

APPROVED MINUTES
ASC C63 SC1: Techniques and Development

April 21, 2010
IEEE Headquarters
Piscataway, New Jersey

Presiding Officer: Dennis Camell

Date Prepared: April 21, 2010

Members Present:

Mark Arthurs
Masud Attayi
Colin Brench (Vice-Chair)
Dennis Camell (Chair)
Bob DeLisi
Don Heirman
Tim Harrington
H. R. Hofmann
Dan Hoolihan
Bill Hurst
Victor Kuczynski
Janet O'Neil (Secretary)
Ghery Pettit
Jeff Silberberg
Art Wall

Employer:

Sony
RIM
Southwest Research Institute
NIST
Underwriters Laboratories Inc. (UL)
Don HEIRMAN Consultants
FCC (present via telecom)
Hofmann EMC Engineering
Hoolihan EMC Consulting
FCC
Vican Electronics
ETS-Lindgren
Intel
FDA Center for Devices & Radiological Health
RCC Inc.

Members Absent:

Doug Parker
Nate Potts
Werner Schaefer
Ralph Showers
Bill Stumpf

Employer:

Liberty Labs
Liberty Labs
Cisco Systems, Inc.
University of Pennsylvania
DLS Electronic Systems

Guests:

Adam Gouker
Ed Hare
Harry Hodes
Michael Kipness
Tom Knipple
Steve Koster
Randy Long
Dheena Moongilan
Jerry Ramie
David Schaefer
Steve Whitesell
David Zimmerman

Employer:

A2LA
ARRL
Acme Testing/ACIL
IEEE-SA
Motorola
ACIL/Washington Labs
L-A-B
Alcatel-Lucent
ARC
TUV SUD America
TIA
TUV SUD America

1.0 Call to Order—Chair

Chair Dennis Camell called the meeting to order at 2:15 pm. A round of introductions was made.

2.0 IP Review and Meeting Fees

Mr. 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 A.)

3.0 Approval of October 21, 2009 Meeting Minutes and April 21, 2010 Meeting Agenda

The Chair presented the consent agenda, which included the agenda for today's meeting (see Attachment B) and the minutes from the last meeting (October 21, 2009) for approval. **Don Heirman moved to approve the October 21, 2009 meeting minutes. The motion was seconded and approved.** See Attachment C for the approved minutes of the October 21, 2009 meeting. The agenda for April 21, 2010 was presented. A few items were added, including a status update for S/C 1 current membership and the current scope. Item 5.4 was modified to remove the words "on hold" following Project 1-15.9 (C63.4 maintenance of revision). A new item was added under new business related to the working group numbering review.

Ghery Pettit moved to approve the agenda as amended. The motion was seconded and approved. See Attachment D for the approved agenda.

4.0 Membership Review

Secretary Janet O'Neil reviewed the attendance records to determine members at risk. (See Attachment E.) There are no members at risk.

Ms. O'Neil noted she had circulated the membership applications and resumes of Larry Stillings, Harry Hodes, Randy Long and Bob DeLisi to the committee for review and approval. Emails with three S/C1 member recommendations for each candidate were shared with the committee. **Ms. O'Neil moved to accept the membership applications of Larry Stillings, Harry Hodes, Randy Long and Bob DeLisi in light of the positive letters of recommendation received. The motion was seconded and approved.**

The rosters 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 F.

Mr. Camell showed the confirmed list of members in S/C 1. (See Attachment F.) **Don Heirman moved to approve the S/C 1 membership list as presented. The motion was seconded and approved.**

ACTION ITEMS:

Secretary O'Neil to modify the S/C 1 membership application to show that letters of recommendation must be attached to the membership application to be considered.

Chair Camell to present confirmed roster of members in SC 1 to C63® parent committee for approval.

5.0 Status Update (for C63® approval)

Mr. Camell reviewed the current scope of work for S/C 1 as shown below:

Current Scope

SC-1 is responsible to provide the technical expertise and resources necessary for writing, updating, or changing existing and proposed C63-approved standards in new or existing measurement techniques and associated instrumentation, measurement methods, and limits development as requested by the parent committee ASC C63.

