INTERNATIONAL ATOMIC ENERGY AGENCY
DIVISION OF RADIATION, TRANSPORT AND WASTE SAFETY

WASTE SAFETY STANDARDS COMMITTEE
(WASSC)

23-27 June 2014

IAEA HEADQUARTERS, VIENNA, AUSTRIA

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WASSC MEETING
IAEA HEADQUARTERS, VIENNA
23 June 2014

W.1 OPENING OF WASSC MEETING

The meeting was opened by Mr Pil-Soo Hahn (DIR-NSRW) noting that this was the first meeting of the seventh term of the Waste Safety Standards Committee. Mr Hahn welcomed all participants, new nominated members and observers and the ones re-nominated, and thanked Mr Geoff Williams from Australia, for accepting the chairmanship of WASSC, after being its Chair for a successful sixth term of WASSC.

Mr Hahn referred briefly to the past history of WASSC, highlighting the importance of the committee while establishing waste safety standards and focused on the new phase of the committee for this term. Now, the feedback on the application of the safety standards by the Member States, and in particular, from WASSC members is relevant in improving the standards and for identifying possible gaps.

Mr Hahn then thanked WASSC members for their involvement in the Agency’s activities for the improvement of the safety standards and reminded them of the importance placed by the Agency on their advice. Mr Hahn introduced Mr Andrew Orrell, new Section Head of the Waste and Environmental Safety Section, who provided a brief opening remark, ensuring to WASSC members his support to the future development of the committee activities.

Mr Orrell handed over the meeting to Mr Williams.

W.2 CHAIRMAN’S REMARKS

Mr G. Williams, Chair of WASSC, welcomed members to this meeting, recalling the words of the previous WASSC Chair, Mr Pather, who referred to it as “the committee of the philosophers”, with always a forward looking to ensure waste safety is implemented satisfactorily.

Mr Williams introduced the Secretariat and thanked their work to support WASSC. Afterward Mr Williams focused on the inputs of WASSC members for agreeing on documents in the development process of the safety standards: at the time of agreeing on the Document Preparation Profile, before sending a draft document to Member States comment and before submitting a draft safety standard to the endorsement of the Commission of Safety Standards, the main commission, for publication.

Mr Williams wished all participants a successful meeting and fruitful participation and outcomes.

W.3 ADOPTION OF AGENDA FOR THE WASSC MEETING

The agenda of the meeting (please refer to Annex I) was adopted without modifications, pointing out to the need to move presentations during the week to allow speakers to take part of WASSC due to other commitments.
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W.4 ADMINISTRATIVE ARRANGEMENTS FOR THE MEETING

Ms G. Siraky, Coordinator of WASSC (WES-NSRW) announced the administrative arrangements for the meeting. Ms Siraky also welcomed all WASSC members, in particular those delegates attending a WASSC meeting for the first time and those participating on behalf of WASSC members, and announced the regrets received. Ms Siraky also referred to the fact that WASSC meetings adhered to the Agency’s paperless meeting policy and that all the presentations would be made available by the end of the day in the dedicated WASSC folder online.

W.5 REPORT FROM 36TH WASSC MEETING

Mr Williams summarized the WASSC 36th meeting report, mainly for information of the new members of WASSC. The presentation pointed out to the main outcomes of the meeting, and to the fact that it was also an opportunity to the Sub-Group of WASSC to meet to identify possible gaps in the WSS.

Mr Williams pointed out to the fact of the need of feedback from WASSC members on their experience with Safety Standards implementation in their country and report on them to WASSC.

No written comments were received on the draft report. The WASSC 36 meeting report was approved.

**Action:** WASSC members to take note of the need of feedback on their experience with Safety Standards implementation in their country and report to WASSC38 on them.

W.5.1 Status of actions arisen from WASSC 36

Ms Siraky presented the current status of the actions arisen from the past meeting, 36th WASSC, attached to this report as Annex II.

W.6 REPORT FROM THE 35th CSS MEETING

Mr D. Delattre (NSS-SSCS) introduced the report of the 35th meeting of the Commission for Safety Standards. Mr Delattre particularly addressed the following:

- Status of Safety Requirements in relation to the Roadmap for long term structure of Safety Standards decided by CSS in 2008;
- Status of endorsed Safety Standards;
- File available on the web site with all Safety Standards embedded;
- Documents approved by CSS35(five draft standards and six DPPs);
- Items discussed by CSS35 and informative presentations;
- Identification of additional guidance needed:
  - Design extension condition (in systems specific guides ?)
  - Independence of safety systems (including diversity, redundancy and separation)
o Provision of alternative sources for power, compressed air and cooling

o Health hazard in perspective, OILs, Concept of Operations for different threat categories, Emergency Facilities and Locations, Emergency Planning Zones and Distances, Communication in emergency, Transition from emergency to existing exposure situation. Handling and transport of non-food commodities.

o Waste management in, or following an emergency situation

Committee members sought clarification on the following topics:

➢ Status of incorporation of the FDA lessons learnt to various Safety Standards (i.e. GSR-Part 3, GSR-3, GS-G-3.1 and 3.5);

➢ Use of Design Extension Condition (DEC) concept needs more guidance, on how to link this concept to operational safety management, for existing plants, when DEC were not addressed at licensing stage; and

➢ Role of different involved parties during the review and approval of Safety Standards: Lead Committee; Secretariat; Coordination Committee; Publication Committee.

W.7 WASSC WORK PLAN 2014-2017

The WASSC Work Plan for 2014-2017 was shared by the Secretariat shortly before the WASSC 38th meeting. WASSC members agreed to provide feedback on it for the next meeting.

W.7.1 WASSC three year report 2011-2013 cycle

Ms Siraky introduced the WASSC three year report from the 6th term of the committee highlighting that:

• it is a standalone document;

• includes background information on historic development of waste safety standards;

• summarises the working methods and the activities of WASSC (2011 – 2013);

• includes status of development of waste safety standards at the end of the period

• identifies the issues of the 6th term; and

• provides recommendations for the current term of WASSC.

Committee members praised the report as it provides a full picture of the Waste Safety Standards (WSS) evolution; its current status and issues to be followed in the future. WASSC members also acknowledged this report and the WASSC WG report as useful resources for building future work of WASSC related to the WSS.

Discussion went on the following topics:

➢ Status of the move of the Safety Glossary to an electronic version;
Status of recommendations from the last term of WASSC regarding strategic planning, generic safety cases and stakeholder involvement;

**Action:** The Secretariat to make status reports on how the recommendations from previous term of WASSC on the following items:

- Strategic planning for severe accident recovery (including remediation, decommissioning and waste management)
- Generic Safety Cases
- Stakeholder involvement

*On how they are being addressed while revising WS-G-3.1 (DS468) and on the development of the TECDOC on large amounts of waste after a nuclear or radiological accident*

**W.7.2 Strategies and Processes for the Establishment of IAEA Safety Standards (SPESS)**

Mr. Delattre introduced the topic addressing the role of the IAEA Safety Standards as part of the Global Nuclear Safety and Security Regime. He noted that the mandate for the development of safety Standards comes directly from the IAEA Statute. He also referred to the history of development of the Safety Standards since the establishment of the IAEA in 1957, to the history of the development of programmes for the different safety areas, and the functioning of the Safety Standards Committees.

There are currently 120 Safety Standards published, with a maximum envisaged number of around 130. Currently there are 30 to 40 Safety Standards under development, between new or existing safety standards under revision.

SPESS lays down the strategies, responsibilities and procedures in the form of a step-by-step guide, to be followed by Agency staff and review committees in developing safety standards. The process flow for the development of safety standards covers the stages of development of the Document Preparation Profile (DPP), preparation of the draft text using external consultants, review by the Committees and by Member States and endorsement by the Commission on Safety Standards and the Board of Governors (only for Safety Fundamentals and Safety Requirements). Mr Delattre highlighted the point at which feedback and decisions are requested from the four Safety Standards Committees and the Nuclear Security Guidance Committee and underlined the importance of the lead Committee for each safety standard being aware of the comments from the other Committees.

Committee members sought clarification on the following topics:

- Ways to receive feedback on Safety Standards;
- Effectiveness and efficiency of the process, and timing involved in the whole process to develop and publish Safety Standards;
- Frequency of the review/revision of the Safety Standards, being roughly 10 years for Safety Requirements and 5 years for Safety Guides, but the actual figures might differ from one document to another.
W.7.3 WASSC working methods

Ms Siraky presented in detail the functioning of WASSC, the working methods of the SSC’s and the use of the web site. As matter of background information Ms Siraky referred to the Terms of Reference of the SSC’s (TOR), the composition of the membership of WASSC, the function of the WASSC members and the functions of the Waste Safety Standards Committee.

The specific working methods presented and discussed were:

1. Each term the DDG appoints the Chairperson for WASSC, from among the members.
2. Ordinarily, WASSC meets twice a year, with each meeting lasting up to five working days.
3. Extraordinary meetings or ad-hoc Working Groups may be called when required.
4. The Chairperson, in conjunction with the Scientific Secretary, will prepare a report of the proceedings of each meeting, and a report at the end of each term on the progress made.
5. The Chairperson represents the views of WASSC at the meetings of the CSS and will ensure that WASSC members are kept informed of any decisions taken. In particular, the Chairperson will seek the views of the CSS on any unresolved issues.
6. Electronic communication is used to the extent possible, particularly in dealing with draft standards and related comments.
7. Each Committee will liaise with other SSC’s as well as CSS and NSCG to ensure coherency between safety and security publications. The Interface Group (IG) is the body which determines draft documents whereby safety-security issues are interfacing.
8. Meetings are conducted in English.
9. WASSC reports to the DDG-NS.

Then, the specific process for the preparation of Safety Standards were presented and discussed. The interactions of the Secretariat with the WASSC members through the web pages and points when the inputs from WASSC members are expected were identified as:

1. The Secretariat posts the documents to the COMMITTEE Members Web Page, to the folder: DRAFTS FOR COMMENTS two months before the first SSC meeting.
2. The Committee Members posts their written comments to the WASSC Members web page 21 days in advance the first SSC meeting.
3. The Technical Officer responsible for the Safety Standard posts the resolution of the comments received one week before the first SSC meeting (Step 3 and 7) and the comments resolution at the WASSC meeting (Step 11)
4. The Committee discusses only the unresolved issues at the meeting.

Three relevant web pages were introduced:

- **Safety Standards**: where generic information can be found, the structure of the whole set of safety standards, the status file, frequently asked questions and a downloadable file with all established safety standards;
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- **Specific WASSC folder**: containing information from previous meetings, on the current meeting (where the presentations are made available in the course of the meeting) and a folder with general information on the Waste Safety Standards;

- **Drafts for comment**: where the documents under discussion for next round of meetings are posted, identifying the review committee that takes part in the process. The process for posting comments was presented, indicating that it is the only part of the process needing specific registration.

**W.7.4 Waste Safety Standards status and future steps**

The status of the Waste Safety Standards was included into a presentation made available at the WASSC37 web folder.

