclear or radiological emergency, but to date no safety standard exists. The safety guide will support GSR Part 7 (DS457) and is intended to harmonize public communications arrangements in radiation incidents and emergencies. There will be a link with operational documents under Emergency Conventions (e.g. iEComm and JPLAN) and will provide the basis for use of existing and planned EPR public communications practical tools. The safety guide will be targeted at all local, regional, national and international entities with responsibility for communication in the event of a nuclear or radiological emergency.

RASSC and WASSC approved the DPP of DS475 for submission to the CSS for endorsement.

**Action:** The Secretariat to submit the DPP for DS475 to the CSS for endorsement


Ms Y. Kumano introduced the DPP for DS477, which will support the safety requirements on management systems (DS456) approved earlier in the meeting in the field of radioactive waste management. The new safety guide will provide updated guidance on developing and implementing management systems for both pre-disposal and disposal of radioactive waste and will apply to the processing, handling, long term periods of storage, and also to the lifecycle of radioactive waste disposal facilities. Once completed, the safety guide will be of use to regulatory bodies, organizations that are directly involved in the waste management activities, and the suppliers of the waste. Consistency with GSR Part 2 (DS456), GSR Part 5 and SSR-5 will be ensured.

A total of 36 comments were received on the DPP, of which 35 were accepted. Most of the comments were related to clarification of the scope of the document, the need for consistency with DS456 and issues related to predisposal management.

One comment requested a change in the title of the document to "Leadership and Management for Safety in Predisposal and Disposal of Radioactive Waste". The proposed change of title was supported by NUSSC. There were mixed views expressed by RASSC and WASSC; the argument to change the title was to ensure consistency with DS456 but there were some concerns that this change could affect the scope of the document. After considerable discussion, it was agreed to keep the proposed title of the document unchanged.

RASSC and WASSC approved the DPP of DS477 for submission to the CSS for endorsement.

**Action:** The Secretariat to submit the DPP for DS477 to the CSS for endorsement

**RW8. DPPs for Approval – Security Series**

**RW 8.1 NST020 Draft Implementing Guide on Sustaining a Nuclear Security Regime**

Mr D. Delattre (NSS-SSCS) introduced the document in the absence of Ms Evans. Mr Delattre pointed out the strong relation between this document and the Safety Requirement document on
Management Systems (DS456) in sustaining a Nuclear Security Regime. This document was already approved by the NSGC, and cleared by NUSSC and TRANSSC. According to SPESS 10, it will be presented for information to the CSS.

Committee members questioned the parallelism in relation to the need of the security regime and the need for a safety regime. In response, it was clarified that for the safety side, the integrated management system provides the assurances of deploying enough resources by Licensees and Member States, in implementing Principle 3 of the Safety Fundamentals.

The DPP for NST020 was cleared by RASSC and WASSC to proceed to the next step of development.

**RW 8.2 NST041 Draft Implementing Guide on Preventive and Protective Measures against Insider Threats**

Mr N. Pope (FS-ONS) introduced the draft implementing guide which is a revision to NSS No. 8. Mr Pope indicated that this DPP has incorporated the comments received from NSGC and the SSCs. It has been approved by NSGC and NUSSC. He also highlighted that NUSSC noted the interfaces on cybersecurity matters of this document with the draft safety guides DS431 on Design of Instrumentation and Control Systems for NPPs, DS436 on Instrumentation and Control and Software Important to Safety for Research Reactors, and DS367 on Safety Classification of Structures, Systems and Components in Nuclear Power Plants.

RASSC and WASSC members asked about a graded approach to this type of measures for radioactive material, as the objective of this DPP is for nuclear material. Mr Pope indicated that the experts preparing this document are experts on insider threats and they will look for this matter in the transport of radioactive material and in radioactive facilities. It might result in the need for another document for this type of materials/activities/facilities. The committee members recommended to support the development of this type of document.

**Action:** The DPP for NST041 was cleared by RASSC and WASSC to proceed to the next step of development

**RW9. Progress Reports on Documents under Development**


Mr T. Boal (NSRW-MRS) introduced the draft safety guide on the Generic Criteria for the Radiation Protection of the Public and the Environment by indicating the objectives of the document:

- To clarify the principles of protection of members of the public and the environment against radiation exposure in planned, emergency and existing exposure situations, and to provide generic guidance on their application to governments, regulatory bodies, registrants and licensees, and organizations designated to deal with emergency exposure situations and existing exposure situations.

- to underpin the development of facility and activity specific safety guides and other relevant documents dealing with this area of protection to ensure a consistent approach.
Mr T. Boal informed WASSC and RASSC on the current table of contents of the draft document and on the plans for its submission to RASSC and WASSC for approval.

The SSCs noted that the NSGC were involved in clearing the document and queried the basis for such a decision. It was clarified that the involvement of the NSGC was due to the eventuality of a security event affecting the environment.


Mr D. Telleria (NSRW-WES) presented the draft safety guide on Radiological Environmental Impact Analysis for Facilities and Activities by referring to the objective of the document which is to provide guidance on the implementation of requirements in the BSS for performing prospectively Radiological Environmental Impact Assessments (REIAs) as part of information provision, governmental decision-making and the regulatory authorization processes for facilities and activities.

Mr Telleria also highlighted the scope of the document, dealing with guidance for the application of REIA in planned exposure situations, as described in the BSS, and planned exposure situations, including expected exposures as a result of normal authorized discharges and also exposures that might occur as a result of potential abnormal or accidental situations, usually known as potential exposures. He also indicated the content of the draft document, its status and the next steps of development.

