

APPROVED MINUTES
ANSI ASC C63® SC1: Techniques and Development
October 3, 2012
The Hilton Hotel, Orange County/Costa Mesa, California

Presiding Officer: Dennis Camell

Date Prepared: October 3, 2012

Members Present:

Mark Arthurs
Dennis Camell (Chair)
Zhong Chen
Bob DeLisi
Dean Ghizzone
Andy Griffin
Don Heirman
Harry Hodes (Vice-Chair)
Dan Hoolihan
Victor Kuczynski
Randy Long
Janet O'Neil (Secretary)
Doug Parker
Ghery Pettit
Nate Potts
Werner Schaefer
Ralph Showers
Dan Sigoiun
Jeff Silberberg
Art Wall
Steve Whitesell

Employer:

Sony
NIST
ETS-Lindgren
Underwriters Laboratories Inc. (UL)
Northwest EMC
Cisco
Don HEIRMAN Consultants
ACIL/ACE-PT
Hoolihan EMC Consulting
Vican Electronics
L-A-B
ETS-Lindgren
Liberty Labs
Intel
Liberty Labs
Schaefer Associates
University of Pennsylvania
Industry Canada
FDA Center for Devices & Radiological Health
TCB Council
Consultant

Members Absent:

Masud Attayi
Tim Harrington
H. R. Hofmann
Greg Kiemel
Rick Lombardi
Bill Stumpf
Don Umbdenstock

Employer:

RIM
FCC
Hofmann EMC Engineering
Northwest EMC
Visteon
DLS Electronic Systems
Tyco Retail Solutions

Guests:

Poul Andersen
Chris Dilay
Mac Elliott
Adam Gouker
Beth Hackett
Ed Hare
Jeff Klinger
Jim Mills
Jerry Ramie
John Repella
Pat Roder
David Schaefer
Dave Southworth
David Zimmerman

Employer:

Andersen Consulting
US Navy
Motorola
A2LA
NVLAP
ARRL
Compatible Electronics
TUV SUD
ARC Technology Services
ACIL/Washington Labs
IEEE
TUV SUD
URS/US Navy
Individual Member of Main Committee

1.0 Call to Order—Chair

1.1 Opening Remarks and Announcements: Chair

1.2 Meeting Logistics Announcements: Host

1.3 Introductions: Secretary

Chair Dennis Camell called the meeting to order at 9:00 am. A round of introductions was made.

2.0 Approval of the Meeting Agenda: Chair

Dennis Camell presented the draft agenda for the October 3, 2012 meeting for review. (See Attachment A.) **Dan Hoolihan moved to approve the agenda as presented. The motion was seconded and approved.**

3.0 Presentation of [patent slides](#): Chair

Dennis Camell gave a presentation that reviewed the status of the meeting fees, ANSI policy related to Intellectual Property (IP), inappropriate topics for IEEE working group meetings and the working group meeting slide template. (See Attachment B.)

4.0 Presentation of [meeting attendance](#) fee slides: Chair

Dennis Camell reviewed the meeting attendance fee structure and noted that Dan Hoolihan, Chair of C63[®], would contact individuals present who are required to pay a meeting attendance fee.

5.0 Approval of Minutes of Previous Meeting: Secretary

Secretary Janet O’Neil presented the minutes of the April 18, 2012 meeting held at IEEE in Piscataway, New Jersey. Mr. Camell moved to approve the minutes as distributed. The motion was seconded and approved. The approved minutes are included in Attachment C.

6.0 Review of [Subcommittee Membership](#): Secretary

6.1 Review of membership – Members at risk. Janet O’Neil advised that the membership of Bill Stumpf and Don Umbdenstock is at risk. (See Attachment D for the updated membership tracking record.) Secretary O’Neil will contact them to advise their membership will be terminated if they miss the next meeting. They can reapply should they wish to rejoin.

6.2 Consideration for Chair. Mr. Hoolihan announced that the chair’s term was expiring on December 31, 2012. He recommended that the chair call for nominations for a new chair of S/C 1. **Bob DeLisi moved to nominate Zhong Chen as chair of SC 1. After discussion, the motion was seconded and approved.** This recommendation was to be forwarded to the main committee.

6.3 Consideration of Members. The chair advised there is one new SC 1 membership application to review: from Jeff Klinger of Compatible Electronics. Mr. Camell received his membership application and resume. He noted he endorsed this membership application. **Mr. Camell moved to approve the membership applications of Jeff Klinger. The motion was seconded and approved.**

The Chair reviewed the roster of working group members as shown on the C63 website. Some revisions were made. The updated rosters of working groups and the SC 1 membership roster are included in Attachment E.

ACTION ITEM: All working group Chairs need to complete their rosters and indicate their officers (Vice-Chair and Secretary) and submit to Chair prior to the next meeting (May 2013).