**W.7.5 Feedback from the Working Group of NUSSC on DS462**

Ms S. Geupel (GRS, Germany) agreed at WASSC36 to represent WASSC at the meeting of the WG of NUSSC to review and discuss the preliminary IAEA resolution of comments submitted by the Member States on DS462. Ms Geupel briefed committee members on several topics of the work of such WG meeting (held in February 2014), mainly focusing on the change in the wording of the requirements as a consequence of the MS review, that might have an impact on the work of WASSC. The presentation made by Ms Geupel is available at the WASSC37 web folder.

WASSC members thanked Ms Geupel her involvement in the WG of NUSSC, diligence in preparing the presentation for WASSC37, and agreed that there were no objections from WASSC on how MS comments were resolved for SF storage. Comments from WASSC addressed the following topics:

- The availability of a regulatory safety experience feedback network for RW and SFM; and

- Severe accidents in the context of GSR-Part 5.

**W.8 REVIEW OF DOCUMENTS FOR APPROVAL**

**W.8.1 DS457 Draft Safety Requirement: Preparedness and Response for a Nuclear or Radiological Emergency (Revision of GS-R-2)**

Ms E. Buglova (IEC-NS) introduced the document referring to the recent history of the review of GS-R-2, Safety Requirement: Preparedness and Response for a Nuclear or Radiological Emergency, issued in 2002 with the co-sponsorship of 7 International Organizations. In 2011 the formal review of this Safety Requirements’ (SR) document started with a workshop of Members States that had major involvement in past accidents and EPR exercises. This workshop identified where more work was needed to complement the existing document. This workshop was followed with topical consultancy meetings to address specific aspects such as on emergency workers, non-radiological consequences, waste management arising from the emergency and the transition phase to existing exposure situations. In addition, the review of the GS-R-2 after the Fukushima Daiichi Accident (FDA) identified that there were no gaps in the Safety Requirements, but there were needs to add clarifications to some topics. Currently, 13 International Organizations have expressed their interest to co-sponsor the revised version of the document.
The objective of the document is to set the requirements for an adequate level of preparedness and response for a nuclear or radiological emergency.

The draft document had been sent to Members States comments in July 2013, and as response, about 900 comments were received from 27 Member States and 9 International Organizations, most of them of editorial nature. The comments received from WASSC members on the current version were all resolved.

Then Ms Buglova elaborated further on the response of the Secretariat to certain comments received from WASSC, as follows:

- **Application of dosimetric concepts of reference level and generic criteria:** Australia requested for additional guidance to elaborate in details on development of protection strategy, the application of dosimetric concepts of reference level and generic criteria and on development of national criteria in line with the requirements. This suggestion will be implemented in a publication of the EPR series, to be developed after approval of DS457 at the CSS level. In addition, the framework for the development of criteria (particularly OILs) is under preparation again within EPR series.

- **The use of the qualifier “detectable” associated to the increase in the incidence of cancers as a basis for longer term medical follow up** was requested to be removed (by Australia). This was presented as accepted and agreed also at RASSC meeting; however, clarification was provided on the aim to establish a cohort for such studies and that there may be also other reasons for the medical follow-up in the long term which was out of the scope of these requirements.

- **The system for putting radiological health hazards in perspective in an emergency** (Appendix III of the document). As a result of bilateral consultations prior to WASSC meeting, the word “safe” was replaced by “no expected health concerns” in Appendix III. However, this matter was further discussed at RASSC. While it was recognized the need for having a requirement for providing information in plain and understandable language, putting radiological health hazards in perspective, to enable informed decision concerning protective and other response actions to be taken during an emergency, the example system in Appendix III was seen as more adequate for guidance level document. As a consequence, Appendix III of the document was removed placing a requirement for the system in the main text while the example system will be addressed in the context of DS475 development.

Ms Buglova indicated that there were to be a revision of necessary inclusion of nuclear security related definitions in the context of DS457 as agreed by NSGC and that there were not unresolved comments from TRANSSC.

WASSC members thanked the work of the Secretariat to resolve the Safety Standards members’ comments. Discussion of WASSC members followed-on, focussed on the following topics:

- **Status of approval of the document by RASSC;**

- **National Policies on RWM and wastes resulting from emergencies:** this Safety Requirement was discussed and agreed at WASSC35; no further comments from WASSC were received since then. In addition, GSR-Part 5 in its scope indicates that covers all RW, irrespective on how it was generated, and includes remediation waste in to the scope of the document, therefore, requirement 2 of GSR-Part 5 should be applicable also to waste arising from an emergency.

- **Planning of waste management following an emergency** was recognized as a quite challenging task as these emergency situations are unforeseeable and not planned to happen, however past experience had shown some common challenges for which adequate consideration at the preparedness stage could be done; and
Paragraph 5.85 needs further elaboration; as experience have been collected on this matter, after Goiania and the contamination with $^{210}$Po. However, further guidance was seen as appropriate for lower level documents.

WASSC members agreed that all issues on WS were satisfactorily addressed. WASSC agreed that DS457 can be sent to CSS for endorsement subject to the agreement of the RASSC Chair regarding the amendments suggested by RASSC.

**Action** Submission of DS457 to CSS for endorsement subject to the agreement of the RASSC Chair regarding the amendments suggested by RASSC

**W.8.2 DS462 Draft Safety Requirement: Revision by amendment of GSR Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4**

Mr D. Delattre (NS) presented draft document DS462, revision of five Safety Requirement documents:

- GSR Part 1, Safety Requirement on Governmental, Legal and Regulatory Framework for Safety;
- NS-R-3, Safety Requirement on Site Evaluation for Nuclear Installations;
- SSR-2/1, Safety of Nuclear Power Plants: Design;
- SSR-2/2, Safety of Nuclear Power Plants: Commissioning and Operation; and
- GSR Part 4, Safety Assessment for Facilities and Activities.

The objective of the document is to update and strengthen a number of safety requirements in the light of the lessons learnt following the Fukushima Daiichi Accident (FDA). The process agreed was the review by amendment of the listed Safety Requirements, performing a focused review. The current step implies the review and approval of the documents for their submission for endorsement to the CSS.

Mr Delattre provided the history of development of the current draft and details on its process of approval. He also summarized the number of the comments received and the process for the resolution of the SSC comments. Mr Delattre also provided the resolution of the WASSC comments from Japan, Pakistan and EC on SSR2/2, and the major changes due to NUSSC members’ comments.

Committee members sought clarification on the following topics:

- Process for the availability of the resolution of comments on documents for approval. It was clarified that for Step 11 there are no need to post the resolution of comments in advance to the meeting, as much of the comments are solved at the meeting. For Step 3 (DPP approval) and Step 7 (approval of the first draft for submission to Member States for comment) SPRESS sets the need to post the comments according to the pre-established timeframe to allow the technical officer to resolve the comments and post their resolution one week prior to the meeting;

- One of the comments referred to the early shutdown of a facility for decommissioning after an incident, and to ensure consistency with GSR-Part 6 and DS452. It was clarified that the Specific Safety Requirements do not need to duplicate the General Safety Requirements and that both are complementary.
• The need of guidance on how to apply the concept of DEC (Design Extension Conditions, in the revised SSR-2/1) to other Nuclear Installations than NPP’s.

• The use of the Safety Case (SC) in demonstrating the safety of facilities is not included in GSR Part 4. It was recognized that the SC concept, supported by Safety Assessments, are only used by the Waste Safety (WS) community, and as such included in the WS documents. WASSC members noted that the concept of SC was brought to WS from the high hazard industries, and it is not yet used by other safety areas. WASSC members recognized that this is formalism, not a breach or a gap, only terminology, but also expressed the wish to see in the future the evolution of the other safety areas to this concept and aiming to their use in a consistent manner.

Ms Sandra Geupel, WASSC representative attending the WG of NUSSC to discuss the resolution of Member States comments on DS462 noted that there were no objections from WASSC on how the Member States comments were resolved by that WG, highlighting the importance of this work for the storage of spent fuel.

WASSC members expressed positive agreement to the submission of the full pack of documents in DS462 to CSS for endorsement for publication.

Action: The Secretariat to submit DS462 to CSS for endorsement for publication.

W.8.3 DS360 Draft Safety Guide on Safety of Nuclear Fuel Reprocessing Facilities

Mr V. Carr (NSNI) presented the draft Safety Guide on Safety of Nuclear Fuel Reprocessing Facilities by referring to its history of development, to its character as facility-specific SG, under the Safety Requirement for Fuel Cycle Facilities (NS-R-5) and to its table of content. The document received before the meeting 277 comments from 5 committee members and two observer organizations. All comments were carefully considered and addressed. All comments were useful and supportive, and contributed to improve wording, clarity and references. Mr Carr also presented the rational for the rejection of few comments.

WASSC members commented on the following topics:

• Different waste streams to be considered, in particular mixed wastes. It was agreed that the important matter is that all waste are characterized and all waste streams are sent to licensed treatment, storage and/or disposal facilities.

• Reprocessing process considered in the scope of the document: the flow sheet relates to aqueous processes, therefore the SG does not deal with non-aqueous reprocessing facilities;

• In several sections the document refers to dose optimization. It was noted that the optimization process entails the optimization of protection and safety measures not the dose optimization, therefore DS360 needs amendment to incorporate the proper use of this concept.

• References to WS requirements and guides should be included through the document, and DS360 should be made consistent with them.

WASSC members then agreed that the document can be sent to Member States comments taking into account the comments made at the meeting.

Action: The Secretariat to submit DS360 to Member States for comments, after the inclusion of the comments of WASSC made at the meeting.
W.8.4 DS381 Draft Safety Guide on Safety of Nuclear Fuel Cycle Research and Development Facilities

Mr V. Carr (NSNI) presented the draft Safety Guide on Safety of Nuclear Fuel Cycle Research and Development Facilities. In particular he referred to its history of development, to its character as facility-specific SG, under the Safety Requirement for Fuel Cycle Facilities (NS-R-5) and to its table of content.

The document received before the meeting 120 comments from 7 committee members. All comments were carefully considered and addressed. All comments were useful and supportive, and contributed to improve wording, clarity and references.

Mr Carr summarized some of the comments received and their proposed resolution: it was proposed that several paragraphs on site evaluation be removed and replaced by a reference to NS-R-3, the Safety Requirements on Site Evaluation for Nuclear Installations, and associated detailed guidance, leaving a reference to physical protection; and the title of the section “preparation for decommissioning” would be retained as such.

WASSC members commented on the following topics:

- As for DS360, this draft also refers to dose optimization in several sections. It was noted that the optimization process entails the optimization of protection and safety measures not the dose optimization, therefore DS381 needs amendment to incorporate the proper use of this concept.
- Use of the term intervention: in many cases the term is used in its normal meaning and in other it is used associated to maintenance. It is noted that such interventions do not relate to the concept of intervention in Radiation Protection. Because of that, and to avoid further confusions and misunderstanding, WASSC members recommend avoid using the term interventions in a guidance for a facility subject to the Radiation Protection procedures, that might need to conduct interventions due to RP needs: after an incident or accident to remove radioactivity or clean equipment or surfaces, to allow to diminish workers exposure.
- Justification is not needed for maintenance; the concept of optimization should be used.

