



Oak Ridge National Laboratory
1 Bethel Valley Road
Oak Ridge, Tennessee 37830



Subject: Report on Foreign Travel - Virtual ISO TC85/SC5 and WG8 Meetings
Date: 01/07/2021
To: Dr. Angela Chambers, Nuclear Criticality Safety Program Manager, National Nuclear Security Administration / NA-511
From: Doug Bowen

Meeting Title: 23rd Plenary of ISO Technical Committee (TC) 85, and ISO TC85/SC5/WG8 Working Group 8, "Nuclear Criticality Safety" working group meetings

Meeting Location: Virtual

Meeting Date: December 2-3, 2020

Attendees on behalf of NCSP:

Doug Bowen

Meeting Purpose:

The purpose of the meeting was to conduct ISO TC85/SC5/WG8 work that was continued from other meetings held earlier in the year (May and July 2020) and to attend and participate in the 23rd plenary of TC85 as convener of WG8. The purpose virtual meeting was to attend and participate in the ISO TC85 Plenary and to conduct ISO TC85/SC5/WG8 "Nuclear Criticality Safety" business as convener and US ANSI/ASTM NTAG ISO deputy overall advisor for "Nuclear Criticality Safety". This is ongoing work and work from the previous meeting in Helsinki, Finland, in 2018 and Berlin, Germany, in 2019, was reviewed and new work resolutions were created for a new work year. The attached status report from the virtual WG8 meeting as presented to the Chair of ISO TC85/SC5 as the official report for work being done by WG8.

Meeting Benefits to the NCSP:

The NCSP benefits from United States (US) participation in the leadership and development of International Organization for Standardization (ISO) standards related to Nuclear Criticality Safety (NCS) directly from sharing the US perspective on NCS community developments in the ANS-8 series standards. The ISO TC85 (Technical Committee on Nuclear energy) / SC5 (Subcommittee on Nuclear technology) / WG8 (Working Group 8) continues to develop international standards identified as needed by member bodies of ISO. SC5 and the WGs meet on an annual basis for face-to-face discussions for the review, comment, and revision of draft documents addressed during the year. Also, the WGs identify possibly needed additional standards to address evolving technologies and international concerns, economic or otherwise. This information is shared with the ANS-8 subcommittee participants at American Nuclear Society meetings to ensure awareness of ISO NCS standards work in progress, challenges, and guidance needs abroad. Working group chairs can use these to influence or enhance consensus standards in the US NCS community. The US Nuclear Regulatory Commission is now endorsing some ISO NCS standards for use by its licensees. A final report from Bowen for the meetings conducted is attached to this trip report.

Purpose of Travel:

The meeting was virtual - no travel necessary.

Persons Contacted at Meeting:

Sixteen WG8 members were present: 4-CA, 4-FR, 1-SE, 4-UK, 2-US, 1-IAEA. Names: D. BOWEN (US) – convener, G. CAPLIN (FR) – co-convener, M. DULUC (FR), R. DRANGA (CA), L. FLINT (UK), N. HARRIS (UK), C. HOPPER (US), V. KHOTYLEV (CA), M. LAGET (FR), C. McNALLY (CA), D. MENNERDHAL (SE), M. PRIGNIAU (FR), J. ROVNY – IAEA representative.

Presentations, Chair Responsibilities, Etc.

See attachments.

Distribution:

Angela Chambers, anagela.chambers@nnsa.doe.gov

Doug Bowen, bowendg@ornl.gov

Marsha Henley, henleym@ornl.gov



ISO TC85/SC5/WG8 “Nuclear Criticality Safety” Meeting Agenda
ISO TC85/SC5/WG8 Virtual Meeting,
01 DEC 2020, 0600 – 0900 AM Eastern Time

01 DEC 2020 – 0600 AM – 0900 AM Eastern Time		
Time (Duration in Min.) {cumulative}	Topic of Discussion	Lead
(10) {10}	<ul style="list-style-type: none"> ▪ Introductory remarks <ul style="list-style-type: none"> – Status report of the WG8 Meeting on 02 JULY 2020 – Summary of resolutions from 02 JULY 2020 meeting – New ISOLink System 	Doug BOWEN (US) Gregory CAPLIN (FR)
(10) {20}	<ul style="list-style-type: none"> ▪ Work Item 1: WG8 Business <ul style="list-style-type: none"> – Jul2020 Resolution #1: Split the proposed roadmap into two documents: 1. Clean version without standard linkages; 2. Detailed version or table or appendix with standard linkages. 	Andy SUTTON (UK)
(5) {25}	<ul style="list-style-type: none"> ▪ Work Item #2 – 2-Column Guidance N-document <ul style="list-style-type: none"> – Jul2020 Resolution #2: Verify the 2-column guidance is accurate and correct, including newly published standard (ISO 22946 “Waste Standard”) – May 2021 	Michael PRIGNIAU (FR)
(10) {35}	<ul style="list-style-type: none"> ▪ Work Item #3 – Proposed Risk Assessment Standard <ul style="list-style-type: none"> – Jul2020 Resolution #3: WG8 to review/comment on latest draft standard. WG8 to provide recommendation about continuing with this proposed standard. WG8 – Sep2020 – Jul2020 Resolution #4: Create an agenda item at the next WG8 virtual meeting in Sep2020 for a 60 min. focused technical discussion and WG8 decision about an NWIP – Sep2020 	Vladimir KHOTYLEV (CA)
(5) {40}	<ul style="list-style-type: none"> ▪ Work Item #4 – NCS Operations Training Standard <ul style="list-style-type: none"> – Jul2020 Resolution #5: Ben WEBBORN to generate a new draft of the NCS Operations Training Standard for a second DIS ballot. FDIS Ballot 	Ben WEBBORN (UK)
(15) {55}	<ul style="list-style-type: none"> ▪ Work Item #5 – Proposed Revision to ISO 7753 <ul style="list-style-type: none"> – Jul2020 Resolution #6: WG8 members to provide information or presentation to WG8 about how they use CAAS in their country. SC5 leadership to aid with an information request. Share this information with WG8. WG8 – Dec 2019 – Jul2020 Resolution #7: Resolution 19 - mark as in progress – defer to Sept. 30, 2020 on how CAAS is used in members’ country. 	Michael LAGET (FR)
(10) {65}	<ul style="list-style-type: none"> ▪ Work Item #6 – Terms and Definitions N-document <ul style="list-style-type: none"> – Jul2020 Resolution #8: Issue draft 4 of the NDOC. HARRIS (UK)/BOWEN (US) – May 2019 – Jul2020 Resolution #9: Publish Issue 1 of the Terms and Definitions N-document. HARRIS (UK)/BOWEN (US) – Sep2020 – Jul2020 Resolution #10: Commence work on Issue 2 of the NDOC to consider terms in new WG8 standards. HARRIS (UK) – Sep2020 – Jul2020 Resolution #11: WG8 commence review/comment on the revised NDOC. WG8 – Dec2020 	Doug BOWEN (US) Neil HARRIS (UK)



