NUCLEAR SAFETY STANDARDS COMMITTEE
(NUSSC)

Report of the 42nd Meeting
29 November – 1 December 2016

International Atomic Energy Agency

Vienna
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1. GENERAL ISSUES

1.1 Opening of the Meeting

The meeting was opened by Mr. G. Rzentkowski (DIR-NSNI).

G. Rzentkowski listed several topics that deserved special attention and could be discussed in NUSSC:

- The last IAEA General Conference and associated side events. The Senior Regulator’s meeting addressed the question of radioactive waste management, the actions launched for nuclear security improvements and the needs of nuclear safety authorities for newcomers.
- The last INSAG meeting and the annual INSAG letter emphasising the concept of « organizational strength in depth ». INSAG invites the IAEA to:
  o Develop recommendations on the matter, which will especially serve as bases for peer review missions;
  o Ensure that safety standards do cover this matter;
- The publication of a TECDOC: “Management of the interface between safety and security for research reactors”. The IAEA intends to develop a similar document for nuclear installation.
- The preparation of the 7th Review Meeting of the Convention on Nuclear Safety. The national reports should especially highlight the actions taken to address the principles of the Vienna Declaration on Nuclear Safety.
- The coming conference on « Topical Issues in Nuclear Installation Safety » (June 2017).
- The CSS approved DPP 497 (Revision of eight closely interrelated Safety Guides).
- SSR-3 (Safety of Research Reactors) has just been published.

He highlighted one of the agenda items: Priorities in the Safety Standard development.

1.2 Chairman’s Introduction

The Chairman mentioned that three committees, NUSSC, EPreSC and WASSC, have met during the week and RASSC meeting was held the previous week.

In terms of safety standards, the Chairman went through the documents on the agenda: one project of safety requirements, five safety guides and 2 DPP and 3 documents related to security.

He highlighted one of the agenda items “Priorities in the Safety Standard development” and the importance of the drafting of the Four-year Term NUSSC Report.

1.3 Adoption of the Agenda of the 42nd NUSSC Meeting

The Agenda of the 42nd NUSSC Meeting was approved.

1.4 Approval of the Report of the 41st NUSSC Meeting

The report of the 41st NUSSC Meeting was adopted.

1.5 Actions of NUSSC Meetings

The progress made on the actions decided at the 41st NUSSC Meeting was presented by Mr M. Svab, NUSSC Scientific Secretary. The actions were either already performed or dealt with during the NUSSC Meeting.

1.6 Dates of the next meetings

The dates of the next NUSSC Meetings were confirmed:
- The 43rd NUSSC Meeting will be held on 19 – 23 June 2017.
- The 44th NUSSC Meeting will be held on 27 November – 1 December 2017.

1.7 Report from the previous meeting of the five Chairs

Prior to the CSS Meeting, a meeting of the five Chairs of the review committees was held. The discussions focused on:

- The computer tool NUCLEUS/NSS-OUI IT Platform;
- The Technical Editors and Publication Committee proofreading, which was subject to lengthy discussions; and
- The experience of remote participation conducted by EPReSC and considered by RASSC and WASSC.

➔ During the next NUSSC Meeting, the IAEA will provide feedback on EPReSC and WASSC initiatives.

1.8 CSS 40th Meeting Report

The report was introduced by Mr. D. Delattre, CSS Scientific Secretary. The IAEA Secretary made a report concerning the matters discussed during the last CSS meeting. The following points were discussed:

- The progress made in the implementation of the long-term structure of safety standards and the update of safety standards to reflect the TEPCO Fukushima Daiichi accident lessons learned;
- The CSS interest (see below);
- The timing of Technical Editors proofreading of safety standards projects; and
- The potential consequences of UNSCEAR Report “Attributing Health Effects to Ionizing Radiation Exposure and Inferring Risks” on safety standards.

CSS approved the following Safety Guides:

- DS427: Draft Safety Guide on Prospective Radiological Environmental Impact Assessment for Facilities and Activities
- DS442: Draft Safety Guide on Regulatory Control of Radioactive Discharges to the Environment
- DS452: Draft Safety Guide on Decommissioning of Nuclear Power Plants, Research Reactors and Other Nuclear Fuel Cycle Facilities

CSS approved the following DPPs:

- DS469: Draft Safety Guide on Preparedness and Response for an Emergency during the Transport of Radioactive Material
- DS497: revision of eight closely interrelated Safety Guides supporting SSR-2/2 (Rev. 1): NS-G-2.2 to 2.8 and NS-G-2.14

CSS decided to change the wording used from “CSS priorities” to “CSS interests” as priorities might evolve during the 4 years term.