WASSC approved the document to proceed to next step subject to the incorporation of the comments provided at the meeting.

Action: The Secretariat to submit DS381 to Member States for comments, after the inclusion of the comments of WASSC made at the meeting.

W.8.5 DS454 Draft Safety Guide: Predisposal Management of Waste from the Use of Radioactive Materials in Medicine, Industry, Research, Agriculture and Education (Revision of WS-G-2.7)

Mr K. Moeller (NSRW) introduced the draft Safety Guide. He summarized the background to the development of the Safety Guide, the justification for its development and its table of content. Mr Moeller referred that 219 comments were received from 8 committee members and one observer organization. Most of the comments were of editorial character or asking for clarification. Mr Moeller then set out the main changes that had resulted from comments from WASSC (lead Committee): there was now clear use of ‘shall’ and ‘should’ statements and citations from GSR Part3. In the objective the term ‘large facilities’ had been changed to ‘moderate sized facilities’ for clarification; all relevant
requirements of GSR Part 3 were now addressed; and some text had been added on the graded approach.

WASSC members recognized WS-G-2.7 as a very good and focused document and with the revision performed it will be improved, ensuring consistency with the current guidance.

WASSC members provided in addition the following comments:

- The use of should statements: some of them look like more requirements than guidance. It was noted that the IAEA’s guidance is considered a very good resource in conducting peer reviews, to verify compliance with Safety Standards. It might be convenient to think also in the peer reviews when preparing the guidance, as in most of the cases, questions are prepared for each should statement. In case of many should statements then many questions will be put for the peer review that might undermine the efficiency of the peer review. It might be convenient to think on a hierarchy of should statements as does exist for shall statements (OAR, in bold, and following text with normal font type);
- Decommissioning of small facilities, to be further developed on DS403;
- Waste minimization: it should be clarified what means this concept to ensure consistency with the Safety Fundamentals and the Safety Requirements, with the aim to minimize waste as it is practicable.

WASSC members thanked the Technical Officer for the document and asked to take into consideration the comments received while drafting the document.

*Action:* The Secretariat to submit DS454 to Member States for comments, after the inclusion of the comments of WASSC made at the meeting.

**W.8.6 DS455 Draft Safety Guide: Establishing a National Radiation Safety Infrastructure**

Mr I. Shadad (NSRW) presented the draft Safety Guide, focusing on the sources for development and current status of approval. Various aspects had been taken into account in the course of its development, such as experience gained from the implementation of the Model Project on upgrading radiation safety infrastructure, information on countries that have gone through the process of establishing safety infrastructure, information on countries that have been providing assistance to other countries in establishing radiation safety infrastructure, and information about countries of different scales in the use of radiation sources. The approach adopted in SSG-16, the Safety Guide on Establishing the Safety Infrastructure for a Nuclear Power Programme, had also been considered. The draft received at this stage 77 comments from two committee members and one observer organization and Mr Shahad informed that the resolution table were available on the web site.

WASSC members sought clarification on the following topics:

- The character of the guidance document with actions to be fulfilled was clearly stated and questioned. In response Mr Shahad informed WASSC that this Safety Guide follows the same style as SSG-16, the Safety Guide on Establishing the Safety Infrastructure for a Nuclear Power Programme; aiming to contribute in this case to the establishment of a National Radiation Safety Infrastructure;
- The character of ‘should’ statements in this SG seems that lost its original intend purpose as used in other type of Safety Guides.

WASSC agreed that DS455 can be sent to Member States for comment.

*Action:* The Secretariat to submit DS455 to Member States for comments.
W.8.7 DS460 Draft Safety Guide on Communication and consultation with interested parties by the Regulatory Body

Mr J-R. Jubin (NSNI) presented the draft Safety Guide, pointing out to text under the Fundamental principle 2 and 9 of SF-1 that calls to appropriate means of informing interested parties. Mr Jubin also noted that one of the lessons learned from the FDA is the need the regulatory bodies enhance communication, transparency and sharing of regulatory knowledge and experience among themselves and with interested parties, such as industry and the public. He noted that this was the second time the draft is sent for approval of the Safety Standards Committees as RASSC and WASSC had not approved the text at previous round. As result of the comments provided by RASSC and WASSC, the role of the regulatory body had been clarified and ambiguous wording removed; additional requirements, including as background information, had been considered to address the CSS request to provide guidance on requirements other than Requirement 36 of GSR Part 1, in particular, the 'regulatory' duties which could be assigned to the authorized party. DS460 had been streamlined and unnecessary duplications and details had been deleted.

65 comments were posted by six delegation members of WASSC, RASSC, NUSSC and NSGC, and from them nearly three forth were accepted directly or with modifications. All the comments resulted in useful improvements. Mr Jubin provided resolution for notable comments.

WASSC members commented:

- Graded approach in communications: on how to apply this concept in relation to risk and other issues, including social factors and interests of stakeholders. Guidance on the relevance of, and how to apply, the graded approach to communication could be developed further in DS460;
- Relation to the optimization process (ref: GSR Part 3) and the establishment of dose constraints, might be useful and key resource while dealing with communication with interested parties.

It was highlighted that DS460 contains generic guidance and is relevant to different General Safety Requirements: GSR Part 1, GSR Part 3, GSR Part 4 and GSR Part 5.

WASSC was satisfied on how their comments were addressed and agreed the document can be sent to Member States consultation. Approval by WASSC was given on the basis that the comments previously made by WASSC in plenum on the importance of communication for key components of the system of radiation protection (e.g. environmental monitoring programme, optimisation) in BSS were considered to be resolved satisfactorily in this draft. It was pointed out that Requirement 21 of GSR Part 1 requires the regulatory body to establish formal and informal mechanisms of communication.

Action: The Secretariat to submit DS460 to Member States for comments, after the inclusion of the comments of WASSC made at the meeting.


W.9  DPPs FOR APPROVAL – SAFETY STANDARDS

W.9.1  DS484 DPP for a Draft Safety Requirement on Site Evaluation for Nuclear Installations (Revision of NS-R-3)

Mr J. Haddad (ISSC-NSNI) introduced the Document Preparation Profile (DPP) for the draft Safety Requirement on Site Evaluation for Nuclear Installation that is a revision of NS-R-3. Mr Haddad linked this document to the Safety Fundamental (SF-1), provided the objective of the document, the status of the related Safety Guides and the basis for the Revision of NS-R-3.

The key objective for the revision of this Safety Requirements document is to provide for numbered bold overarching requirements, and related changes, to update the structure of the Safety Requirement document to the current style adopted for such category of documents.

The document received at this stage a total of 33 comments, and most of them were accepted. The table of resolutions and the revised DPP were posted on the committees’ web site.

Committee members commented the following:

- Consideration of the decommissioning phase at the siting of a facility: It was noted that the siting stage generates relevant information as background level that will be important reference at the decommissioning phase. It was also noted the importance of setting, at so early stage, the end-state of the facility after decommissioning. The siting will provide relevant information for deriving the design of the facility, taking into account its end-state. This will also help in setting the decommissioning strategy since early development of the facility, including the expectation of the stakeholders for the end-of-life of the facility and the use of the site afterwards.

WASSC members agreed to submit the DPP to the CSS after incorporating the small amendments suggested at the meeting. In addition, WASSC suggested that decommissioning while evaluating sites to be taken into account in the development of the document.

Action: The Secretariat to submit the DPP for DS484 to CSS for approval, after the inclusion of the comments of WASSC made at the meeting.


Mr R. Krivanek (OSS-NSNI) introduced a Document Preparation Profile for a draft Safety Guide on Ageing Management for Nuclear Power Plants, highlighting that also encompasses the storage of Spent Fuel at that plants (Revision of NS-G-2.12). Mr Krivanek noted that the previous version was issued in 2009 and linked to Safety Requirements that have been revised since then (SSR-2/1 and SSR2/2). In addition, this revision should also cover Long Term Operation (LTO) of NI’s.

Then, the specific objectives of this SG revision are to update obsolete, insufficient or missing sections and incorporate a current state-of-the-art of industry practices and research and development. This objective can be further developed and the focus will be on:

- Scope setting and screening for ageing management and LTO;
• Ageing management (AM) review;
• Review of ageing management programmes;
• Management of obsolescence;
• Relevant plant documentation and programmes to AM and LTO;
• Programme for long term operation;
• Time limited ageing analysis.

The document will also assure consistency in terminology; provide definitions when needed and comprehensive guidance for physical ageing, conceptual obsolescence and technological obsolescence.

The document received 38 comments from 8 members of SSCs’ and one observer organization. Most of them were accepted and the ones not accepted were discussed at the meeting.

WASSC members then commented the following topics:

• The importance for ageing management for SF in the case of long-term operation of NPPs and/or extension of their useful life is the need for due consideration of the spent fuel storage facilities and also the size of the extended storage capacity, for the whole period until the decision on its subsequent fate is implemented (storage away from reactor, disposal or recycling);

• The need for ageing management of the SF at NPPs, considering the timing needed to define at governmental level by MS the strategies for radioactive waste management and spent fuel management, including their decision and implementation process;

• The fact that SF might be considered by certain MS as waste, but by others as a material (resource for further use);

• SF storage might not only encompass wet storage at NPPs but also longer term storage in dry storage (casks);

• Interface with other documents, as SSG-15, on storage of SF;

• Importance to also consider the ageing not only for the materials of the installations, but also for the material constituent of the SF.

WASSC members agreed to submit the DPP to the CSS for approval. WASSC members suggested, for the case of long term operation of NPPs and/or extension of their useful life, due consideration to the SF storage facilities and also the size of the extended storage capacity should be taken into account in the development of this draft safety guide.

Action: The Secretariat to submit the DPP for DS485 to CSS for approval.
W.9.3 DS486 DPP for a Draft Safety Guide: Establishing the Safety Infrastructure for a Nuclear Power Programme (Revision of SSG-16)

Mr M. Svab on behalf of Mr D. Graves (RAS-NSNI) introduced the Document Preparation Profile for the revision of SSG-16, Safety Guide on “Establishing the safety infrastructure for a Nuclear Power Programme”, addressing its current use by embarking countries, as a module for the International Regulatory Review Services provided by the Agency, and to the related self-assessment package. This SG provides guidance on the implementation of the safety requirements under DS462, DS456 and DS457. Taking into account that the revision of such requirements are advanced, those changes need to be considered early in the establishment of a safety infrastructure for a NPP, therefore there is a need to update as soon as possible this guide document to allow embarking countries develop their infrastructure accordingly.

Mr Svab identified the areas of proposed changes in the safety requirements that will require inclusion in the revised version of SSG-16 and the Fukushima implications to be considered in the revision.

