ANSI-Accredited Standards Committee C63[®] Electromagnetic Compatibility

SUBCOMMITTEE 2 – E3 Terminology Definitions and EMC Best Practices

Approved Meeting Minutes Tuesday, 05 May 2015, 1300 to 1400 Embassy Suites, Minneapolis-North, Brooklyn Center, MN 55430

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.
- 1.2. <u>Meeting Logistics Announcements:</u> The chairman addressed meeting arrangements for the afternoon 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. <u>Review and Adoption of Agenda</u>. The agenda was approved as written. See Attachment 2.
- 3. **<u>IEEE Patent Policy</u>**. The standard IEEE Patent Policy was reviewed as required.

4. <u>Attendance Fee Slides.</u> 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. Dilay noted that the WG1 membership needs to be updated, and that the WG2 membership needs to be added. He displayed the current active SC2 membership as approved at the last SC2 meeting, noting that by default all subcommittee chairs are members of SC2. The SC2 membership list appears in Attachment 3. Mr. Dilay took an action to provide Mr. Jerry Ramie with the updated membership information for posting to the website. (see Action Item 13.1)
- 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 expressed the desire to have 2 additional C63[®] members, Poul Andersen and Harry Hodes, participate in WG2 in consideration of their particular areas of work. While Mr. Hodes was not in attendance at the meeting, Mr. Andersen stated that he would consider becoming a member. Mr. Dilay will approach Mr. Hodes to determine his interest in becoming a WG2 member. (see Action Item 13.2)

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 Compliance Testing, LLC., Phoenix/Chandler, AZ on 11 November 2014. 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. <u>Action Item Review.</u> Action items from the previous meeting were reviewed and resolved as shown below:

#	ACTION ITEM	Due Date
13.1	Mr. Shellman to electronically distribute draft ANSI C63.26-	Closed
	20XX proposed definitions to the SC2 membership for review	
	and schedule an interim WebEx meeting to address results of the	
	review.	
13.2.	Mr. Shellman modify wording in the PINS for ANSI C63.28-	Closed
	20XX to be consistent with the latest change in the SC2 Scope.	
13.3.	Mr. Heirman to send information to Mr. Dilay concerning	Closed
	commercial product development and applicable EMC standards.	

During discussion of the action items, it was noted that the PINS for draft C63.28-20XX does not yet appear on the C63[®] public website. Mr. Dilay took an action to provide the revised PINS for ANSI C63.28-20XX to Mr. Jerry Ramie for posting to the website. (see Action Item 13.3)

8. SC2 Status and Working Group Reports

8.1. **Revised SC2 Scope & Duties**. The chairman presented the SC2 Scope, noting that it has been revised to address the new Best Practices project. Mr. Hoolihan noticed a typographical error in the text that needed correction. The revised Scope was approved with the recommended change and balloted to be presented to the C63[®] Main Committee for approval. SC2 Duties for WG1 and WG2 were reviewed, as well, and a motion passed by voice vote for their presentation to the Main Committee for approval.

8.2. Working Group 1 Report.

8.2.1. The chairman recognized the successful publication of ANSI C63.14-2014 in December of last year, and noted that moving ahead; WG1 has initiated preparation of the update, scheduled for completion in 2019.

- 8.2.2. The draft PINS for ANSI C63.14-2019 was displayed for review. Mr. Dilay noted that it largely reflects the same text as the previous one, but that the term "Spectrum Management," has been added to section 5 of the PINS to cover current developments in DoD activities. He also identified some detail changes section 6 to ensure coverage of all stakeholders. The description of the content of the standard, however, remains the same. After discussion a motion for approval of the new PINS was passed by voice vote.
- 8.2.3. 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.
- 8.2.4. The schedule for completion of ANSI C63.14-2019 was shown, the chairman 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. The schedule will be posted to the SC2 member site. (see Action Item 13.4)
- 8.2.5. The chairman addressed the current status of WG1 activity towards preparation of the new draft, citing reviews of terms and definitions conducted or in progress for standards published or in draft form since the cut-off of new entries into C63.14-2014. He displayed the initial review of draft C63.26 and discussed the general nature of the SC2 comments, noting that responses to those comments have already been adjudicated by the Wireless WG, and some issues remain to be worked out, including policy on the handling of definition attributions and footnotes. Draft .26 will be undergoing significant revision based on ballot review comments and additional definitions are under consideration, so coordination with WG1 is anticipated to continue for some time. The review of definitions from ANSI C63.7-2015 was also displayed. Since this standard is already published, however, the review only addressed applicable definitions to be incorporated into C63.14-2019. Draft C63.2 was reviewed, as well, but does not contain any definitions.