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(10) {75}	Work Item #7 – Role Definitions N-document <ul style="list-style-type: none"> – Jul2020 Resolution #12: WG8 to review/comment and provide comments. WG8 – Sep 2020 – Jul2020 Resolution #13: Publish NDOC. BOWEN (US)/HARRIS (UK) – Dec 2020 – Jul2020 Resolution #14: WG8 to review Issue 2, draft 3 and to provide comments/feedback to FLINT (UK). WG8 – Dec 2020 – Jul2020 Resolution #15: WG8 to review additional roles for inclusion into Role Definitions N-document. WG8 – Sep 2020 – Jul2020 Resolution #16: Add an agenda item for the Sep2020 virtual meeting to include discussion about potential new roles for this N-document. – BOWEN (US) – Sep 2020 	Doug BOWEN (US) Lauren FLINT (UK) Neil HARRIS (UK)
(10) {85}	Work Item #8 – Proposed revision to ISO 16117 “Estimation of the Number of Fissions of a Postulated Criticality Accident” <ul style="list-style-type: none"> – Jul2020 Resolution #17: Provide WG8 with details about a proposed, minor, revision to ISO 16117, “Estimation of the Number of Fissions of a Postulated Criticality Accident.” – Jun 2021 	Yuichi YAMANE (JP)
(10) {95}	Coffee Break	
(10) {105}	Work Item #9 – Amendment to ISO 1709 Standard <ul style="list-style-type: none"> – Jul2020 Resolution #18: ISO 1709 face-to-face discussion as a subsequent revision on deferred topics (HARRIS (UK) to share for members to add to the list for revision scope) beyond the scope of the amendment. BOWEN (US) – Sep2020 	Neil HARRIS (UK) Doug BOWEN (US)
(5) {110}	Work Item #10 – ISO Standard Summary Documents (Brochures) <ul style="list-style-type: none"> – Jul2020 Resolution #19: WG8 to review all ISO Standard Summary Documents and provide input to Karin RANTAMÄKI (FI). WG8 – Aug2020 – Jul2020 Resolution #20: Karin RANTAMÄKI to update brochures based on WG8 input. RANTAMÄKI (FI) – Sep2020 – Jul2020 Resolution #21: Publish updated brochures. BOWEN (US)/RANTAMÄKI (FI) – Sep2020 	Karin RANTAMÄKI (FI)
(20) {130}	Work Item #11 – Proposed ISO Standard for Validation of Computational Methods <ul style="list-style-type: none"> – Jul2020 Resolution #22: Jeremy MUNSON will update the “Status and Items to Discuss List” for discussion at the Dec2020 WG8 meeting. MUNSON – Dec2020 	Jeremy MUNSON (US)



ISO TC85/SC5/WG8 “Nuclear Criticality Safety” Meeting Agenda
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Time (Duration in Min.) {cumulative}	Topic of Discussion	Lead
(20) {150}	Work Item #12 – Other Business <ul style="list-style-type: none"> – Jul2020 Resolution #23: Agenda item at next WG8 meeting: WG8 member exchanges with the IAEA and revision of NCS-related standards; WG8 review/input of these standards. BOWEN – Sep2020 – Jul2020 Resolution #24: WG8 distribution of the ISO 11311 draft with frontmatter for review/comment. BOWEN(US)/CAPLIN(FR) – Aug2020 – Jul2020 Resolution #25: Add an agenda item for the next WG8 meeting to discuss ISO 11311 standard issues and the need to publish a correction to the standard. BOWEN (US) – Sep2020 	Doug BOWEN (US) Gregory CAPLIN (FR)
(30) {180}	New Business <ul style="list-style-type: none"> – Confirmation vote for WG8 convenor – Resolution discussion – Next meeting 	WG8
	Adjourn	



ISO TC85/SC5/WG8 “Nuclear Criticality Safety” Meeting Agenda
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WORK IN
PROGRESS &
STATUS
(02JUL2020
RESOLUTIONS)

VIRTUAL MEETING – 02 July 2020 – RESOLUTIONS

Work Item #1 – WG8 Business

- **Jul2020 Resolution #1:** Andy SUTTON to split the proposed roadmap into two documents: 1. Clean version without standard linkages; 2. Detailed version or table or appendix with standard linkages.

Work Item #2 – 2-Column Guidance N-document

- **Jul2020 Resolution #2:** Verify the 2-column guidance is accurate and correct, including newly published standard (ISO 22946 “Waste Standard”). Michael PRIGNIAU (FR) (+ support by Dennis, Vladimir and Neil) – May 2021

Work Item #3 – Proposed Risk Assessment Standard

- **Jul2020 Resolution #3:** WG8 to review/comment on latest draft standard. WG8 to provide recommendation about continuing with this proposed standard. WG8 – Sep2020
- **Jul2020 Resolution #4:** Create an agenda item at the next WG8 virtual meeting in Sep2020 for a 60 min. focused technical discussion and WG8 decision about an NWIP – Sep2020

Work Item #4 – NCS Operations Training Standard

- **Jul2020 Resolution #5:** Ben WEBBORN to generate a new draft of the NCS Operations Training Standard for a second DIS ballot.

Work Item #5 – Proposed Revision to ISO 7753

- **Jul2020 Resolution #6:** WG8 members to provide information or presentation to WG8 about how they use CAAS in their country. SC5 leadership to aid with an information request. Share this information with WG8. WG8 – Dec 2019
- **Jul2020 Resolution #7:** Resolution 19 - mark as in progress – defer to Sept. 30, 2020 on how CAAS is used in members’ country.