He updated this to reflect the current activity of the committee. A few changes were suggested until the final version was obtained as below:

New Scope

SC-1 provides the technical expertise and resources necessary for maintaining existing and newly proposed C63[®] approved standards documents. New or existing measurement techniques and associated instrumentation, measurement methods, and limits development related to EMC are incorporated as requested by the parent committee ASC C63[®].

Mr. Heirman moved to approve the scope of work as amended. The motion was seconded and approved.

ACTION ITEM:

Chair Camell to present new scope of work to the C63[®] parent committee for approval.

6.0 Working Group Reports

6.1 Project 1-13.2 C63.4 Site Requirements Above 1 GHz – Now C63.25

Chair Camell noted that WG Chair Mike Windler is taking measurements using the Time Domain Reflectometry (TDR) method. The draft of the document was submitted in the Fall of 2009. Don Heirman noted that there are two site validation techniques proposed, one using the time domain method and the other being the SVSWR method documented in CISPR 16-1-4. The goal is to introduce an alternative validation method that obtains the same results. Mr. Camell showed the presentation on the systematic errors in the SVSWR method that Mr. Windler gave at the Asia Pacific EMC conference in Beijing, China on April 14. The presentation includes a description of the TDR method.

For reference, the new standard C63.25 provides requirements for radiated emissions test sites including open area sites, semi-anechoic rooms below 1 GHz, partially absorber lined open area sites, and semi-anechoic rooms above 1 GHz. C63.25 will copy the below 1 GHz requirements (performance and construction) from C63.4. The new standard will include by reference SVSWR and the new Time Domain validation method.

6.2 Project 1-15.5 C63.23 Measurement Uncertainty

Working group chair Bob DeLisi presented his report. (See Attachment G.) He has submitted a draft document which was circulated to the working group for comments. Many comments were received and are being incorporated into the current document. The target completion date is October 2010. Don Heirman commented that Type A evaluations should be included in the document and then passed along to be included in the IEC related documents.

6.3 Project 1-15.6 C63.5 Antenna Calibration

Working group Chair Dennis Camell provided his report. (See Attachment H.) The revised project time line schedules a new draft to be available by mid 2010. This draft will be sent to the parent

committee by late 2010 and submission for public review is targeted for early 2011. Don Heirman noted that the antenna calibration draft in CISPR lists several antenna calibration methods, including those in ANSI C63.5. He would like to see the most recent C63.5 standard have a date that is referenced in the CISPR document, i.e., the ANSI C63.5-2006 version.

6.4 Project 1-15.9 C63.4 Maintenance of Revision

Don Heirman provided a verbal update on site validation above 1 GHz. He noted this is the leading product of ANSI ASC C63®. It was just published in September 2009 and is now recognized within the FCC as an alternative test method. He addressed the top five topics now being addressed by the working group:

1. Measurements above 1 GHz: bore-sighting is still implied in the document. There was much discussion about this aspect, but no resolution was found. Hence, the text from the 2003 version was included in the 2009 version.
2. Removing clause 13 from the standard related to intentional radiators.
3. Site specific text is being reviewed to see if text needs to be moved, etc.
4. Antenna calibration text is being reviewed to see if text needs to be moved, etc.
5. Definitions are being reviewed so this section matches with the definitions used in the C63® directory (C63.14).

Members of the working group include Don Heirman, Bill Hurst, Steve Berger and Tim Harrington. Ghery Pettit volunteered to be a member of the working group.

6.5 Project 1-10.1 C63.10, Standard for Testing Unlicensed Wireless Devices C63.26, Standard for Testing of Licensed Wireless Devices

Working group chair Art Wall, presented his report. (See Attachment I.) The working group met on April 19 and 20. Thirty-two of 54 working group members plus four observers attended these meetings. The report includes the timeline for submitting these documents for balloting. For reference, C63.10-2009 was published in September 2009. The PINS for C63.10 Edition 2 was approved by C63® and submitted to ANSI for balloting. The PINS for C63.26 for licensed transmitters was approved by ANSI in July 2009.

