



**Accredited Standards Committee C63<sup>®</sup>**  
**Electromagnetic Compatibility**  
**Subcommittee 3** - International Standardization  
**Draft Minutes**

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**Chair:** [Heirman, Don](#)  
**Vice Chair:** [Schaefer, Werner](#)  
**Secretary:** [Ramie, Jerry](#) (non-voting)  
**February 18, 2016**  
**3:00 to 5:00 pm EST**

- 1. Call to Order: Chair** - the meeting was called to order at 3:00PM-EST
  - 1.1 Opening remarks and Announcements: Chair** - Don Heirman is the new Chairman, Mr. Andersen ended his term last year. He thought that we should meet before May to jump start the work of SC3 under the new Chair and Secretary.
  - 1.2 Meeting logistics announcements: Host** (none)
  - 1.3 Introductions: Secretary** - Those attending were Jerry Ramie, Don Heirman, Andy Griffin, Bob Hofmann, Craig Fanning, Terry Mahn, Vladimir Bazhanov,
  
- 2. Approval of the Agenda: Chair** - the Agenda was approved by acclamation.
  
- 3. Presentation of [patent slides](#): Secretary** - The patent slides were shown and no patent issues were raised.
  
- 4. Approval of previous minutes ([November 2015](#)): Secretary** - The previous Minutes from 11/10/15 were shown in a line-by-line manner. The draft Minutes were approved by acclamation. Credentials required for access to the [SC3 private area](#):  
**subcomite3**  
**43sta43**  
**AI-6:** Jerry to have [Approved 11/10/15 Minutes](#) posted under "[Approved SC3 Meeting Minutes](#)" in PDF.
  
- 5. Review of [Subcommittee Membership](#): Chair** - current SC3 roster from website:

**Membership Guidelines for Subcommittees:**

For an individual to remain a voting member of a Subcommittee, active participation in Subcommittee meetings and regular responses to Subcommittee email votes is required. Should a member fail to attend at least one of three consecutive scheduled meetings (in person or remotely via web conference (when used)) or respond to at least one of every two consecutive Subcommittee email votes, their membership in that Subcommittee may be at risk.

Note: Abstentions shall be treated the same as a “yes” or “no” vote regarding the requirement to respond to email votes.

There was confirmation of the voting and non-voting members. Don emphasized that SC3 members are the technical advisors for CISPR and all of its subcommittees, as well as TC77 and SC77B. He looks forward to working closer with them to meet the scope of SC3. (see 5.5 below)

**Subcommittee 3 Membership Roster**

Name	Role within Subcommittee 3	Affiliation
<a href="#">Andersen, Poul</a>	Member SC3	Poul Andersen Consulting
<a href="#">Berger, Stephen</a>	Chair Subcommittee 8	TEM Consulting

<a href="#">Chen, Zhong</a>	Chair Subcommittee 1	ETS-Lindgren
<a href="#">Vladimir Bazhanov</a>	Chair Subcommittee 7	Ericsson AB
<a href="#">Griffin, Andy</a>	Member SC3 CISPR/H Technical Advisor	CISCO Systems
<a href="#">Hare, Ed</a>	Member SC3	ARRL
<a href="#">Heirman, Don</a>	Chair SC3; Chair CISPR; CISPR/A Deputy Technical Advisor	Don HEIRMAN Consultants
<a href="#">Hoolihan, Dan</a>	Chair C63 <sup>®</sup>	Hoolihan EMC Consulting
<a href="#">Hurst, Bill</a>	Member SC3 CISPR Technical Advisor	FCC
<a href="#">Kuczynski, Victor</a>	Member SC3	Vican Electronics
<a href="#">Long, Randy</a>	Chair Subcommittee 6	Laboratory Accreditation Bureau
<a href="#">Potts, Nate</a>	Member SC3	Liberty Labs
<a href="#">Schaefer, Werner</a>	Vice Chair SC3 CISPR/A Technical Advisor	Schaefer Associates
<a href="#">Dilay, Chris</a>	Chair Subcommittee 2	DOD – Joint Spectrum Center (JSC)
<a href="#">Whitesell, Steve</a>	Chair Subcommittee 5	Whitesell Consulting / TIA
<a href="#">Art Wall</a>	Chair Subcommittee 4	Radio Regulatory Consultants / TCB
<b>Non-Voting Members</b>		
<a href="#">Arnett, Dave</a>	Liaison Member (non-voting) CISPR/I Technical Advisor	Hewlett Packard
<a href="#">Fanning, Craig</a>	Liaison Member (non-voting) CISPR/D Technical Advisor	Elite Electronic Engineering
<a href="#">Hofmann, H.R. (Bob)</a>	Emeritus Member SC3 (non-voting)	Hofmann EMC Engineering
<a href="#">Mahn, Terry</a>	Liaison Member (non-voting) CISPR/B Technical Advisor	Fish and Richardson
<a href="#">Michael Cibulka</a>	Liaison Member (non-voting) TC77 & SC77B Technical Advisor	Rockwell Automation AI-7: Jerry to add Michael Cibulka to SC3 roster page
<a href="#">Yandek, Ed</a>	Liaison Member (non-voting) CISPR/F Technical Advisor	Edward Yandek LLC