Work Item #6 – Terms and Definitions N-document

- **Jul2020 Resolution #8:** Issue draft 4 of the NDOC. HARRIS (UK)/BOWEN (US) – May 2019
- **Jul2020 Resolution #9:** Publish Issue 1 of the Terms and Definitions N-document. HARRIS (UK)/BOWEN (US) – Sep2020
- **Jul2020 Resolution #10:** Commence work on Issue 2 of the NDOC to consider terms in new WG8 standards. HARRIS (UK) – Sep2020
- **Jul2020 Resolution #11:** WG8 commence review/comment on the revised NDOC. WG8 – Dec2020

Work Item #7 – Role Definitions N-document

- **Jul2020 Resolution #12:** WG8 to review/comment and provide comments. WG8 – Sep 2020
- **Jul2020 Resolution #13:** Publish NDOC. BOWEN (US)/HARRIS (UK) – Dec 2020
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Current ISO WG8 Standards		
ISO Standard	Standard Title	Revision Date
ISO-7753:1987	Nuclear Energy – Performance and testing requirements for criticality detection and alarm systems	01-AUG-1987
ISO-14943:2004	Nuclear fuel technology — Administrative criteria related to nuclear criticality safety	01-OCT-2004
ISO-27467:2009	Nuclear criticality safety — Analysis of a postulated criticality accident	15-FEB-2009



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Current ISO WG8 Standards		
ISO Standard	Standard Title	Revision Date
ISO-27468:2011	Nuclear criticality safety — Evaluation of systems containing PWR UOX fuels — Bounding burnup credit approach	01-JUL-2011
ISO-11311:2011	Nuclear criticality safety — Critical values for homogeneous plutonium-uranium oxide fuel mixtures outside of reactors	01-JUL-2011
ISO-11320:2011	Nuclear criticality safety — Emergency preparedness and response	01-OCT-2011
ISO-16117:2013	Nuclear criticality safety — Estimation of the number of fissions of a postulated criticality accident	01-OCT-2013
ISO-1709:2018	Nuclear energy - Fissile materials - Principles of criticality safety in storing, handling and processing	01-FEB-2018
ISO-21391:2019	Nuclear criticality safety -- Geometrical dimensions for subcriticality control -- Equipment and layout	01-AUG-2019
ISO 22946:2020	Nuclear criticality safety — Solid waste excluding irradiated and non-irradiated nuclear fuel	08-JAN-2020



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

CONVENOR	Douglas G. BOWEN (US)
CO- CONVENOR	Gregory CAPLIN (FR)
NUMBER OF PARTICIPANTS:	(12-01-2020 Meeting only) 16 Total representing 5 ISO Member Countries + 1 Organization (see attached attendance list)
COUNTRIES REPRESENTED:	4-CA, 4-FR, 1-SE, 4-UK, 2-US, 1-IAEA
DOCUMENTS DISTRIBUTED	See attached agenda, ISO TC85/SC5/WG8 Final Meeting Agenda
DOCUMENTS DISCUSSED	See attached agenda, ISO TC85/SC5/WG8 Final Meeting Agenda
WG MEETINGS SINCE THE LAST PLENARY (DATES AND PLACES)	WG8 meetings were held virtually via MS Teams on 5-27-2020, 7-2-2020, and 12-1-2020.
WORK ITEMS IN PROGRESS	<ul style="list-style-type: none"> • Work Item #1 – WG8 Business • Work Item #2 – 2-Column Guidance N-document • Work Item #3 – Proposed Risk Assessment Standard • Work Item #4 – NCS Operations Training Standard (ISO 23133) • Work Item #5 – Proposed Revision to ISO 7753 • Work Item #6 – Terms and Definitions N-document • Work Item #7 – Role Definitions N-document • Work Item #8 – Proposed revision to ISO 16117 “Estimation of the Number of Fissions of a Postulated Criticality Accident” • Work Item #9 – Amendment to ISO 1709 Standard • Work Item #10 – ISO Standard Summary Documents (Brochures) • Work Item #11 – Proposed ISO Standard for Validation of Computational Methods • Work Item #12 – Other Business
DIFFICULTIES MET	None



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ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5
WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

RESOLUTIONS

Work Item #1 – WG8 Business

- Resolution #1: WG8 approves the current draft of the WG8 roadmap to be issued as a N-DOC
- Resolution #2: WG8 to provide ideas for a detailed version or table or appendix of WG8 roadmap N-DOC or a new N-DOC with standard linkages for discussion at the next WG8 meeting. WG8 – May 2021

Work Item #2 – 2-Column Guidance N-document

- Resolution #3: Verify the 2-column guidance is accurate and correct, including newly published standard (ISO 22946 “Waste Standard”). Michael PRIGNIAU (FR) (+ support by MENNERDAHL, KHOTYLEV and HARRIS) – May 2021

Work Item #3 – Proposed Risk Assessment Standard

- Resolution #4: Generate a new draft of the proposed Risk Assessment Standard based on scheduled discussions with CA and FR in Dec2020 and incorporating UK and SE comments. KHOTYLEV/MCNALLY (CA) – April 2021
- Resolution #5: Send new draft of the proposed Risk Assessment Standard to WG8 for review and comment in preparation for May 2021 WG8 meeting – KHOTYLEV/MCNALLY (CA) – May 2021

Work Item #4 – NCS Operations Training Standard (ISO 23133)

- Keeping this as a work item until the standard is published (FDIS ballot to come soon).

