

APPROVED MINUTES
ASC C63® SC1: Techniques and Development
April 18, 2012
IEEE Headquarters - Piscataway, New Jersey

Presiding Officer: Dennis Camell

Date Prepared: April 18, 2012

Members Present:

Mark Arthurs
Masud Attayi
Colin Brench (Vice-Chair)
Dennis Camell (Chair)
Zhong Chen
Bob DeLisi
Dean Ghizzone
Andy Griffin
Don Heirman
Harry Hodes
H. R. Hofmann
Dan Hoolihan
Nick Hooper
Steve Jones
Victor Kuczynski
Randy Long
Janet O'Neil (Secretary)
Doug Parker
Ghery Pettit
Werner Schaefer
Dan Sigoion
Jeff Silberberg
Art Wall
Steve Whitesell

Members Absent:

Tim Harrington
Rick Lombardi
Nate Potts
Ralph Showers
Bill Stumpf
Don Umbdenstock

Guests:

Mac Elliott
Adam Gouker
Beth Hackett
Ed Hare

Employer:

Sony
RIM
Amphenol-HSI
NIST
ETS-Lindgren
Underwriters Laboratories Inc. (UL)
Northwest EMC
Cisco
Don HEIRMAN Consultants
Acme Testing Co./ACIL
Hofmann EMC Engineering
Hoolihan EMC Consulting
Underwriters Laboratories Inc. (UL)
FCC
Vican Electronics
L-A-B
ETS-Lindgren
Liberty Labs
Intel
Schaefer Associates
Industry Canada
FDA Center for Devices & Radiological Health
RCC Inc.
Consultant

Employer:

FCC
Visteon
Liberty Labs
University of Pennsylvania
DLS Electronic Systems
Tyco Retail Solutions

Employer:

Motorola
A2LA
NVLAP
ARRL

John Hirvela
Jim Mills
Dheena Moongilan
Brad Moore
Jerry Ramie
Roger Rasmusser
John Repella
Rich Worley

HP
TUV SUD
Alcatel-Lucent
NVLAP
ARC Technology Services
Liberty Labs
ACIL/Washington Labs
Dell

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 8:30 am. A round of introductions was made.

2.0 Approval of the Meeting Agenda: Chair

Dennis Camell presented the draft agenda for the April 18 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 October 5, 2011 meeting held in Thompson Park, Lincroft, 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 there were no members at risk. (See Attachment D for the updated membership tracking record.)

6.2 Consideration of Members –Ms. O'Neil advised there are two new SC 1 membership applications to review: from Greg Kiemel and Dean Ghizzone (Northwest EMC). Mr. Camell received the membership applications and resumes of these gentlemen. He noted he endorsed these membership applications as did Dan Hoolihan, Victor Kuczynski, Harry Hodes and Don Heirman. **Mr. Camell moved to approve the membership applications of Greg Kiemel and Dean Ghizzone. The motion was seconded and approved.**

6.3 Consideration for new Vice-Chair. Mr. Camell noted that Colin Brench is no longer available to support C63 activity and will not attend future meetings. Mr. Camell is looking for a volunteer to replace Mr. Brench as Vice-Chair.

The Chair reviewed the roster of working group members as shown on the C63 website. Some revisions were made. The updated roster of working group members and SC 1 membership roster with contact information is 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 Camell prior to the next meeting (October 2012).

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.) He reviewed the balloting process and noted there were eight versions of the document reviewed before the final document was ready to ballot. The invitation to ballot will close on April 20, 2012. Balloting will start shortly thereafter. The maintenance team concluded comment resolution following review by SC 1.

The main changes to the document were discussed. These include:

- Addition of what should be on visual displays based on the size of the screen.
- Information on test setup for tablet PCs.
- Clarification on the proper use of the average detector and the frequency range it is to be used (Clause 4 and Annex H)
- Replaced the antenna list in Table 1 with three tables that show which antennas are to be used for general measurements, NSA measurements, and compliance testing measurements.
- Indicated any constraints in the use of hybrid antennas

The annex in C63.5 explaining the conditional use of hybrid antennas will be included in C63.4. Once C63.5 is published, the annex will be removed from C63.4 and will simply include a reference to C63.5. The membership of the C63.4 Working Group is included in the report.

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.) The working group met yesterday; the meeting was not well attended due to conflict between parallel working group meetings. The latest draft of C63.5, D4.0 April 2012, is under review in the working group. He noted that a CALTS is very different from a SACS. The term "reference site" needs to be clarified as well as a distinction drawn between SACS and CALTS. Respective annexes in C63.5 contain extensive and detailed information in regard to antenna calibration site requirements.

Mr. Camell advised that he will address the comments made during the meeting and will incorporate them in the next draft. This draft will be circulated to the sub-committee for review by mid-May. He will ask for comments back within one month so the document can be forwarded to the parent committee for review and ballot.