The objective and scope of the document are:

- To provide guidance on establishing the safety infrastructure for a NPP considering the ongoing revision of the IAEA’s safety requirements;
- To reflect relevant lessons learned from Fukushima accident consistent with the revision of the safety requirements
- To focus on the application of the safety requirements during the phases covered in SSG-16;
- The revision will also include user’s feedback from the utilization of SSG-16 (i.e. workshops, missions);
- There is no intention to change the structure, the approach or the scope currently contained in SSG-16.

In addition, it was made clear that the “Action statements” in SSG-16 for the three initial phases of a nuclear power programme should be, in principle, maintained.

WASSC members recommended to keep flexibility regarding the intended structure of the document, as from the current version there have been identified certain inefficiencies, and certain actions might need to introduce further details.

WASSC members agreed to submit the DPP to the CSS for approval.

**Action:** The Secretariat to submit the DPP for DS486 to CSS for approval.

W.9.4 DS487 DPP for a Draft Safety Guide on Design of Fuel Handling and Storage Systems for NPPs (revision of NS-G-1.4)

Mr K. Sim (NSNI) introduced the document Preparation Profile for the revision of the design aspects of NS-G-1.4, the draft Safety Guide on Design of fuel handling and storage systems for NPPs.

The objective for the safety guide is to provide recommendations on how to meet the safety requirements, established in SSR-2/1, for the design of fuel handling and storage systems in NPPs.
The current version of the document is obsolete, as was produced in 2003, in accordance with a previous Safety Requirement document. In addition SSR-2/1 is under review by DS462.

The purpose of the revision is to maintain consistency with the upstream, safety requirements document, SSR-2/1, and other relevant requirements (e.g. GSR-Part4, SSR-2/2) and guides; and to reflect lessons learned from the FDA.

At this stage the document received a total of 28 comments from 5 representatives of NUSSC, one of them in association to a WASSC member. From them, three comments are relevant to the WASSC area of work:

- Need to address the design of transport casks for SF (Reference to SSG-15);
- Fuel storage over the long term, exceeding the design lifetime of the NPP;
- Design of storage facilities for spent fuel, which are not an integral part of an operating NPP, although such facilities may be located on the same site (Ref to SSG-15).

WASSC members noted the following:

- Two of the items identified by the NUSSC comments (topics above) are being dealt by SSG-15, and there is no problem at all;
- The fuel storage over long term, exceeding the design lifetime of the NPP, including the design integrity of SF pools and the long term integrity, should need to be addressed by DS487;
- The Dual Purpose Cask document, that it is being published as a TECDOC, shortly.

WASSC members agreed to submit the DPP to the CSS for approval.

**Action:** The Secretariat to submit the DPP for DS487 to CSS for approval.

### W.10 NSGC DOCUMENTS FOR CLEARANCE

#### W.10.1 NST002 Draft Implementing Guide: Regulations and Associated Administrative Measures for Nuclear Security

Ms R. Evans (NSNS) introduced the draft implementing guide on regulations and associated administrative arrangements for nuclear security, noting that it is an interface and crosscutting document for all aspects of nuclear security.

This draft implementing guide is intended to provide guidance to assist a State identify the responsibilities of those involved in nuclear security so that suitable regulations and associated administrative measures may be developed for establishing and sustaining an effective nuclear security regime.

The draft document is structured to provide a State with the means to undertake an assessment of its legislative and regulatory framework for governing nuclear security and take actions to update its framework as necessary.
The document is not considered a model regulation, and its aim is to guide MSs to develop their own regulations and associated administrative measures. It fills a strong need recognized by more than 100 MS. The safety and security interface is also highlighted in the document so that all interfaces are well addressed.

WASSC members noted that at this point in time the document does not address directly RWM, and checked if the intention is to apply the document also for RWM and SFM. The intended scope is to cover all material in throughout nuclear fuel life-cycle. Regarding the RW disposal, the Technical Officer informed that is out of the scope of the document.

WASSC cleared the draft document for submission to MS comments for a period of 120 days.

**W.10.2 NST014 Draft Implementing Guide: Nuclear Forensics in Support of Investigations**

Mr D.K. Smith (NSNS) introduced the concept of nuclear forensics supporting law enforcement investigations and nuclear security vulnerability assessments in the context of the Model Action Plan (MAP) that applies to the generalized conduct of a nuclear forensics examination.

NST014 is the revision of the Nuclear Security Series No 2, “Nuclear Forensics Support”, issued in 2006 that was developed in partnership with the Nuclear Forensics International Technical Working Group (ITWG). The revised document incorporates advances to include Member State’s recent experience applying nuclear forensics to prevent and respond to nuclear and other radioactive materials out of regulatory control.

Mr Smith went on providing further details on the implementation of MAP, in particular on analysis and interpretation performed on nuclear and other radioactive material, stressing its iterative character, leading to the findings, and the relationship of MAP with the document NST013, Radiological crime scene management. In addition, comparison to the traditional forensics was presented.

WASSC members expressed that perhaps the most interesting for WASSC regarding NST014 is that elements are very common to some of the safety investigations called for in monitoring legacy sites. Comments included:

- need to recognise the interface of safety and security in Paragraph 1.1, and that the forensics should be conducted also observing the Safety Requirements;
- as well as the safety implications for those responders and analysts conducting the nuclear forensics examination, there may be safety implications for the wider community (e.g. general public) which only come to light during the forensic investigation (for instance, the discovery of alpha-emitting radionuclides not detected as part of an initial response to a nuclear security event). Guidance on how to respond to such wider safety issues, both at the scene and along any transport routes, should be included in NST014;
- note that during a nuclear forensics examination, those conducting the examination will be interfacing with law-enforcement agencies as well as with nuclear regulators;
- a foot note should be added on paragraph 1.2 to indicate that the scope of regulatory control on radioactive material is defined in GSR-Part 3; and
- on Table 1, the reference to K-40 should be deleted as it is a NORM.

NST014 has been cleared by WASSC to proceed to the next step, approval of the DDG-NS.
W.10.3 NST023 Draft Implementing Guide: Physical protection of nuclear material and nuclear facilities

Mr M. Khaliq (NSNS) introduced the draft document noting the change in title to include also reference to nuclear material and that this draft underpins the Recommendations in NSS-13, Nuclear Security Recommendations on physical protection of nuclear material and nuclear facilities.

The objective of this implementing guide is to provide comprehensive and detailed guidance to MS, competent authorities and operators in relation to the recommended requirements of NSS13/INFCIRC/223/Revision 5 with respect to unauthorized removal of nuclear material in use and storage and sabotage of nuclear material and nuclear facilities.

The document has interfaces with other topical guides, and this is identified through the document. In addition, detailed annexes provide further material for implementing the guide.

The development of the draft had six consultancies and a Technical Meeting with 35 MS participating.

The document was cleared by WASSC with no objections to proceed to submission to MS for comments.

W.10.4 NST045 DPP for a Draft Implementing Guide on Computer Security in Nuclear Security

Mr M. Rowland (NSNS) introduced the document proposed as a revision to the Nuclear Security Series document No 17, Computer Security for nuclear facilities. The challenges of the current document were presented: very NPP focused, lack of guidance on computer security for radioactive material and sources; lack of computer security for transport and storage of nuclear or radioactive material.

The objective of the document is to establish implementation guidelines for developing and integrating computer security as a fundamental part of nuclear security. The scope will cover nuclear material and facilities, radioactive material and associated facilities and other radioactive material out of regulatory control. Waste management facilities are included in the scope of the document. The document will provide implementing guidance for the three NSS recommendation documents (NSS13, NSS14 and NSS15).

At this stage, 7 Member states and one international organization from NUSSC and NSG provided 21 comments.

The DPP was cleared by WASSC for further development with no objections.

W.11 DOCUMENTS FOR DISCUSSION

W.11.1 DS427 Draft Safety Guide on Assessment of Facilities and Activities for Protection of the Public and Protection of the Environment

Mr D. Telleria (WES-NSRW) introduced the document and briefed the Committee on its current status of development.
This draft Safety Guide supports the safety requirements in GSR Part 3 (BSS) and there is also a direct link with the other safety guides in this area: *Radiation Protection of the Public and the Environment* (DS432) and *Regulatory Control of Radioactive Releases to the Environment from Facilities and Activities* (DS442).

DS427 provides recommendations and guidance on a general framework for performing assessments of facilities and activities to estimate and control radiological effects on public and on the environment. This assessment is intended for planned exposure situations as part of governmental decision-making and the regulatory authorization processes for facilities and activities. In summary, the document aims to integrate the radiological assessment undertaken as part of the authorization process with that part of the Environmental Impact Assessment process related to radiological matters.

At the previous meeting, RASSC and WASSC discussed the consideration of “flora and fauna” and “potential exposures”. The meeting also noted that NUSSC did not support the inclusion of potential exposures in the scope of the document and left this decision to the WASSC (lead committee). However, the two Committees considered they needed additional information before being able to support or reject that position and instructed the Secretariat to prepare a new version to be discussed during current SSCs sessions.

Based on the comments received, a new version of DS427 was developed and uploaded on the Committees’ website in April 2014. A total of 267 comments were received from 10 SSC’s members and two International Organizations.

The emphasis of the presentation of Mr Telleria was on the topics below, aiming to facilitate decision and advice on the further development of the document.

- Change in the title to “Assessment of facilities and activities for protection of the public and protection of the environment”;
- Flora and fauna is now fully separated as an optional choice by national regulators and a generic practical proposal is made, based on the ICRP approach;
- More options have been added for the selection of accident scenarios to be included for consideration of potential exposures.

Mr Telleria explained the background and rationale behind each of these three proposed changes.

The ICRP approach to protection of flora and fauna uses Reference Animals and Plants (RAPs) and Derived Reference Consideration Levels” (DRCLs) and the IAEA Coordination Group on Protection of the Environment considers this a suitable approach.

The 1 mSv dose limit for members of the public contributes to effectively control radionuclide concentrations in air, water and soil, which in turn can be compared with the DRCLs for flora and fauna using RAPs. This approach allows for easy monitoring and control and does not add an additional burden on operators. This tool has been extensively discussed at international level, and there is a general agreement that the method is technically sound and robust.

Potential exposures are mentioned in requirements 7, 9, 11 and 12 in the BSS and, from the comments received there is strong support for the inclusion of potential exposures in the safety guide. The prospective assessment of potential exposures (a risk using possible accidents with their probabilities) is not the same as the assessment of the consequences resulting from an actual accident or the assessment of possible accidents for emergency preparedness and response. There is a need for input on possible source terms from the nuclear safety community, but otherwise it is primarily a radiation protection issue.