Committee members asked for further clarification on how the latest document from the ICRP on protection of the environment was taken into account in the draft document. Mr Telleria explained concisely on the application of the system to control the protection of the environment as developed in DS427, following ICRP108. The first step implies the adoption of Reference Flora and Fauna, the second step implies the estimation of the radiological effects to the Reference Flora and Fauna (based on the source term and dose calculations to the Reference Flora and Fauna) and third step implies the comparison of the results with the reference values contained in ICRP108. In this form, it is also possible to apply measurement and verification of the protection through monitoring of the environment. In this approach, the same system is used to protect humans, flora and fauna, and this provides a mechanism to demonstrate that the environment is protected.

**RW 9.3 DS442 Draft Safety Guide: Regulatory Control of Radioactive Discharges to the Environment (Revision of WS-G-2.3)**

Mr G. Proehl (NSRW-WES) presented the current status of DS442, the draft safety guide on Regulatory Control of Radioactive Discharges to the Environment, the revision of the IAEA’s Safety WS-G-2.3. In particular, he highlighted the objectives of the draft document as:
• To provide guidance on the regulatory control of discharges\(^1\) with a view to protecting the public and the environment;

• to elaborate on the principles given in SF-1 and the requirements given in GSR Part 1, the BSS and GSR Part 4; and

• to ensure consistency with DS427 and DS432.

Mr Proehl also provided information on the current structure of the draft document and on the plans for its development.

Mr M. Crick (UNSCEAR) informed the SSCs, on behalf of UNEP, that this organization has contributed to the development of the safety guide since the initiation of the development process and that UNEP is willing to co-sponsor the document.

**RW 9.4 DS458 Draft Safety Guide on Radiation Protection and Regulatory Control for Consumer Products**

Mr I. Gusev (NSRW-RMS) presented a progress report on the draft safety guide on Radiation Protection and Regulatory Control of Consumer Products (DS458). He highlighted that the current stage of development of the draft document is addressing comments from Member States and the objective of the presentation was to provide information to the SSCs and for initial discussion on the Member States’ comments.

A total of 208 comments were received from 14 Member States, of which 169 were accepted and 39 rejected. The accepted comments included 45 resolutions with modifications.

Member States’ comments included requests to change definitions. These proposals could not be accepted as the definitions are included in the IAEA Safety Glossary. In addition, Belgium offered to provide an annex on irradiated gemstones. Further discussion went on about the compatibility of Figures 3.1 and 3.2, with the text of the document and the criteria for exemption. Committee members recommended to re-draft the figures from the viewpoint of a regulator for the step-by-step decision making process.

**RW10. General Session**

**RW 10.1 Current Issues of On-site and Off-site Radioactive Waste Management in Japan**

Mr K. Oue (NRA – Japan) and Ms N. Moritani (MOE – Japan) presented the current status and challenges for radioactive waste management at the Fukushima Daiichi NPPs, both on-site and off-site respectively.

\(^1\) *Discharge* refers to the on-going or anticipated authorized releases, of gaseous, aerosol or liquid radioactive material. It does not include accidental releases to the environment.
The topics covered in the presentation were:

- Current status of the damaged reactor;
- On-site processing and temporary storage of solid radioactive waste;
- Measures for reducing dose from solid radioactive wastes;
- On-site processing and temporary storage of liquid radioactive waste;
- Installation of the Advance Liquid Processing System (ALPS);
- Construction of additional waste water storage tanks;
- Total amount of disaster waste generated and disposed until now;
- Outlines of The Act on Special Measures concerning the Handling of Environmental Pollution by Radioactive Materials Discharged by the Nuclear Power Station Accident, including its purpose, roles of interested parties and basic principles;
- Management of waste: within the countermeasure area, material designated as waste (implemented by the national government); low-level contaminated waste other than specified waste;
- Flow diagram for treatment of specified waste and decontaminated soil and wastes;
- Landfill disposal of incinerated ash, as a function of the concentration of radionuclides;
- Temporary storage and landfill disposal of material designated as waste;
- Progress in the special decontamination area and the intensive contamination survey area;
- Decontamination roadmap;
- Efforts to secure interim storage facilities; and
- Future processes

RASSC and WASSC members welcomed the detailed presentation which provided great insight into the issues faced by Japan. The exchange of questions from SSC members and answers from the speakers covered:

- The disposal concept for off-site waste is to be finished by the end of March 2014 The designated waste (Ref: slide 8 of presentation B) is currently in interim storage;
- The technical challenge is on the side of the disposal of contaminated material off-site;
- The special and intensive contaminated material refers to the material generated within the 20 km of the radius of the NPP, with an annual dose higher than 20 mSv – that is called counter-measure area– where ICRP recommendations are being followed, where $^{137}$Cs is the radionuclide of main concern;
• Criteria to be reached after the decontamination process is implemented in the countermeasure area: the goal of decontaminated soil in the long-term uses a radiological criteria of 1mSv/y, recognizing that in practice it might be a very long and complicated process to reach this target, nowadays an interim target of 20 mSv/y is being used;