7.0 Working Group Reports

C63.4: Emissions Measurements

Working Group Chair: [Don Heirman](#)

Status: Current-2009. Next edition in progress

Don Heirman, Chair of the C63.4 maintenance team, provided an update of his working group activity. (See Attachment F.) The ballot on original standard passed; there were five negative ballots. Both approval and disapproval comments had to be resolved. A recirculation ballot was sent to the initial balloting group on 28 September with a ballot deadline due by COB on 26 October 2012. He addressed their considerations in the recirculation. Their basic approach (as in all recirculation situations) was to not make changes that would move those approving to disapproving. Any errors identified and validated were corrected. The report shows the main amendments in the recirculation ballot.

Mr. Heirman recognized and thanked Harry Hodes and Tim Harrington for their efforts in addressing the comments received. He noted some 30-40 hours was spent in resolving the comments. The chair thanked Mr. Heirman for his efforts on this working group.

C63.5: Antenna Calibration

Working Group Chair: [Dennis Camell](#)

Status: Current-2006. Next edition in progress

Working group Chair Dennis Camell provided his report. (See Attachment G.) He noted the PINS is not current; a new title is being used: Draft American National Standard for Electromagnetic Compatibility—Radiated Emission Measurements in Electromagnetic Interference (EMI) Control—Calibration *and Qualification* of Antennas (9 kHz to 40 GHz). This is an active document from 2006. The latest draft that underwent a WG review was D4.2, dated August 2012. The report provides a detailed summary of the changes in the document.

The next draft being prepared for SC1 review includes:

- Use of chambers in the frequency range above 1 GHz
- Change H to V reflection test to 0.75 dB difference
- Use of SACS below 1 GHz
- Keep annex B?
- Keep RAM section? (this gives height specific AFs)
- Possible new terms: ACS_{lo} & ACS_{hi}
- Change temperature variance like C63.4, 4.7.6

The working group held a short, ad hoc working group meeting on October 2 in the afternoon. Zhong Chen was tasked to “clean up” the document and make the changes as noted during the working group meeting. Dan Hoolihan requested an edit to the text to show “dipole-type” antenna (i.e. add the word “type”). The chair agreed to make this change. Zhong Chen asked about the timeline for moving this standard forward. The chair replied that three years are left in the 10 year lifecycle. The committee agreed to set a target publication date of 2013.

ACTION ITEM: Zhong Chen to implement changes to the C63.5 draft as indicated during the October 2 working group meeting.

C63.10: Unlicensed Wireless Devices Testing

Working Group Chair: [Art Wall](#)

Status: Next edition in progress

Chair Art Wall presented his report. (See Attachment H.) The Wireless Working Group (WWG) met on October 1, 2012 in the afternoon and the morning of October 2, 2012. Attendance included 32 wireless working group members (11 participated via Web-Ex) plus three observers. The meetings focused on the balloting of C63.10-20xx (on compliance testing of unlicensed transmitters) and development of C63.26 (licensed transmitters).

Regarding balloting of C63.10-20XX, this was completed on July 17, 2012 with 19 of 27 ballots returned. The standard was approved as 17 of 19 votes were positive, 2 votes were negative and there was 1 abstention. A total of 113 comments were received. The major concerns involved instrumentation, measurements below 30 MHz and DTS measurement procedures. The comments were briefly discussed during the meeting and should be resolved by the balloting group by the end of October 2012. The proposed changes will be re-balloted.

The report includes three motions:

- **Motion 1, Mr. Wall moved to request 3-4 week separation be between the C63® meetings and the TCBC Workshops. The motion was seconded and approved. The motion will be passed along to the C63 steering committee for action.**
- Motions 2 and 3 were discussed, but a vote was deemed not necessary to move these items forward.

C63.23: Measurement Uncertainty

Working Group Chair: [Bob DiLisi](#)

Status: New Guide. Draft being written; Edition 2.0

Working Group Chair Bob DeLisi presented his report. (See Attachment I.) He noted the re-circulation ballot started on August 10, 2012 and closed on August 31, 2012. Thirteen ballots were distributed; nine approvals were received, four ballots were not returned, no comments were received. The BSR 8 process has been initiated. Don Heirman asked if there was a change in the document during the recirculation. Mr. DeLisi confirmed no comments were received so it was sent out to ballot. The Chair thanked Mr. DeLisi and his working group for their efforts in moving this forward.

C63.25: Time Domain Applications for Test Site Validation

Working Group Chair: Dennis Camell

Status: New Standard. Draft being written.

No new work has been done in this working group at this time.

C63.26: Licensed Transmitter Testing

Working Group Chair: [Art Wall](#)

Status: New Standard. Draft being written.