Ten “interests” for the 6th CSS term were listed:

- Harmonize safety standards and security recommendations;
- Perform a review of the safety committees structure and recommend to the DG a future optimum structure;
- Considering the observations and lessons in the Director General’s Fukushima Daiichi Accident Report, confirm those areas that the safety committees need to continue to focus on, and progress the development of new standards and guidance to address the remaining gaps;
- Implement the IT platform for the development, review, dissemination, and revision of IAEA safety standards and security recommendations and associated guidance;
- Perform a holistic review of the complete collection of Safety Guides;
- Clarify the radiation protection system in existing exposure situations;
- Finalize the development of the guidance on transition from emergency situations to recovery situations and the guidance on communication before, during and after an emergency situation;
- Develop, in cooperation with the relevant international organizations, guidance on radiation protection in exposure situations characterized by very low doses and dose rates;
- Investigate with NSGC what input might be needed from the Safety Standards Committees for the Nuclear Security Series on further guidance on the use of “unacceptable radiological consequences” and “high radiological consequences” as criteria for implementing specific recommendations; and
- The Secretariat to continue the joint MTCD/NS efforts to streamline the approval and publication process and significantly enhance its effectiveness.

NUSSC chair put emphasis on the action “Perform a holistic review of the complete collection of Safety Guides” and the input NUSSC could develop for such review. IAEA Secretariat reminded that there are currently about 150 Safety Guides and about 40 DPP approved to update some of them.

### 1.9 The Nuclear Safety and Security Online User Interface (NSS-OUI)

The IAEA recalled the strategy underlying this interface for the preparation and the publication of safety standards and introduced its basic elements.

All Safety Standards are now available and tagged in NSS-OUI.

For now, 107 publications are available full text (23 NSS and 84 Standards)

- All available GSRs and SSRs (except SSR-6) have been imported and are searchable full text.
- All available GSGs and SSGs have been imported and are searchable full text (except the two transport safety SSGs)

A number of previous standards are already available full text and if not, they can be accessed thanks to a link to the pdf publication.

Thus metadata search is fully operational and the full text search will also be at the end of the year.

All Nuclear Security Series publications are also available full text except:

- NSS No. 1 available on request
- NSS No 9 and 11 being at the end of their revision process

The IAEA made a demo on the research abilities and the feedback mechanism of the interface.

> NUSSC confirmed the interest of this IT tool

### 1.10 Priorities in the Safety Standards development

The IAEA recalled its objectives for the review of Safety Standards:

- Once every 10 years for safety requirements;
- Once every 5 years for safety guides.

It was recalled that the CSS and the review committees can express their view on which document to give priority for an update.
Among CSS priorities for its 6th term, three areas are of particular interest for NUSSC:

1) Harmonize safety standards and security recommendations and in particular:
   • Promoting a common development process for safety standards and security recommendations and associated guidance, including further involvement of the CSS.
   • Progressing on a common glossary for nuclear security and safety.
2) Considering the observations and lessons in the Director General’s Fukushima Daiichi Accident Report.
3) Perform a holistic review of the complete collection of Safety Guides and as appropriate a prioritization for the new guides or revision of existing ones.

During the current term as well as the next one, NUSSC will have to contribute to those particular priorities. The IAEA recalled that the conclusions of the 7th Review Meeting of the Contracting Parties to the Convention on Nuclear Safety could influence the definition of priorities.

Some NUSSC Members recalled that NUSSC identified Safety Guides as a priority impacted by the lessons learned from the Fukushima Daiichi NPP accident:

<table>
<thead>
<tr>
<th>NUSSC Meeting</th>
<th>Conclusion on the prioritization</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUSSC 34</td>
<td>NS-G-1.9</td>
<td>Reactor cooling system, DS481, DPP approved; first review at NUSSC 42</td>
</tr>
<tr>
<td></td>
<td>NS-G-1.10</td>
<td>Containment, DS482, DPP approved; first review during NUSSC 41</td>
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<tr>
<td></td>
<td>NS-G-2.15</td>
<td>Severe accident, DS483, DPP approved; consultation of Member States closed</td>
</tr>
<tr>
<td>NUSSC 35</td>
<td>NS-G-1.6</td>
<td>Seismic design and qualification, DS490, DPP approved; first review at NUSSC 42</td>
</tr>
<tr>
<td></td>
<td>SSG-2</td>
<td>Deterministic safety analysis, DS491, DPP approved; first review at NUSSC 41</td>
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<td></td>
<td>NS-G-1.5</td>
<td>DPP on the agenda of NUSSC 42</td>
</tr>
<tr>
<td>NUSSC 36</td>
<td>SSG-15</td>
<td>Spent fuel storage, DS489, DPP approved; first review at NUSSC 42</td>
</tr>
<tr>
<td></td>
<td>SSG-16</td>
<td>Establishing the Safety Infrastructure for a Nuclear Power Programme (Rev.1), DS486, DPP approved, MS consultation closed, second review at NUSSC 42</td>
</tr>
<tr>
<td>NUSSC 39</td>
<td>For review to reflect the Vienna Declaration on Nuclear Safety</td>
<td>External events excluding earthquake, DPP on the agenda of NUSSC 42</td>
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<tr>
<td></td>
<td>NS-G-1.5</td>
<td>Internal hazards, DS494, DPP approved.</td>
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<td>NS-G-1.7</td>
<td>Internal hazards, DS494, DPP approved.</td>
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<td>NS-G-1.11</td>
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</table>
NUSSC noted that the main effort should be targeted at updating the safety guides.

