

APPROVED MINUTES
ASC C63 SC1: Techniques and Development
April 16, 2008
IEEE Headquarters, Piscataway, NJ

Presiding Officer: Mike Windler

Date Prepared: April 16, 2008

Members Present:

Masud Attayi
Stephen Berger
Colin Brench
Dennis Camell (Vice Chair)
Tim Harrington
Don Heirman
Dan Hoolihan
Bill Hurst
Victor Kuczynski
John Lichtig
Janet O'Neil (Secretary)
Doug Parker
Ghery Pettit
Nate Potts
Ralph Showers
Jeff Silberberg
Mike Windler (Chair)

Employer:

RIM
TEM Consulting
Southwest Research Institute
NIST
FCC
Don HEIRMAN Consultants
Hoolihan EMC Consulting
FCC
Vican Electronics
Lichtig EMC Consulting
ETS-Lindgren
Liberty Labs
Intel
Liberty Labs
University of Pennsylvania
FDA Center for Devices & Radiological Health
Underwriters Laboratories Inc. (UL)

Members Absent:

Jon Casamento
H. R. Hofmann
Greg Korytkowski
Werner Schaefer
Bill Stumpf

Employer:

FDA Center for Devices & Radiological Health
Hofmann EMC Consulting
Quantum
Cisco Systems, Inc.
DLS Electronic Systems

Guests:

Poul Andersen
Zhong Chen
Bob DeLisi
Kurt Fischer
Gerald Hayes
Ed Hare
Dheena Moongilan
Art Wall
Steve Whitesell
Richard Worley
David Zimmerman

Employer:

SAE Representative
ETS-Lindgren
Underwriters Laboratories Inc. (UL)
NIST
Sony Ericsson Mobile Communications
ARRL
Lucent
RRC, Inc.
Vtech
Dell, Inc.
TUV Product Service

1.0 Call to Order—Chair

Chair Mike Windler, called the meeting to order at 1:00 pm. A round of introductions was made.

2.0 IP Review and Meeting Fees

Mr. Windler showed a slide that reviewed the status of the meeting fees and ANSI policy related to Intellectual Property (IP).

3.0 Approval of October 23, 2007 Meeting Minutes and April 16, 2008 Consent Agenda

The Chair presented the consent agenda, which included the agenda for today's meeting (see Attachment A) and the minutes from the last meeting (October 23, 2007) for approval. The minutes were pulled from the consent agenda for discussion. The comments on the draft minutes from Werner Schaefer were addressed. These concern paragraphs 4.2 on Project 1-8.1 (C63.22), 4.7 on Project 1-15.7 (C63.4), and 4.10 on Project 1-15.11 on broadband emissions. The minutes show these agenda items/projects being removed from future agendas since the items "were moved to the C63 parent committee." The minutes were corrected to show these projects as being "dropped by the consensus body." On paragraph 4.8 related to maintenance of revision to C63.4, item 4.8.e on LISN calibration procedures shows this as being "removed" when in fact it is still being worked on by the committee. The word "remove" was deleted from item 4.8.e. It was moved and seconded to approve the minutes as amended. The motion was approved. The amended motions are attached to the minutes (see Attachment B).

The agenda was amended to include item 2.3 "Review of ANSI Patent Policy." A presentation by Zhong Chen was added to agenda Item 4.5. It was moved and seconded to approve the consent agenda with these additions. The motion was approved. On the patent policy, Mr. Heirman noted that ANSI advised that if any working group discussion involves a patent, it must be brought to the attention of the parent committee.

4.0 Membership Review

Secretary Janet O'Neil reviewed the attendance records to determine members at risk. (See Attachment C.) Jon Casamento and Greg Korytkowski's membership are at risk. They have missed three meetings in a row; the secretary will contact them to advise their membership has been terminated. Ms. O'Neil advised that Werner Schaefer was contacted as a result of the action item from the last meeting to confirm his continued members. She learned Mr. Schaefer intends to remain an active member of S/C 1. The Chair confirmed he had seen Mr. Schaefer at the meetings on Tuesday; however, Mr. Schaefer was not aware the S/C 1 meeting had been moved from its traditional Tuesday to Wednesday this year. The committee agreed that Mr. Schaefer's membership should not be terminated at this time. The roster of S/C 1 members and S/C 1 working group members were distributed to the committee for review. The updated rosters are included in Attachment D.

ACTION ITEM: O'Neil to advise Jon Casamento and Greg Korytkowski that their membership in S/C 1 has been terminated.