Work Item #5 – Proposed Revision to ISO 7753

- Resolution #6: Send first draft of Annex A to WG8. LAGET – Dec 2020
- Resolution #7: WG8 to review and comment Annexes A and C – March 2021
- Resolution #8: Develop a Working Draft (WD) of the proposed revision to ISO 7753 by the next WG8 meeting based on NWIP ballot comments and scheduled discussions with UK and FR in Feb2021. LAGET – May 2021

Work Item #6 – Terms and Definitions N-document

- Resolution #9: Issue draft 4 of the NDOC. HARRIS (UK)/BOWEN (US) – April 2021
- Resolution #10: Publish Issue 1 of the Terms and Definitions N-document. HARRIS (UK)/BOWEN (US) – May 2021
- Resolution #11 Commence work on Issue 2 of the NDOC to consider terms in new WG8 standards. HARRIS (UK) – September 2021
- Resolution #12: WG8 commence review/comment on the revised NDOC. WG8 – November 2021

Work Item #7 – Role Definitions N-document

- Resolution #13: WG8 approves the current draft of the Role Definitions N-DOC (ISSUE 2 - DRAFT 3) to be issued.
Document issued as NDOC 275 after the meeting
- Resolution #14: Lauren FLINT (UK) to generate a first draft of Issue 3 of the NDOC 275 based on additional role definitions discussed in the Dec2020 WG8 meeting (Role Definitions N-document update Dec



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**ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5
WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)**

	<p>2020.pptx) for WG8 review and discussion at the next WG8 meeting. FLINT (UK) – May 2021</p> <p>Work Item #8 – Proposed revision to ISO 16117 “Estimation of the Number of Fissions of a Postulated Criticality Accident”</p> <ul style="list-style-type: none">• Resolution #15: Provide WG8 with details about a proposed, minor, revision to ISO 16117, “Estimation of the Number of Fissions of a Postulated Criticality Accident.” YAMANE (JP) – May 2021 <p>Work Item #9 – Amendment to ISO 1709 Standard</p> <ul style="list-style-type: none">• Resolution #16: Neil HARRIS (UK) to host a meeting with a subset of WG8 members in early 2021 to discuss technical content in the NWIP Attachment 1 document to ensure all pre-DIS ballot concerns/comments are resolved. HARRIS (UK) – January 2021• Resolution #17: Include a general revision scope discussion in the Japan 2021 WG8 meeting agenda. HARRIS (UK)/BOWEN (US) – November 2021 <p>Work Item #10 – ISO Standard Summary Documents (Brochures)</p> <ul style="list-style-type: none">• Resolution #18: Publish updated brochures. BOWEN (US)/RANTAMÄKI (FI) – May 2021• Resolution #19: WG8 to provide ideas for promoting these brochures – May 2021 <p>Work Item #11 – Proposed ISO Standard for Validation of Computational Methods</p> <ul style="list-style-type: none">• Resolution #20: Jeremy MUNSON will update the “Status and Items to Discuss List” for discussion at the next WG8 meeting. MUNSON (US) – May 2021 <p>Work Item #12 – Other Business</p> <ul style="list-style-type: none">• Resolution #21: G. CAPLIN (FR) to update and distribute a new draft for the proposed amendment to ISO 11311 including comments already received from SE. G. CAPLIN (FR) – Dec 2020• Resolution #22: WG8 to provide review and comment for the amendment to ISO 11311. WG8 – April 2021• Resolution #23: Doug BOWEN (US) to add an agenda item for discussion at the next WG8 meeting. BOWEN (US) – May 2021• Resolution #24: WG8 to provide review and comment to V. KHOTYLEV (CA) on IAEA DS517 (SSG5,6&7) with mention of whether these comments have been passed through their national representative. WG8 – Feb,2 2021• Resolution #25: WG8 approves by a formal vote D. BOWEN (US) as a convener for a new term.
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23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

ISO TC85/SC5/WG8 Final Meeting Agenda for 12-01-2020 Meeting

01 DEC 2020 – 0600 AM – 0900 AM Eastern Time

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(5) {40}	Work Item #4 – NCS Operations Training Standard (ISO 23133) <ul style="list-style-type: none"> • Jul2020 Resolution #5: Ben WEBBORN to generate a new draft of the NCS Operations Training Standard for a second DIS ballot. FDIS Ballot 	Ben WEBBORN (UK)
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(10) {95}	Coffee Break	
(10) {105}	Work Item #9 – Amendment to ISO 1709 Standard <ul style="list-style-type: none"> • Jul2020 Resolution #18: ISO 1709 face-to-face discussion as a subsequent revision on deferred topics (HARRIS (UK) to share for members to add to the list for revision scope) beyond the scope of the amendment. BOWEN (US) – Sep2020 NWIP Amendment 1 	Neil HARRIS (UK) Doug BOWEN (US)
(5) {110}	Work Item #10 – ISO Standard Summary Documents (Brochures) <ul style="list-style-type: none"> • Jul2020 Resolution #19: WG8 to review all ISO Standard Summary Documents and provide input to Karin RANTAMÄKI (FI). WG8 – Aug2020 • Jul2020 Resolution #20: Karin RANTAMÄKI to update brochures based on WG8 input. RANTAMÄKI (FI) – Sep2020 • Jul2020 Resolution #21: Publish updated brochures. BOWEN (US)/RANTAMÄKI (FI) – Sep2020 	Karin RANTAMÄKI (FI)
(20) {130}	Work Item #11 – Proposed ISO Standard for Validation of Computational Methods <ul style="list-style-type: none"> – Jul2020 Resolution #22: Jeremy MUNSON will update the “Status and Items to Discuss List” for discussion at the Dec2020 WG8 meeting. MUNSON – Dec2020 	Jeremy MUNSON (US)



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5
WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

01 DEC 2020 – 0600 AM – 0900 AM Eastern Time

Time (Duration in Min.) {cumulative}	Topic of Discussion	Lead
(20) {150}	Work Item #12 – Other Business <ul style="list-style-type: none"> • Jul2020 Resolution #23: Agenda item at next WG8 meeting: WG8 member exchanges with the IAEA and revision of NCS-related standards; WG8 review/input of these standards. BOWEN – Sep2020 • Jul2020 Resolution #24: WG8 distribution of the ISO 11311 draft with frontmatter for review/comment. BOWEN(US)/CAPLIN(FR) – Aug2020 • Jul2020 Resolution #25: Add an agenda item for the next WG8 meeting to discuss ISO 11311 standard issues and the need to publish a correction to the standard. BOWEN (US) – Sep2020 	Doug BOWEN (US) Gregory CAPLIN (FR)
(30) {180}	New Business <ul style="list-style-type: none"> • Confirmation vote for WG8 convenor • Resolution discussion • Next meeting (proposed for May 2020 – Virtual) 	WG8
	Adjourn	



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5
WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

