

**APPROVED MINUTES**  
**ASC C63 SC1: Techniques and Development**  
**October 8, 2008**  
**Underwriters Laboratories (UL), Northbrook, IL**

Presiding Officer: Mike Windler

Date Prepared: October 8, 2008

**Members Present:**

Colin Brench  
Dennis Camell (Vice Chair)  
H. R. Hofmann  
Bill Hurst  
Victor Kuczynski  
Janet O'Neil (Secretary)  
Doug Parker  
Ghery Pettit  
Nate Potts  
Werner Schaefer  
Ralph Showers  
Mike Windler (Chair)

**Employer:**

Southwest Research Institute  
NIST  
Hofmann EMC Consulting  
FCC  
Vican Electronics  
ETS-Lindgren  
Liberty Labs  
Intel  
Liberty Labs  
Cisco Systems, Inc.  
University of Pennsylvania  
Underwriters Laboratories Inc. (UL)

**Members Absent:**

Masud Attayi  
Stephen Berger  
Tim Harrington  
Don Heirman  
Dan Hoolihan  
John Lichtig  
Jeff Silberberg  
Bill Stumpf

**Employer:**

RIM  
TEM Consulting  
FCC  
Don HEIRMAN Consultants  
Hoolihan EMC Consulting  
Lichtig EMC Consulting  
FDA Center for Devices & Radiological Health  
DLS Electronic Systems

**Guests:**

Poul Andersen  
Zhong Chen  
Randall McCarver  
Dheena Moongilan  
Steve Whitesell

**Employer:**

SAE Representative  
ETS-Lindgren  
Telecordia Technologies  
Alcatel-Lucent  
Vtech

## **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). See Attachment A.

## **3.0 Approval of April 16, 2008 Meeting Minutes and October 8, 2008 Consent 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 (April 16, 2008) for approval. **It was moved and seconded to approve the consent agenda. The motion was approved.** See Attachment C for the approved minutes of the April 16, 2008 meeting.

## **4.0 Membership Review**

Secretary Janet O'Neil reviewed the attendance records to determine members at risk. (See Attachment D.) No members are at risk; all members have met the membership criteria of not missing three consecutive meetings. 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 E.

## **5.0 Working Group Reports**

### **5.1 Project 1-13.2 C63.4 Site Requirements Above 1 GHz**

Chair Windler noted a new PINS has been issued to move all site requirements from C63.4 into a separate standard C63.25. (See Attachment F.) The time line to complete the scope of work is expected to be April 2009. Mr. Windler noted the original scope of the project was part of the PINS for the revision of C63.4. This new PINS addresses test site requirements in C63.4 and adds new requirements for site validation above 1 GHz. Site VSWR requirements (per CISPR 16-1-4) by reference and time domain measurement methods will be added to this standard. Mr. Windler noted that the working group has active members conducting time domain measurements to 18 GHz.

### **5.2 Project 1-15.5 C63.23 Measurement Uncertainty**

In the absence of working group chair Bob DeLisi, Mike Windler presented his report. The PINS is still active. Liberty Labs and ETS-Lindgren will offer data related to uncertainty values used for antenna calibration. There will be an e-mail ballot of edition 2 of the document before the next meeting with a six week window for response. Mr. Windler noted that the provided figures for uncertainty components will be based on practical experience, which does not seem to be the case for some uncertainty estimates documented in CISPR 16-4-2. The gage R&R approach is being used. Gage R&R refers to a statistical approach to gauging or measuring the repeatability and reproducibility of a measurement system and process.

## **ACTION ITEMS:**

**Parker and Chen to provide data related to uncertainty values used for antenna calibration by December 31, 2008.**

**O'Neil to contact Dennis Lewis of Boeing Seattle to solicit text for the informative annex on traceability for review by December 31, 2008.**

### **5.3 Project 1-15.6 C63.5 Antenna Calibration**

Working group Chair Dennis Camell provided his report. (See Attachment G.) The working group met for an extended period on October 7. They have addressed the comments received from the VCCI related to adding free space corrections for dipole antennas. Mr. Hofmann asked that the standard site method include a reference to 1 GHz. Revisions completed include:

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

Regarding the schedule for this work, the draft will be sent to the working group for review in January 2009; he expects the document to then be ready to bring to S/C 1 in the spring of 2009.

#### **ACTION ITEMS:**

**Camell to give C63.14 a “head’s up” that this new revision is coming and some new terms are introduced.**

**Camell and working group to include clarifying calibrations at 1 GHz in the standard since the current standard has overlapping requirements for that frequency.**

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

This working group has been dissolved and the topic will be taken off the agenda for future meetings.

### **5.5 Project 1-10.1 C63.10 Standard for Testing Unlicensed Wireless Devices**

In the absence of working group chair Art Wall, Chair Windler presented the report. (See Attachment H.) Mr. Windler noted that the first draft ONLY consolidates existing requirements and the second draft will improve on those requirements. The document was sent out on August 28. One negative vote was received in response and more than 250 comments – mostly editorial in nature – were received. 16 ballots were sent out; nine were received back. The ballot group was successful. The comments resolution committee includes Mr. Wall, Mr. Windler and Bill Hurst. Mr. Windler advised the ballot will be recirculated by November and forwarded to ANSI for public review by the end of this year.

#### **ACTION ITEM:**

**O'NEIL to coordinate an article on this standard with Art Wall and Don Heirman for publication in *Wireless Design and Development*.**

## **6.0 Web Site Management**

Vice-Chair Dennis Camell advised that all action items related to the C63 website from S/C 1 discussed at the last meeting have been addressed.

## **7.0 Old Business**

No items discussed.

## **8.0 Standards Development: Next Steps**

No new items discussed. See website for current status of documents.

## **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 I for the Action Items list.)

### **ACTION ITEM:**

**O'Neil to distribute the updated consolidated action items and draft minutes from the October 8, 2008 meeting to the committee.**

## **10.0 Time and Place of Next Meeting**

The next series of C63 meetings will take place for four days over April 20-23, 2009 at IEEE in Piscataway, NJ. The SC1 meeting date will be on Wednesday, April 22, 2009.

## **11.0 Adjourn**

With no further business, Chair Windler 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®  
Attachment B: Agenda for October 8, 2008 SC 1 Meeting  
Attachment C: Approved Minutes from April 2008 Meeting  
Attachment D: Meeting Attendance List  
Attachment E: SC 1 Membership Roster and Working Group Roster  
Attachment F: Windler Report on C63.25  
Attachment G: Camell presentation on Project 1-15.6, C63.5  
Attachment H: Windler Report on C63.10  
Attachment I: Consolidated Actions Items list