- 5.1 **New chairman - Chair**— already discussed above
- 5.2 **Review of subcommittee membership – members at risk** AI-8: Jerry to start Attendance Spreadsheet with previous attendance populated from 2014 forward.
- 5.3 **Consideration of new members** - none
- 5.4 **Selection of Secretary** - Jerry Ramie has been asked by the Steering Committee to support the work of SC3. His participation will be as a non-voting Secretary, as in SC1 & SC4.
- 5.5 **Review of [Scope and Duties](#)** - Scope and Duties from the [SC3 landing page](#) were shown:

AI-9: Jerry to send reminder to all SC3 Members to review Scope statement by 4/15/16.

SC3

### International Standardization

#### Scope:

Subcommittee 3 provides a forum for comparing international standards activities to ASC C63<sup>®</sup> membership standards activities and makes recommendations to the C63<sup>®</sup> Main Committee on possible US positions on international EMC matters, to facilitate harmonization of national and international standards, considering US regulatory as well as commercial requirements. Subcommittee 3 may make recommendations to the C63<sup>®</sup> Main Committee about introducing the work of C63<sup>®</sup> to the US National Committee Technical Advisory Groups for submission to international standards committees.

#### Links

- [Subcommittee 3 and Working Group Membership List](#)
- [Standards Developed by Subcommittee 3](#)
- [Approved Meeting Minutes](#)
- [Meeting Schedule](#)
- [Generic Agenda](#)

#### Duties:

SC 3 shall review international EMC standards for technical issues that may affect C63<sup>®</sup> membership standards development. These reviews may lead to recommendations for action by C63<sup>®</sup> to promote harmonization of C63<sup>®</sup> standards with international standards. Via the SC 3 liaison representatives of the USNC TAGs for international standards organizations with EMC activities (e.g., CISPR, TC77, ISO), information is shared in both directions with the following expectation:

Don indicated that if there were any changes to be made to the scope now is the time to bring that up. **AI-10:** At the May meeting, all SC chairs will be asked to present their SC scopes for C63 Main Committee approval. Any desired changes made now and agreed upon by this Subcommittee can be presented for approval by the Main committee.

**5.6 Need for CISPR-TA involvement** - no objections were raised by the TAs for their help with harmonization either of their documents with those in C63<sup>®</sup> or vice versa.

## 6. Analysis of equivalencies between C63<sup>®</sup> and IEC/IEEE standards

Don went over each of these entries indicating the general status of possible areas for harmonizing. This will have to be expanded with comments inserted for each row at our May meeting in New Jersey.

