

# C63<sup>®</sup> American National Standards Committee C63<sup>®</sup>

## Electromagnetic Compatibility

### Subcommittee 3: International Standardization

Chair: Ross Carlton

Vice Chair: Ernesto Mendoza

Secretary: Jerry Ramie

Webinar

October 3, 2023; 1:00 PM – 2:30 PM - PDT

#### Approved Minutes

1. **Call to Order: Chair** - The meeting was called to order at 1:03PM-PDT
  - 1.1 **Announcements: Chair's remarks** – Welcome to the meeting!
  - 1.2 **Meeting logistics announcements: Host** (N/A)
  - 1.3 **Introductions: Secretary – roll call** (attending members with their affiliations and guests are recorded separately below) (note **absences**, **excused absences** and **errors**)
  - 1.4 **Present membership: Report any roster errors to the ASC-C63<sup>®</sup> Secretary**

**Subcommittee 3 Membership Roster**. See **errors**, **absences** and **excused absences** below:

Name	Role within Subcommittee 3	Affiliation
<u>Abbondante, Nick</u>	<b>Chair Subcommittee 4</b> US CISPR/A Technical Advisor	Intertek (Primary)
<u>Braxton, Tom</u>	Chair Subcommittee 5	ARRL (Expert)
<u>Carlton, Ross</u>	Chair Subcommittee 3	Gibbs & Cox (EMC Society Expert)
<u>Coder, Jason</u>	Chair Subcommittee 7	NIST (Primary)
<u>DeLisi, Bob</u>	<b>Chair C63</b>	UL LLC (Primary)
<u>Fanning, Craig</u>	Liaison Member US CISPR/D Technical Advisor	Elite Electronic Engineering (Primary)
<u>Griffin, Andy</u>	<b>Chair Subcommittee 1</b> <b>TC77 TAG Advisor</b> US CISPR/H Technical Advisor	CISCO Systems (Primary)
<u>Hodes, Harry</u>	Member	Consultant
<u>Hoolihan, Dan</u>	<b>Member</b>	Hoolihan EMC Consulting
<u>Klinger, Jeff</u>	Member	Cetecom, Inc.
<u>Kramer, Doug</u>	Chair Subcommittee 6	Apple Inc. (Technical Expert)
<u>Mendoza, Ernesto</u>	Vice Chair Subcommittee 3 US CISPR Technical Advisor US CISPR/F Technical Advisor <b>TC77/SCA Technical Advisor</b>	Signify
<u>Popovici, Horia</u>	Member	Innovation, Science and Economic Development Canada (Alternate)
<u>Potts, Nate</u>	Member	Keysight Technologies (Primary)
<u>Shellman, Marcus</u>	Chair Subcommittee 2	DOD – Joint Spectrum Center (JSC) (Primary)
Non-Voting Members		
<u>Arnett, Dave</u>	Liaison Member US CISPR/I Technical Advisor	Garmin
<u>Cibulka, Michael</u>	Liaison Member <b>TC77 &amp; SC77B Technical Advisor</b>	MC Lab Services
<u>Hofmann, H.R. (Bob)</u>	Emeritus Member	Hofmann EMC Engineering

<b>Jones, Steve</b>	<b>Liaison Member</b>	<b>FCC Laboratory</b>
<b>Mahn, Terry</b>	<b>Liaison Member US CISPR/B Technical Advisor</b>	<b>Fish and Richardson</b>
<b>Pettit, Ghery</b>	<b>Liaison Member CISPR/I Chair</b>	<b>Pettit EMC Consulting, LLC</b>

**Guests and Observers:** (non-voting) Jerry Ramie, Michael Duncanson, Stephen Anderson, David Chamberlain, Jason Nixon, Bob DeLisi, Nicholas Abbondante, Warwick Wong, Mark Arthurs, William Elliott, Deanna Zakharia, Randy Long, Bill Graff, Henry Benitez, Bo Li, Jeff Klinger, Victor Kuczynski, Ken Gjerde **AI-160:** Jerry to implement **changes** in SC3 roster shown above

**1.5 Quorum: (50% of roster) constitutes a quorum.** (rounding up) (15 roster members / 2 = 7.5 >> 8 (therefore **8 people** are required for a quorum) **Was quorum achieved? (Yes)** If not, any actions taken are subject to confirmation by electronic ballot or at a future meeting. (Quorum is not required for Working Group meetings)

**2. Approval of the Consent Agenda (includes Agenda & previous Minutes): Secretary -** The Consent Agenda was approved by acclamation. ([Previous Approved Minutes](#))