• On-site management of liquid waste processing and technologies: Activated Liquid Processing System (ALPS), designed to remove 62 radionuclides in seven currents: activated carbon to remove mainly chlorides; titanic acid, to remove mainly $^{90}$Sr; ferrocyanate compound to remove mainly $^{137}$Cs; silver-impregnated activated carbon to remove mainly $^{137}$Cs; and other specific resins to remove mainly $^{60}$Co and ruthenium;

• Perspective for processing and disposing waste: a document is foreseen to be finished and published in 2017, connected to the national decision on the long-term perspective and for managing radioactive waste;

• Monitoring of on-site water storage, safety and seismic evaluations of the storage systems;

• Radiation protection of workers handling radioactive waste, to be below 50 mSv/y, the utilization of shielding measures and of breathing protection;

• The concept of Safety Case seems currently not to be applied to the systems and processes under use or development. WASSC members recommended that the development of a Safety Case for the interim storage facilities and disposal facilities for radioactive waste would be highly convenient in order to move quickly with practical measures for their implementations; taking into account the lessons learnt from the Chernobyl accident, when now, more than 30 years after the accident, the responsible organizations are dealing with non-organized waste in non-organized disposal; to avoid short term sights in taking waste management decisions, it is important to have Safety Cases underpinning decisions and taking into account the recommendations in the IAEA’s Safety Guides GSG-3 and GSG-23;

• Regarding the communication of challenges, the Safety Case would have a major role as an instrument for achieving the confidence of the public;

• Roles and responsibilities of organizations participating in radioactive waste management activities: MOE, dealing with the oversight of the management of designated waste in countermeasure areas (off-site) and NRA dealing with the oversight of on-site activities.

WASSC members suggested that for the next meeting more information should be shared on technological challenges and on the development of requirements for waste management.

**RW 10.2 WHO Report “Health Risk Assessment from the nuclear accident after the 2011 Great East Japan Earthquake and Tsunami based on Preliminary Dose Estimation”**

Ms M. Perez (WHO) presented the report “Health risk assessment from the nuclear accident after the 2011 Great East Japan Earthquake and Tsunami”, undertaken by regional emergency centers of the World Health Organization (WHO) in Manila (Philippines) and Kobe (Japan). The report was published
in February 2013, based on preliminary dose estimation published in May 2012. Both documents are available on the WHO website. UNSCEAR participated in the development of both documents as an observer. The scope of the report was to assess radiation doses and radiation-related health risks to the public and emergency workers.

The Health Risk Assessment is a task which was undertaken in line with the roles and responsibilities of the different organizations according to the Joint Radiation Emergency Management Plan, which was very recently updated. One of the key tasks in the post-emergency long-term phase is to assess and manage long-term health risks and advise on follow-up programmes, provide information to the public, Member States and international organizations and to identify needs and priorities for public health action.

Ms Perez pointed out that the methodology of this work was mainly built on areas commonly covered by other WHO reports addressing chemical and other health hazards. The key steps of the study were:

- Exposure assessment;
- Hazards identification;
- Dose-response relationship; and
- Risk characterization.

Ms Perez summarized the most important exposure pathways for the public, namely (1) external radiation from the cloud: (2) inhalation of airborne radioactivity; and (3) ingestion via foodstuffs and drinking water. Doses in the thyroid are important primarily in the first three months. It is also important to note that conservative assumptions were used for the assessment and that UNSCEAR is performing a more accurate dose assessment using more recently collected data.

The WHO Report concluded that outside the most affected areas, even in locations within Fukushima prefecture, the predicted risks remain low and no discernible increases in cancer risk above the natural variation in baseline rates are anticipated. The lifetime risk for some cancers may be elevated above baseline rates in certain age and sex groups in the most affected location (higher risks for people exposes as infants and children compared to adults; the highest risk for thyroid cancer in infant girls).

For workers, no acute radiation effects were observed and none of the seven reported deaths among emergency workers can be attributed to radiation. No deterministic effects of radiation are expected, apart from possible thyroid disorders in those two workers who inhaled significant quantities of radioactive iodine. In addition, for most of the workers, the radiation-related cancer risks are of similar magnitude as the normal fluctuation in the baseline cancer rates.

**RW 10.3 UNSCEAR Report “Exposures due to the Nuclear Accident following the Great East Japan Earthquake and Tsunami”**

Mr M. Crick explained the context of the report prepared by UNSCEAR. The Committee is currently composed of 27 Member States in total. The report does not address policy matters, management of public health and applied science.
A two-year period was needed to collect all the information for the report, involving 80 experts from 18 countries, and took into account the following:

- Source term for radiation protection assessment – which/what measures were taken in the environment;
- Doses to members of the public, taking account of time sequence, movement of people, etc; and
- Dispersion in the environment using information from the Meteorological Organization and marine dispersion models.

Five organizations were involved:

- CTBTO - global radionuclide monitoring stations;
- FAO - food monitoring;
- IAEA – data/samples from missions;
- WHO - health risk assessment, food data and contamination; and
- WMR – access to top weather services.

The 2012 report to the General Assembly contains the following preliminary findings:

- Evacuation reduced exposure levels dramatically;
- No radiation-related deaths observed due to exposure;
- Excess rates of cancer due to exposure highly unlikely;
- Social and psychological impact on population are expected to be significant;
- Long-term health monitoring strongly recommended; and
- With the possible exception of water plants, the exposure to marine and terrestrial non-biota are too low for observable acute effects.