C63 <sup>®</sup> Document	SC	Subject	International Document	Review Leader (WG Chair)
C63.4	SC1	Measurements	CISPR 16-2-X CISPR 32	Heirman
C63.5	SC1	Antenna Calibration	CISPR 16-1-6	DeLisi
C63.9	SC5	Office Equipment Immunity	IEC 61000-4-3	Griffin
C63.15	SC5	Immunity	IEC 61000-4-X CISPR 35	Heirman
C63.16	SC5	ESD	IEC 61000-4-2	Whitesell
C63.23	SC1	Uncertainty	16-4-2	Heirman DeLisi
C63.24	SC5	Generic On-Site Meas.	IEEE 473	Berger - <b>Heirman</b>
C63.25	SC1	Test Site Validation Antenna calibration site	CISPR 16-1-4 CISPR 16-1-5	Sigouin
C63.26	SC1	Licensed Transmitters	ETSI wireless requirements	Wall
C63.27	SC7	Co-existence	IEC 62657-2	Berger
C63.28	SC2	Best Practices	No equivalent	Dilay

**AI-11:** Don asked for a co-leader for those standards activity noted in (6) above with his name assigned in the past. He will ask this again at the next webinar.

**New standards for consideration:**

<a href="#">C63.29-draft Learn more</a>	Lighting products	<a href="#">SC 4</a>	<a href="#">Mendoza, Ernesto</a>	<a href="#">C63.29 PINS</a>	New standard. Draft being written.
<a href="#">C63.30-draft Learn more</a>	Wireless Power Transfer Products	<a href="#">SC 4</a>	<a href="#">Thul, Travis</a>	<a href="#">C63.30 PINS</a>	New standard. Draft being written.
<a href="#">C63.31-draft Learn more</a>	ISM equipment (FCC MP-5)	<a href="#">SC 4</a>	<a href="#">Walton, Derek</a>	<a href="#">C63.31 PINS</a>	New standard. Draft being written.

**Publication status of the above C63<sup>®</sup> documents to determine the appropriate time to review in more depth their content with that of international equivalents to lead to harmonization where possible**

<b>C63<sup>®</sup> standard</b>	<b>Publication status</b>
<b>C63.4 (Heirman)</b>	Published in 2014, new PINS being approved for "limited amendment" to correct site validation issues in Annex D and correct equations. <b>AI-12:</b> Jerry to check status of "limited amendment" PINS submitted by Don. (circulated to SC1 yet?)
<b>C63.5 (DeLisi)</b>	2006 edition under revision
<b>C63.9 (Griffin)</b>	2008 edition not under revision - most issues were editorial errors that resulted in technical problems. They are working under a PINS-C study project at the moment.
<b>C63.15 (Heirman)</b>	2010 edition under revision - copyright releases are being sought. <b>AI-13:</b> Jerry to pull <a href="#">Annex C</a> out of new draft C63.15 and post it so SC3 members can use it as an example of how to prepare for seeking releases.
<b>C63.23 (DeLisi)</b>	2012 edition not under revision
<b>C63.24 (Heirman)</b>	New standard on in-situ immunity measurements (joint task with IEEE 473 which covers in-situ emission measurements) – C63.24 is a generic method extracted in large part from C63.18 (In-situ immunity measurements of medical devices in a hospital environment)
<b>C63.25 (Sigouin)</b>	New standard under preparation
<b>C63.26 (Wall)</b>	2013 edition not under revision

We are awaiting publication on these documents:

**C63.27- Discuss after publication: Berger**

**C63.28- Discuss after publication: Dilay**

**C63.29- Discuss after publication: Mendoza**

**C63.30- Discuss after publication: Thul**

**C63.31- Discuss after publication: Walton**

There was an open call for comments from the Members on these documents.

**7. Further Standards Analysis**

**7.1 ASC-C63<sup>®</sup> member standards that need possible SC3 analysis - All**

**7.2 Issues from IEC (incl. CISPR & TC77), ISO and other international**

**standards activity potentially affecting US standards development: Chair -**

Craig Fanning commented on the ISO automotive EMC standards. ISO SC32 (formerly TC22) is still under WG3, involved with automotive standards for vehicles and components. ISO

addressed immunity tests while CISPR SC/D addresses emission measurements.. **AI-14:** Jerry to send Craig a copy of the most recent draft of C63.15.

**8. Old Business and discussions**

**8.1 Smart Grid Proposals: Heirman** - This is a very big topic. Where do we get involved with our C63 documents? **AI-15:** Jerry to post the two slides that showed the C63® standards that apply to emission measurements and immunity testing for Smart Grid applications. Any new C63® standards work since then can be added.