Chair Art Wall presented his report. (See Attachment H.) He advised C63.26 which addresses compliance testing of licensed transmitters, is in its 5th draft. The working group met in conjunction with the C63.10 working group as noted above. The development of previous drafts has slowed down due to the focus on the 2nd Edition of C63.10. A renewed effort to better organize the WWG Task Groups is underway in order to focus on maturing the next draft of C63.26.

8.0 Old Business - Chair

No old business was addressed.

9.0 New Business - Chair

PINS for C63.2 revision. Werner Schaefer discussed the need for a new PINS to fully address a revision to this standard titled "Specifications for Electromagnetic Noise and Field Strength Measurement Instrumentation, 10 Hz to 40 GHz." He presented a document on the proposed changes to ANSI C63.2-2009 that he prepared with Mark Terrien of Agilent Technologies. (See Attachment J.) It outlines the major changes required to update the document to reflect necessary requirements expressed in terms that are common in the international test instrumentation industry today. In short, the standard calls out various specifications that are outdated or irrelevant in an EMI receiver today. Harmonization with the globally used EMI test instrumentation standard CISPR 16-1-1 and other related basic EMC instrumentation standards is highly desirable to ensure that a unique set of instrumentation specifications are available that can be met by a single piece of test equipment. See the PINS on the revision to C63.2 for the rationale (Attachment K). **Harry Hodes moved to approve the PINS for a revision to ANSI C63.2-2009 as presented. Don Heirman seconded the motion. The motion was approved.**

Don Heirman, Harry Hodes, Ghery Pettit, Dave Southworth, Victor Kuczynski and Werner Schaefer volunteered to be members of the working group. The working group will select its own chair.

10.0 Review of Interpretation Requests: Chair

Chair Camell advised he had received several requests for interpretations on various documents as below:

- C63.5-May 2012-response date
- C63.5-May 2012-RAM Schwarzbeck dipole 3
- C63.5-June 2012-SACS Requirement-V2
- C63.4-June 2012-GP around turntable
- C63.5-July 2012-SA requirement above 1 GHz
- C63.5-July 2012-SACS requirement above 1 GHz
- C63.5-Sept 2012-SSM AUC location
- C63.5-July 2012-SSM_OATS

The report lists these documents and notes how the requests for interpretation were addressed. (See Attachment L.)

Discussion ensued about links from the IEEE to the C63 website to review interpretations. The content for the website needs to be updated and links fixed. Pat Roder of IEEE agreed to take this back to IEEE Headquarters to get the fix implemented. Dan Hoolihan thanked Dennis Camell for his considerable efforts in reviewing and addressing the numerous interpretations received since the last meeting.

ACTION ITEM: Pat Roder to fix IEEE website link to C63 interpretations.

11.0 C63.org Website Use and Updates: Web Content Manager ([Ed Hare](#))

Ed Hare noted that he is in the process of updating the site to include the approved minutes, interpretations and standards-related news.

Action Item: Secretary O'Neil to send Ed the approved minutes of the SC 1 committee as a PDF that are missing from the website.

12.0 Review of the Action Items from Previous Meetings: Secretary

Secretary O'Neil advised that there were no new action items from the last meeting. Ongoing action items are shown below. An updated action item list will be distributed to the SC 1 members along with the draft minutes from this meeting. (See Attachment M for the Action Items list.)

ACTION ITEM: O'Neil to distribute the updated consolidated action items and draft minutes from the October 3, 2013 meeting to the committee.

ACTION ITEM: O'Neil to send the password to the SC 1 committee so they can access the SC 1 "members only" section of the website. NOTE: This user and pass code is for access to the SC 1 page ONLY. Working groups under other SCs will have different user codes and passwords.

13.0 Time and Place of Next Meeting: Chair

The next series of C63® meetings will be determined by the steering committee at its next meeting on October 4, 2012.

14.0 Closing Remarks and Adjournment: Chair

With no further business, Chair Camell adjourned the meeting at 11:20 am. He thanked everyone for attending the meeting.

Minutes submitted by:



Janet O'Neil, Secretary, SC 1

ATTACHMENTS

Attachment A: Agenda for October 3, 2012 SC 1 Meeting

Attachment B: Patent Slides Required Meeting Template Slides for ASC C63®, IP Info

Attachment C: Approved Minutes from April 18, 2012 SC 1 Meeting

Attachment D: Meeting Attendance/Tracking List

Attachment E: SC 1 Membership Roster and Working Group Roster

Attachment F: Heirman Report on C63.4

Attachment G: Camell Report on C63.5

- Attachment H: Wall Report on C63.10 and C63.26
- Attachment I: DeLisi Report on C63.23
- Attachment J: Schaefer/Terrien Report on Proposed Changes to ANSI C63.2-2009
- Attachment K: PINS on the revision to ANSI C63.2-2009
- Attachment L: Camell List of Interpretation Requests
- Attachment M: Consolidated Action Items List