NUSSC invited the IAEA to propose subjects that could be more thoroughly addressed in safety standards.

Members of NUSSC are also invited to think of subjects that could be considered as priorities.

NUSSC decided to dedicate a day, prior or after its next meeting, to work on the general structure of safety guides. Participation will be on a voluntary basis and participants are requested to prepare short power point presentation to propose such structure.

2. REVIEW OF IAEA SAFETY STANDARDS

2.1 DS478 - Specific Safety Requirements: Safety of Nuclear Fuel Cycle Facilities, (SSR-4)

The document is an update of NS-R-5 first published in 2008. The DPP was agreed by the Committees, cleared by NSGC and approved by CSS in April 2014. The current revision was initiated to comply with the long term structure of safety standards approved in 2008. The scope of the document remains essentially unchanged.

Ninety-one (91) comments from seven (7) NUSSC members were made and all were resolved.

There was only one significant dissenting opinion on the design extension condition for existing fuel cycle facilities. To resolve it the IAEA stated that the requirements for new facilities shall be applied to existing facilities to the extent practicable.

The updated version of DS478 and the table of comments and resolutions were available on the IAEA website before the NUSSC meeting.

During the meeting, NUSSC developed some amendments to DS478 to account for comments raised and improved consistency with other Specific Safety Requirements.

NUSSC gave its approval for submission to CSS of DS478 with a few modifications in different paragraphs (§6.1, Requirement 54, Requirement 57, Requirement 74 and deletion of the last sentence of §6.6.) to achieve greater coherence with GSR and SSR already published.

2.2 DS434 Radiation Safety of radioisotope production facilities (Safety Guide)

This document is a new guide, prepared after two consultancy meetings. The DPP was approved in March 2010. The isotope production at research reactors was excluded to avoid duplication; this document only covers accelerator production. The objective of this Safety Guide is to provide recommendations on how to meet the requirements of the BSS GSR Part 3 with regard to radioisotope production facilities.

The updated version of DS474 and the table of comments and resolutions were not available on the SSCs’ website before the NUSSC meeting even if all comments have been taken into account. RASSC and NSGC gave their approval for Member States consultation.

During the meeting, discussions aroused on:

- Which installations were covered by DS434 and the possibility to have a more explicit title
- The fact that isotope production at research reactors is addressed in other safety guides. The IAEA indicated that different guides are being updated in which the safety of research reactors are more thoroughly addressed.
NUSSC gave its approval for submission of DS434 to Member States. It wished that the note verbale on this document mentions that the isotope production at research reactors is addressed in other safety guides.

2.3 DS449 Format and content of the safety analysis report for NPPs (Safety Guide)

The DPP was approved in June 2015. DS449 is a revision of GS-G-4.1 (2004) to take into account the evolutions brought by the GSR, NS-R-3, SSR-2/1 et SSR-2/2 and the current practices of Member States. One of the annexes is a “Typical Table of Content of a Safety Analysis Report”.

The updated version of DS449 and the table of comments and resolutions were available on the SSCs’ website before the NUSSC meeting.

During the meeting discussions were about the necessity to take into account the current revision of NS-R-3 and the possibility to anticipate its future requirements.

NUSSC gave its approval for submission to Member States of DS449. NUSSC also draw attention to the Secretariat on the necessity for the IAEA to take into account, in Chapter 2 of DS449, the current drafting of DS484 (update of NS-R-3).

2.4 DS481 Design of Reactor Coolant System and Associated Systems in NPPs (Safety Guide)

The DPP was approved in April 2014 and DS481 is a revision of NS-G-1.9 (2004). This document takes mainly into account, the new framework of Safety Requirements and the feedback and lessons from Fukushima Daiichi NPP accident.

The updated version of DS481 and the table of comments and resolutions were available on the SSCs’ website before the NUSSC meeting. Most of the comments were accepted.

NUSSC gave its approval for submission to Member States of DS481.

2.5 DS485 Ageing Management and Development of a Programme for Long Term Operation for NPPs (Safety Guide)

The DPP was approved in October 2014 and DS485 is an update of NS-G-2.12. The updated version of DS485 and the table of comments and resolutions were available on the SSCs’ website before the NUSSC meeting. The vast majority of comments were fully implemented and helped to improve the guide, some minors comments were rejected as not consistent with the current wording of SSR 2/2.

