C63®

ANSI-Accredited Standards Committee C63 Electromagnetic Compatibility

SUBCOMMITTEE 2 – E3 Terminology Definitions and EMC Best Practices

Tuesday, 10 November 2015, 0900 to 1000 UL LLC, 12 Laboratory Drive, Research Triangle Park, NC 27709

- 1. <u>Call to Order.</u> Mr. Chris Dilay, SC2 Chairman, called the meeting to order.
 - 1.1. <u>Opening Remarks</u>: The chairman welcomed everyone to the meeting and recognized the SC2 officers.
 - 1.2. <u>Meeting Logistics Announcements:</u> The chairman addressed meeting arrangements for the morning sessions.
 - 1.3. <u>Introductions</u>: The chairman called for a round of introductions from meeting attendees. The attendee list appears in Attachment 1.
- 2. **Review and Adoption of Agenda.** The agenda was approved as written. See Attachment 2.
- 3. **IEEE Patent Policy.** The standard IEEE Patent Policy was reviewed as required.
- 4. Attendance Fee Slides. The chairman displayed the attendance fee slides from the C63 website.

5. Membership Review.

- 5.1. The SC2 membership list was displayed as it appears on the C63[®] public website. Mr. Heirman noted that the affiliation for Harry Hodes should be updated to "Bay Area Compliance Labs." Additionally, it was noted that Victor Kuczynski is no longer chair of SC6 and Janet O'Neill is no longer as Vice Chair of SC2. Mr. Dilay took an action to provide Mr. Jerry Ramie with the updated membership information for posting to the website. (see Action Item 20151110-1)
- 5.2. Mr. Dilay displayed the WG1 membership, which was highlighted on the SC2 membership list.
- 5.3. Also displayed was the initial WG2 membership that resulted from the interest shown at the last SC2 meeting, noting that additional new members have been obtained from the DoD.
- 5.4. The chairman addressed the consideration of new members to the group. No action on soliciting new members was taken.
- 6. <u>Review and Adoption of Minutes of Previous Meeting</u>. The chairman called for a review of the SC2 meeting minutes from the meeting held at Embassy Suites, Minneapolis-North, Brooklyn Center,

MN on 05 May 2015. The minutes were approved without changes. The minutes will be forwarded to Mr. Jerry Ramie for posting onto the ASC C63[®] public website and SC2 member webpage.

7. **Action Item Review.** Action items from the previous meeting were reviewed and resolved as shown below:

#	<u>ACTION ITEM</u>	Disposition
20150505-1	Mr. Dilay to provide Jerry Ramie with updated SC2, WG1 and WG2 membership lists for posting to the C63 [®] website.	CLOSED
20150505-2	Mr. Dilay to approach Mr. Hodes about membership to WG2 to support preparation of draft ANSI C63.28-20XX.	CLOSED
20150505-3	Mr. Dilay to provide the revised PINS for ANSI C63.28-20XX to Mr. Jerry Ramie for posting to the C63 [®] website.	CLOSED
20150505-4	Mr. Wojtaszek to post the schedule for completion of ANSI C63.14-2019 to the SC2 member site.	CLOSED
20150505-5	Mr. Ramie to update the C63 [®] public website upon receipt of current SC2 membership and the PINS for ANSI C63.28-20XX.	CLOSED
20150505-6	C63 [®] subcommittee chairs to coordinate with SC2 on development of their terms and definitions.	Ongoing

8. SC2 Status and Working Group Reports

8.1. Working Group 1 Report.

8.1.1. Mr. Duncanson provided an update of WG1 activities since the last meeting, beginning with a review of the established SC2 rules for adding new terms and definitions to draft ANSI C63.14-20XX. He displayed the SC2 coordination process noting that all terms and definitions published in ANSI C63[®] standards will be published in .14. Terms and definitions sourced from military standards, the treatment of acronyms, C63 developed definitions and inputs from international standards were all addressed. He detailed the status of SC2 reviews of definitions residing in ANSI C63.7 2015, draft ANSI 63.16 20XX, and draft ANSI C63.26 20XX, wherein he recounted resolution of an issue regarding SC1s use of footnotes in a number of definitions, the resolution concluding that C63.14 20XX will simply publish the definition without the footnote, with attribution to ANSI C63.26 20XX.