**RW 10.4 IAEA’s Comprehensive Report on Fukushima**

Mr L. Bevington, Nuclear Safety Action Team, spoke about the coordination of activities to prepare the Fukushima Comprehensive Report. The report will be prepared based on DG Amano’s decision at the 2012 IAEA General Conference. The aim is to provide a comprehensive assessment of the Fukushima Accident, in particular to bring together the many other reports that have already been published or are under development. The overall objective is to learn the lessons and provide direction to strengthening nuclear safety worldwide.

- An organizational structure has been set up with working groups and advisory groups to prepare the report.
Three main groups: 20-25 experts from 40 Member States across five working groups covering the main areas; advisory group mainly from INSAG and ICRP to guide on preparation of the report and to raise key issues as work is carried out i.e. which topics to cover; and an internal IAEA core group comprising of senior managers at DDG level to provide groups with views on issues requiring decisions. Each group also contains a Japanese expert.

Five areas covered by the report focus on details of the accident, safety assessment, emergency preparedness and response, assessment of consequences and a forward-looking section on post-accident assessments.

Mr Bevington reported on the timeline and key milestones for preparing the report, and the current activities.

A peer review mission was held to review the TEPCO decommissioning roadmap. A report is available on the IAEA website and discusses issues such as the current status of the reactors, safety systems to remain cooling for next 10-20 years, waste management and radiological protection issues. Members requested more information on which non-radiological consequences are covered by the report. It was confirmed that societal consequences and ecological impacts will be covered. The depth and breadth of each of the areas is being worked out as the report is developed.

Another comment was made with regard to the various reports carried out by international organizations. It is to be expected that reports should be compatible and support each other and not provide conflicting information through the conclusions of each, for example the reports produced by WHO, IAEA and UNSCEAR. In reply, it was mentioned that all relevant organizations have been invited to participate in the groups and whilst some have responded positively, others have not.

**RW 10.5 RSM and WES activities under the Action Plan**

Mr Pinak summarized the projects presently being undertaken by NSRW and the Fukushima Prefecture to jointly address identified issues of concern.

There are two categories of projects:

1) Fukushima Co-operative Projects (started one year ago), defined and initiated by the IAEA in cooperation with the Fukushima Prefecture, focusing on:

   - Remediation and decontamination;
   - Management of radioactive wastes; and
   - Preparation of radiation maps for the public.

2) Fukushima Initiative Projects:

   - Radionuclide movement in rivers and lakes, including contamination technology for rivers and lakes and in wildlife.
• Plans have been developed for the three years of the contract. It was mentioned that many more projects are being undertaken by the Agency in cooperation with authorities and agencies in Japan.

**RW11. Reports on Application and Implementation of Safety Standards**

**RW 11.1 Perspective of the World Nuclear Association on the IAEA Safety Standards**

Mr J. Townes presented an industrial perspective on behalf of the Radiation Protection Working Group and underlined the value that the WNA places on IAEA safety standards, particularly those related to radiation protection.

The pillars of radiation protection are:

- Justification of practices;
- Optimization of protection; and
- Limitation of doses to prevent people coming close to unacceptable levels of harm.

Mr Townes noted that, regarding the BSS, there are Member State requirements to establish and enforce dose limits. Some key concepts are also introduced regarding dose limits and risks of cancer effects. All limits were established from studies on bomb-survivors and scientific debate. The limits are further adjusted by this concept of detriment which enables us to balance risks of types of cancer together, compared against different types of health effects. Those limits are set by ICRP and adopted by the IAEA. The main focus is cancer risks adopted by this quantity of detriment in order to compare risks against one another. It is not established for non-cancer effects.

The Chair commented that it is a good reminder to Committees establishing safety standards that they are not only important for regulators but also critical for operators and the wider nuclear industry.

A question was raised regarding non-cancer effects in the dose limits, and whether it was believed by the WNA that these should be taken into account in establishing dose limits. It was commented that early discussions with ICRP have begun regarding emerging scientific evidence on diseases of heart and brain, circulatory diseases and radiation modified inherent risks in the population. The WNA welcomes discussions on this but considers that more time is needed to balance all risks and to know what the magnitude is.

**RW 11.2 Experience in Implementing IAEA Safety Standards in Korea**

Mr Lee (RASSC Member for Korea) began the presentation by reporting on the radiation sources in Korea, which includes 23 NPP’s and over 6,000 radiation users, a number which is growing rapidly. KINS is the only organization supporting the Korean Government in the area of nuclear safety and radiation review and inspection.

Regarding the review of the regulatory system and accommodation of the 1996 BSS, this was carried out in two steps. Korea is attempting to comply with the IAEA standards and trying to implement the new BSS similar to before.
Mr Cheong (WASSC Member for Korea) introduced the Korean commitment to harmonization with the IAEA safety standards in Korean regulatory activities and the ongoing efforts taking place in the waste safety area. There is a 5-year plan currently in place to improve the regulatory framework and revise and improve their own standards in line with international standards. The safety standards review is conducted as a follow-up to the IRRS mission conducted in 2011.

A question was raised regarding implementation of the 1996 BSS. It was commented that the intent of the BSS was an evolution not a revolution and whether there changes in the new BSS that required major changes in the legislation which then impacted on people implementing the legislation. It was mentioned that any new concepts are difficult to accept/implement but on the waste side that there are concerns about exemption levels for bulk amounts of radioactive materials and it is being considered as to how to implement these.