ISO TC85/SC5/WG8 Attendance List for 12-01-2020 Meeting

D. BOWEN (US) – convenor
G. CAPLIN (FR) – co-convenor
M. DULUC (FR)
R. DRANGA (CA)
L. FLINT (UK)
N. HARRIS (UK)
C. HOPPER (US)
V. KHOTYLEV (CA)
M. LAGET (FR)
C. McNALLY (CA)
D. MENNERDHAL (SE)
M. PRIGNIAU (FR)
J. ROVNY – IAEA representative
A. SUTTON (UK)
J. WANG (CA)
B. WEBBORN (UK)

Currently in this meeting (16)		
	Christine McNally	
	Bowen, Douglas G.	
	Dennis Mennerdahl Outside your organization	
	Ben Webborn Outside your organization	
	Calvin (Guest) Guest	
	Christine McNally Outside your organization	...
	DULUC Matthieu Outside your organization Organizer	
	G. CAPLIN (Invité) Guest	
	LAGET Michael (FR) (Invité) Guest	
	Lauren Flint Outside your organization	
	Michael Prigniau (Invité) Guest	
	Neil Harris Outside your organization	
	ROVNY, Juraj Outside your organization	
	Ruxandra Dranga Outside your organization	
	Sutton, Andrew M (SL) Outside your organization	
	Vladimir Khotylev CNSC-CC... Outside your organization	
	Wang, Jingjing Outside your organization	



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

Attachment 1 – ISO TC85/SC5/WG8 Meeting Agenda for 27May2020

27 May 2020 – 0600 AM – 0900 AM Eastern Time		
Time (Duration)	Topic of Discussion	Lead
0600 (10)	(3) Introductory remarks & Status report of Berlin resolutions	BOWEN (US) CAPLIN (FR)
0610 (40)	<p>(4) WG8 Berlin Resolutions (Legend: X = no action; X=in progress; X=complete; X=cancelled)</p> <ul style="list-style-type: none"> • Work Items <ul style="list-style-type: none"> ○ 1 – WG8 business (resolutions 3, 4, 5, 6, 7, 8, 9) ○ 2 – (FR) 2-Column Guidance N-document (resolution 10) <ul style="list-style-type: none"> ▪ A new intro was shared @ICNC: Done ▪ 2.1 – Updates with new standards: Still in progress (not sure to have something to share at the end of May). • 3 – (UK) Proposed Waste Standard (resolution 11, 12, 13) COMPLETE ○ 4 – (CA) Proposed Risk Assessment Standard (resolution 14) <ul style="list-style-type: none"> ▪ CA is soliciting WG8 comments (comments received from UK, SE, and US) 	WG8 and Project Leaders
0650 (5)	(5) Break	
0655 (40)	<p>(6) WG8 Berlin Resolutions (Legend: X = no action; X=in progress; X=complete)</p> <ul style="list-style-type: none"> • Work Items <ul style="list-style-type: none"> ○ 5 – (UK) NCS Operations Training Standard (resolutions 15, 16, 17) <ul style="list-style-type: none"> ▪ DIS Ballot Complete; Present results. ▪ Findings from 2-week WG8 consideration (sent 18MAY20 to WG8) ▪ Way forward: FDIS, Re-DIS, publish, other ○ 6 – (FR) Proposed Revision to ISO 7753 (resolutions 18, 19?, 20?, 21, 22) <ul style="list-style-type: none"> ▪ FR has prepared a draft ISO 7753 standard for NWIP submission ○ 7 – (UK/WG8) Terms and Definitions N-document (resolutions 23, 24, 25) <ul style="list-style-type: none"> ○ Re-formatted N-document for consideration ○ 8 – (UK/WG8) Role Definitions N-document (resolutions 26, 27, 28) <ul style="list-style-type: none"> ○ Presentation of new roles, proposed definitions for Issue 2 of the N-document] 	WG8 and Project Leaders
0735 (10)	(7) Break	



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5
WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

27 May 2020 – 0600 AM – 0900 AM Eastern Time

Time (Duration)	Topic of Discussion	Lead
0750 (50)	<p>(8) WG8 Berlin Resolutions (Legend: X = no action; X=in progress; X=complete)</p> <ul style="list-style-type: none"> • Work Items <ul style="list-style-type: none"> ○ 9 – (JP) Proposed Revision to ISO 16117 (resolution 29) ○ 10 – (UK) Amendment to ISO 1709 Standard (resolutions 30, 31, 32) ○ 11 – No work item 11 ○ 12 – (UK, FR) ISO Standard Summary Documents (Brochures) (resolutions 33, 34, 35) <ul style="list-style-type: none"> ▪ 12.1 – (UK) WG8 Roadmap Discussion • 13 – (US) Proposed ISO Standard for Validation of Computational Methods (resolution 36) <ul style="list-style-type: none"> ○ An NWIP draft has been developed and shared with WG8 	WG8 and Project Leaders
0840 (20)	<p>(9) Discuss the review/amendment to ISO 11311 (MOX)</p> <p>(10) WG8 member exchanges with the IAEA and revision of NCS-related standards; WG8 review/input of these standards</p>	WG8
0900	Adjourn	



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

WORK IN
PROGRESS
& STATUS
(Berlin
Resolutions –
May 2019)

VIRTUAL MEETING – May 27, 2020 – RESOLUTIONS (Berlin still “in progress” + Virtual Meeting)

Work Item #1 – WG8 Business

- **May2020 Resolution #1:** WG8 to review and add to Andy’s proposed roadmap.
- **May2020 Resolution #2:** Add July agenda item for more discussion about WG8 roadmap and an agenda item for our next face-to-face meeting (Paris, December).
 - Continuous resolution for updating internal processes and other work item documents
 - 1-2 months before a meeting we shall review these documents for clarity.
 - Add 2-column guidance document and brochures/summary documents to the list of internal documents to review.

Work Item #2 – 2-Column Guidance N-document

- **Berlin Resolution #10:** Revise 2-column guidance NDOC N176 for new standards that have been developed and to clarify the intent/purpose of the document. CAPLIN (FR) – Dec 2020 **IN PROGRESS: MODIFIED BY May2020 Resolution #3**
- **May2020 Resolution #3:** Change Berlin resolution #10 to December (Paris meeting). Verify the 2-column guidance is accurate and correct, including newly published standard (ISO 22946 “Waste Standard”). Michael PRIGNIAU, FR (+ support by Dennis, Vladimir and Neil).