- 8.1.2. In the course of discussion about draft ANSI C63.16, Mr. Whitesell noted that SC5 had consulted the IEEE 100 online dictionary about terms and definitions. He raised the issue of the potential for conflict and inconsistencies between ANSI C63.14 and IEEE library due to the fact that the online dictionary updates as new standards are published, while C63.14 lags, updated on a five year schedule. The discussion eventually moved to the desirability of transitioning ANSI C63.14 from its current form to a database structure, Mr. Heirman noting this trend in international standardization. After much discussion on potential pros and cons, it was decided that more information on implementing such a move is needed. Mr. Dilay took an action contact Sue Vogel to research the development of an ANSI C63.14 database. (see Action Item 20151110-2)
- 8.1.3. The chairman displayed the schedule for completion of ANSI C63.14-2019, noting that August 2018 is the tentative cut-off date for the incorporation of new definitions to be considered from C63 draft standards. The projected publication is currently October 2019.
- 8.1.4. Mr. Dilay discussed the ongoing effort to coordinate with the other C63[®] subcommittees on developing and obtaining copyright approvals for their definitions where required. He stressed the responsibility of subcommittee chairs to submit their new terms and definitions to SC2 for review as soon as is practical for the draft standard.

8.2. Working Group 2 Report: Best Practices Guide

- 8.2.1. The chairman provided a status update for the ANSI C63.28-20XX development effort, reporting on the initial task to review Annex B of the Engineering Practice Study (EPS) published in 2001 by the DoD/Industry E3 Standards Committee, which was chaired by DISA/Joint Spectrum Center and ANSI C63[®]. He noted that the compendium provides tables of the applicable EMC standards addressed by the study, and Annex B2 of the study lists these standards by categories of product types. The intent of this initial effort is to validate the exhaustive list of references, updating standards where needed and deleting those either cancelled, or no longer in use by industry. The updated references will form the basis of WG2 effort at comparisons with MIL-STD-461G.
- 8.2.2. Mr. Dilay displayed the JSC EPS Guide Annex B1 update, which is provided on an Excel spreadsheet, the first page of which is a stoplight chart (red, yellow, green) indicating the status of completion for the standardization bodies represented in the annex, along with the numbers of standards associated with each body and the WG2 member assigned the task of the review and update. Accompanying pages of the spreadsheet detailed review findings for the status of the individual standards associated with each organization. In the course of discussion about IEC/CISPR, TC77, and CENELEC standards, which represented those shown in red on the chart; a total of 279 standards indicating "no response to date," Mr. Heirman noted that CISPR maintains a database of all their current standards that should provide a quick solution for the update. He took an action to provide the URL of the Annex of CISPR and IEC standards to the WG. (See Action Item 20151110-3)

- 8.2.3. The chairman addressed status of the effort to derive a definition for EMC Best Practices. He displayed several proposed definitions of "EMC Best Practice," and "EMC Best Practice Standard," for consideration by the group, noting that the best practice definition needed to be broad in scope and that both definitions are needed to support the .28 effort. He also displayed the definition of "EMC best Practice," obtained from the European Committee for Standardization (CEN) Workshop 10, Expert Group 7 Final Report for consideration as an example, and reemphasized the importance of the definitions as a means of scoping the standards comparison effort. Mr. Wojtaszek noted that the Expert Group 7 report has been posted on the SC2 member's website. WG2 has an action to review these definitions and have recommendations ready for the next WG2 WebEx meeting. (See Action Item 20151110-4)
- 8.2.4. Randy Long, who works for the Lab Accreditation Bureau was consulted for his insight into EMC best practices from an assessor perspective. His response was that from an accreditation standpoint, in accordance with applicable ISO requirements, best practices address laboratory practices for meeting a requirement. They will assess a lab's quality systems for ensuring accurate compliance measurements. He noted that if best practices were tied directly into test methods, then it would be something he could assess. After discussion it was concluded that there is little direct correlation or overlap between the term "best practices," as used in the context of accreditation and as applicable to the intent of draft ANSI C63.28.