One day before the meeting, WASSC approved DS485 for submission to CSS with two modifications on section 3.

During the meeting, they were discussions on:

- The modifications proposed by WASSC on section 3, in particular the addition of a new paragraph “Decision for ageing management and long term operation should take due account of the potential implications for the subsequent decommissioning phase”.
- Difference between LTO and ageing management.
- Deletion of §4.13 to 4.17 as those paragraphs would better fit in a Safety Guide on the content of the safety report.
- §2.17 and the necessity to prevent and mitigate the consequences of ageing.

NUSSC gave its approval for submission to CSS after:

- paragraph 2.17 has been amended to address both prevention of ageing and mitigation of the ageing consequences;
- paragraphs 4.13 to 4.17 have been rephrased. These two last paragraphs should be simplified and connected to LTO for them to fit into the scope of the guide.

2.6 DS489 Storage of Spent Nuclear Fuel (Safety Guide)

The DPP was approved in spring 2015. DS489 is a revision of some paragraphs of SSG-15 (2012) by addendum in order to better capture extreme situations such as multiple initiating events occurring simultaneously following the gap analysis of the Safety Standards based on the feedback from the Fukushima Daiichi Accident.

The updated version of DS489 and the table of comments and resolutions were available on the SSCs’ website before the NUSSC meeting.

During the meeting, discussions aroused on:

- The interface with the current revision of NS-R-5 (DS478).
- Potential need of a consultation of TRANSSC. The IAEA recalls that the evolutions do not affect the parts on transport.
- Interface with other Safety Guides already published (e.g. GSR part 6) or being drafted.
- Interface between safety and security and the reference to Security Series publications.
- Paragraph 5.21 which was subject to many comments.
- The scope of the internal IAEA consultation when considering the comments received on documents. Some sections (External Event Section, Safety Assessment Section) may have not been properly consulted.
- Interface with SSR-2/1 for spent fuel storage facilities. The IAEA recalled that the NS-G-1.4 is undergoing revision and encompasses such field which is not in the scope of DS489.
- The perceived emphasis on the dry storage of spent fuel.

→ NUSSC gave its approval for submission to Member States of DS489. NUSSC invites the IAEA to include in the version which will be submitted to Member States, the recent comments made by some sections of the IAEA.

2.7 DS492 Human Factors Engineering in NPPs (Safety Guide)

This is a new safety guide the subject was identified as a cross cutting activity and as a gap at the time the DPP was drafted. The DPP was approved in April 2015. The first draft was developed in three Consultancy Meetings during 2016 and then submitted to the Committees for comments in September 2016. 270 comments were received and all of them were resolved.

The updated version of DS492 and the table of comments and resolutions were available on the SSCs’ website before the NUSSC meeting. Most of the comments were accepted.

There were discussions on the possibility to clarify the title of the guide to highlight that the document is only concerned with the conceptual design of the installation and not with its operation.

→ NUSSC gave its approval for submission to Member States with a slight modification of its title: “Human Factors Engineering in the Design of NPP”.

2.8 Status of Safety Standards

A presentation on the status of safety standards was given by Mr. M. Svab.

Two safety standards were published by the IAEA since the previous NUSSC Meeting:

- GSR Part 2 Leadership and Management for Safety (published 30 June 2016)
- SSR-3 Safety of Research Reactors (published on 7 November 2016)
Mr. Svab informed the NUSSC Members that the Consultancy Meetings for the development of DS497 (Revision of 8 Operational Safety Guides) will be held on 7 – 9 February 2017 and on 30 October – 2 November 2017.

3. REVIEW OF DOCUMENT PREPARATION PROFILES (DPPs) – SAFETY STANDARDS

3.1 DS498 DPP External Events Excluding Earthquakes in the Design of Nuclear Installations (Safety Guide)

This document is an update of NS-G-1.5 and was first published in 2003.

With this version, the scope of the safety guide will be extended to all nuclear installations in order to incorporate the lessons learned of the Fukushima Daiichi NPP Accident.

39 comments were received, 18 of which were rejected as out of the scope of the DPP. WASSC already approved the DPP under the condition that the comments made by US-NRC are taken into account.

During the meeting, there were discussions on:

- The actions taken concerning US-NRC comments. The US delegate considered the IAEA proposal to be reasonable.
- The understanding of the terms “external events” especially for people working on probabilistic safety assessment.
- The inclusion of other examples of external hazards

It was recalled the differences and interactions between DEC and external hazards.

➔ NUSSC noted that this DPP is following a quite old NUSSC recommendation (NUSSC35 – summer 2013) to update the existing standards in the field.