**9. New Business:**

**9.1 Status of [website](#)** - the [SC3 landing page](#) and [SC3 rosters](#) were shown.

**10. Review of the action items from previous meetings: Secretary** - Consolidated Action Items from the 11/10/15 meeting were reviewed. The Status of each item was updated as shown below.

**Consolidated Action Items from 11/10/15 Meeting of C63/SC3**

AI #	Task	Responsible party	Due Date	Status
AI-1:	Poul Andersen to raise issue about having reached the term limit as SC 3 chair in the Main Committee meeting	Poul Andersen	11/2015	CLOSED
AI-2:	Don Heirman to pursue whether there are things in C63.4 that it would be advantageous to include in CISPR 32 and vice-versa. The question of what to display on a video screen when making measurements is of particular interest	Don Heirman	2/18/16	C63.4 WG is considering a) video display B) site validation
AI-3:	Don Heirman to provide URL for seminar on CISPR activity and try to get permission for Poul to review <a href="http://espressoengineering.tv/db-index.asp?vid=CISPR-Report">http://espressoengineering.tv/db-index.asp?vid=CISPR-Report</a> This is a video describing CISPR activities	Don Heirman	2/18/16	CLOSED
AI-4:	WG1 Chair (Poul Andersen) to provide needed changes resulting from review of IEEE edited C63.12 document back to IEEE editors	Poul Andersen	2/18/16	CLOSED as C63.12 is about to be published
AI-5:	Poul Andersen to provide Jerry Ramie with information for updating status (disbanding) of WG1 on web site when time is appropriate	Poul Andersen	2/18/16	CLOSED as the WG will be disbanded as its job is done

**11. Time and place of next face to face meeting: Chair** - see [Upcoming Meeting Schedule 5/10/16 @ IEEE headquarters](#) in Piscataway, NJ

**12. Closing remarks and Adjournment: Chair** - The meeting was adjourned at 4:23PM-EST.

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**End of Meeting**

**Consolidated Action Items from 02/18/16 Meeting of C63/SC3**

AI #	Task	Responsible party	Due Date	Status
AI-2:	Don Heirman to pursue whether there are things in C63.4 that it would be advantageous to include in CISPR 32 and vice-versa. The question of what to display on a video screen when making measurements is of particular interest	Don Heirman	5/10/16	C63.4 WG is considering a) video display B) site validation
AI-6:	<a href="#">Approved 11/10/15 Minutes</a> posted under " <a href="#">Approved</a> "	Jerry Ramie	5/10/16	CLOSED

	<a href="#">SC3 Meeting Minutes</a> " in PDF			2/21/16
AI-7:	Jerry to add Michael Cibulka to SC3 roster page	Jerry Ramie	5/10/16	CLOSED posted 2/18
AI-8:	Jerry to start Attendance Spreadsheet with previous attendance populated from 2014 forward	Jerry Ramie	5/10/16	CLOSED sent 2/18
AI-9:	Jerry to send reminder to all SC3 Members to review Scope statement by 4/15/16	Jerry Ramie	4/15/16	CLOSED sent 3/2
AI-10:	At the May meeting, all SC chairs will be asked to present their SC Scopes for C63 Main Committee approval	All SC Chairs	5/10/16	
AI-11:	Don asked for a co-leader for those standards activity noted in (6) above with his name assigned in the past.	All SC Chairs	5/10/16	
AI-12:	Jerry to check status of "limited amendment" PINS for C63.4 submitted by Don. (circulated to SC1 yet?)	Jerry Ramie	5/10/16	CLOSED sent 2/18
AI-13:	Jerry to pull <a href="#">Annex C</a> out of the new draft of C63.15 and post it so SC3 members can use it as an example of how to prepare for seeking releases.	Jerry Ramie	5/10/16	CLOSED <a href="#">posted</a> 2/18
AI-14:	Jerry to send Craig a copy of the most recent draft of C63.15	Jerry Ramie	5/10/16	CLOSED sent 2/18
AI-15:	Jerry to post the two slides that showed the C63 <sup>®</sup> standards that apply to emission measurements and immunity testing for Smart Grid applications	Jerry Ramie	5/10/16	CLOSED Docs sent to Don H.