**RW 11.3 Indonesia’s Experience in Applying Exemption and Clearance Levels in the BSS**

Mr Rusdian from the Indonesian regulatory body stated that the objective of their regulatory body is to harmonize activities with IAEA and international standards, although it is acknowledged that sometimes these changes come about too fast and greater stability of standards would be desirable.

It was mentioned that it is difficult to introduce new concepts as they need to be approved via governmental processes. There are three government regulations in Indonesia relating to exemption and clearance on safety of ionizing radiation and security of radioactive sources, based mainly on the BSS.

**RW 11.4 Discussion**

The Chair asked if there were any issues that members would like to raise on implementing safety standards.

Mr Colgan commented that whilst workshops are being held on the BSS, most of the outreach is done through the Department of Technical Cooperation for developing Member States. However he has requested that any Member States experiencing difficulties should raise it and the Agency would do its best to assist.

It was commented that the United States evaluates the safety standards to determine if any gaps exist as well as to review what has been harmonized. The US is now moving towards enhancing stakeholder review and input, working with other federal agencies and seeking feedback through stakeholder solicitation.

**RW12. Other Business**

For the benefit of WASSC members, Mr Colgan raised the issue of foodstuffs which was discussed during the July 2012 meeting of RASSC. RASSC invited the Secretariat to establish a working group of international organizations to identify the international standards for food and drinking water which exist, the criteria on which they are based and the circumstances in which they are intended to be used. Mr Igor Gusev is responsible for this and in April last year, the Agency invited the EC, NEA, FAO, WHO and Codex Alimentarius, as well as experts from Japan, Russian Federation, Ireland and Belarus to discuss the related issues. Feedback was sought from RASSC on advice on how to move forward on this, to incorporate this into a discussion document for review at the next RASSC meeting. It was also
raised at IEM4 (International Experts Meeting) and it may be of interest to WASSC to review the discussion document and put forward any comments before the end of July with the aim of creating a final discussion document.

The WASSC coordinator will provide members with the link to the document for information and comments.

**RW 12.1 Joint Convention – Report of the First Inter-Sessional Meeting**

Ms Siraky, WASSC and Joint Convention coordinator, presented the outcomes of the First Inter-sessional Meeting as well as informing on the latest growth in the number of Contracting Parties, which has now grown to 67. The three newest Contracting Parties were welcomed, Armenia, Mauritius and Oman.

The activities undertaken so far this year for the JC included the meeting of the Working Group of Experienced Officers of the JC and CNS, which was held in January. This initiative was suggested during the Fourth Review Meeting, with the aim of comparing and, where possible, harmonizing the guidelines and activities of both Conventions. Following the previous WASSC meeting, available officers met to brainstorm topics which formed the basis of the meeting in January. The main areas covered included the review process, country group sessions, consistency of processes between both Conventions, training of officers and preparation of national reports. The JC Inter-sessional Meeting, held in April, was based on the 13 proposals put forward by the Contracting Parties, as well as the report of the Working Group of Officers. Eleven of the 13 proposals were credited with having merit to proceed. It was also suggested that a necessity may exist for an Extraordinary Meeting to be held, in which case, the scheduled date of 12-13 May 2014, for the Organizational Meeting may be postponed to 14-15 May, to allow the EM to take place beforehand. According to the Rules and Guidelines however, an EM can only take place after a formal request is submitted by at least one CP for consideration by all CP’s. The aim of the EM would be to discuss and agree on the final changes to Rules and Guidelines to be implemented before the 5th Review Meeting.

The JC Topical Meeting on Comprehensive Approaches to the Back End of the Nuclear Fuel Cycle is to be held from 16-18 October and the Note Verbal is to be issued this week to Contracting Parties only.

The JC Regional Promotional Meeting is to be held in November in the Asia Region, in conjunction with the ANSN Workshop. Both Contracting Parties and Member States from the region are invited to participate in order to give prospective CP’s an overview of the JC and benefits of being a CP. The meeting is being held in Korea and a big thank you is being extended to KINS for their efforts so far.

Members queried the timeline of the RM and suggested that the current time period over which the RM is held is perhaps too short to allow for effective peer review. It was queried as to whether this time frame would be discussed or topics could be put forward for the EM. Ms Siraky advised that the training of officers may be one way to guide officers towards leading more focused discussions.

It was also confirmed that the EM would be requested by the US according to the Rules and Guidelines of the JC.

Mr M Svab, CNS Scientific Secretary provided the members with an overview of current activities of the WG on Effectiveness and Transparency. The 2nd EM for CNS was held in August 2012 to discuss the lessons learnt from the Fukushima Accident and to review the effectiveness of the provisions of the CNS. As an outcome of the RM, the CP’s decided to establish the working group which by the next RM, would be required to provide a list of actions required to strengthen the effectiveness of the CNS and amend, where necessary, the Convention. During the WG meetings, the following areas were discussed and working papers to be prepared as a result:

- Identification of potential improvements to work on Convention,
- Identification and analysis of the tools to achieve enhancement, and
- To prepare proposals of concrete actions to be undertaken.

It is expected that the work of the WG will facilitate adoption of proposals for consideration at the 6th RM. The final report is to be prepared by end of November this year.