**2.1 Review of the patent slides** – The patent slides were reviewed and all agreed to abide by the policies shown.

**3. Review of Subcommittee Membership, - Report any errors to the Secretary**

**3.1 Review of Membership Guidelines**

**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.

**Member Attendance Log: Any errors in the log?**

5/28/20	9/9/20	12/3/20	3/3/21	5/26/21	8/25/21	12/15/21	3/2/22	5/17/22	11/8/22	2/22/23	5/10/23	Full Name
		x	x	x	x	x	x	x	x	x	x	Abbondante, Nick
												Braxton, Tom
	x	x	x	x	x	x	x	x	x	x	x	Carlton, Ross
x	x	x	x	x	x	x	x	x	x	x	x	Coder, Jason
x	x		x	x	x	x	x	x	x	x	x	DeLisi, Bob
x				x	x	x	x	x	x		x	Fanning, Craig
x		x		x	x		x	x	x	x		Griffin, Andy
												Hodes, Harry
x	x	x	x	x	x	x	x	x	x	x	x	Hoolihan, Dan
							x	x	x	x	x	Klinger, Jeff
x			x	x		x	x	x	x	x	x	Kramer, Doug
x	x	x	x	x	a	x	x	a	x	a	x	Mendoza, Ernesto
x	x	x		x	a	x	x	x		x		Popovici, Horia
		x	x	x	x	x		x	x		x	Potts, Nate
x		a	x		x			x		x	x	Shellman, M.
						x						Amett, Dave
x	x	x	x	x	x		x				x	Cibulka, Michael
		x		x		x	x			x		Hofmann, H.R.
				x	x		x	x	x		x	Jones, Steve
												Mahn, Terry
	x	x	x	x		a	x	x		x		Pettit, Ghery
x	x	x	x	x	x	x	x	x		x	x	Ramie, Jerry

**Any members at risk? Harry Hodes** is at risk.

### 3.2 Consideration of new members? [Application for C63® Subcommittee Membership](#)

#### 4. Status of harmonization projects - Chair

Status of harmonization of C63 documents with documents of other Standards Development Organizations (SDOs) is summarized in Table 1. Status is provided by the cognizant Subcommittee.

**Table 1: ANSC-C63® Document Harmonization Summary**

ANSC-C63®			Other SDO		Status
Document	SC	Subject	Document	Harmonization Goal	
C63.16	SC5	ESD Guide	IEC 61000-4-2	<ul style="list-style-type: none"> <li>* Proposed Annex H is C63.16-2016 Clause 7</li> <li>* Proposed Annex I subclause I.2 contains material from the fourth paragraph of C63.16-2016 Clause 9 and an excerpt from Figure 11.</li> <li>* Proposed Annex I subclause I.3 is C63.16-2016 subclause 6.4.5.2.</li> <li>* Proposed Annex I subclause I.4 is adapted from C63.16-2016 Annex A and includes Table A.2 and Table A.3.</li> </ul>	<a href="#">Rejected by TC77 by 1/24/23</a>

#### 5. Other Old Business: Chair

**5.1 Existing harmonization project reports** - Written or verbal reports of the status of harmonization projects and needs for liaison support shall be presented by the responsible Subcommittee Chair. Written reports shall be made using either the [C63 PowerPoint template](#) or the [C63 PowerPoint template wide](#). Prior to the SC3 meeting, the [SC report](#) shall be provided to the projectionist for showing on the screen at the SC3 meeting.

**5.2 Liaison needs** – Identify needs and potential candidates for liaisons to facilitate harmonization projects. ~~No new needs were identified at the last meeting. No liaison is shown for TC77 on the SACCOM site. Victor Kuczynski sent a text to Mr. Cibulka, he responded with a new address. Henry B. asked if we kept the previous tables with lists of Standards. (Yes, they're in our older Minutes) Bob noted we will port to other SDOs, not the reverse. We take info from SCs to get us onto other SDO agendas. Ernesto noted that our SCs evaluate their documents for recommendations to SC3 for harmonization. Ernesto volunteered to temporarily act as our TC77 liaison until another candidate emerges.~~

**5.3 Harmonization process** – Discuss and develop harmonization processes and guidance for Subcommittees. ~~Review the new approved changes to the process flow chart in [Item 6.2](#) below.~~

**5.4 C62.12** – This document will be allowed to expire in 2025 since the need for such a standard has been overcome by events.

#### 6. New Business: Chair -

**6.1 New harmonization projects** – Discuss new harmonization projects for documents under development by the Subcommittees.