5.0 Working Group Reports

5.1 Project 1-13.2 C63.4 Site Acceptability Above 1 GHz

Chair Windler noted a new PINS has been issued. He showed this to the committee. See Attachment E. Mr. Windler noted the original scope of the project was part of the part 4 revision PINS; now there is a new PINS proposal to the parent committee to address test site requirements in C63.4 and new requirements for site validation above 1 GHz. If the PINS is approved at the parent committee meeting on April 17, this will be a new project. The time line to complete the scope of work is expected to be 12-18 months.

ACTION ITEM: Windler to post new PINS to C63 website if it is approved at the parent committee meeting.

5.2 Project 1-15.5 C63.23 Measurement Uncertainty

Bob DeLisi presented his report. See Attachment F. The working group met on April 16, prior to the SC 1 meeting. He notified the members that if they do not attend the working group meeting or actively participate, they will be dropped from the working group membership. His report showed a list of the current working group members. A new focus for the committee has been established. They created an outline of work to expedite completion of the draft standard, including Type A multiple levels of analysis (nesting) and providing embedded worksheets for labs to use. For Type B, they will provide sources of contributors, calibration data to be analyzed and used, and which measurements may need to be done. Mr. DeLisi noted that the current text is already in C63.5; however, edition 2 still requires work as well as addressing emissions below 30 MHz for E-Fields and emissions above 1 GHz. They will also expand the section to include other methods in C63.5. He enlisted the help of new members from Liberty Labs, Nate Potts and Doug Parker, to provide assistance. Mr. Heirman noted that the effort of this group is unique in that the text will be new with no overlaps to existing documents or standards. References only will be provided to other documents, which may contain supplemental material. Kurt Fisher volunteered to provide an informative annex on traceability and its impact on uncertainty so this may be incorporated in the draft standard.

ACTION ITEM: Kurt Fisher to provide text for the informative annex on traceability for review by July 1, 2008.

5.3 Project 1-15.6 C63.5 Antenna Calibration

Working Group Chair Dennis Camell provided his report. See Attachment G.

He reviewed items completed since the last meeting, including:

- Add E_d^{\max} equation for vertical polarization into Annex A
- Fix table 3
- Re-instate sentence on biconicals—"Antenna factors obtained for biconical dipole antennas using the SSM that are used for either product testing or NSA testing shall be corrected to free space values using the correction factors provided in Annex G." as in the 2004 edition.

Work that needs to be addressed includes:

- Remove the ground response to improve horn antenna calibrations
- Address editorial revisions
- Clarify minimum frequency resolution for calibrations
- Clarify Section 5 and Annex G on the uses of Free Space Antenna Factors and the uses of Near Free Space Antenna Factors

If time permits, they will work on an informative annex on the complex fit NSA method, which will eventually become a normative annex. They intend to add the Time Domain

Methods for free space antenna calibrations as well as add limits to vertical vs. horizontal 1-meter ratio in order to minimize error from ground coupling in emissions tests.

Don Heirman noted that the IEC does not have any standard related to antenna calibration. The recent vote for the IEC to adopt C63.5 was lost by one vote. Mr. Heirman noted that the next IEC meeting will be in June in London (at NPL); at the meeting they will address antenna calibration. This is a unique opportunity for the ANSI C63 work to be incorporated. Mr. Heirman asked about geometry specific antenna factors. Mr. Camell talked about this in reference to geometry specific correction factors. Regarding the schedule for this work, he expects the document to be ready to bring to S/C 1 in late 2008.

ACTION ITEM: Camell to add new text covering standard gain horn antennas above 1 GHz, either use physical dimensions for reference with some S11 electrical check to assure working horn or incorporate what cal labs use for horns above 1 GHz (extrapolation, etc)

ACTION ITEM: Camell to add free space corrections for dipoles, such as done by the VCCI.

5.4 Project 1-15.9 Maintenance of Revision to C63.4

Chairman Windler noted that this project is now in the parent committee. As an update, he advised the ballot on this recently failed, largely due to not enough people casting a vote. Fifteen people signed up to form the balloting group, of these, nine ballots were returned (two with negative comments, six approvals some with comments, one abstention). Six ballots were NOT returned. The ballot failed due to the insufficient return of ballots - even though the review period was extended. An ad hoc committee has been formed in the parent committee to review the balloting group and start fresh. This has raised issues about balloting procedures and how to address those who do not vote, which in reality is a negative vote.

5.5 Project 1-15.10 C63.2 and C63.4 Use of Spectrum Analyzers for Emissions Testing

In the absence of Working Group Chair Werner Schaefer, Mr. Windler presented his report. (See Attachment H.) Mr. Windler noted there were no negative comments on the returned ballots to the C63.4 revision related to the use of spectrum analyzers. Thus, there is no further action required since the project is now completely enveloped by the revision process of ANSI C63.4.