**RW 12.3 Discussion on the TOR of the Safety Standards Committees (SSCs)**

Mr Delattre summarized the objectives of the harmonization of the Terms of Reference (TOR) as follows:

- Harmonize the TOR of the four SSCs with the Nuclear Safety Guidance Committee.
- During the establishment of the Terms of Reference of the NSGC, more terms were introduced which may be useful for the four SSCs whilst some currently in use were not retained for use by the NSGC.
- Systematic assessment of all individual single differences between SSCs and NSGC has been carried out. It is posted as a table on the safety standards website. It was noted that the SSCs are in place for a longer period of time, and their Terms of Reference are therefore more highly developed.
- The role of SPESS is to carry more detail than in the TOR. Keeping the TOR fairly generic in nature provides greater flexibility for the work of the SSCs.
- The proposal for the revised TOR will be posted to the website for comment by all five committees over the next two months. Comments should be submitted by the end of August. The objective is to finalize these at the Meeting of the Chairs early November, discussed the week before by the NSGC and then proceed with internal Agency clearance process. The revised TOR will be included in the invitations for nomination of members for the new term beginning in 2014.

Members queried whether it can be assumed that all TOR for the five Committees will now be aligned. It was advised that the TOR for all four SSCs are the same and any differences with the NSGC, together with the rationale for these are outlined in the table as discussed earlier. It was reiterated that comments are welcomed from all five Committees.
The Chair queried as to whether WGs would be established for the NSGC as done in the past with WASSC and it was answered that this has also been incorporated in the Terms of Reference of the NSGC.

**RW 12.4 OIOS Review of the Transport Programme**

Ms Rao presented a background on the Office of Internal Oversight Services (OIOS), the typical evaluation process, the evaluation on the transport programme, its findings and its conclusions.

The OIOS reports to the Director General and provides evidence-based conclusions and recommendations to Member States and the Secretariat to further improve the work of the Agency. Individual performance and compliance is not evaluated. Together with experts, the evaluation is undertaken over 4-6 months and involves gathering of quantitative data, reviewing publications, reports and meeting discussions and interviews. A report for the DG is then prepared and a summary report is sent to the Board of Governors. This is then followed by a periodic review to determine whether suggestions have been implemented.

The evaluation of NSRW was undertaken for the first time ever by OIOS and covered the Regular Programme from the period of 2006-2012 by two experts and two members of the OIOS team.

Some of the recommendations or findings were as follows:

- Encourage more Member States without a major nuclear programme to be better represented in TRANSSC, even if they have a low number of transport-related activities;
- Many TRANSSC members found the internal processes of the Agency frustrating;
- There is agreement that meetings were useful but suggestions for improvement were related to the outcome of the meeting and what could be done to increase effectiveness, including reduction of non-essential items and better structuring of the agenda;
- Develop closer working ties with international bodies;
- Review structure of SSR-6 itself with better alignment with the UN model and regulations with regard to structure and content;
- Survey findings suggest regulations are user-friendly, easy to apply, have helped minimize incidents. Training and development in the transport area are significant contributors to the regulator being able to minimize incidents.

Overall, the Transport Programme was found to be highly relevant despite minor concerns on efficiency and sustainability of the Agency’s activities in this area. So far, some recommendations have already begun to be implemented. Ms Rao noted that NSRW requested the evaluation but, unless proposed specifically or the area receives a large amount of funding that requires more attention, it will not be undertaken routinely.

**RW13. Closing of the Meeting**

**RW 13.1 Conclusions of the Joint Session**
Mr Williams and Mr Massera concluded the meeting by commenting on the benefit of bringing the two Committees together and the resulting range of perspectives on all issues. They also thanked the Secretariat for its support and in particular for the high-quality drafting of documents.

All members were thanked for their participation and wished a safe journey home.
ANNEX I
List of Actions

RASSC

Action: The Secretariat to finalize the discussion document "International Standards Related to Food and Water Contaminated with Radionuclides" for discussion at the next RASSC meeting in November 2013.

Action: The Secretariat to develop a proposal for developing guidance on the control of non-food commodities contaminated as a result of a nuclear or radiological emergency.

Action: The Secretariat to submit DS401 to the Commission on Safety Standards for endorsement

Action: The Secretariat to amend the title of the safety guide and submit DS421 to the Commission on Safety Standards for endorsement

Action: The Secretariat to formally invite WHO to cosponsor DS421.

Action: The Secretariat to take into account any comments received and proceed with finalization and publication of the TECDOC on the new dose limit for the lens of the eye.

Action: The Secretariat to prepare a draft three-year report for the sixth term to be discussed at RASSC 35.

RASSC/WASSC

Action: The Secretariat to submit DS450 to the CSS for endorsement.

Action: The Secretariat to submit DS456 to Member States for comment.

Action: The Secretariat to submit DS457 to Member States for comment.

Action: The Secretariat to submit DS462 to Member States for comment.

Action: The Secretariat to submit DS447 to Member States for comment.

Action: The Secretariat to submit DS448 to Member States for comment.

Action: The Secretariat to consult with the chair of NUSSC (lead Committee) regarding the outcome of discussions on the DPPs for DS472 with the recommendation of RASSC and WASSC that the decision to merge DS460 with DS472 be postponed until the Safety Standards Committees review a draft of DS460.

Action: The Secretariat to submit the DPP for DS472 to the CSS for endorsement, taking into account comments by RASSC and WASSC.