Work Item #3 – Proposed Waste Standard – Complete

Work Item #4 – Proposed Risk Assessment Standard

- **Berlin Resolution #14:** WG8 to review/comment on latest draft standard. WG8 to provide recommendation about continuing with this proposed standard. WG8 – Aug 2019 **IN PROGRESS**
- **May2020 Resolution #4:** WG8 review and comment on updated proposed risk assessment standard. Add July agenda item for more discussion.

Work Item #5 – NCS Operations Training Standard

- **May2020 Resolution #5:** WG8 to review post-DIS draft of the NCS operations training standard before the next meeting (July). **IN PROGRESS**
- **May2020 Resolution #6:** Defer discussion to the July meeting to allow WG8 to review the DIS comment resolutions and then decide if planned move to FDIS stage is supported. **IN PROGRESS**

Work Item #6 – Proposed Revision to ISO 7753

- **Berlin Resolution #19:** WG8 members to provide information or presentation to WG8 about how they use CAAS in their country. SC5 leadership to provide assistance for an information request. Share this information with WG8. WG8 – Dec 2019 **IN PROGRESS**
- **Berlin Resolution #22:** Submit for NWIP ballot. (Currently, FR, UK, SE, US, JP, CA support this project) LAGET (FR)/BOWEN (US) – Jan 2020 **IN PROGRESS**



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

- **May2020 Resolution #7:** Resolution 19 - mark as in progress – defer to Sept. 30, 2020 on how CAAS is used in members’ country. **COMPLETE**

- **May2020 Resolution #8:** Submit the NWIP Form 4 for the revision process **COMPLETE**

Work Item #7 – Terms and Definitions N-document

- **Berlin Resolution #23:** Issue draft 4 of the NDOC. HARRIS (UK)/BOWEN (US) – May 2019 **IN PROGRESS**
- **Berlin Resolution #24:** Commence work on Issue 2 of the NDOC. HARRIS (UK) – Mar 2020
- **Berlin Resolution #25:** WG8 commence review/comment on the revised NDOC. WG8 – May 2020
- **May2020 Resolution #9:** Add agenda item for July to discuss progress made. **COMPLETE**

Work Item #8 – Role Definitions N-document

- **Berlin Resolution #26:** UK to generate a revision of the Role Definition NDOC and send to WG8 for review. HARRIS (UK) – Jun 2019 **IN PROGRESS**
- **Berlin Resolution #27:** WG8 to review/comment and provide comments. WG8 – Sep 2019
- **Berlin Resolution #28:** Publish NDOC. BOWEN (US)/HARRIS (UK) – Dec 2019
- **May2020 Resolution #10:** Add agenda item for the July to discuss progress made. **COMPLETE**

Work Item #9 – Proposed revision to ISO 16117 “Estimation of the Number of Fissions of a Postulated Criticality Accident”

- **Berlin Resolution #29:** Provide WG8 with details about a proposed, minor, revision to ISO 16117, “Estimation of the Number of Fissions of a Postulated Criticality Accident.” YAMANE (JP) – Jun 2020
- **May2020 Resolution #11:** Work with Yuichi on the next meeting and include discussion additional potential revision scope of interest from UK and add an agenda item. **COMPLETE**

Work Item #10 – Amendment to ISO 1709 Standard

- **Berlin Resolution #32:** UK to revise draft ISO 1709 amendment and to submit a DIS ballot, as appropriate. HARRIS (UK)/BOWEN (US) – Dec 2019 **IN PROGRESS**
- **May2020 Resolution #12:** Submit the NWIP Form 4 for the amendment process
- **May2020 Resolution #13:** ISO 1709 face-to-face discussion as a subsequent revision on deferred topics (Neil to share for members to add to the list for revision scope) beyond the scope of the amendment.

Work Item #11 – ISO Standard Summary Documents (Brochures)

- **May2020 Resolution #14:** produce brochure for newly published “Waste Standard” (ISO 22946)
 - Brochure format is being changed to make them easier to use (see next resolution); UK will post for public access
- **May2020 Resolution #15:** Neil/Karin can provide format suggestions for WG8 review. Neil has asked all the project leads to verify the content is up-to-date. Neil will provide these for updating NDOCs as needed.



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

**ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5
WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)**

Work Item #12 – Proposed ISO Standard for Validation of Computational Methods

- **May2020 Resolution #16:** WG8 to provide comments to Jeremy MUNSON directly for further development of the NWIP ballot. WG8 comments to Jeremy for discussion at the next WG8 meeting in July. Doug to send out a new request WG8 for 2-week comment so Jeremy has an opportunity to review WG8 feedback by the July meeting. **COMPLETE**

Other Business

- **May2020 Resolution #17:** Defer the discussion about the following items to the July meeting – add two agenda items:
 - Revision/amendment of ISO 11311 (MOX),
 - WG8 member exchanges with the IAEA and revision of NCS-related standards; WG8 review/input of these standards