For C63.10 Edition 2 – unlicensed transmitters - work is progressing in the following Task Groups:

- Edition 1 maintenance items
- Measurements above 1 GHz*
- Instrumentation (New)*
- Broadband system measurements
- Band edge measurements*
- MIMO*
- EIRP and ERP measurements
- Polar plots and antenna characteristics
- FM modulators
- Multiple transmitters*
- Antenna array testing*

- Measurements below 30 MHz
- * Work in these TGs overlaps with C63.26*

For C63.26 – licensed transmitters - work is progressing in the following Task Groups:

- Instrumentation*
- RF Power Output*
- Modulations characteristics
- Occupied bandwidth
- Conducted spurious emissions
- Radiated spurious emissions*
- Frequency stability tests
- Additional TGs for specific devices
- * Work in these TGs overlaps with C63.10*

ACTION ITEM:

ALL WORKING GROUP CHAIRS to verify and ensure that all documents are provided in the IEEE required document template.

7.0 Web Site Management

Chair Dennis Camell asked if anyone on the committee would be interested in taking over as the point person to handle S/C 1 website matters. Mr. Camell defined “website management” as one person being responsible to ensure that all S/C 1 links are up to date with current documentation and files prior to each S/C 1 meeting. Ed Hare volunteered to handle this work. Bob Hofmann requested that the titles of the subcommittees and working groups be added alongside the numbers of working groups.

ACTION ITEM:

Chair Camell to suggest to the parent committee that the titles of the working groups/standard documents be added to the C63® website.

8.0 Old Business

No old business was addressed.

9.0 New Business

9.1 Review of recent interpretation requests: Chair Camell reviewed the recent questions raised (see Attachment J) on various documents and relayed how they were addressed. These go to the parent committee secretary who passes them along to the appropriate subcommittee. The subcommittee then addresses the interpretation reply and sends this to the parent committee to review and vote upon.

9.2 Working Group numbering review – Chair Camell discussed the numbering system for the working groups. Don Heirman relayed the history behind the current number system that was initiated by Ed Bronaugh. **Dan Hoolihan moved to delete the “1-15.X” before a working group and use instead the document number. For example, Project 1-15.6 would now be Project C63.5. The motion was seconded and approved.**

10.0 Standards Development

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

11.0 Action Item Review

Chair Dennis Camell advised that the updated action item list would be distributed to the S/C 1 members along with the draft minutes from this meeting. (See Attachment K for the Action Items list.)

ACTION ITEM:

O'Neil to distribute the updated consolidated action items and draft minutes from the April 21, 2010 meeting to the committee.

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


12.0 Time and Place of Next Meeting

The next series of C63 meetings will take place for four days over October 25-29, 2010. The S/C 1 meeting date will be on Wednesday, October 27, 2010 at 8:30 am.

13.0 Adjourn

With no further business, Chair Camell adjourned the meeting at 4:30 pm.

Minutes submitted by:



Janet O'Neil
Secretary, S/C 1

ATTACHMENTS

- Attachment A: Required Meeting Template Slides for ASC C63®, Meeting Fees, IP Info
- Attachment B: Draft Agenda for April 21, 2010 S/C 1 Meeting
- Attachment C: Approved Minutes from October 21, 2009 Meeting
- Attachment D: Approved Agenda for April 21, 2010 S/C 1 Meeting
- Attachment E: Meeting Attendance List
- Attachment F: S/C 1 Membership Roster and Working Group Roster
- Attachment G: DeLisi Report on C63.23
- Attachment H: Camell Report on C63.5
- Attachment I: Wall Report on C63.10 and C63.26
- Attachment J: Camell Report on Interpretation Requests
- Attachment K: Consolidated Action Items list