8.3. Working Group 2 Report: Best Practices Guide

8.3.1. The chairman displayed the PINS for development of ANSI C63.28-20XX, "American National Standard Dictionary for Best Practices for Electromagnetic Compatibility," noting that it had been approved at the C63[®] main committee meeting in Austin, TX., and incorporates changes needed to make it consistent with the SC2 Scope, as modified at the SC2 meeting held in Mesa, AZ last November and subsequently approved by the C63[®] main committee.

- 8.3.2. Mr. Dilay addressed the best practices approach displaying a Power Point brief that outlined the current WG2 methodology for preparation of draft C63.28-20XX, providing an overview of the project; the scope of the effort, projected contents, the user community and schedule for completion. He provided an overview of the major standards to be covered and how military versus commercial test method comparisons will be addressed. He provided a flow diagram of the process and showed the projected table of contents.
- 8.3.3. The chairman addressed the status of the effort to date, noting that since the last meeting the WG had obtained and began review of the European Committee for Standardization (CEN) Workshop 10, Expert Group 7 Final Report on the Electromagnetic Environment. He explained its relevance as part of the European Defense Standards Reference (EDSTAR) system, designed to provide defense procurement agencies and industry with industry EMC standards qualified as best practices to be included in defense contracts. He described the scope of the effort and its similarity to the Engineering Practice Study (EPS), which forms the basis of the SC2 WG2 effort, as another source for identifying the viability of industry standards for DoD applications. He noted the report assessed E3 standards used within the member states of the European Union, and approximately 400 were determined to be qualified for a preferential list of selected recommended standards. He also noted that as a part of their process, CEN defined the term "Best Practice Standard," urging that WG2 follow suit with an appropriate definition of "Best Practice," to aid in narrowing the scope of the analysis process and to help focus the development of draft .28.
- 8.3.4. Mr. Dilay displayed the EPS, which provided the results of detailed comparisons of national and international EMC requirements and test methods study against MIL-STD-461E. He provided an overview of the effort and described the types of standards included in the evaluation, noting that SC2 does not have the manpower necessary to duplicate an effort of that magnitude. Instead he seeks to approach the task from a high level and begin by updating the references in Annex B1 of the study, which provides tables of the applicable EMC standards addressed by the study, and Annex B2 of the study that lists these standards by categories of product types. The intent 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. Mr. Silberberg recommended that the WG obtain a copy of IEC Guide 107, which provides guidance for identifying appropriate EMC standards for various types of manufactured products. Mr. Dilay readily agreed that this document would be a useful addition to WG2 references. He stated plans for a WG2 WebEx meeting sometime in the June timeframe to get the effort underway.

9. <u>SC2 website maintenance</u>. Mr. Dilay provided a report on the status of the SC 2 Webpage. Mr. Wojtaszek provided an overview of the organization of the site and functionality of the

embedded links. Mr. Dilay noted that the site is a repository of all our documents, including status reports and meeting minutes, etc. Mr. Wojtaszek pointed out that the Expert Group 7 report, the EPS study, and the Best Practices Approach brief, all addressed during the meeting, are already posted on the SC2 site and available for review.