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

Attachment 2 – ISO TC85/SC5/WG8 Meeting Agenda for 02JUL2020

02 JUL 2020 – 0600 AM – 0900 AM Eastern Time		
Time (Duration)	Topic of Discussion	Lead
0600 (10)	(11) Introductory remarks & Status report of the WG8 Virtual Meeting on 27 May 2020	BOWEN (US) CAPLIN (FR)
0620 (40)	<p>(12) WG8 Berlin 2019 meeting and WG8 Virtual Meeting #1 Resolutions (Legend: X = no action; X=in progress; X=complete; X=cancelled/modified)</p> <ul style="list-style-type: none"> • Work Items <ul style="list-style-type: none"> ○ 1 – WG8 business (May2020 resolutions 1, 2) <ul style="list-style-type: none"> • Discuss Proposed Roadmap from Andy SUTTON • WG8 review request sent by BOWEN on 29Jun2020 ○ 2 – (FR) 2-Column Guidance N-document (Berlin resolution 10, May2020 resolution 3) <ul style="list-style-type: none"> ▪ No update – Resolution deferred to December during the May meeting. ○ 3 – ISO 22946 “Waste Standard” is complete ○ 4 – (CA) Proposed Risk Assessment Standard (Berlin resolution 14, May2020 Resolution 4) <ul style="list-style-type: none"> ▪ WG8 review and comment on updated proposed risk assessment standard 	WG8 and Project Leaders
0700 (5)	Break	
0705 (50)	<p>(13) WG8 Berlin 2019 meeting and WG8 Virtual Meeting #1 Resolutions (Legend: X = no action; X=in progress; X=complete; X=cancelled/modified)</p> <ul style="list-style-type: none"> • Work Items <ul style="list-style-type: none"> ○ 5 – (UK) NCS Operations Training Standard (May2020 Resolution 5, 6) <ul style="list-style-type: none"> ▪ WG8 to review post-DIS draft and decide to move to the FDIS stage ▪ WG8 review request sent by BOWEN on 29Jun2020 ○ 6 – (FR) Proposed Revision to ISO 7753 (Berlin resolutions 19, 22, May2020 resolutions 7, 8) <ul style="list-style-type: none"> ▪ NWIP ballot request sent to Steve Lloyd on 19 June 2020 ○ 7 – (UK/WG8) Terms and Definitions N-document (Berlin resolutions 23, 24, 25, May2020 resolution 9) <ul style="list-style-type: none"> ○ WG8 review request sent by BOWEN on 01Jul2020 ○ 8 – (UK/WG8) Role Definitions N-document (Berlin resolutions 26, 27, 28, May2020 resolution 10) <ul style="list-style-type: none"> ○ WG8 review request sent by BOWEN on 01Jul2020 	WG8 and Project Leaders
0755 (5)	Break	



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

02 JUL 2020 – 0600 AM – 0900 AM Eastern Time

Time (Duration)	Topic of Discussion	Lead
0800 (45)	<p>(14) WG8 Berlin 2019 meeting and WG8 Virtual Meeting #1 Resolutions (Legend: X = no action; X=in progress; X=complete; X=cancelled/modified)</p> <ul style="list-style-type: none"> • Work Items <ul style="list-style-type: none"> ○ 9 – (JP) Proposed Revision to ISO 16117 (Berlin resolution 29, May2020 Resolution 11) ○ 10 – (UK) Amendment to ISO 1709 Standard (Berlin resolutions 32, May2020 resolution 12, 13) <ul style="list-style-type: none"> ▪ NWIP guidance requested from Steve Lloyd on 30Mar2020; request resent on 01Jul2020 ○ 11 – (UK, FR) ISO Standard Summary Documents (Brochures) (May2020 resolutions 14, 15) • 12 – (US) Proposed ISO Standard for Validation of Computational Methods (May2020 resolution 16) <ul style="list-style-type: none"> ○ Discussion about potential NWIP draft • 13 – Other business (May2020 resolution 17) <ul style="list-style-type: none"> ○ Revision/amendment of ISO 11311 (MOX) ○ WG8 member exchanges with the IAEA and revision of NCS-related standards; WG8 review/input of these standards 	WG8 and Project Leaders
0845 (15)	(15) New business; new resolutions; plans for the next meeting	WG8
0900	Adjourn	



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

WORK IN
PROGRESS
& STATUS
(Berlin
Resolutions –
May 2019
+ May2020
and July2020
Virtual
Meetings)

VIRTUAL MEETING – 02 July 2020 – RESOLUTIONS (Berlin still “in progress” + May2020 Virtual Meeting)

Work Item #1 – WG8 Business

- **May2020 Resolution #1:** WG8 to review and add to Andy’s proposed roadmap. **COMPLETE**
- **Jul2020 Resolution #1:** Andy SUTTON to split the proposed roadmap into two documents: 1. Clean version without standard linkages; 2. Detailed version or table or appendix with standard linkages.
- **May2020 Resolution #2:** Add July agenda item for more discussion about WG8 roadmap and an agenda item for our next face-to-face meeting (Paris, December). **COMPLETE**

Work Item #2 – 2-Column Guidance N-document

- **Berlin Resolution #10:** Revise 2-column guidance NDOC N176 for new standards that have been developed and to clarify the intent/purpose of the document. CAPLIN (FR) – Dec 2020 **MODIFIED BY May2020 Resolution #3**
- **May2020 Resolution #3:** Change Berlin resolution #10 to December (Paris meeting). Verify the 2-column guidance is accurate and correct, including newly published standard (ISO 22946 “Waste Standard”). Michael PRIGNIAU, FR (+ support by Dennis, Vladimir and Neil).

Work Item #3 – Proposed Waste Standard – COMPLETE

Work Item #4 – Proposed Risk Assessment Standard

- **Berlin Resolution #14:** WG8 to review/comment on latest draft standard. WG8 to provide recommendation about continuing with this proposed standard. WG8 – Sep2020 **IN PROGRESS**
- **May2020 Resolution #4:** WG8 review and comment on updated proposed risk assessment standard. Add July agenda item for more discussion. **COMPLETE**
- **Jul2020 Resolution #2:** Create an agenda item at the next WG8 virtual meeting in Sep2020 for a 60 min. focused technical discussion and WG8 decision about an NWIP – Sep2020

Work Item #5 – NCS Operations Training Standard

- **May2020 Resolution #5:** WG8 to review post-DIS draft of the NCS operations training standard before the next meeting (July). **COMPLETE**
- **May2020 Resolution #6:** Defer discussion to the July meeting to allow WG8 to review the DIS comment resolutions and then decide if planned move to FDIS stage is supported. **COMPLETE**
- **Jul2020 Resolution #3:** Ben WEBBORN to generate a new draft of the NCS Operations Training Standard for a second DIS ballot.