5.6 Project 1-10.1 C63.10 Standard for Testing Unlicensed Wireless Devices

Art Wall reported that 23 people attended the working group meeting held on April 14. The goal is to develop a standard to document the procedures for testing wireless devices to show compliance with FCC Rules in a timely manner. Edition 1 of C63.10 was approved last year for balloting by the S/C 1. Final editing of the draft standard is now essentially complete and it is ready for balloting. The working group requests that the draft be forwarded to C63 for balloting. Over the past year, work has begun on Edition 2 of the C63.10. A draft PINS-C for Edition 2 of the standard is attached for discussion and forwarding to C63 (see Attachment I). Mr. Wall pointed out Item 8 on the PINS-C. The topics shown under Item 8 were addressed during the working group meeting. These topics will be addressed in the second revision to the standard. Mr. Wall called attention to topic J which includes measurements below 30 MHz.

Don Heirman moved that the document be forwarded to the parent committee for review and balloting. The motion was seconded and approved.

6.0 Web Site Management

Vice-Chair Dennis Camell led a review of the C63 website related to S/C 1. From list of active standards shown, the webmaster was asked to remove C63.6 and C63.19. C63.2 will be updated. Mr. Heirman asked that all documents on the website be posted as PDFs. All public documents must be shown as PDFs. He asked that all attachments to the minutes be also posted to the website. On the working groups, the webmaster should add new S/C 1 members Nate Potts and Doug Parker to the working group membership for C63.5. Mr. Windler asked that a generic agenda be posted once the meeting location for the next meeting is determined. One month prior to the meeting, the preliminary agenda should be posted. Mr. Heirman suggested that all items pertaining to membership be password protected. Also, once the S/C1 minutes are approved, they should go to the public site, along with the attachments to the minutes. However, Attachment C which shows the roster information of addresses, phone numbers, etc. should ONLY list the person's name and company affiliation and not their address/phone number/e-mail address. Draft minutes and attachments should be posted to the password protected area until they are approved. The password access should only be given out by the chair of each subcommittee.

Poul Andersen then reviewed the activity of SC 3 and noted the items that need to be deleted from the listing of standards on the website. ANSI C63 standards were shown with references to the corresponding CISPR standards. Several standards were listed as "low priority". Mr. Andersen asked if the committee did not feel any standard should be listed as a low priority to let him know.

ACTION ITEM: Camell to remove C63.6 and C63.19 from website.

ACTION ITEM: Camell to post updated version of C63.2

ACTION ITEM: Working Group Chairs to post all documents to C63 website as PDF copies only.

ACTION ITEM: O'Neil to provide approved minutes only with attachments – all in PDF format – to Camell for posting to the public C63 website (draft minutes should only be posted to password protected area of site).

ACTION ITEM: Camell to add Nate Potts and Doug Parker to roster of working group members for C63.5

ACTION ITEM: Camell to ensure that all items pertaining to membership be posted to the password protected area of the site only.

ACTION ITEM: Camell to post generic S/C 1 October 2008 agenda to website now.

ACTION ITEM: Camell to preliminary S/C 1 October 2008 agenda to website in early September 2008

7.0 Standards Development: Next Steps

No additional steps other than those previously noted above were discussed.

9.0 Action Item Review

Chair Mike Windler 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 J for Action Items list.)

ACTION ITEM: O'Neil to distribute the updated consolidated action items and draft minutes from the April 16, 2008 meeting to the committee.

10.0 Time and Place of Next Meeting

The next series of C63 meetings will take place for three days over October 6-9, 2008 at UL in Northbrook, IL. The SC1 meeting date will on Wednesday, October 8. Mr. Wall noted he will schedule a working group meeting for C63.10 – date and time TBD.

11.0 Adjourn

With no further business, Chair Windler adjourned the meeting at 3:00 pm.

Minutes submitted by:

Janet O'Neil
Secretary, S/C 1

ATTACHMENTS

Attachment A: Agenda for April 16, 2008 SC 1 Meeting

Attachment B: Amended and Approved Minutes from October 23, 2007 Meeting

Attachment C: Meeting Attendance List

Attachment D: SC 1 Membership Roster and Working Group Roster

Attachment E: Windler New PINS on C63.4 (Site Acceptability Above 1 GHz), Windler PINS on Site Requirements

Attachment F: DeLisi presentation on Project 1-15.5, C63.23

Attachment G: Camell presentation on Project 1-15.6, C63.5

Attachment H: Schaefer presentation on Project 1-15.10, C63.2 and C63.4

Attachment I: PINS-C for Project 1-10.1, C63.10

Attachment J: Consolidated Actions Items list