- 10. Old Business. None.
- 11. <u>New Business</u>. WebEx meeting for WG2 date and time to be announced.
- 12. <u>Action Item Review.</u> Newly assigned actions appear below:

#	ACTION ITEM	Disposition
12.1	Mr. Dilay to provide Jerry Ramie with updated SC2, WG1 and WG2 membership lists for posting to the C63 [®] website.	ASAP
12.2.	Mr. Dilay to approach Mr. Hodes about membership to WG2 to support preparation of draft ANSI C63.28-20XX.	ASAP
12.3.	Mr. Dilay to provide the revised PINS for ANSI C63.28-20XX to Mr. Jerry Ramie for posting to the $C63^{\ensuremath{\mathbb{R}}}$ website.	ASAP
12.4	Mr. Wojtaszek to post the schedule for completion of ANSI C63.14-2019 to the SC2 member site.	ASAP
12.5.	Mr. Ramie to update the C63 [®] public website upon receipt of current SC2 membership and the PINS for ANSI C63.28-20XX.	ASAP
12.5	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. <u>Next Meeting.</u> The next SC2 meeting is scheduled for 10 November 2015 at UL, Research Triangle Park, NC.

15. <u>Adjournment</u>. The SC2 meeting was successfully completed as scheduled. The chairman adjourned the meeting at 1400.

Attachment 1

SC2 Meeting Attendance List (May 05, 2015) Embassy Suites, Minneapolis-North, Brooklyn Center, MN 55430

NAME	TITLE	EMAIL
Chris Dilay	Chair, SC2	chris.dilay@navy.mil
Michael Duncanson	Secretary, SC2	michael.l.duncanson.ctr@mail.mil
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
Jeff Silberberg	Observer	jeffrey.silberberg@fda.hhs.gov
Beth Hackett	Observer	Bethany.hackett@nist.gov

ANSI Accredited Standards Committee C63® Electromagnetic Compatibility Subcommittee 2 – E3 Terminology Definitions

SC 2 Meeting Agenda for – 05 May 2015 Embassy Suites, Minneapolis-North, Brooklyn Center, MN 55430

Tuesday, 1:00 PM - 2:00 PM

- 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 <u>patent slides</u>: (Secretary)
- 4. Presentation of <u>meeting attendance</u> fee slides: (Secretary)
- 5. Review of <u>Subcommittee Membership</u>: (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 <u>new</u> members
- 6. Approval of minutes of previous SC2 meeting (Secretary)
- 7. Review action items of previous SC2 meeting (Secretary) (See Error! Reference source not found.)
- 8. SC2 Status and Working Group Reports
 - 8.1 SC2 <u>Scope</u>
 - 8.2 Working Group 1: ANSI C63.14 Status Chair: Marcus Shellman
 - 8.2.1 ANSI C63.14-2014 published
 - 8.2.2 Draft PINS for ANSI C63.14-2019
 - **8.2.3** Coordination with other C63 subcommittees on terms/definitions and copyright approvals
 - 8.2.4 ANSI C63.14-2019 development schedule
 - 8.2.5 Current status: review of new draft terms and definitions; ANSI C63.26, ANSI C63.2, ANSI C63.7

- 8.3 Working Group 2 <u>Best Practices Guide</u> Chair: Chris Dilay 8.3.1 <u>PINS</u>
 - 8.3.2 Approach to <u>Best Practices Guide</u> development
 - 8.3.3 Status of planning efforts
 - 8.3.4 CEN Expert Group EE Final Report (EDSTAR)
- 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@exelisinc.com

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

Attachment 3

<u>SC2 Membership List</u> 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@exelisinc.com
Mr. Tomasz Wojtaszek	Web Coordinator, SC2 (WG1/WG2)	<u>tomasz.wojtaszek@navy.mil</u>
Mr. Dan Hoolihan	Chair, C63 [®] (WG2)	danhoolihanemc@aol.com
Mr. Jerry Ramie	Web Master, C63 [®]	jramie@artechnical.com
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	rlong@l-a-b.com
Mr. Stephen Berger	Chair, SC7	stephen.berger@ieee.org
Mr. Bob DeLisi	Chair, SC8	bob.delisi@us.ul.com
Mr. Don Heirman	Member (WG2)	<u>d.heirman@ieee.org</u>
Mr. Victor Kuczynski	Member	vican@on.aibn.com
Ms. Janet O'Neil	Member	j.n.oneil@ieee.org
Mr. Bob Hofmann	Member	hrhofmann@att.net
Mr. Harry Hodes	Member (WG1)	hhodes@acil.org
Mr. Steve Koster	Member (WG1)	<u>stevek@wll.com</u>
Mr. Dave Schaefer	Member (WG1)	dschaefer@tuvam.com