There was an extensive discussion at WASSC regarding the following topics:
• The suit of SGs on the public and environmental protection (DS427, DS432 and DS442), on the lead committees and if the three SGs were needed. WASSC were informed on the aims of the three SGs, and specific presentations were made, as progress reports on DS432 and DS442 (please refer to W12.1 and W12.2 in this report);
• WASSC requested a compatibility check with existing Safety Guides and avoidance of overlap were emphasised;
• WASSC acknowledged that ‘potential exposures’ is a key concept in the BSS (the assessment and control of potential exposures is clearly identified as a requirement in the BSS), and should be included in DS427;
• Regarding Protection of the Environment, a number of documents have been published by the ICRP, USDOE and the EC so that consideration of the topic is sufficiently mature. It is therefore appropriate for the Agency do provide guidance at this stage.
• The change in title, as the new title suggested by the Technical Officer was considered not satisfactory. The working title agreed by WASSC is: A common Framework for Radiological Environmental Impact Assessment and Protection of the Public.

It was anticipated that the draft safety guide, together with DS432 and DS442, will be submitted to the next WASSC meeting in November 2014 with a view to submission to Member States for review.

W.12 PROGRESS REPORTS


Mr T. Boal (NSRW) introduced the draft safety guide indicating that it supports the revised BSS (GSR Part3) in relation to three exposure situations (planned, emergency and existing), three types of exposures (occupational, public and medical), and the protection of the environment.

The objective of this draft is to provide generic guidance on the application of the requirements for the protection of members of the public and the environment against radiation exposure given in GSR Part 3.

The draft guidance is intended to underpin the development of facility and activity specific safety guides, dealing with this area of protection and, by so doing, ensure a consistent approach. To support the BSS on occupational and medical exposure there are other Safety Guides under development (DS455 and DS399). In addition, the protection of the public and environment is covered by three SGs: DS432, DS427 and DS442. To be fully consistent, these three Safety Guides are now under development in parallel, and will be submitted together to the SSC’s in November 2014.

W.12.2 DS442 Draft Safety Guide: Regulatory Control of Radioactive Releases to the Environment from Facilities and Activities (revision of WS-G-2.3)

Mr D. Tellería (WES, NSRW) introduced this draft document. He referred that DS442 elaborates guidance relevant to the requirements in GSR Part 3 with respect to Dose limitation; Dose constraint, Optimization, Operational limits and conditions, Radiological Impact assessment, Discharges, Graded approach, Authorization and Compliance and enforcement regarding the radioactive releases from facilities and activities in planned exposure situations.
DS442 is a revision of Safety Guide No. WS-G-2.3 “Regulatory Control of Radioactive Discharges to the Environment” (2000). A Technical Meeting provided inputs for its revision in 2008. The DPP was approved by the CSS in 2010 and the first draft was prepared in a series of consultancy meetings. An advanced second draft is now being finished and will be submitted for the SCCs sessions in November 2014.

The aim of DS442 is to provide governments, regulatory bodies, applicants, registrants and licensees with and structured approach to limit the radiation exposures to the public resulting from discharges and for the optimization of their protection. Guidance is given on establishing discharge authorizations and on demonstrating compliance with them.

DS442 interrelates to the draft Safety Guides DS432 “Radiation Protection of the Public and the Environment” and DS427 “Assessment of Facilities and Activities for Protection of the Public and Protection of the Environment”.

The scope of DS442 includes controllable releases (discharges) to the environment of airborne (gases and aerosols) or liquid effluents from activities and facilities in planned exposure situations. It excludes accidents and late releases from disposal facilities. The consideration of new and previously unregulated activities is discussed, as well as the particularities of mining, milling, activities with NORM (if their discharges are controllable).

The following actions with DS442 are to progress drafting and ensure consistency with DS432 and DS427 and to submit on time for approval for submission to MS for November meetings of SCCs the 3 documents together.

At the request of the committee members Mr Telleria clarified that for protection of the environment, DS442 propose that flora and fauna can be included in a radiological impact assessment (like that described in DS427) to inform prospectively on the acceptability of an activity or facility, but flora and fauna should not be used for defining discharge limits, which should be based only on the optimization of the protection of humans (public).


Ms M. Kinker (WES-NSRW) informed on progress made by the Secretariat in the development of the draft Safety Guide on Predisposal Management of Radioactive Waste from Fuel Cycle Facilities, which had been approved in July 2013 by WASSC35 for submission to Members States for comments.

Ms Kinker began with an overview and background of the document; namely, that the document is a revision of WS-G-2.6, Safety Guide on the Predisposal Management of High Level Radioactive Waste; and that the scope of the document is focused on the predisposal management of radioactive waste (RW) from nuclear fuel cycle facilities, including centralized facilities but excluding facilities for mining/processing of U/Th ores and Spent Nuclear Fuel storage facilities. After the DPP for the document was approved by the CSS in October 2010, a number of consultancies were held to develop the document, with the draft being approved by WASSC35 for submission to the MS in July 2013 (MS comments were due by December 2013).

Ms Kinker noted that 365 comments had been posted by 16 countries (Afghanistan, Australia, Canada, Finland, France, Germany, India, Indonesia, Iraq, Japan, Russian Federation, Sweden, Switzerland, Ukraine, United Kingdom, and United States of America) and 1 international observer (European Nuclear Installations Safety Standards Initiative, ENISS).
She noted that consultancies had been recently held to address MS comments, and that the majority of comments had been accepted. The majority (over 80%) of the comments were classified as adding clarification and improvement to the quality of the document; approximately 10% were focused on waste management strategies and management systems (responsibilities of relevant parties), and another 5% of the comments were related to the structure and scope of the document. Ms Kinker provided an overview of the comments and an indication of the Secretariat’s views on how the comments were being considered; the majority of the comments being accepted. The modified document was expected to be posted on the WASSC website for clearance by WASSC38 for submission to Commission on Safety Standards for approval for publication.


Ms M. Kinker introduced this document. The draft safety guide on Predisposal Management of Radioactive Waste from Reactors was discussed together with DS447. The document is a revision of WS-G-2.5, Predisposal Management of Low and Intermediate Level Radioactive Waste (RW); and the scope of the document is focused on the predisposal management of radioactive waste (RW) from nuclear reactors (includes power reactors and research reactors).

The document received 373 comments from 16 countries (Afghanistan, Australia, Belgium, Canada, Finland, France, Germany, Hungary, Indonesia, Iraq, Japan, Russian Federation, Sweden, Ukraine, United Kingdom, and United States of America) and ENISS. Of that total, almost 90% added clarification and improvement to the quality of the document, 6% were related to waste management strategies and integrated management systems, and another 7% were focused on the structure and scope. The majority of the comments were being accepted, and the modified document was expected to be posted on the WASSC website for clearance by WASSC38 for submission to Commission on Safety Standards for approval for publication.

**W.12.5 DS452 Draft Safety Guide: Decommissioning of Nuclear Installations**

Mr V. Ljubenov (NSRW) introduced the progress in drafting DS452, including background information on the history of its development, activities undertaken and the main challenges in its development.

The objective of this SG is to provide specific guidance on the decommissioning of nuclear installations for implementing the Safety Requirements document on decommissioning of facilities.

The final draft will be submitted to WASSC38 for comments and approval for submission to MS.

Committee members discussed the following:

- Initial decommissioning plan, timing for its availability, needs of updates, inclusion (or not) of cost estimates;
- Cost estimates: to be decided according to the national regulations and legal system;
- Regulatory criteria for the end-state of the NI (green field v. further use) for site specific decisions: It was recognized that Radiation Protection provides dose criteria, but for effective
implementation specific activities should be derived, depending on each case and on the expected end-state;

- Decommissioning of damaged reactors: this matter was discussed at WASSC36, recognized the need to be acknowledged into DS452, pointing to the differences to the usual decommissioning process (at the initial phase, with the transition from the emergency situation and stabilization). Reference to a Safety Report might be included as it details to the unique circumstances of this case).

**W.12.6 Guidance on Interface Safety-Security**

Mr D. Delattre (NSNI) introduced the internal guidance for technical officers on how to address safety-security interfaces, which had been prepared by an in-house task force and reviewed by and ad-hoc group of the four Chairs of the Safety Standards Committees and four NSGC members. The guidance had three main elements: addressing interfaces, not including safety guidance in nuclear security drafts or security guidance in draft safety standards; and cross-referencing relevant guidance in the other series. He also referred to the history of development of the Guidance on how to address Safety/security interfaces.

It was acknowledged that 80% of Safety Standards and the same figure for Nuclear Security Series publications have an interface.

As example, some text from the guidance to technical officers for addressing interfaces while preparing a Document Preparation Profile (DPP) and at drafting stage was presented.

The material will be incorporated to the SPRESS C “Guidance for drafting safety standards and nuclear security series publications”.

**W.12.7 IT platform for the future of IAEA’s Safety Standards**

Mr D. Delattre (NSNI) introduced a proposal for an information technology platform being developed to support a knowledge management system for the collection of feedback on Safety Standards, with the intend to be used in the future for the review, revision and publication processes.

The current revision process of separate publications involves consistency challenges. These situations call to the need of a content management system as a whole and not as a set of individual independent publications.

The key element of the proposal imply the collection of feedback though a web page, and then followed by steps to validate the correctness of the feedback. This type of approach will allow reviewing Safety Standards that share same topical areas and overarching issues in a consistent manner. It was highlighted the central role of the metadata in the ability of the system to identify the topical issues in different standards.

Mr Delattre was commended by the WASSC members, recognizing the complexity of the project.

WASSC members then discussed and commented the following:

- Use of the tool: internal or external;
- Deliverables: e.versions (pdf’s) of Safety Standards (SS) and/or web pages on specific topics of the SS for user friendliness
• Risk analysis was made? How this will impact on the content of the SS?

• Need for stability of Standards;

• Need to clarify the functionalities requested making sure that the end results fits to the expected outcome;

• To avoid changing all standards at the same time;

• Need to ensure that this tool is used to change parts of standards before the timeframe of 10 years for a full review.

Mr Delattre thanked the feedback received and gave the message that this tool will increase the speed of revision of documents and will add stability to the Standards.

W.13 TOPICAL SESSION

W.13.1 Panel discussion on Decommissioning and Remediation Missions to Japan in 2013

The discussion panel was constituted eight panellists, members of the missions from the Waste Technology Section (NE) and Waste and Environmental Section, on decommissioning and remediation held in Japan during 2013, as follows: J.C. Lentijo (Dir-NFWM) and team leader of the missions, P-S. Hahn (Dir-NSRW, and deputy team leader of the missions), V. Michal (ASH-WTS), H. Monken-Fernandez (WTS), S. Samanta (WTS), G. Bruno (ASH-WES at the time of the missions), G. Proehl (WES), V. Ljubenov (WES), I. Akira (WTS). The discussions after the presentations had two co-moderators, Mr G. Williams (Chair of WASSC) and Mr Akira (WTS).

WASSC received two presentations, one on decommissioning and another on remediation, with focus on the summary of issues, findings and advice to Japanese counterpart. The presentations were done by Mr V. Michal, and H. Monken-Fernandez. The presentations are available on the WASSC37 web page and mission reports also available on the Agency’s web and distributed in advance to the meeting.

