In this bonus edition of the “ACIL EMC Standards Alert Newsletter,” we focus on some aspects of the organization and function of the Accredited Standards Committee ASC C63®. Among other things, this entity is responsible for the development and maintenance of many of the EMC Standards that have been adopted by the FCC. As a result, the activities of the ASC C63® have a direct effect on your EMC laboratory’s bottom line. We are all acutely aware that even small changes to EMC standards can have large financial and managerial impacts on our EMC laboratory operations.

In keeping with our mission of bringing "news you can use" to the owners and managers of EMC laboratories, we present this special close-up look at some functions of the ASC C63®, along with information on its upcoming meeting in April 2009 as well as brief notices about upcoming workshops that may be of interest to our members.

GET INVOLVED! There will be a lot of activities of direct interest to ACIL CAS EMC members at the upcoming ASC C63® meeting.

ASC C63® will meet the third week in April at the IEEE Headquarters in Piscataway, New Jersey. The meeting details are contained on the C63® web site. The URL is: http://www.c63.org/upcomingmeetingschedule.htm

The scope of the Accredited Standards Committee ASC C63® is as follows:

Development of definitions and methods of measurement of electromagnetic noise and signal strengths (radiated and conducted), determination of levels of signal strength, levels of unwanted sources, limiting ratio of noise (and/or unwanted sources) to signals and development of methods of control of, and guidelines for influence, coupling and immunity. Where subjects dealt with overlap with those of other national committees, appropriate liaison will be established.

To accomplish the above activities, ASC C63® develops electromagnetic compatibility standards documents which it, publishes, archives and sells to the general public. Of particular interest to ACIL CAS members is the main committee, and the subcommittees on measurement techniques and accreditation which will be meeting the third week in April. (See upcoming meeting schedule at the end of this Standards Alert).
Main committee:

This committee is comprised of over 30 organizations and individual members. (See http://www.c63.org/documents/rosters_public/c63_members.htm). It is important for our ACIL CAS members to know that ACIL is a voting member of ASC C63®. ACIL attends each bi-annual meeting and provides a summary report of upcoming standards actions critical to ACIL CAS members. Your voice can be heard!

At the meeting of the main committee, the members receive a broad variety of reports from subcommittees, members and guests. The main committee approves all projects, and these are then listed with the American National Standards Institute [ANSI] in their “Standards Action” e-publication which is available (approximately) every month. The parent/main committee also comprises the balloting pool for approval of the actual standards developed within the subcommittees, subcommittee working groups and project teams. For a sample of what is discussed and deliberated in a typical meeting agenda, see http://www.c63.org/documents/c63/c63_generic_meeting_agenda_03_2007.htm

Note: For the balloting process, the ACIL representative solicits inputs from members of the ACIL CAS to include in the ACIL ballot response. This means that ACIL CAS members with an interest in EMC matters have both the right and the opportunity to make formal written "comments" on drafts of new or to-be-revised ASC C63® Standards.

These written comments (which can include proposed technical and/or editorial changes in the draft text, and/or arguments in opposition to, or in support of, changes proposed by others) are required to be considered and reviewed very carefully by the committee. If the comments are deemed appropriate, they will be incorporated into the final draft standard that is then sent to ANSI for final approval. This is how CAS can contribute to meaningful—and reasonable—standards.

How Can You Make A Difference?

ACIL CAS members with an interest in EMC matters can voice their concerns and have their input considered by getting involved directly in subcommittees and working groups. How? ACIL can name up to 5 of its CAS members (inclusive of the primary one voting member) to represent ACIL interests in the subcommittee and working group activity. There is no additional meeting fees for this participation. Note further that subcommittee membership requires a recommendation of the subcommittee to the parent committee for approval. WG membership does not need approval, but will have to follow the procedures of the WG itself.

There are two subcommittees that have the lion’s share of the responsibility for maintaining and producing standards and for providing a forum for improving lab assessments and assessment reports. ASC C63® SC-1 maintains the majority of the C63® standards. This Subcommittee is always looking for technical help during the standards-writing processes. Participation in ASC C63® SC-6 affords the opportunity to present suggestions aimed at the improvement of the laboratory assessment processes, and learn about changes in policy and/or procedure that the accrediting bodies are either considering or implementing. Here are further details about these two subcommittees:

Subcommittee 1: Measurement techniques and developments

Scope: SC-1 provides the technical expertise and resources necessary for writing, updating, or changing existing and proposed ASC C63® approved standards in the areas of new or existing measurement techniques and associated instrumentation, measurement methods, and limits development as requested by the parent committee.

SC-1 maintains the following standards which are of most interest to ACIL CAS testing laboratories:

ANSI C63.2: Measurement instrumentation specifications. [Note: a new edition was published in 2009]

ANSI C63.4: Emission measurements including site validation. [Note: a new edition was published in 2009]

ANSI C63.5: Antenna calibration [Note: work is now ongoing for the next edition which is expected in 2011]

ANSI C63.10: Testing unlicensed wireless devices. [Note: the first edition was published in 2009, and follow-up maintenance work is on-going]

ANSI C63.22: Automated EMI measurements. [This document deals with pitfalls and do’s when using automated emission measurement instrumentation.]