➔ NUSSC gave its approval on DS498 DPP after a modification of chapter 7 has been made. The list of section 7 “Safety design provisions against external events” should include an additional bullet “other external hazards”.

3.2 DS502 DPP Continuous improvements of Operational Safety Performance in NPPS (Safety Guide)

This document is in correlation with DS497 but also a response to expectations from participants of different technical meetings and workshops regarding the need for guidance in this area.

The updated version of the DPP was posted on the IAEA website before the meeting.

55 comments were received and the majority of them were accepted. The necessity of such a safety Guide is not yet definitely fixed and the IAEA informed the participants that this DPP will be further developed and presented again at the next NUSSC meeting.

During the meeting there were discussions:

- The link with safety culture
- The relevance of such subject for other installations than nuclear power plants
- The possibility to benefit from the update of NS-G-2.4, NS-G-3.1 and 3.5 to address this subject
- The title of the document that may be confusing

➔ NUSSC noted that IAEA decided to further work on the DPP on the basis of comments received and that NUSSC approval was not anymore requested on the current DPP.
4. NSGC DOCUMENTS FOR CLEARANCE

4.1 NST045 Computer Security for Nuclear Security (Implementing Guide)

The objective of this document is to provide guidance on developing, implementing and integrating computer security as a key component of nuclear security covering NSS 13, NSS 14, and NSS15.

The DPP was approved in June 2014, 5 consultancy meetings and one technical meeting were convened from November 2014 to June 2016. The development of NST045 was made in close coordination with NST057 and NST047.

The Agency explained the difference between two terminologies:

- The sensitive information assets which are defined [NSS20] as any equipment or components that are used to store, process, control or transmit sensitive information; and
- The terms sensitive digital assets (SDAs) which identify those sensitive information assets that are computer-based and need computer security measures for their protection.

The updated version of NST045 and a table introducing the actions taken on the comments received were posted on the IAEA website shortly before the meeting. The NUSSC cleared this version as no discussion aroused during the NUSSC Meeting.

4.2 NST048 Security of Radioactive Material in Use and Storage and of Associated Facilities (Implementing Guide)

This document is a revision of NSS 11.

The document was approved by Coordination Committee in September 2016 and by NSGC in November. RASSC, WASSC and EPReSC cleared the draft.

One question arose on the definition to give to “safety system” in this document. It appeared that the use of these terms under the title “interfaces with safety system” (p35) refers to the safety regime in general. NUSSC Members wondered whether under paragraphs 3.86 (d) and III.2(e), the sentence “systems important to safety” should be used instead of “safety system”.

4.3 NST051 DPP Security during the Lifetime of Nuclear Facilities (Implementing Guide)

Six consultancy meetings since November 2014 and a Technical Meeting in January 2016 were held to develop this new document.

The updated version of NST051 and a table introducing the actions taken on the comments received were posted on the IAEA website shortly before the meeting.

NUSSC invites the IAEA to reassess the possibility to cover such subject in existing guides.
5. MISCELLANEOUS

5.1 Four-years term NUSSC Report

At the end of the current mandate, NUSSC will have to deliver its quadrennial report. The Chair stressed the importance of starting considering its content. Usually this report is divided in two parts:

- The first one provides a retrospective view on NUSSC activities. It could be structured as follow:
  - A factual part:
    - The lessons learned from the Fukushima Daiichi NPP accident
    - The implementation of the long term structure of safety standards (summary table of DS, NST, DPP reviewed by NUSSC from 2014 to 2017 and an overview of the NUSSC/WASSC meetings)
    - The increasing consideration of the interface safety/security
    - The actions performed between NUSSC meetings
    - Greater awareness of the IAEA activities and Member States activities in nuclear field.
  - An analytical part on working methods, its strengths and weaknesses which could particularly draw on the conclusions of OIOS mission.

- The second part provided a prospective view to guide the actions of the next NUSSC mandate. It could address, among others, such subjects:
  - The improvements in the coherence of Safety Standards, especially thanks to OUI tool and the simultaneous revision of different Safety Standards
  - The structure of Safety Guides and the possibility to reinforce the “top-down” approach
  - The content of Safety Guides and their interface with TecDocs and Safety Reports or other international documents (e.g. IEC, ISO)
  - The improvement of the specification for update, to enable more detailed DPP
  - The involvement of NUSSC in the drafting of TecDocs, Safety Reports or other IAEA publications
  - The topics and/or documents identified by NUSSC as priorities for update,

→ NUSSC requested the scientific secretariat to start preparing the structure and the first part of the NUSSC report

→ For the next NUSSC meeting, all participants should think about challenges and priorities, and ideas for the analytical and prospective parts and provide the Secretariat with them by the end of May. The IAEA will make them available online.