Broad discussions were on:

• long-term plans, benefits of fixing targets in dose; plans for the disposal of accumulated waste;

• different cultures – many things are indeed common across cultures, but can lead to different optimisation outcomes;

• need guidance on implementing ICRP 109 & 111 (optimisation); “better at justifying a practice than justifying an intervention”.

W.13.2 Feedback on IEM6, Radiation Protection following the Fukushima-Daiichi Accident: promoting confidence and understanding (IEM6)

Mr T. Colgan (NSRW) summarized the outcome of IEM6, attended by 220 participants from 68 Member States and 10 International Organizations. The meeting was chaired by Mr Sigurdur Magnusson, Director of the Icelandic Radiation Safety Authority. The EIM prioritized the participation of young professionals, many of whom served as Chairs, co-Chairs or Rapporteurs of the technical sessions. The IEM was organized into 15 technical sessions, comprising 14 keynote addresses, 36 presentations, posters and discussion periods. Each of the sessions was summarized and an IEM Chairperson’s Summary was produced at the end of the meeting.

One recurring theme throughout the IEM was the importance of communication in terms of explaining radiation protection concepts to the public, highlighting uncertainties in environmental measurements and risk estimates, involving affected communities in remediation decisions and learning from past accidents. The IEM also noted the effective cooperation between International Organizations in responding to the Fukushima Daiichi accident and urged that this be extended to other areas of mutual interest in the future.

The main conclusions from the IEM6 are:

- Early real-time sampling and personnel monitoring is important to improve the source term estimation and reduce the uncertainty in estimated values;
- Because of the uncertainty in the currently available dose estimates, it is important that work continues both to better establish the range of individual doses received and also to determine if there are any identifiable health consequences in terms of late effects, including non-cancer effects, in the exposed populations;
- The relevant international organizations need to prioritize work to develop a harmonized approach to the control of foodstuffs and drinking water contaminated as a result of a nuclear or radiological accident. This needs to be simple to implement and take fully into account the issues that apply in the Accident State, other affected States and non-affected States. Similarly, guidance needs to be developed on the international trade in, and the control of, contaminated non-food commodities;
- The ultimate success of remediation programmes depends on the combined efforts of actions by the local authorities, affected communities, and individual citizens;
- The development of social media brings challenges in terms of the increase in the sources and the amount of information, even contradictory information, that is available and the difficulty in identifying credible sources. This is a challenge for national authorities, but can also be used to their benefit as social media provides a much more efficient outlet for dissemination;
- The need for better communication falls on the radiation protection community as a whole. We need to dedicate resources to ensure we adequately inform decision-makers and the general public about radiation, radiation risks and the underlying philosophy and ethics of the System of Radiation Protection. If people don’t understand our advice, it is unreasonable to expect them to implement it;
- While the System of Radiation Protection is, generally, fit for purpose, it should be modified and improved in line with the lessons from the Fukushima Daiichi accident;
All States should develop and implement a national strategy in relation to building and maintaining competence in radiation protection; and

Many of the lessons learnt from previous accidents have not been fully implemented and similar issues and concerns have been raised following the Fukushima Daiichi accident. One of the lessons learnt is that lessons must be addressed and not ignored.

A summary of the meeting is presently being prepared and will be published in due course.

Committee members’ key comments follow:

- Joint Convention Summary report called to look into the safety implications of very long periods and delayed disposal of spent fuel and radioactive waste; Safety Assessments for these situations should be performed to make clear the safety implications;
- Regulatory Body to be considered a credible source of information: need to work in advance on this aspect; and
- Decision making after an accident and the need to explain the different reality in terms of dose.

W.13.3 Feedback on IEM7, Severe Accident Management in the Light of the Accident at the Fukushima Daiichi Nuclear Power Plant

Mr H. Khartabil (SAS/NSNI) on behalf of Mr A. Ulser (SAS/NSNI) and J. LaFortune (IEC/NS) summarized the outcome of IEM7, attended by approx. 170 participants from 36 Member States and 6 International Organizations. The meeting was chaired by Anwar Habib, Chairman of PNRA, Pakistan. The Scientific Secretariat was shared by the Safety Assessment Section of NSNI and the International Emergency Center from the Nuclear Safety and Security Department of the IAEA. The target audience was experts involved with severe accident management, regulatory bodies, operating organizations and technical support organizations.

The topics covered by IM7 were:

- Sharing improvements made to severe accident management programmes following the Fukushima Daiichi accident
- Discussing the appropriate regulatory treatment of severe accident management
- Discussing how to train and equip operators to effectively implement SAMGs
- Identifying any knowledge gaps related to the implementation of SAMGs and how to fill these gaps
- Discussing linkages between on-site and off-site response plans during a severe accident
- Identifying potential priority areas for research and development

The meeting was organized in five technical sessions and a specific session for discussing posters received as contributions.

The conclusions in the chairman’s report of the meeting were:
• **Training programs** should take a practical, learn by doing, approach using realistic training aids and allow for an evaluation of their effectiveness

• **Flexibility and resourcefulness** in accident management strategies

• Strengthening **regulatory capabilities**

• **Instrumentation and Control** - agreement needed as to the minimum number of variables that need to be monitored to effectively respond to a severe accident; discussion on degree of instrument qualification needed

• **Response equipment (onsite & offsite)** - guidance needs to be developed to establish the best approaches to the management and deployment of this equipment

• **Common operational picture** – Severe accident management guides and emergency plans need to ensure that all response teams including operators, technical support centres and emergency responders have a common situational awareness in order to respond effectively

• **Expanded response to a severe accident** - Member states should also ensure that they have provisions to be able to, if required, extend the response arrangements

• **Emergency management organization** - Emergency plans and severe accident management strategies should explicitly recognize the risk of losing key personnel and make provisions to ensure the resilience of the response teams

• This IEM brought together **onsite and offsite response** experts

• shared ideas on how best to further strengthen their ability to provide a **coordinated response** during a severe accident

• The IAEA plays a crucial role in assisting MSs to prepare their capability to respond to a severe accident and several suggestions for future IAEA activities were noted

• IAEA should work with Member States to continue to improve Severe Accident Management provisions by further developing guidance and continuing to encourage the use of the IAEA services

• IAEA to sponsor benchmarking activities on severe accident management and emergency response

• IAEA should consider developing guidance for damage control management at NPPs

• IAEA should assist Member States to better coordinate severe accident management strategies with emergency response

**W.13.4 UNSCEAR’s Fukushima Report: “Levels and Effects of Radiation Exposure to the Nuclear Accident after the 2011 Great East-Japan Earthquake and Tsunami”**

Mr M. Crick (UNSCEAR) presented the report of UNSCEAR on the radiological impact of the Fukushima Daiichi accident that was published in April 2014. The evaluation of effects and risks was completed by over 80 cost-free international experts in cooperation with five International Organizations.
Mr Crick gave details on the evaluations performed. He referred to the estimated atmospheric releases on which the studies were based, to the radionuclides and the exposure pathways considered in detail. The assessment undertaken relied on environmental measurements and various models to estimate doses. All input data were subject to quality criteria. Based on evacuation scenarios, the settlement-average effective doses for the evacuees were estimated. External exposure was the dominant exposure pathway, and mainly as a result of food restrictions imposed by the Japanese authorities in the immediate aftermath of the accident, doses from food consumption were considerably less than after the Chernobyl accident. An evaluation of reported doses was also carried out for a large number of workers involved in the mitigation and other activities.

In terms of health effects, no radiation-related death or acute disease had been observed and a discernible increase in cancer rates among the general population was not expected. Models imply a small increased cancer risk, but increases in incidence were generally expected not to be discernible against background rates and natural variability. An increased risk of cancer for workers with doses over 100 mSv was inferred, though any change in cancer incidence due to the exposure was also not expected to be discernible. The UNSCEAR evaluation also noted a significant impact on mental and social well-being with depression and post-traumatic stress symptoms identified in the affected population.

In terms of impact on the environment, exposures were in general too low for observable acute effects. Effects in the marine environment were confined to radioactivity release points and while biomarker changes for terrestrial species could not be ruled out, the possible significance for populations was unclear.

W.14 GENERAL SESSION

W.14.1 Feedback from WASSC members on implementation of IAEA Safety Standards

This agenda item was postponed to the next meeting, reminding WASSC members on the action agreed at the time of the approval of the meeting report of WASSC 36 (please refer to W.5 in this report).

W.14.2 Reports from International Organizations

W.14.2.1 Recent EU activities related to WASSC

Ms B. Batandjieva-Metcalf (observer from EC, DG ENER) reported on the EU activities on Spent Fuel and Radioactive Waste Management since the last WASSC meeting.

Regarding strategy topics, the European Energy Security Strategy was agreed. This includes that the possibility of fuel supply diversification needs to be a condition for any new investment. This strategy document also encourages the accelerated adoption of the amended Nuclear Safety Directive. In addition, the 2013 EU General Report was issued, including the stress tests performed and the enhanced cooperation with IAEA.

Concerning legislations: the BSS, Directive 2013/59/EURATOM was agreed in 2013, including public information to be made available in case of emergency; the revised Nuclear Safety Directive 2009/70/EURATOM is being discussed before approval, and an analysis of the transposition measures
communicated by MSs to the Commission (as required by the Spent Fuel and Waste Directive 2011/70/EURATOM) has commenced. The Directive 2011/70/EURATOM is a binding legislation, different from the Joint Convention which is an incentive convention. It requires National Programmes on spent fuel and radioactive waste management on how the National Policy are to be implemented in practice. National Reports should explain how the articles of the Directive 2011/70/EURATOM are implemented. ENEF prepared guidelines on the National Programmes to the industry and ENSREG prepared their guidelines for preparing the National Reports.

With reference to international Peer Reviews, it is up to the EU Member States to decide on when and how to hold these missions. Some countries may decide on the use of the IAEA peer review services for reviewing their national regulations, frameworks and programmes for spent fuel and radioactive waste management. For this purpose the Agency featured missions, IRRS and ARTEMIS are being foreseen as available tools.

WASSC members commented on the need of having further information on ARTEMIS missions. Mr G. Bruno provided information about this peer review tool that covers Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation. A brochure, web page and guidelines are now under preparation and agreed to make a further informative presentation at forthcoming meetings.

**W.14.3 Report from the International Conference on the Safety and Security of Sealed Sources, held in Abu-Dhabi, October 2013**

Ms Kinker summarized the outcomes of this conference, as this topic was included into the WASSC37 Agenda to highlight the fact that there was a session devoted to long term management of disused sealed radioactive sources (DSRS).

The conference was attended by over 320 participants from 87 IAEA’s Member States, one non-Member State and 6 International Organizations. There were 7 thematic sessions, 60 invited speakers and 140 submitted papers.