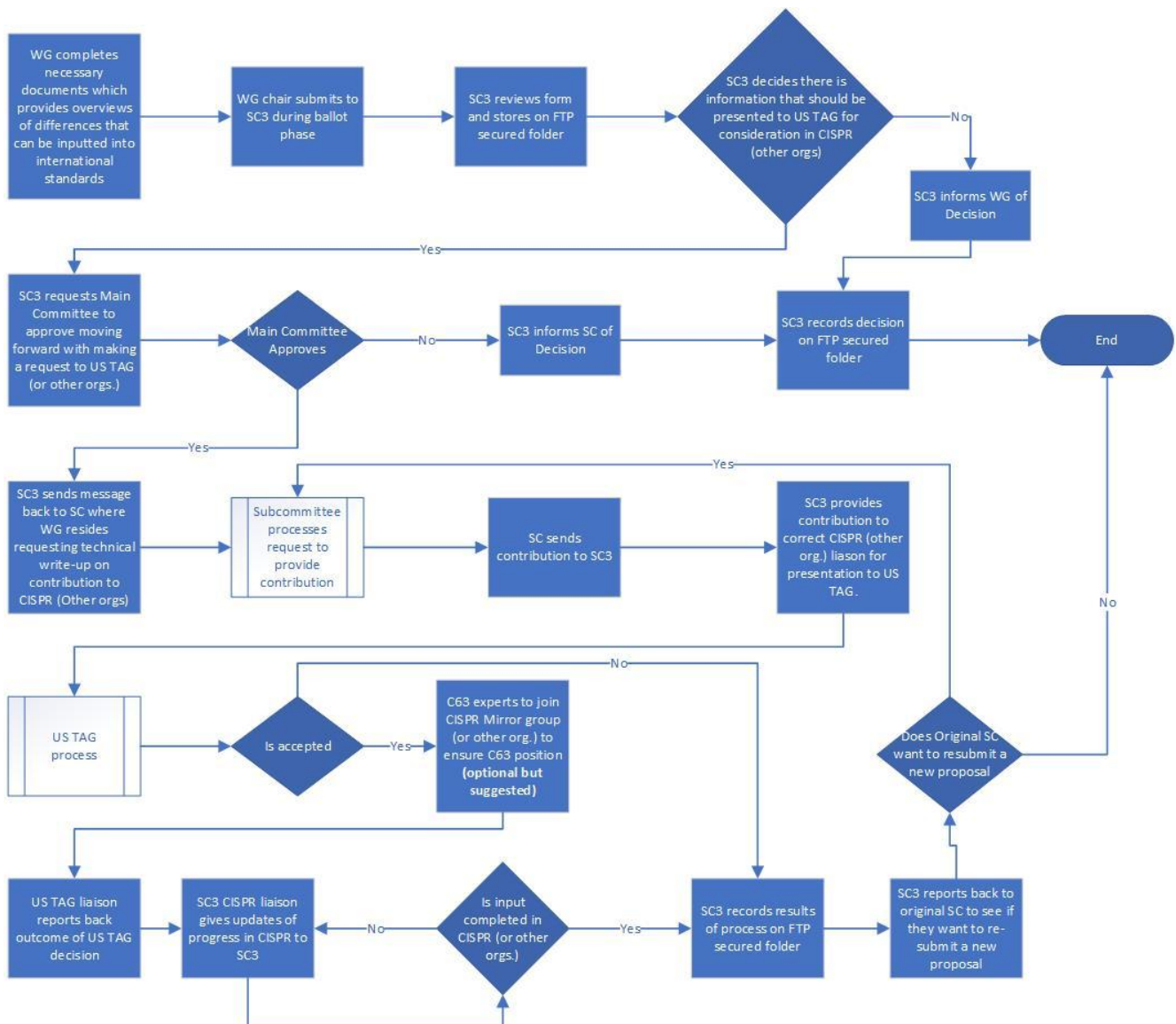
**6.11 - C63.16 Guide to ESD Testing** – Silberberg harmonize with IEC 61000-4-2?  
**Discussion:** Our content was not accepted by TC77 when it was offered earlier this year. Real-world field

failures sometimes cannot be duplicated using IEC 61000-4-2, so C63.16 has unusual methods that may use lower humidity during the testing. Adoption by TC77 is unlikely. AI-159: Ross, Jerry & Jeff S. to review SC5 & C63.16WG Minutes for a record of their contact with TC77 and store in the SC3 folder and the Harmonization Summary table. Closed posted 5/15

**6.2 SC3 Scope, Duties and Tasks** – There were no comments on the Scope at our last meeting. Only a Scope and Duties (Tasks) are required by our policy. As a result our new Scope, Work Flow, & General Tasks (Duties) are shown below: approved at last meeting (& approved by Main Committee 5/11/23)

*Subcommittee 3 (SC3) is responsible for promoting and facilitating harmonization of C63 publications with those developed by national and international standards bodies. SC3 establishes and maintains liaisons with these standards bodies or the appropriate national committee to facilitate coordination and cooperation. SC3 is also responsible for writing and maintaining existing and proposed C63 standards as assigned by the Main Committee American National Standards Committee (ANSC) C63.*

**Work Flow:**



**Membership Criteria**

There are two classes of membership: regular members and liaison members.