Work Item #6 – Proposed Revision to ISO 7753

- **Berlin Resolution #19:** WG8 members to provide information or presentation to WG8 about how they use CAAS in their country. SC5 leadership to provide assistance for an information request. Share this information with WG8. WG8 – Dec 2019 **IN PROGRESS**
- **Berlin Resolution #22:** Submit for NWIP ballot. (Currently, FR, UK, SE, US, JP, CA support this project) LAGET (FR)/BOWEN (US) – Jan 2020 **COMPLETE**



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

- **May2020 Resolution #7:** Resolution 19 - mark as in progress – defer to Sept. 30, 2020 on how CAAS is used in members’ country. **IN PROGRESS**
- **May2020 Resolution #8:** Submit the NWIP Form 4 for the revision process – BOWEN (US) **COMPLETE**

Work Item #7 – Terms and Definitions N-document

- **Berlin Resolution #23:** Issue draft 4 of the NDOC. HARRIS (UK)/BOWEN (US) – May 2019 **IN PROGRESS**
- **Jul2020 Resolution #4:** Publish Issue 1 of the Terms and Definitions N-document. HARRIS (UK)/BOWEN (US) – Sep2020
- **Berlin Resolution #24:** Commence work on Issue 2 of the NDOC. HARRIS (UK) – Sep2020 **Closed to Jul2020 Resolution #5**
- **Jul2020 Resolution #5:** Commence work on Issue 2 of the NDOC to consider terms in new WG8 standards. (Close Berlin Resolution #24) HARRIS (UK) – Sep2020
- **Berlin Resolution #25:** WG8 commence review/comment on the revised NDOC. WG8 – Dec2020
- **May2020 Resolution #9:** Add agenda item for July to discuss progress made. **COMPLETE**

Work Item #8 – Role Definitions N-document

- **Berlin Resolution #26:** UK to generate a revision of the Role Definition NDOC and send to WG8 for review. HARRIS (UK) – Jun 2019 **COMPLETE**
- **Berlin Resolution #27:** WG8 to review/comment and provide comments. WG8 – Sep 2020
- **Berlin Resolution #28:** Publish NDOC. BOWEN (US)/HARRIS (UK) – Dec 2020
- **May2020 Resolution #10:** Add agenda item for the July to discuss progress made. **COMPLETE**
- **Jul2020 Resolution #6:** WG8 to review Issue 2, draft 3 and to provide comments/feedback to FLINT (UK). WG8 – Dec 2020
- **Jul2020 Resolution #7:** WG8 to review additional roles for inclusion into Role Definitions N-document. WG8 – Sep 2020
- **Jul2020 Resolution #8:** Add an agenda item for the Sep2020 virtual meeting to include discussion about potential new roles for this N-document. – BOWEN (US) – Sep 2020

Work Item #9 – Proposed revision to ISO 16117 “Estimation of the Number of Fissions of a Postulated Criticality Accident”

- **Berlin Resolution #29:** Provide WG8 with details about a proposed, minor, revision to ISO 16117, “Estimation of the Number of Fissions of a Postulated Criticality Accident.” YAMANE (JP) – Jun 2021 (Postponed for 1-year)
- **May2020 Resolution #11:** Work with Yuichi on the next meeting and include discussion additional potential revision scope indicted of interest from UK and add an agenda item. **COMPLETE**

Work Item #10 – Amendment to ISO 1709 Standard

- **Berlin Resolution #32:** UK to revise draft ISO 1709 amendment and to submit a DIS ballot, as appropriate. HARRIS (UK)/BOWEN (US) – Dec 2019 **COMPLETE**
- **May2020 Resolution #12:** Submit the NWIP Form 4 for the amendment process. BOWEN (US)/HARRIS (UK) – Sep2020 **COMPLETE**



23rd Plenary of ISO TC85 “Nuclear energy, nuclear technologies, and radiological protection”

ISO TC 85/SC5/WG8, Nuclear Criticality Safety REPORT to ISO TC85/SC5 WG8 Virtual Meetings (27May2020, 02Jul2020, and 01Dec2020)

- **May2020 Resolution #13:** ISO 1709 face-to-face discussion as a subsequent revision on deferred topics (HARRIS (UK) to share for members to add to the list for revision scope) beyond the scope of the amendment. BOWEN (US) – Sep2020

Work Item #11 – ISO Standard Summary Documents (Brochures)

- **May2020 Resolution #14:** produce brochure for newly published “Waste Standard” (ISO 22946) **COMPLETE**
- **May2020 Resolution #15:** Neil HARRIS (UK) and Karin RANTAMÄKI (FI) to provide format suggestions for WG8 review. Neil has asked all the project leads to verify the content is up-to-date. Neil will provide these for updating NDOCs as needed. **COMPLETE**
- **Jul2020 Resolution #9:** WG8 to review all ISO Standard Summary Documents and provide input to Karin RANTAMÄKI (FI). WG8 – Aug2020
- **Jul2020 Resolution #10:** Karin RANTAMÄKI to update brochures based on WG8 input. RANTAMÄKI (FI) – Sep2020
- **Jul2020 Resolution #11:** Publish updated brochures. BOWEN (US)/RANTAMÄKI (FI) – Sep2020

Work Item #12 – Proposed ISO Standard for Validation of Computational Methods

- **May2020 Resolution #16:** WG8 to provide comments to Jeremy MUNSON (US) directly for further development of the NWIP ballot. WG8 comments to Jeremy for discussion at the next WG8 meeting in July. Doug to send out a new request WG8 for 2-week comment so Jeremy has an opportunity to review WG8 feedback by the July meeting. **COMPLETE**
- **Jul2020 Resolution #12:** Jeremy MUNSON will update the “Status and Items to Discuss List” for discussion at the Dec2020 WG8 meeting. MUNSON – Dec2020

Work Item #13 – Other Business

- **May2020 Resolution #17:** Defer the discussion about the following items to the July meeting – add two agenda items:
 - Revision/amendment of ISO 11311 (MOX) **COMPLETE**
 - WG8 member exchanges with the IAEA and revision of NCS-related standards; WG8 review/input of these standards (make a new Jul2020 resolution) **Closed to Jul2020 Resolution #18**
- **Jul2020 Resolution #18:** Agenda item at next WG8 meeting: WG8 member exchanges with the IAEA and revision of NCS-related standards; WG8 review/input of these standards. BOWEN – Sep2020
- **Jul2020 Resolution #19:** WG8 distribution of the ISO 11311 draft with frontmatter for review/comment. BOWEN(US)/CAPLIN(FR) – Aug2020
- **Jul2020 Resolution #20:** Add an agenda item for the next WG8 meeting to discuss standard issues and the need to publish a correction to the standard. BOWEN(US) – Sep2020