The session on long term management had presentations on:

- French experience of DSRS management
- Borehole disposal project in the Philippines
- Long term safe and secure management of DSRS in Turkey
- Management of DSRS in Cuba, Ghana, Ukraine, Portugal
- Management of DSRS in Ghana
- IAEA approach to operations solving problems of DSRS in MS

Recommendations from this session that were focused on management of DSRS included:

- Supplier States are encouraged to strengthen their cooperation, collect data related to sources exported and share them;
- Accession to the Joint Convention for those countries that are not Contracting Parties
• Additional guidance at the international level for the long term management of DSRS (policy and strategy, national storage facility, organization of return to supplier, interface with transport & waste regulations)

A Technical Meeting will be held in October 2014 dedicated to the development of additional guidance for the long term management of DSRS, in the context of the Code of Conduct on the Safety and Security of Radioactive Sources.


Mr V. Ljubenov (WES, NSRW) informed about this report, the first activity on decommissioning under the NSAP (2012). It is a collection of experiences and lessons learnt from past events (based on INES 5-7 events). The document covers post-emergency phases and on-site activities. In the case of the FDA, the information is based on the 2012 status, and it was already used to inform the IEM4 in 2013. The document has 8 sections, 86 pages, 42 figures, 9 tables and 38 references. The document is being used as an input in designing a new international project on decommissioning of severely damaged facilities and will be published in the NE series.

The presentation covered details on the purpose of the document, its scope, issues addressed and key learnings on most of the relevant topics: post-accident planning, stabilizations, characterization, damaged fuel management, decommissioning and site remediation, waste management and stakeholder communication and involvement. The full presentation is available at the WASSC37 web folder.

W.14.5 Report from the annual meeting of WATEC (April 2014)

Mr V. Michal (ASH-WTS, NEFW) presented an overview of the International Waste Technical Committee (WATEC). This is a working group of senior experts with the following aims:

• To provide advice, guidance and support to the IAEA’s RWM programme,
• To provide a forum for information and knowledge sharing,
• To act as a link between the IAEA’s activities and national RWM programmes.

It is constituted by 20 members from MS, appointed by the DDG-NE for a 4-year mandated and there are also observers from EC, OECD-NEA, ISO, WNA, and also observers from MS.

WATEC meets once a year for 4 days and the Scientific Secretary of the meeting is WTS SH. The Agenda is developed on the basis of WATEC recommendations from the previous meeting and RWM programme needs about Issues and trends in RWM (based on updates provided through Questionnaires), Topical sessions and Conclusions and recommendations.

This year WATEC was held between 1 and 4 April 2014. It was attended by 17 WATEC members and 10 observers. Waste Technology (WTS) and Waste & Environmental Safety (WES) Sections were involved. The topics covered in the agenda were:

• Follow-up and up-dates on WATEC 2013 recommendations and on international organizations activities.
• Issues and Trends in WATEC Members States;

• Topical sessions on Inventories of radioactive waste and spent fuel, Embarking Nuclear Power Countries / Nuclear “Newcomers”, and managing large amounts of waste.

In addition to topical sessions, two Panel discussions were organized on WTS networks and on Decommissioning and Remediation Missions to Japan in 2013.

The recommended topics for WATEC 2015 were: NORM waste outside the fuel cycle; Legacy waste (characterisation and risk management); Challenges in international cooperation in RW treatment; Cost drivers for decommissioning and disposal; Definition of end states for decommissioning and remediation; Disposal aspects (e.g., experience/lessons learned, innovative approaches, interdependencies in planning).

W.14.6 PRISMA – The generic Safety Case

Mr K. Moeller (WES, NSRW) informed about the 2nd plenary on the Application of the Practical Illustration and Use of the Safety Case Concept in the Management of Near-Surface Disposal Project (PRISMA) that took place in October 2013. In the PRISMA project a generic safety case is developed following the PRISM approach. A generic safety case is developed for every decision step in the lifetime of a near surface disposal facility. In the plenary working groups successfully developed the safety case for the site selection.


Ms Y. Kumano (WES, NSRW) summarized the background information, the objectives and outcomes related to this workshop.

The workshop was organized with the following objectives:

1. to enhance the understanding of the concept of an integrated safety case for Dual Purpose Casks for Spent Nuclear Fuel;

2. to analyse the gap between the current practices within Member States and the proposed concept on a Safety Case for Dual Purpose Casks for Spent Nuclear Fuel, which is now being prepared for publication as a TECDOC summarizing the discussion conducted by the joint international working group (from TRANSSC and WASSC) between 2011 and 2013; and

3. to discuss further improvements of the application of the integrated safety case concept.

This workshop was attended by 54 participants from 19 MS and one International Organization (EU).

At the end of the workshop, possible topics on future IAEA activities were discussed, and following three activities were recommended:

1) A document providing guidance for developing an Ageing Management Programme (AMP) specifically for DPCs should be developed.

   • Experience compendium
Lessons learned, design changes towards inspection for ageing management

AMP for records management and ageing management for regulatory changes and technological advances

Maintenance of the Safety Case during the storage period

Examples of safety-related components requiring reference within an AMP:
  - Seals / bolts
  - Shielding
  - Absorber materials

2) Develop guidance for a methodology to develop acceptance criteria for storage and on-site transport including generic storage accident conditions

3) Information exchanges by relevant IAEA activities to discuss application of information in the TECDOC related to:
   a) Transport and storage of damaged fuel
   b) DPCs for high-level waste
   c) Guidance for developing a Safety Case for spent fuel in canisters for storage and transportation
   d) Multi-purpose containers to include use for disposal

W.15 OTHER BUSINESS

W.15.1 Feedback from the Secretariat on the Russian proposals for development of SS

Mr T. Colgan (RSM-NSRW) introduced the proposals received from the Russian Federation on the development of additional guidance material which had been presented by the proponent at the joint RASSC/WASSC session in November 2013. At that time the Secretariat undertook to consider the request from the Russian Federation and to provide a response at forthcoming meeting. In addition, a submission had been received from the United States and this, together with the initial submission from the Russian Federation and the response from the Secretariat had been posted on the WASSC37 meeting website prior to the meeting.

The main points in the response from the Secretariat are:

- Technical guidance, including operational intervention levels, already exists with regard to the management (including decontamination) of contaminated people and other items in the aftermath of an emergency;
- Extensive guidance exists in relation to radioactive waste management. These apply to radioactive waste irrespective of the fact how the radioactive waste was generated. Waste generated during decontamination activities that fulfils the criteria for clearance is to be managed
through conventional waste streams, according to national regulations. Transboundary issues involving radioactive waste or contaminated materials are most appropriately dealt with in the framework of existing conventions, treaties and bilateral agreements;

- Management of clean-up following an accident at a non-radiation facility is addressed in the safety guides Control of Orphan Sources and Other Radioactive Material in the Metal Recycling and Production Industries (SSG-17) and Remediation Process for Areas Affected by Past Activities and Accidents (GS-G-3.1). While the radionuclides involved may be different, the philosophy and approach is the same;

- The regulation of such justified practices for non-medical imaging will be addressed in the safety guide Radiation Safety of X-ray Generators and Radiation Sources Used for Inspection Purposes and for Non-Medical Imaging (DS471). The DPP for this safety guide was approved by the Safety Standards Committees in 2013;

- Requirement 5.22 of the BSS requires Member States to “establish specific reference levels for exposure due to radionuclides in commodities……..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”. However, no supporting guidance material has been developed in relation to the control of contaminated non-food commodities.

WASSC thanked the Secretariat for the analysis performed and the response to the Russian Federation proposal. Discussion with WASSC went on the following topics:

- The importance of using existing criteria for the RWM during decontamination;
- Radiation protection of the public and the decision on the acceptable levels of exposure to the checked against the existing criteria;

WASSC agreed that a discussion document should be prepared, reviewing existing IAEA documents in order to identify the extent to which these may be applicable and, consequently, the additional specific topics on which further guidance is required in relation to the control of contaminated non-food commodities. This document should be discussed at future SSCs meetings before any additional work is undertaken.

**Action:** The Secretariat to develop a discussion document reviewing existing IAEA documents in order to identify the extent to which these may be applicable and, consequently, the additional specific topics on which further guidance is required in relation to the control of contaminated non-food commodities.

**W.16 CONCLUSIONS OF THE SESSION**

Mr Williams concluded the meeting referring to the notable outcomes of the 37th meeting of WASSC, that were: two Safety Requirements documents were approved for submission to CSS, five Safety Guides were approved for submission to MS for comments, and four DPPs were approved.

He also highlighted the fruitful discussions between experienced and new WASSC members. In addition he remarked that the WASSC Working Group report and three year report were acknowledged as useful resources for building future work of WASSC related to the WSS.

Looking ahead for the forthcoming meetings, several points were highlighted, in particular the need to discuss the work plan for WASSC for this term and the need to work on several terms and concepts needing definition for the Safety Glossary.
Mr Williams closed then the meeting thanking all the Committee members and observers of international organizations for all their constructive contributions to the meeting, and wished all safe trip back home.
ANNEX I TO THE WASSC REPORT:

37th Meeting of the Waste Safety Standards Committee (WASSC)

23-27 June 2014, Vienna

M2, M Building, VIC

DRAFT AGENDA

14:00 – Monday, 23 June 2014

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<tr>
<th>W.1.</th>
<th>Opening of WASSC meeting</th>
<th>Pil-Soo Hahn (Dir-NSRW) and A.Orrell (SH-WES)</th>
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<tbody>
<tr>
<td>W.2.</td>
<td>Chairman’s remarks</td>
<td>G. Williams</td>
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<tr>
<td>W.3.</td>
<td>Adoption of agenda for the WASSC Meeting</td>
<td>For approval</td>
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<td>W.4.</td>
<td>Administrative arrangements for the meeting</td>
<td>For information</td>
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<td>W.5.</td>
<td>Report from 36th WASSC meeting</td>
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<td>W.5.1</td>
<td>Status of actions arisen from WASSC 36</td>
<td>For information</td>
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<td>W.6.</td>
<td>Report from the 35th CSS meeting</td>
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<td>W.7.</td>
<td>WASSC work plan 2014-2017</td>
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<tr>
<td>W.7.1</td>
<td>WASSC three year report 2011-2013 cycle</td>
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<tr>
<td>W.7.2</td>
<td>Strategies and Processes for the Establishment of IAEA Safety Standards (SPESS)</td>
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<td>W.7.3</td>
<td>WASSC working methods</td>
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<td>W.7.4</td>
<td>Waste Safety Standards status and future steps</td>
<td>For information</td>
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<td>W.7.5</td>
<td>Feedback from the Working Group of NUSSC on DS462</td>
<td>For information</td>
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9:00 – Tuesday, 24 June 2014

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<tr>
<th>W.8.</th>
<th>Review of documents for approval</th>
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<tbody>
<tr>
<td>W8.1</td>
<td>DS457 Draft Safety Requirement: Preparedness and Response for a Nuclear or Radiological Emergency (Revision of GS-R-2)</td>
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</tbody>
</table>
W8.2. DS462 Draft Safety Requirements: Revision by amendment of GSR Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4 For approval for submission to CSS D. Delattre