9. SC2 website maintenance.

- 9.1. Mr. Wojtaszek provided a report on the status of the SC 2 member webpage, providing an overview of the organization of the site and functionality of the embedded links. He displayed the site, noting that it is a repository of all our documents, including status reports and meeting minutes, etc. He also pointed out that the Expert Group 7 report, the EPS study, and the Best Practices approach brief are posted on the site and available for review. A number of meeting attendees expressed accolades for the site, commenting on how well organized and informative it is.
- 9.2. Mr. Ramie took an action to incorporate needed updates to the SC2 public website. (See Action Item 20151110-5)
- 10. Old Business. None.
- 11. <u>New Business</u>. Mr. Dilay noted his pending action to research the feasibility of transitioning ANSI C63.14 from a standard to a database.
- 12. **Action Item Review.** Newly assigned actions appear below:

#	ACTION ITEM	Disposition
20151110-1	Mr. Dilay to provide Jerry Ramie with identified updates to the SC2 membership list posted on the C63 [®] website.	ASAP
20151110-2	Mr. Dilay to contact Sue Vogel to initiate research on the	ASAP

#	<u>ACTION ITEM</u>	Disposition
	feasibility of converting ANSI C63.14 into a database.	
20151110-3	Mr. Heirman to provide Mr. Dilay with the URL to the online annex of CISPR standards.	ASAP
20151110-4	SC2 WG2 members to review definitions provided for "EMC	Next WG2
	Best Practice," and "EMC Best Practice Standard," and provide feedback / recommendations for draft ANSI C63.28.	Meeting
20151110-5	Mr. Ramie to update the SC2 membership list and other information on the C63® website upon receipt needed changes from Mr. Dilay.	ASAP
20151110-6	C63® subcommittee chairs to coordinate with SC2 on development of their terms and definitions.	Ongoing

- 13. <u>C63[®] Newsletter Input.</u> Mr. Dilay stated that preparation of the newsletter input is pending, but would be provided to Mr. Zimmerman before the end of the week.
- 14. **Next Meeting.** The next SC2 meeting is scheduled for May 9 through 12 at IEEE Headquarters, Piscataway, NJ.
- 15. <u>Adjournment</u>. The SC2 meeting was successfully completed as scheduled. The chairman adjourned the meeting at 1000.

Attachment 1

SC2 Meeting Attendance List (Nov 10, 2015) UL LLC, 12 Laboratory Drive, Research Triangle Park, NC 27709

NAME	TITLE	EMAIL
Chris Dilay	Chair, SC2	chris.dilay@navy.mil
Michael Duncanson	Secretary, SC2	michael.duncanson@aecom.com
Tomasz Wojtaszek	Web Coordinator, SC2	tomasz.wojtaszek@navy.mil
Poul Anderson	Chair, SC3	anderpoul@comcast.net
Stephen Whitesell	Chair, SC5	swhitesell@ieee.org
Randy Long	Chair, SC6	rlong@l-a-b.com
Dan Hoolihan	ASC C63® Chair	danhoolihanemc@apl.com
Jerry Ramie	C63 Webmaster	jramie@arctechnical.com
Don Heirman	Member	d.heirman@ieee.org

ANSI Accredited Standards Committee C63®

Electromagnetic Compatibility

Subcommittee 2 – E3 Terminology Definitions

SC 2 Meeting Draft Agenda for – 10 November 2015 UL LLC, 12 Laboratory Drive, Research Triangle Park, NC 27709