Action: The Secretariat to submit the DPP for DS473 to the CSS for endorsement.
**Action:** The Secretariat to submit the DPP for DS474 to the CSS for endorsement

**Action:** The Secretariat to submit the DPP for DS475 to the CSS for endorsement

**Action:** The Secretariat to submit the DPP for DS477 to the CSS for endorsement
ANNEX II
Agenda

Radiation Safety Standards Committee (RASSC) – Thirty fourth Meeting

Board Room, 4th Floor, C-building
2-5 July 2013

10:00 – Tuesday 2 July 2013 – Board Room (C-building)

R1. Opening of Meeting M. Pinak, SH-RSM
R2. Chairman’s Comments G. Massera
R3. Adoption of the Agenda G. Massera
R4. Administrative Arrangements T. Colgan
R5. Chairman’s Report of RASSC 33 G. Massera
R6. Actions Arising from RASSC 33 T. Colgan

R7. Control of Foodstuffs Contaminated as a Result of a Nuclear or Radiological Emergency

R7.1 Review of Guideline Values for Foodstuffs in the Codex Alimentarius For information C. Blackburn
R7.2 Report of the RASSC Working Group on Foodstuffs For discussion I. Gusev
R7.3 Discussion G. Massera

R8. Safety Standards for Approval

R8.1 DS401 Draft Safety Guide: Application of the Principle of Justification to Practices, including Non-Medical Imaging For approval for submission to the CSS T. Boal
R8.2 DS421 Draft Safety Guide: Protection of the Public against Exposure Indoors due to Natural Sources of Radiation For approval for submission to the CSS T. Boal

R9. Topical Session: Control of Medical Exposures

R9.1 Report of the International Conference "Radiation Protection in Medicine: Setting the Scene for the Next Decade" For information O. Holmberg
R9.2 Patient Perspective on Radiation Protection in Medicine For information K. Kirk
R9.3 Patient Safety Learning and Strengthening in Medical Uses of Radiation – IAEA Resources For information D. Gilley
available for Member States

R9.4 Discussion G. Massera

R10. Implementation of the Basic Safety Standards

R10.1 Draft TECDOC: New Dose Limit for the Lens of the Eye: Implications and Implementation For discussion T. Boal

R10.2 Report on Meeting of the Inter-Agency Committee on Radiation Safety (IACRS) For information T. Colgan

R10.3 Report on BSS Workshop in Uruguay For information T. Colgan

R11. Development of the Metal Recycling Code of Conduct

R11.1 Update on Technical Meeting to Develop the Code of Conduct on Metal Recycling For information E. Reber

R12. End of Term Report

R12.1 Three Year Report of RASSC 2011-2013 For discussion G. Massera

R13. Reports from International Organizations

R13.1 Food and Agriculture Organization of the United Nations (FAO) C. Blackburn
R13.2 International Labour Organization (ILO) S. Niu
R13.3 Pan American Health Organization (PAHO) P. Jimenez
R13.4 United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) M. Crick
R13.5 World Health Organization (WHO) M. Perez
R13.6 European Commission (EC) A. Janssens
R13.7 Nuclear Energy Agency / Organization for Economic Co-operation and Development (NEA/OECD) E. Lazo
R13.8 European Nuclear Installation Safety Standards Initiative (ENISS) B. Lorenz
R13.9 International Commission on Radiological Protection (ICRP)
R13.10 International Radiation Protection Association (IRPA) R. Czarwinski
R13.11 International Source Suppliers and Producers Association (ISSPA) W. Fasten
R13.12 International Standards Organization (ISO)
R13.13 World Nuclear Association (WNA) J. Townes

Closing of the Meeting

R14. Any other business G. Massera
R15. Dates of Future Meetings T. Colgan
34th Meeting of the Radiation Safety Standards Committee (RASSC)  
35th Meeting of the Waste Safety Standards Committee (WASSC)  

Conference Room C-1, 2nd floor, C-Building  
3 – 5 July 2013  

AGENDA  

RASSC/WASSC Joint Session  

09:00 – Wednesday, 3 July – Friday, 5 July 2013 (Conference Room C-1)  

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<td>RW1</td>
<td>Opening of Joint Session</td>
<td>09:00–09:30</td>
<td>P.-S. Hahn, DIR-NSRW</td>
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<td>RW2</td>
<td>Chairmen’s Remarks</td>
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<th>General Safety Standards and Related Issues</th>
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| RW5.1 | Feedback from the Commission on Safety Standards (CSS 33) | For information | D. Delattre |
| RW5.2 | Feedback from the Meeting of the Five Chairs | G. Williams/G. Massera |
| RW5.3 | Feedback from the Interface Group | D. Delattre |
| RW5.4 | Report of the Nuclear Security Guidance Committee | For information | I. Barraclough |
| RW5.5 | Status of the CSS/Secretariat Plan for the Review of Safety Standards after Fukushima | For information and discussion | D. Delattre |

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<th>RW6</th>
<th>Review of documents for approval</th>
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| RW6.1 | DS450 | Draft Safety Requirements: Decommissioning of Facilities | For approval for submission to CSS | V. Ljubenov |
| RW6.2 | DS456 | Draft Safety Requirements: Management Systems (revision of GS-R-3) | For approval for submission to MS comment | P. Gest |
RW6.3 DS457 Draft Safety Requirements: Preparedness and Response for a Nuclear or Radiological Emergency (revision of GS-R-2) For approval for submission to MS comment E. Buglova

RW6.4 DS462 Revision through Addenda of GSR Part1, NS-R-3, SSR-2/1, SSR-2/2, GSR Part-4 For approval for submission to MS comment D. Delattre