6. CLOSURE OF THE MEETING

6.1 List of Actions for the 42nd NUSSC Meeting

The List of Actions for the 42nd NUSSC Meeting was introduced by Mr. Svab to the audience. The NUSSC Members did not comment on the list and approved it. The list was attached to this report as an annex (Annex II).

6.2 Conclusions

All the agenda items were addressed. The actions decided at the 42nd NUSSC Meeting are intended to be posted on the website of the IAEA.
The dates of the next NUSSC Meetings will be:

- 43rd NUSSC Meeting: 19-23 June 2017.
- 44th NUSSC Meeting: 27 November 2017 – 1 December 2017.
## ANNEX I AGENDA

### 42\textsuperscript{nd} Meeting of the Nuclear Safety Standards Committee (NUSSC)

**29 November – 1 December 2016, Vienna**

**VIC, M Building, Meeting Room M3**

**Tuesday, 29 November 2016, at 2:00 p.m. – Thursday, 1 December 2016, till 4:00 p.m.**

1. **GENERAL ISSUES**

1.1 Opening of the Meeting
   - Opening remarks by DIR-NSNI  
   **Mr G. Rzentkowski**
   **DIR-NSNI**

1.2 Chairman’s Introduction  
   **Mr F. Feron**

1.3 Adoption of the Agenda of the 42\textsuperscript{nd} NUSSC Meeting  
   **For approval**  
   **NUSSC Members**

1.4 Approval of the Report of the 41\textsuperscript{st} NUSSC Meeting  
   **For approval**  
   **NUSSC Members**

1.5 Actions of NUSSC Meetings  
   **For information**  
   **Mr M. Svab**

1.6 Dates of the next meetings:
   - 43\textsuperscript{rd} NUSSC Meeting: 19 – 23 June 2017  
   - 44\textsuperscript{th} NUSSC: 27 November – 1 December 2017 (TBD)  
   **For approval**  
   **NUSSC Members**

1.7 Report from the previous meeting of the Chairs  
   **For information**  
   **Mr F. Feron**

1.8 CSS 40\textsuperscript{th} Meeting Report  
   **For information**  
   **Mr D. Delattre**

1.9 Status of the NSS-Online User Interface IT platform  
   **For information**  
   **Mr D. Delattre**

1.10 Priorities in the Safety Standards development  
   **For information**  
   **Mr M. Svab**

2. **REVIEW OF IAEA SAFETY STANDARDS**

2.1 **DS478** - Specific Safety Requirements: Safety of Nuclear Fuel Cycle Facilities, No.SSR-4 (All SSCs, NSGC)  
   **For approval for submission to CSS**  
   **Mr R. Gater**

2.2 **DS434** - Draft Safety Guide: Radiation Safety of Radioisotope Production Facilities (All SSCs, NSGC)  
   **For approval for submission to MS**  
   **Mr I. Gusev**

2.3 **DS449** – Draft Safety Guide: Format and Content of the Safety Analysis Report for NPPs (also for RASSC, WASSC, EPReSC, NSGC)  
   **For approval for submission to MS**  
   **Mr P. Villalibre**

2.4 **DS481** - Draft Safety Guide: Design of Reactor Coolant System and Associated Systems in NPPs (also for NSGC)  
   **For approval for submission to MS**  
   **Mr B. Poulat**

2.5 **DS485** - Draft Safety Guide: Ageing Management and development of a Programme for LTO of NPPs  
   **For approval for submission to**  
   **Mr R. Krivanek**
(also for WASSC) 

2.6 **DS489** - Draft Safety Guide: Storage of Spent Nuclear Fuel (also for EPReSC, WASSC and NSGC) 

2.7 **DS492** - Draft Safety Guide: Human Factors Engineering in NPPs (also for EPReSC) 

2.8 Status of Safety Standards 

3. **REVIEW OF DOCUMENT PREPARATION PROFILES (DPPs) – Safety Standards** 

3.1 **DPP DS498** - Draft Safety Guide: External Events Excluding Earthquakes in the Design of NIs (also for WASSC) 

3.2 **DPP DS502** - Draft Safety Guide: Continuous Improvement of Operational Safety Performance in NPPs (also for RASSC, TRANSSC, WASSC) 

4. **NSGC DOCUMENTS FOR CLEARANCE** 

4.1 **NST045** - Draft Implementing Guide: Computer Security for Nuclear Security (also for NSGC, EPReSC, WASSC, RASSC and TRANSSC) 

4.2 **NST048** - Draft Implementing Guide: Security of Radioactive Material in Use and Storage and of Associated Facilities (also for NSGC, EPReSC, RASSC, WASSC) 

4.3 **NST051** - Draft Implementing Guide: Security During the Lifetime of Nuclear Facility (also for NSGC, EPReSC, WASSC, RASSC and TRANSSC) 

