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Accredited Standards Committee C63®

Electromagnetic Compatibility

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NEWSLETTER

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MESSAGE FROM THE CHAIR

Daniel D. Hoolihan, Chairman ANSI-ASC C63®

The fall 2019 committee at work in Santa Rosa, California.

The Fall-2019 meeting of the "C63-Committee" was held in Santa Rosa, California at the Keysight Technologies facility. The meetings were held from Monday (November 18th) through Thursday (November 21st).

The meeting facilities were excellent and the lunches were timely and refreshing. Keysight treated the members to a social gathering on Monday night that was enthusiastically received. We thank Keysight Technologies for hosting the meetings in California!

The attendance at the meetings was substantial with a significant number of our California members participating in the working group, subcommittee, and main committee meetings. There was some overlap of working group and subcommittee meetings as the "C63-Committee" attempted to hold all its meetings in four days.

Progress was made on a number of standards including C63.24, C63.4, C63.10 and others. Details on the progress are covered in this newsletter. This progress continues in between face-to-face meetings via Webex capabilities hosted by the Committee's secretaries, Jerry Ramie and Allen Crumm.

The Chairman announced he would be retiring from his Chairman position at the end of 2020 (the end of his third term in office) and he would not be available for any further service as Chairman.

The next meeting of the "C63-Committee" will be held May 4-8, 2020 at ETS-Lindgren's facility in Cedar Park (a suburb of Austin), Texas. Our hosts will be Zhong Chen and Janet O'Neil.

Keysight Technologies in Santa Rosa, CA

Subcommittee 1

Techniques and Development

Zhong Chen (ETS-Lindgren), Chair.

Subcommittee 1 met in Santa Rosa, California at the November meetings. At this time, they have no early comments from SC1 discussion periods. They instead described the manner in which their comments would be resolved in the document that is now the C63.4 ballot. The committee reviewed the report to SC1 and set up a webinar in which they will go over the SC1 ballot comments, if any, and MEC comments, if received, on December 12. They are focusing on targeting C63.4 starting ballot formation and expect to ballot early in 2020.

Subcommittee 2 Definitions

Marcus Shellman, Chair.

ANSI C63 SC2 held its committee meeting on November 19, 2019. The SC2 Working Group 1 is currently preparing for balloting of ANSI C63.14 with publication anticipated by the end of April 2020. The SC2 Working Group 2 is conducting monthly webinars and making good progress in developing ANSI C63.28. Publication of that document is expected by the end of CY2020.

Subcommittee 3

International Harmonization

Don Heirman (Don Heirman Consultants), Chair

The C63 Subcommittee 3 met in Santa Rosa in November and identified further reviewers for the standards. The template that was used to report the comparisons was shown and discussed. There were also two more reports that were both completed and reviewed at this time. They also evaluated sources of C63 and IEC standards to use in the comparisons that were reviewed. SC 2 was identified as capturing reports in C63.28 on Best Practices. The committee held discussions on candidates for harmonizing, where practical, with international standards or continue to retain the present C63 standards. The next meeting will be a webinar on 13 Feb 2020.

Subcommittee 4 Wireless and ISM Equipment Measurements

Bob DeLisi (UL), Chair

At the time of the C63.10 working group meeting in November, the working group only had access to three sets of the ballot comments on *C63.10 Testing Unlicensed Wireless Devices* as IEEE has yet to send the full set of comments. Once they are received a meeting will be setup to review/resolve the comments. The Working group on C63.29 continues to make progress on its Procedures for compliance testing of lighting products in regards to:

- Dimmer test methods now including two methods and it is the regulators discretion as to which to allow (with triac enabled and triac not enabled).
- Input power tolerance discussion concluded in allowing and aligning with C63.4 draft with an input power tolerance of 5%.
- The LED programable (window) driver test method proposed in the technical group is similar to the one proposed in CISPR. There are some differences like the input voltage range (US LED drivers are capable to operate in a 120V to 277V voltage range).
- The draft has been updated to, where appropriate, reference C63.4 material rather than duplicating the information.

The working group anticipates a completed draft by the third of 2020.

Subcommittee 5 Immunity Testing

Ed Hare (ARRL), Chair

Updates: SC 5 is in coordination with Subcommittee 3 to bird-dog reviews of documents for SC3, even if the reviewer

is not a SC member. They plan to add reports from reviewers of SC5 documents to the agenda for future SC5 meetings. The site survey document is being developed in cooperation with the IEEE P473 WG on site surveys, using common text on test setups to measure ambient noise. In regards to C63.24 (*In-situ immunity testing*) P473 progress is slow, so other than some text developed in common, work was done to complete C63.24. The detailed information on lab testing using frequencies, modulations, etc. has been removed as all we need to know is what transmitter or ambient signal triggered interference. The document was complete, approved by the Main Committee as being ready for ballot. IEEE Mandatory Editorial Coordination is now underway. There will be a ballot on C63.24 to commence after any editorial changes mandated by MEC are implemented and a recirculation in the Main Committee.

Subcommittee 6 Laboratory Accreditation/ Conformity Assessment

Randy Long (ANSI-ASQ National Accreditation Board, dba L-A-B), Chair

It has been suggested that C63 adopt language for a default transition plan in its published standards, perhaps in the introduction. There has been some discussion as to whether this could be done as either normative or informative.

The sample wording presented was "ANSI C63® recommends a transition period of not more than 1 calendar year for implementation of this consensus standard where a transition period has not been defined either in regulations or by customer requirements."

Subcommittee 7 Spectrum Etiquette

Jason Coder, Chair

In summary, C63.17 is due to be revised or reaffirmed and comments have been received and need to be evaluated.

Meanwhile, C63.27 is being revised for numerous technical additions, improved guidance and readability. It is soon to be released for SC7 to review.

Subcommittee 8 Medical Equipment Testing

Stephen Berger (TEM Consulting, LP), Chair

Subcommittee 8 announced the publication of C63.19 (on Hearing Aid Compatibility) on November 19, 2019.

They are now working on taking on a project with ideas brainstormed as below:

Among those topics are:

- Alarms
  - What safeguards are expected when alarms are transmitted wirelessly?
  - What actions are expected when an alarm fails to reach its intended destination?
- Logging
  - What information related to wireless performance, e.g. failed packets, failed attempts to communicate, is recorded?
  - When and where is this information reported?
- Usefulness of PIM/PISM/PSM model for SC8 work
  - The Object Management Group has developed a detailed system to organize their standards to define performance while allowing companies technical freedom. The system includes:
    - PIM - platform-independent model
    - PISM - platform-independent simulation model
    - PSM – platform specific model
- Life-Cycle Considerations
  - How are equipment aging issues incorporated into device evaluation and more broadly to the risk assessment process for devices?
- Risk Assessment
  - What are the characteristics of a good or deficient risk assessment?
  - Is more specific guidance needed on the testing risk category level?
- GNURadio and SDR Technology.

- Is more tutorial and guidance needed for using spectrum record and playback for medical device testing? More broadly is the potential of software defined RF instrumentation being adequately applied to medical device evaluation.

- Bluetooth connectivity issues.
  - Equivalence of the effects of 50% square wave modulation with actual RFID waveforms.

- Alarm fatigue, cognitive issues & application to wireless alarms. Standard that has served as the effective agreement between the cellular and hearing aid industries addressing the needs of hearing aid users.

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