Adam Gouker asked about the Schwarzbeck antenna related to Don Heirman's earlier presentation. Mr. Camell responded that C63.4 will disallow use of Schwarzbeck VHAP and UHAP

dipoles to be used as reference antennas as only a Roberts dipole is allowed. The addition of hybrid antennas annex from C63.4 is also included in the C63.5 draft.

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.) He noted there have been many changes to the C63.10 document since the last version was circulated. Steve Jones noted that the FCC has moved towards very streamlined KDBs related to measurement procedures with referral to the C63 documents for more detailed information on measurements.

The Wireless Working Group (WWG) met on April 16, 2012 in the afternoon and the morning of April 17, 2012. Attendance included 31 wireless working group members plus two observers and seven WebEx participants. C63.10-20xx on compliance testing of unlicensed transmitters was approved by SC-1 and C63 for balloting, but delayed for last minute updates. Mr. Wall expects to submit the document for balloting in June 2012. Any comments should be resolved in October 2012.

The document has been delayed due to:

- a) 4.4.1 – Table 1 – antenna requirements – revised to agree with new text in C63.5-20xx
- b) 7.11 – new FCC procedure for DTS devices
- c) 7.12 – updated procedures for UNII devices
- d) 7.15 – FM transmitters (clarified table-top and conducted RF power measurements)
- e) ANNEXES A & B – Application of procedures and test report formats

The working group will continue to meet monthly with task group conference calls. Further details are included in Attachment H.

C63.23: Measurement Uncertainty

Working Group Chair: [Bob DiLisi](#)

Status: New Standard. Draft being written; Edition 1.0

Working Group Chair Bob DeLisi presented his report. (See Attachment I.) The ballot opened on February 22, 2012. There was one negative response and comments submitted by two other balloters. A total of 71 comments were received. These are targeted to be addressed by the end of July 2012 with subsequent recirculation to the parent committee C63. The membership of the C63.23 working group is included in the report.

C63.25: Time Domain Applications for Test Site Validation

Working Group Chair: Dennis Camell

Status: New Standard. Draft being written.

Chair Camell presented his report. (See Attachment J.) The committee has been reorganized since Mike Windler, the former chair of this committee, resigned. Mr. Windler forwarded all documentation from the working group to Mr. Camell. Don Heirman noted that this document would be referenced by each of the C63 standards. In other words, all site validation text from

the other standards will be pulled from the C63 standards and replaced with a reference to the new C63.25 standard. The working group is preparing a draft document. Additional measurements are in process. It is expected that the document will be ready to ballot in the spring of 2013.

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 3rd draft. The working group met in conjunction with the C63.10 working group as noted above. The document was reviewed in some detail; it is still in the early stages development.

Some major issues discussed included:

- a) 4.5 – Test sites – to be included as an option
- b) 5.1 – RF power output measurements – technology driven
- c) 5.5 Spurious radiated emissions – signal substitution method
- d) 6 – Additional tests for specific radio services
- e) Annex J – Pre-calibrated test procedure

The working group will continue its monthly task group conference calls. They plan to circulate the 4th draft of C63.26 for licensed transmitters in September 2012, with balloting of the document expected in June 2013.

8.0 Old Business - Chair

No old business was addressed.

9.0 New Business - Chair

Werner Schaefer asked how to handle errors in a standard. Mr. Camell noted the interpretations process to explain the error should be followed.

Harry Hodes and Ghery Pettit asked about the publication of interpretations so those who have a standard know about any interpretations that affect measurement techniques.

10.0 Review of Interpretation Requests: Chair

Chair Camell advised he had received four requests for interpretations on various documents (C63.5-2006 and C63.4-2009) and relayed how they were addressed. (See Attachment K.)

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 interpretations and standards-related news.

12.0 Review of the Action Items from Previous Meetings: Secretary

Secretary O'Neil advised that the updated action item list would be distributed to the SC 1 members along with the draft minutes from this meeting. (See Attachment L for the Action Items list.)

ACTION ITEM: O'Neil to distribute the updated consolidated action items and draft minutes from the April 18, 2012 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 Standards Development - Next Steps: Chair

Chair Camell reported that all standards are active and there is nothing new to report.

14.0 Time and Place of Next Meeting: Chair

The next series of C63® meetings will take place in Costa Mesa, CA for four days over October 1-4, 2012. The SC 1 meeting date will be on Wednesday, October 3, 2012 at 8:00 am.

15.0 Closing Remarks and Adjournment: Chair

With no further business, Chair Camell adjourned the meeting at 12:00 pm. He thanked everyone for coming to the meeting.

Minutes submitted by:



Janet O'Neil, Secretary, SC 1

ATTACHMENTS

Attachment A: Agenda for April 18, 2012 SC 1 Meeting

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

Attachment C: Approved Minutes from October 5, 2011 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: Camell Report on C63.25

Attachment K: Camell List of Interpretation Requests

Attachment L: Consolidated Action Items List