RW6.5 DS447 Draft Safety Guide: Predisposal Management of Radioactive Waste from Fuel Cycle Facilities For approval for submission to MS comment M. Kinker

RW6.6 DS448 Draft Safety Guide: Predisposal Management of Radioactive Waste from Reactors For approval for submission to MS comment M. Kinker

RW7 DPPs for Approval – Safety Standards

RW7.1 DS472 Draft Safety Guide: Organization, Management and Staffing of a Regulatory Body (to review and combine the following Safety Guides: GS-G-1.1, GS-G1.5, DS113, GSG-4 and DS460) For approval for submission to CSS J. Parlange

RW7.2 DS473 Draft Safety Guide: Regulatory Body Functions and Processes (to review and combine the following Safety Guides: GS-G-1.2, GS-G1.3, GS-G-1.4, GS-G1.5, SSG-12 and part of WS-G-5.1) For approval for submission to CSS G. Jones

RW7.3 DS474 Draft Safety Guide: Arrangements for the Termination of an Emergency For approval for submission to CSS S. Nestoroska Madjunarova

RW7.4 DS475 Draft Safety Guide: Arrangements for Communications in Preparedness and Response for a Nuclear or Radiological Emergency For approval for submission to CSS L. Berthelot

RW7.5 DS477 Draft Safety Guide: The Management System for the Predisposal and Disposal of Radioactive For approval for submission to CSS Y. Kumano
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<td>Current issues of on-site and off-site Radioactive Waste Management in Japan</td>
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<td>RW10.2</td>
<td>WHO Report &quot;Health Risk Assessment from the nuclear accident after the 2011 Great East Japan Earthquake and Tsunami based on Preliminary Dose Estimation&quot;</td>
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<td>RW10.3</td>
<td>UNSCEAR Report &quot;Exposures due to the Nuclear Accident following the Great East-Japan Earthquake and Tsunami&quot;</td>
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<td>RW10.4</td>
<td>IAEA Comprehensive Report on Fukushima</td>
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<td>RW10.5</td>
<td>Response to the Fukushima Daiichi Accident from the NEA and its Members</td>
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### RW11. Reports on Application and Implementation of Safety Standards

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<th>For information and discussion</th>
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### RW12. Other Business

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<td>Convention on Nuclear Safety – Feedback on the Working Group of Effectiveness and Transparency</td>
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<td>M. Svab</td>
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<td>Terms of Reference of the Safety Standards Committees</td>
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<td>D. Delattre</td>
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<td>RW12.4</td>
<td>OIOS Review of Transport Programme</td>
<td>For information</td>
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### RW13. Closing of the Meeting

| RW13.1 | Conclusions of the Joint Session | G. Williams/G. Massera |

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<td>27th TRANSSC</td>
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<td>4th NSGC</td>
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<td>34th CSS</td>
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<td>36th WASSC</td>
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<td>35th RASSC</td>
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ANNEX III
List of Participants

The Committee

G. Massera, Argentina (Chairman)
H. Topfer, Australia
L. Van Bladel, Belgium
M.H. Marechal, Brazil
P. Thompson, Canada
Z. Qifu, China
J. Davidkova, Czech Republic
A. Hamed Osam, Egypt
M. Markkannen, Finland
J-L Godet, France
M. Helming, Germany
L. Koblinger, Hungary
Y. Rusdian, Indonesia
D. Pollar, Ireland
J. Koch, Israel
L. Bologna, Italy
N. Ishikawa, Japan
S.Y. Lee, Rep. of Korea
B. El Fawaris, Libya
A. Mastauskas, Lithuania
M. Tijsmans, Netherlands
A. Cotteril, New Zealand
G. Saxebol, Norway
A. Merta, Poland
S. Mikheenko, Russian Federation
V. Jurina, Slovakia
T. Sutej, Slovenia
O.J. Pule, South Africa
C. Alvarez, Spain
A. Leupin, Switzerland
T. Pavlenko, Ukraine
J. Loy, United Arab Emirates
S. McCready-Shea, United Kingdom
B. McDermott, United States of America

Advisors

P. Bérard, France
J-F Lecomte, France
A. Schmitt-Hannig, Germany
Y. Ishimori, Japan
T. Yamaguchi, Japan
B-S Kim, Rep. of Korea
United Nations Organizations
C. Blackburn, Food and Agriculture Organization of the United Nations (FAO)
S. Niu, International Labour Organization (ILO)
M. Gaunt, International Labour Organization (ILO)
T. Zodiates, International Labour Organization (ILO)
P. Jimenez, Pan American Health Organization (PAHO)
M. Crick, United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR)
F. Shannoun, United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR)
M. Perez, World Health Organization (WHO)
N. Prasopa-Plaizier, World Health Organization (WHO)

International Organizations
A. Janssens, European Commission (EC)
W. Fasten, International Source Suppliers and Producers Association (ISSPA)
E. Lazo, Nuclear Energy Agency of the Org. for Economic Co-operation and Development (NEA/OECD)

Other Organizations
B. Lorenz, European Nuclear Installation Safety Standards Initiative (ENISS)
J-F. Lecomte, International Commission on Radiological Protection (ICRP)
R. Czarwinski, International Radiation Protection Association (IRPA)
M. Voytchev, International Electrotechnical Commission (IEC)
W. Fasten, International Source Suppliers and Producers Association (ISSPA)
M. Shinichiro, World Nuclear Association (WNA)
J. Townes, World Nuclear Association (WNA)