W8.3. DS360 Draft Safety Guide on Safety of Nuclear Fuel Reprocessing Facilities For approval for submission to MS for comments V. Carr

W8.4. DS381 Draft Safety Guide on Safety of Nuclear Fuel Cycle Research and Development Facilities For approval for submission to MS for comments V. Carr

W8.5. DS454 Draft Safety Guide: Predisposal Management of Waste from the Use of Radioactive Materials in Medicine, Industry, Research, Agriculture and Education (Revision of WS-G-2.7) For approval for submission to MS for comments K. Moeller

W8.6. DS455 Draft Safety Guide: Establishing a National Radiation Safety Infrastructure For approval for submission to MS for comments I. Shadad

W8.7. DS460 Draft Safety Guide on Communication and consultation with interested parties by the Regulatory Body For approval for submission to MS for comments J-R. Jubin

W9. DPPs for approval – Safety Standards

W9.1 DS484 DPP for a Draft Safety Requirement on Site Evaluation for Nuclear Installations (Revision of NS-R-3) For approval for submission to CSS J. Haddad

W9.2 DS485 DPP for a Draft Safety Guide: Ageing Management for Nuclear Power Plants For approval for submission to CSS R. Krivanek

W9.3 DS486 DPP for a Draft Safety Guide: Establishing the Safety Infrastructure for a Nuclear Power Programme (Revision of SSG-16) For approval for submission to CSS D. Graves

W9.4 DS487 DPP for a Draft Safety Guide on Design of Fuel Handling and Storage Systems for NPPs (Revision of NS-G-1.4) For approval for submission to CSS K. Sim
### W.10. NSGC Documents for clearance

<table>
<thead>
<tr>
<th>W10.1 NST002</th>
<th>Draft Implementing Guide: Regulations, Agreements and Associated Administrative Measures for Nuclear Security</th>
<th>For clearance to submit to MS</th>
<th>R. Evans</th>
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</thead>
<tbody>
<tr>
<td>W10.2 NST014</td>
<td>Draft Implementing Guide: Nuclear Forensics in Support of Investigations</td>
<td>For clearance to submit to DDG-NS</td>
<td>D. Smith</td>
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<tr>
<td>W10.3 NST023</td>
<td>Draft Implementing Guide: Physical protection of nuclear facilities</td>
<td>For clearance to submit to MS</td>
<td>M. Khaliq</td>
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<tr>
<td>W10.5 NST045</td>
<td>DPP for a Draft Implementing Guide on Computer Security in Nuclear Security</td>
<td>For clearance for development</td>
<td>M. Rowland</td>
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</table>

### W.11. Documents for discussion

| W11.1 DS427 | Draft Safety Guide on Assessment of Facilities and Activities for Protection of the Public and Protection of the Environment | For comment and discussion | D. Telleria |

### W.12. Progress Reports

| W12.1 DS432 | Draft Safety Guide: Protection of the Public and the Environment | For information | T. Boal |
| W12.2 DS442 | Draft Safety Guide: Regulatory Control of Radioactive Releases to the Environment from Facilities and Activities (revision of WS-G-2.3) | For information | D. Telleria |


W12.5. DS452 Draft Safety Guide: Decommissioning of Nuclear Installations For information V. Ljubenov

W12.6. Guidance on Interface Safety-Security For information D. Delattre

W12.7. IT platform for the future of IAEA’s Safety Standards For information D. Delattre

9:30 – Thursday, 26 June 2014

W.13. Topical Session

W.13.1 Panel discussion on Decommissioning and Remediation Missions to Japan in 2013

- Summary of issues, findings and advice to Japanese counterpart, V. Michal, H. Monken-Fernandez
- Moderated discussion with the IAEA Missions Teams members from WTS and WES

W.13.2 Feedback on IEM6, Radiation Protection after the Fukushima-Daiichi Accident: promoting confidence and understanding T. Colgan

W.13.3 Feedback on IEM7, Severe Accident Management in the Light of the Accident at the Fukushima Daiichi Nuclear Power Plant H. Khartabil

W.13.4 UNSCEAR’s Fukushima Report: Levels and Effects of Radiation Exposure to the Nuclear Accident after the 2011 Great East-Japan Earthquake and Tsunami M. Crick

W.14. General session
W.14.1 Feedback from WASSC members on implementation of IAEA Safety Standards For information WASSC members

W.14.2 Reports from International Organizations For information WASSC Observers

W14.2.a Recent EU activities related to WASSC B. Batandijeva

W.14.3 Report from the International Conference on the Safety and Security of Sealed Sources, held in Abu-Dhabi, October 2013 For information M. Kinker

W.14.4 Feedback on WTS-WES joint Report on "Experiences and Lessons Learned Worldwide in Cleanup and Decommissioning of Nuclear Facilities in the Aftermath of Accidents" For information V. Ljubenov

W.14.5 Report from the annual meeting of WATEC (April 2014) For information V. Michal

W14.6 PRISMA – The generic Safety Case For information K. Moeller


9:00 – Friday, 27 June 2014

W.15. Other Business

W.15.1 Feedback from the Secretariat on the Russian proposals for development of SS For discussion T. Colgan

W.16. Conclusions of the session G. Williams
## Dates of future meetings

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<th>Meeting</th>
<th>Dates</th>
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<tr>
<td>36th CSS</td>
<td>3-5 November 2014</td>
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<tr>
<td>6th NSGC</td>
<td>10-14 November 2014</td>
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<td>29th TRANSSC</td>
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<td>37th RASSC</td>
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<tr>
<td>38th WASSC</td>
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<tr>
<td>38th NUSSC</td>
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# ANNEX II to the WASSC REPORT:

## STATUS OF ACTIONS FOLLOWING 36th WASSC

### WASSC SESSIONS

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<th>ACTION</th>
<th>STATUS</th>
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<tbody>
<tr>
<td>W5</td>
<td>WASSC35 report, to include the WASSC member comments and finalize the draft report</td>
<td>Done</td>
</tr>
<tr>
<td>W8.1</td>
<td>DS441 DSG on Construction for Nuclear Installations, to proceed to next step, to forward it to CSS for endorsement for publication</td>
<td>Approved by CSS 35</td>
</tr>
<tr>
<td>W9.1</td>
<td>DS427, DSG on Radiological Environmental Impact Assessment, to be redrafted according to the comments of WASSC</td>
<td>Comments from SSC's incorporated and distributed to SSC's for their comment</td>
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<tr>
<td>W10.1b</td>
<td>DOCUMENT PROVIDED AFTER WASSC Draft document provided by Mr Geleel (WASSC Member for Egypt) on ‘Predisposal management of radioactive waste – General Safety Requirements’ Mr Geleel (<a href="mailto:magdadel200@hotmail.com">magdadel200@hotmail.com</a>) would appreciate comments from WASSC members on the draft document, within 4 months.</td>
<td>Comments received from one WASSC member</td>
</tr>
<tr>
<td>W11.1</td>
<td>WG of WASSC report, to be made available at the WASSC web site</td>
<td>Available at the WASSC36 web folder since 19 November 2013</td>
</tr>
<tr>
<td>W11.2</td>
<td>Sixth three year report</td>
<td>Done</td>
</tr>
<tr>
<td></td>
<td>WASSC members to provide inputs on item 4, issues of the period and conclusions</td>
<td>3yr Report distributed on 19 March 2014 (to previous members) and 2 April 2014 (to new members)</td>
</tr>
<tr>
<td></td>
<td>Secretariat to finalize the report based on the feedback received</td>
<td></td>
</tr>
<tr>
<td>ITEM AG</td>
<td>ACTION</td>
<td>STATUS</td>
</tr>
<tr>
<td>---------</td>
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</tr>
</tbody>
</table>
| RW6.1   | DS419, DSG on Radiation Safety in Well logging.  
  a) The Secretariat to redraft the Security section and to be sent out to SSC’s members  
  b) WASSC and RASSC members to comment by 30 January 2014  
  c) the Secretariat to incorporate comments, subject only to editorials, not to major topics, and then to send DS419 to Member States for comments | Done | Done |
|         | DS419 have been posted to MS comments – Due date 21 September 2014 |        |        |
| RW6.2   | DS420, DSG on Radiation Safety for Nuclear Gauges,  
  a) The Secretariat to redraft the Security section and to be sent out to SSC’s members  
  b) WASSC and RASSC members to comment by 30 January 2014  
  c) the Secretariat to incorporate comments, subject only to editorials, not to major topics, and then to send DS420 to Member States for comments | Done | Done |
|         | DS419 have been posted to MS comments – Due date 21 September 2014 |        |        |
| RW6.3   | DS427, DSG on Radiological Environmental Impact Assessment, to be redrafted according to the comments of WASSC and RASSC, and to be resubmitted to SSC’s for approval (Step 7) | Comments from SSC’s incorporated and distributed to SSC’s for their comment |        |
| RW6.4   | DS453, DSG on Occupational Radiation Protection to be sent to Member States for comments after incorporating the amendments suggested by RASSC and WASSC members | DS453 have been posted to MS comments – Due date 20 June 2014 |        |
| RW6.5   | DS458, DSG on Radiation Protection and Regulatory Control for Consumer Products agreed to proceed to next step, to forward it to CSS for endorsement for publication | Approved by CSS 35 |        |
| RW6.6   | DS460, DSG on Communication and Consultation with interested Parties, to be redrafted according to the comments of RASSC and WASSC and sent back to SSC’s for approval | Comments from SSC’s incorporated and resent to SSC’s for approval for submission to MS for comments |        |
| RW7.1 | DPP for DS476, for a SR on Safety of Research Reactors (Revision of NS-R-4) to proceed to next step, to forward it to CSS for approval | Approved by CSS 35 |
| RW7.2 | DPP for DS478, for a SR on Safety for Nuclear Fuel Cycle facilities (Revision of NS-R-5) to proceed to next step, to forward it to CSS for approval | Approved by CSS 35 |
| RW7.3 | DPP for DS479, for a DSG on Operational Experience Feedback for Nuclear Facilities, agreed to be sent to CSS after SSC’s comments incorporated | Approved by CSS 35 |
| RW7.4 | DPP for DS483, for a DSG on Severe accident management programme for NPPs, agreed to be sent to CSS with comments of SSC’s incorporated | Approved by CSS 35 |
| RW8.1 | NST022, DIG on Security Information in Nuclear Security, cleared for next step of development | Implemented |
| RW8.2 | DPP for NST048, DIG on Security of Radioactive Material in use and storage and of associated facilities, cleared for next step of development | Implemented |
| RW11.1 | Proposal for Safety Standards developments from the Russian Federation,  
  a) to make it available to SSC members  
  b) to comment on the appropriateness of the proposals to the Secretariat  
  c) Secretariat to report on the results of the comments and the suggestions from the Secretariat | Done  
  Comments received from one WASSC member  
  Secretariat response available on the WASSC37 web folder |