## Regular Members:

For regular membership consideration, applicants are required to attach a resume to the application form highlighting their expertise in electromagnetic compatibility and the type of contributions they can provide of interest to Subcommittee 3. Subcommittee membership requires Subcommittee approval and a C63® vote and, if approved, notice of acceptance will be sent to the applicant. For name and address of the Subcommittee Chair and for Subcommittee projects, please see the Subcommittee listings on the C63® web site at [www.C63.org](http://www.C63.org)

See "[Membership and Working Group Roster](#)" page for additional criteria for continued membership

## Liaison Members:

Liaison members are special non-voting members as by virtue of their positions may be needed to conduct SC3 business that covers topics of the standards committees which they represent. The liaison members of Subcommittee 3 consist of the technical advisors (TAs) and deputy technical advisors (DTAs) of the IEC USNC TAGs which have as their main scope EMC topics. These members are approved by the regular members of the subcommittee and the parent committee as noted for regular members. Should the need arise to include additional liaison members during the year (in addition to those included on the SC membership list approved at the first C63® meeting of the year) as a result of special circumstances (i.e., the individual can contribute significantly to the work of the Subcommittee), liaison membership may be granted after approval by the Regular Members of the Subcommittee and a parent committee vote. .

NOTE: Fees for membership, meetings, and other costs are covered in the general fee structure on the C63® web site. Liaison members will not have a regular membership fee but may be charged a meeting fee to offset meeting expenses.

Last Updated 05/26/2023

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**6.3 OPEN - Chair** - Bob asked if other activities are being planned for SC3? Should we reach out to liaisons who may be active? During discussion, it was decided that better awareness is needed between SC3 and liaisons. Additionally, providing SC/WG members with better information on the activities of other SDOs, including the IEC and IEEE EMCS, would be helpful. **AI-161:** Ross to write to the liaisons to make them aware of SC3 efforts. **AI-162:** Ross to request links from liaisons to various dashboards as needed. **AI-163:** Ernesto to provide a list of links to CISPR sites to Jerry for posting. (list of publications)

Ernesto discussed limits and methods for three low-frequency Standards. (Setting limits is beyond the scope of C63 standards) There was interest in a listing of these to circulate to the SC3 Members. **AI-164:** Ernesto to prepare a three-paragraph letter of new work for circulation to SC3 Members.

Nick mentioned that C63.25.3 "Validation Methods for Radiated Emission Test Sites, 18-40 GHz" will include reverb chamber validation methods based on those of IEC 61000-4-21. (IEC 61000-4-21 covers from 200 MHz to 18 GHz) We have liaisons with both SDOs and will facilitate any harmonization.

**7. C63.org website use and updates: Secretary** - We normally post documents to the [SC3 protected area](#). If any SC or WG needs help with this posting, a Technical Secretary is available to assist.

## 8. Review of the Action Items: Secretary

### 8.1 Review of Action Items from previous meeting:

**Consolidated Action Items from 05/10/23 Meeting of SC3**

AI #	Task	Responsible party	Due Date	Status
<b>AI-159:</b>	Ross, Jerry & Jeff S. to review SC5 & C63.16WG Minutes for a record of their contact with TC77 and store in the SC3 folder and the Harmonization Summary table	Ross Carlton Jerry Ramie Jeff Silberberg	Next meeting	<b>Closed</b> posted 5/15

**8.2 Review of Action Items from this meeting—Secretary -**

**9. Next meeting: Chair – TBD** (week of May 12, 2024)

**10. Closing remarks and Adjournment: Chair** - The Chair thanked the members and guests for their participation. The meeting was adjourned at 2:08 PM-PDT.

\*\*\*\*\* End of Meeting \*\*\*\*\*

**Consolidated Action Items from 10/03/23 Meeting of SC3**

<b>AI #</b>	<b>Task</b>	<b>Responsible party</b>	<b>Due Date</b>	<b>Status</b>
AI-160:	Jerry to implement changes in SC3 roster shown above	Jerry Ramie	Next meeting	Closed changed 10/10/23
AI-161:	Ross to write to the liaisons to make them aware of SC3 efforts.	E. Mendoza	Next meeting	Open
AI-162:	Chair to request links from liaisons to various dashboards as needed.	E. Mendoza	Next meeting	Open
AI-163:	Ernesto to provide a list of links to CISPR sites to Jerry for posting.	E. Mendoza	Next meeting	Closed provided 5/15
AI-164:	Ernesto to prepare a three-paragraph letter of new work for circulation to SC3 Members.	E. Mendoza	Next meeting	Open