5. **MISCELLANEOUS** 

5.1 Four-years Term NUSSC Report 

6. **CLOSURE OF THE MEETING** 

6.1 Actions following the 42nd NUSSC Meeting 

6.2 Conclusions
<table>
<thead>
<tr>
<th>Meeting Title</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>40th CSS Meeting</td>
<td>7 – 11 November 2016</td>
</tr>
<tr>
<td>2nd EPreSC Meeting</td>
<td>27 June – 1 July 2016</td>
</tr>
<tr>
<td>3rd EPreSC Meeting</td>
<td>28 November – 2 December 2016</td>
</tr>
<tr>
<td>43rd NUSSC Meeting</td>
<td>19 – 23 June 2017</td>
</tr>
<tr>
<td>44th NUSSC Meeting</td>
<td>27 November – 1 December 2017</td>
</tr>
<tr>
<td>41st RASSC Meeting</td>
<td>21 – 25 November 2016</td>
</tr>
<tr>
<td>42nd WASSC Meeting</td>
<td>28 November – 2 December 2016</td>
</tr>
<tr>
<td>10th NSGC Meeting</td>
<td>14 – 18 November 2016</td>
</tr>
<tr>
<td>33rd TRANSSC Meeting</td>
<td>15 – 18 November 2016</td>
</tr>
</tbody>
</table>
## ANNEX II Actions following the 42\textsuperscript{nd} NUSSC Meeting

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.9</td>
<td>NUSSC Members to request, on a voluntary basis, access to OUI module for feedback, to the NUSSC Secretary.</td>
<td>NUSSC Members</td>
<td>Whenever</td>
</tr>
<tr>
<td>1.10</td>
<td>Priorities in the Safety Standards development: IAEA and NUSSC Members to suggest topics considered as priorities.</td>
<td>Secretariat NUSSC Members</td>
<td>ASAP</td>
</tr>
<tr>
<td>2.1</td>
<td>DS478 - Specific Safety Requirements: Safety of Nuclear Fuel Cycle Facilities, No.SSR-4 Approved for submission to CSS with the modification of paragraph 6.1, 6.6, Requirements 54, 57 and 74 and their associated requirements.</td>
<td>Secretariat</td>
<td>ASAP</td>
</tr>
<tr>
<td>2.2</td>
<td>DS434 - Draft Safety Guide: Radiation Safety of Radioisotope Production Facilities Approved for submission to Member States. The Note verbale should mention that the production of radioisotope in research reactors is dealt with in other Safety Guides.</td>
<td>Secretariat</td>
<td>ASAP</td>
</tr>
<tr>
<td>2.4</td>
<td>DS481 - Draft Safety Guide: Design of Reactor Coolant System and Associated Systems in NPPs Approved for submission to Member States.</td>
<td>Secretariat</td>
<td>ASAP</td>
</tr>
<tr>
<td>2.5</td>
<td>DS485 Draft Safety Guide: Ageing Management and development of a Programme for LTO of NPPs Approved for submission to CSS after the modification of paragraphs 2.17. Paragraphs 4.13 to 4.17. should also be simplified and more connected to LTO.</td>
<td>Secretariat</td>
<td>ASAP</td>
</tr>
<tr>
<td>2.6</td>
<td>DS489 Draft Safety Guide: Storage of Spent Nuclear Fuel Approved for submission to Member States providing the IAEA modifies the wording taking into account the recently raised comments.</td>
<td>Secretariat</td>
<td>ASAP</td>
</tr>
<tr>
<td>2.7</td>
<td>DS492 Draft Safety Guide: Human Factors Engineering in NPPs Approved for submission to Member States</td>
<td>Secretariat</td>
<td>ASAP</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Responsible Party</td>
<td>Timeline</td>
</tr>
<tr>
<td>---------</td>
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<tr>
<td></td>
<td>Approved for submission to CSS, providing the inclusion in the list of chapter 7, section 7, of a new bullet “other external hazards”.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>DPP DS502- Draft Safety Guide: Continuous Improvement of Operational Safety Performance in NPPs</td>
<td>Secretariat</td>
<td>ASAP</td>
</tr>
<tr>
<td></td>
<td>NUSSC took note of the IAEA decision to continue working on this DPP on the basis of the comments received prior to NUSSC Meeting and invited the IAEA to consider the possibility for this issue to be handled in already existing Safety Guides.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>NST048 - Draft Implementing Guide: Security of Radioactive Material in Use and Storage and of Associated Facilities Cleared for submission to DDG providing a footnote is inserted under the title “interfaces with the safety system” clarifying the use of the terms “safety system” and that “safety systems” is replaced by “items important to safety” in paragraphs 3.86 d) and III.2 e).</td>
<td>Secretariat</td>
<td>ASAP</td>
</tr>
<tr>
<td>4.3</td>
<td>NST051 - Draft Implementing Guide: Security During the Lifetime of Nuclear Facility Cleared for submission to Member States.</td>
<td>Secretariat</td>
<td>ASAP</td>
</tr>
<tr>
<td>5.1</td>
<td>Four-years Term NUSSC Report: - Start preparing the structure and the first part of the NUSSC report - Think about challenges and priorities and provide the Secretariat with them by the end of May. IAEA to combine them and make them available online.</td>
<td>Secretariat, NUSSC Members &amp; Observers</td>
<td>Before the next NUSSC meeting By 31 May 2017 NUSSC Members to inform the Secretariat</td>
</tr>
<tr>
<td></td>
<td>Proposition to the Chairs to discuss the holistic approach at the next chairs meeting of 19 April (before the CSS)</td>
<td>SSC Chairs</td>
<td>19 April</td>
</tr>
<tr>
<td></td>
<td>IAEA to organize a one-day volunteers working group to discuss the long-term structure of Safety Guides.</td>
<td>Secretariat</td>
<td>Next NUSSC Meeting</td>
</tr>
</tbody>
</table>
Secretariat to provide feedback on the use of Webex or streaming during Safety Standards Committees Meetings.