Tuesday, 9:00 AM - 10:00 AM

- 1. Call to order and opening Statement Chair
 - 1.1 Opening remarks and announcements: (Chair)
 - 1.2 Meeting logistics announcements: (Host)
 - 1.3 Introductions: (Secretary)
- 2. Approval of the agenda: (Secretary)
- 3. Presentation of patent slides: (Secretary)
- 4. Presentation of meeting attendance fee slides: (Secretary)
- 5. Review of **Subcommittee Membership**: (Chair)
 - 5.1 Review of subcommittee membership members at risk
 - 5.2 Review of Working Group 1 membership
 - 5.3 Review of Working Group 2 membership
 - 5.4 Consideration of new members
- 6. Approval of minutes of previous SC2 meeting (Secretary)
- 7. Review action items of previous SC2 meeting (Secretary) (See <u>Attachment 1</u>)
- 8. SC2 Status and Working Group Reports
 - 8.1 Working Group 1: ANSI C63.14 Status Chair: Marcus Shellman
 - 8.1.1 Current status: Review of new draft terms and definitions.
 - 8.1.2 ANSI C63.14-2019 development schedule
 - 8.1.3 Coordination with other C63 subcommittees on terms/definitions and copyright approvals.
 - 8.2 Working Group 2 Best Practices Guide Chair: Chris Dilay
 - 8.2.1 Current status
 - 8.2.2 Draft development schedule
 - 8.2.3 JSC Guide Annex B Update
- 9. SC2 website maintenance

- 9.1 Public SC2 Web Content Manager (Jerry Ramie)
- 9.2 Member SC2 Web Content Manager (Tom Wojtaszek)
- 10. Old Business: (Chair)
- 11. New Business: (Chair)
- 12. Review action items from this meeting: (Secretary)
- 13. C63 Newsletter Input (Secretary)
- 14. Time and place of next meeting: (Chair)
 - 14.1 Place: TBD, Date: TBD
- 15. Closing remarks and Adjournment: (Chair)

Current SC2 Officers and web coordinator:

SC2 Chair: Chris Dilay, chris.dilay@navy.mil

SC2 Vice Chair: Marcus Shellman, Jr., marcus.shellman.civ@mail.mil SC2 Secretary: Mike Duncanson, michael.duncanson@aecom.com

SC2 Web Coordinator: Tomasz Wojtaszek, tomasz.wojtaszek@navy.mil

Attachment 3

SC2 Membership List
Chairman – Marcus Shellman
ASC C63® / SC2 Membership Roster

NAME	TITLE	EMAIL
Mr. Chris Dilay	Chair, SC2 (WG1/WG2)	chris.dilay@navy.mil
Mr. Marcus Shellman	Vice Chair, SC2 (WG1/WG2)	marcus.shellman.civ@mail.mil
Mr. Michael Duncanson	Secretary, SC2 (WG1/WG2)	michael.duncanson@aecom.com
Mr. Tomasz Wojtaszek	Web Coordinator, SC2 (WG1/WG2)	tomasz.wojtaszek@navy.mil
Mr. Dan Hoolihan	Chair, C63 [®] (WG2)	danhoolihanemc@aol.com
Mr. Jerry Ramie	Web Master, C63®	<u>jramie@artechnical.com</u>
Mr. Zhong Chen	Chair, SC1	zhong.chen@ets-lindgren.com
Mr. Poul Anderson	Chair, SC3	anderpoul@comcast.net
Mr. Steve Whitesell	Chair, SC5	swhitesell@ieee.org
Mr. Ed Hare	Vice Chair, SC 5	W1RFI@arrl.org
Mr. Randy Long	Chair, SC6	<u>rlong@l-a-b.com</u>
Mr. Stephen Berger	Chair, SC7	stephen.berger@ieee.org
Mr. Bob DeLisi	Chair, SC8	bob.delisi@us.ul.com
Mr. Don Heirman	Member (WG2)	d.heirman@ieee.org
Mr. Victor Kuczynski	Member	vican@on.aibn.com
Ms. Janet O'Neil	Member	j.n.oneil@ieee.org
Mr. Bob Hofmann	Member	<u>hrhofmann@att.net</u>
Mr. Harry Hodes	Member (WG1)	hhodes@acil.org
Mr. Steve Koster	Member (WG1)	stevek@wll.com
Mr. Dave Schaefer	Member (WG1)	dschaefer@tuvam.com