ANSI C63.23: Measurement Uncertainty (Draft) [This document is intended to be used with any of the ASC C63® measurement standards (especially C63.4) — it is mainly an introduction to MU, with examples on how to find influence quantities and then calculate expanded uncertainty.]

ANSI C63.25: Test site validation using Time Domain techniques. (draft) [This document will contain the latest development on validating sites above 1 GHz, detailing how to find the exact locations where additional absorbers are needed and/or where reflective materials will need to be removed.]
ANSI C63.26: Testing licensed transmitters (draft)  
[This document will consolidate FCC-approved measurement procedures from many sources.]

At this time, the standards with the most development activities are ANSI C63.23, ANSI C63.25, and ANSI C63.26.

If you have expertise and interest in working on any of these subjects, the chairmen of these projects will be on-site at the ASC C63™ meeting series in April. For details on their planned activities at the meeting please send emails to the following people:

For ANSI C63.10 contact awall@atlanticbb.net
For ANSI C63.23, contact bob.delisi@us.ul.com.
For ANSI C63.25, contact Michael.j.windler@us.ul.com, and
For ANSI C63.26 contact awall@atlanticbb.net.

Subcommittee 6: Accreditation/Conformity Assessment

Scope: SC-6 provides a resource for laboratory competency assessment activity. It has a number of subgroups/working groups. At each meeting, representatives of the assessor organizations (A2LA and NIST/NAVLAP) are invited to give a report on the status of EMC test and calibration lab accreditation.

While there are no EMC standards being developed by this subcommittee, they have interests that might be referenced in standards, including such topics as suggesting a method for accrediting bodies (ABs) dropping the dates from the scopes of accreditations, providing proficiency testing, and guiding how to calibrate EMC test equipment. The FCC member also presents updates on the MRAs and related activity along with the reports from the major ABs.

Going Forward: Your Ideas Count. We hope to hear from you. (Please note that the ASC C63™ meetings are open to all). However, there is a fee charged for observing. The fee structure is detailed at: http://www.c63.org/documents/c63/fee_schedule.html

If you have any other questions about the committee activity, please send an e-mail to our editor at: d.heirman@ieee.org. (Don is also the chairman of ASC C63™)

Upcoming EMC Standards meetings/workshops

The Next ASC C63™ series of meetings will be held during the week of April 19th 2010 at the IEEE Headquarters in Piscataway, NJ. Visit the C63™ website for the particulars (www.c63.org). ACIL is a voting member of C63™ but ob-

Upcoming Workshops

- A workshop on ANSI C63.10 wireless transmitter measurements to meet the FCC Rules will be held on 15-16 June 2010 at UL in Northbrook, IL. Information on registration is posted at the top of the home page of the iNARTE web site (www.narte.org).

- A High Energy Electromagnetic Interference workshop will be given on 25-26 March at the Compliance Certification Laboratory campus in Fremont, California. CCL is now part of Underwriter’s Laboratory and hence UL is continuing its support of these workshops. The registration information is on the iNARTE web site as noted above.

- The ANSI C63.4/C63.5 Time Domain Workshops will be held on 23-24 July 2010 - i.e., the Friday and Saturday before the start of the IEEE EMC Symposium in Ft. Lauderdale, FL. Registration information will be provided as part of the advance program for the IEEE EMC Symposium when it is published.

- The Telecommunications Certification Body Council (TCBC) will be holding its workshop during the week of April 26-30, 2010 at the Holiday Inn - Inner Harbor in Baltimore, Maryland. During the first 3 days, the TCB Council will host is regular spring TCB Council Workshop. The TCB Council Workshop will have great participation from the FCC, since it is located so close to FCC offices. The workshop topics will include: FCC Updates and Roundtable Discussions, International Approvals for 4G and LTE Technologies, Site Attenuation Issues, the CTIA OTA Test Plan, and an Overview of Global Regulatory Approvals. In addition, there will be a TCB Council meeting the morning of Tuesday, April 27th, 2010. Information on the TCB Council Workshop can be found on the web at: http://www_tcbcouncil.org/displayconvention.cfm?conventionnbr=7991

- Immediately following the TCB Council Workshop, the TCB Council is sponsoring a 2-day Internal Audit Workshop on April 29-30, 2010. This Internal Audit Workshop is geared toward issues affecting both laboratories and Certification Bodies regarding requirements contained in ISO/IEC 17025 and ISO/IEC Guide 65 (future Guide ISO/IEC 17065). Presenters from NVLAP, ACLASS and ANSI will be present with additional input provided by A2LA (absent due to a schedule conflict). Attendees will be provided with information on how to use the ISO/CASCO Standards and Guides not only to meet the requirements, but also make improvements in their internal procedures and quality, thus improving efficiency.

Information on the TCB Council-sponsored Internal Audit workshop can be found at the following URL: http://www_tcbcouncil.org/displayconvention.cfm?conventionnbr=7991

The information contained in this newsletter is current based on sources as of the date of electronic publication, is the sole opinion of its editor, Don Heirman. ACIL is not responsible for its content.

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