ANNEX III List of Participants

<table>
<thead>
<tr>
<th>Country</th>
<th>Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>Mr D. Merrouche</td>
</tr>
<tr>
<td>Austria</td>
<td>Mr N. Müllner</td>
</tr>
<tr>
<td>Belgium</td>
<td>Mr B. De Boeck</td>
</tr>
<tr>
<td>Brazil</td>
<td>Mr J. A. Barretto De Carvalho</td>
</tr>
<tr>
<td>Canada</td>
<td>Mr Ried</td>
</tr>
<tr>
<td>Canada</td>
<td>Mr P. Webster</td>
</tr>
<tr>
<td>China</td>
<td>Mr W. Zhang</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Mr Z. Tipek</td>
</tr>
<tr>
<td>Egypt</td>
<td>Mr M. Ibrahim</td>
</tr>
<tr>
<td>Finland</td>
<td>Ms M. Järvinen</td>
</tr>
<tr>
<td>France</td>
<td>Mr F. Feron (Chairman)</td>
</tr>
<tr>
<td>France</td>
<td>Mr Wattele</td>
</tr>
<tr>
<td>Germany</td>
<td>Ms M. Rueffer</td>
</tr>
<tr>
<td>Hungary</td>
<td>Ms E. Retfalvi</td>
</tr>
<tr>
<td>Iran</td>
<td>Mr K. Sepanloo</td>
</tr>
<tr>
<td>Israel</td>
<td>Mr R. Harari</td>
</tr>
<tr>
<td>Japan</td>
<td>Mr T. Kurasaki</td>
</tr>
<tr>
<td>Japan</td>
<td>Mr T. Nakajima</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>Mr Y. H. Choi</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>Mr Hyung Joon Ahn</td>
</tr>
<tr>
<td>Libya</td>
<td>Mr K. M. Ihdayb</td>
</tr>
<tr>
<td>Mexico</td>
<td>Mr C. Camargo</td>
</tr>
<tr>
<td>Norway</td>
<td>Mr H. Mattsson</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Mr M. Rahman</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Mr M. Lankin</td>
</tr>
<tr>
<td>Russian federation</td>
<td>Mr Krechetov</td>
</tr>
<tr>
<td>Slovakia</td>
<td>Mr. P. Uhrík</td>
</tr>
<tr>
<td>South Africa</td>
<td>Ms K. Naidoo</td>
</tr>
<tr>
<td>Spain</td>
<td>Mr M. Rodríguez Martí</td>
</tr>
<tr>
<td>Sweden</td>
<td>Mr A. Hallman</td>
</tr>
<tr>
<td>UAE</td>
<td>Mr H. Al Khafili</td>
</tr>
<tr>
<td>Country</td>
<td>Observer</td>
</tr>
<tr>
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</tr>
<tr>
<td>UK</td>
<td>Mr R. Moscrop</td>
</tr>
<tr>
<td>USA</td>
<td>Ms K. Brock</td>
</tr>
<tr>
<td>Observer from ENISS</td>
<td>Mr G. Bassing</td>
</tr>
<tr>
<td>Observer from ENISS</td>
<td>Mr J. Barbaud</td>
</tr>
<tr>
<td>Observer from ENISS</td>
<td>Mr P. Nocturne</td>
</tr>
<tr>
<td>Observer from IEC</td>
<td>Mr J-P. Bouard</td>
</tr>
<tr>
<td>Observer from EUR</td>
<td>Ms C. Toth</td>
</tr>
<tr>
<td>WNA</td>
<td>Mr F. Lignini</td>
</tr>
</tbody>
</table>