



American National Standards Committee C63[®]

Electromagnetic Compatibility

Subcommittee 3: International Standardization

Chair: Ross Carlton

Vice Chair: **VACANT**

Secretary: Jerry Ramie

Webinar

December 15, 2021; 2:00 PM – 4:00 PM - EST

Approved Minutes

1. **Call to Order: Chair** - The meeting was called to order at 2:06PM-EST
 - 1.1 **Announcements: Chair's remarks** – We will review a flow chart and duties and continue to review the comparison reports and the status of the comparison action items.
 - 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) (Absences highlighted in gray)
 - 1.4 **Present membership: Report any roster errors to the ANSC-C63[®] Secretary**

Subcommittee 3 Membership Roster

 Errors shown in yellow highlight

Name	Role within Subcommittee 3	Affiliation
Carlton, Ross	Chair Subcommittee 3	ETS - Lindgren
Coder, Jason	Chair Subcommittee 7	NIST
DeLisi, Bob	Chair Subcommittee 4	UL LLC
Dilay, Chris	Member	Naval Info. Warfare Center Pacific
Griffin, Andy	Member US CISPR/H Technical Advisor	CISCO Systems
Hare, Ed	Chair Subcommittee 5	ARRL
Hoolihan, Dan	Chair ASC-C63 [®]	Hoolihan EMC Consulting
Kramer, Doug	Member	ETS-Lindgren
Long, Randy	Chair Subcommittee 6	ANAB (ANSI National Accreditation Board)
Popovici, Horia	Member	Innovation, Science and Economic Development Canada
Potts, Nate	Member	Keysight Technologies
Samoto Mits	Member	Liberty Labs Asia
Shellman, Marcus	Chair Subcommittee 2	DOD – Joint Spectrum Center (JSC)
Non-Voting Members		
Abbondante, Nick	Liaison Member US CISPR/A Technical Advisor	Intertek
Arnett, Dave	Liaison Member US CISPR/I Technical Advisor	Garmin
Cibulka, Michael	Liaison Member TC77 & SC77B Technical Advisor	Rockwell Automation
Fanning, Craig	Liaison Member US CISPR/D Technical Advisor	Elite Electronic Engineering
Hofmann, H.R. (Bob)	Emeritus Member	Hofmann EMC Engineering
Jones, Steve	Liaison Member	FCC Laboratory
Mahn, Terry	Liaison Member US CISPR/B Technical Advisor	Fish and Richardson
Mendoza, Ernesto	US CISPR Technical Advisor US CISPR/F Technical Advisor	Signify

Pettit, Ghery	Liaison Member CISPR/I Chair	Pettit EMC Consulting, LLC
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Guests and Observers: (non-voting) Jerry Ramie

1.5 Quorum: (50% of roster) constitutes a quorum. (rounding up) (13 roster members / 2 = 6.5 >> 7 (therefore **7 members** 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 [Agenda](#): Secretary - The modified Agenda was approved by acclamation.

2.1 Approval of the previous Minutes - [20210825](#) The previous Minutes were reviewed and [approved](#) by acclamation.

2.2 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?

2/14/19	5/2/19	8/28/19	11/20/19	2/13/20	5/28/20	9/9/20	12/3/20	3/3/21	5/26/21	8/25/21	12/15/21	Full Name
						x	x	x	x	x		Carlton, Ross
			x	x	x	x	x	x	x	x		Coder, Jason
	x		x	x	x	x		x	x	x		DeLisi, Bob
	x		x			x			x	a		Dilay, Chris
	x			x	x		x		x	x		Griffin, Andy
	x		x				x	x	x			Hare, Ed
	x		x		x	x	x	x	x	x		Hoolihan, Dan
x	x				x			x	x			Kramer, Doug
	x		x		x	x	x	x		x		Long, Randy
x		x		x	x	x	x	x	x	a		Mendoza, Ernesto
				x	x	x	x		x	a		Popovici, Horia
x	x	x	x	x			x	x	x	x		Potts, Nate
x	x	x		x				a	a	a		Samoto, Mits
	x	x	x		x		a	x		x		Shellman, M.
		a	a	a	a				a	a		Thul, Travis
							x	x	x	x		Abbondante, Nick
x												Arnett, Dave
x	x			a	x	x	x	x	x	x		Cibulka, Michael
x	x			x	x				x	x		Fanning, Craig
x		x	x				x		x			Hofmann, H.R.
	x		x	x					x	x		Jones, Steve
												Mahn, Terry
						x	x	x	x			Pettit, Ghery
x	x	x	x	x	x	x	x	x	x	x		Ramie, Jerry

Any members at risk? None are at risk.

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

4. Status of harmonization of all C63 Standards with international equivalents - Chair

C63 documents listed in the first column are to be compared with the standards indicated in the far-right column. The assigned comparisons are to show where harmonization may or may not be possible and what action should be taken. All this will be in the reporting form for each standard shown.

Table 1: Comparisons of ASC-C63® Documents and International Documents

C63® Document	SC #	Subject	International Document (Reviewer Actions)
C63.2	SC1	Test Instrumentation	CISPR 16-1-1 RA-1
C63.4	SC1	Measurements	CISPR 16-2-X; RA-2 CISPR 16-1-4; RA-3 CISPR 32; RA-4
C63.5	SC1	Antenna Calibration	CISPR 16-1-6; RA-5 SAE ARP 958; RA-6A RA-6B CISPR 16-1-4; RA-7
C63.9	SC5	Office Equipment Immunity	IEC 61000-4-39; RA-8
C63.10	SC4	Unlicensed Transmitters	Too many ETSI standards for comparison.
C63.15	SC5	Immunity	IEC 61000-4-x; RA-9 CISPR 35; RA-10
C63.16	SC5	ESD	IEC 61000-4-2; RA-11 ISO 10605; RA-12 SAE J1113-xx; RA-13
C63.23	SC1	Uncertainty	CISPR 16-4-2; RA-14 CISPR 16-1-4; RA-15
C63.24 draft	SC5	Generic In Situ Meas.	IEEE 473 ; RA-16
C63.25.1	SC1	Test Site Validation, 1 GHz to 18 GHz	CISPR 16-1-4; RA-17B
C63.25.2	SC1	Test Site Validation, 30 MHz to 1 GHz	CISPR 16-1-4; RA-17A
C63.25.3	SC1	Test Site Validation, 18 GHz to 40 GHz	RA-17C
C63.26	SC4	Licensed Transmitters	ETSI wireless requirements mmWave possible comparison. RA-18
C63.27	SC7	Co-existence	IEC 62657-2; RA-19
C63.28 draft	SC2	Best Practices	No equivalent; RA-20
C63.29 draft	SC4	Lighting products	CISPR 15; RA-21 IEC 61827;
C63.30 draft	SC4	Wireless Power Transfer Products	CISPR 11; RA-22 CISPR 14-1; RA-23 CISPR 32; RA-24 CISPR 12; RA-25
C63.31 draft	SC4	ISM equipment (FCC MP-5)	CISPR 11; RA-26 CISPR 14-1; RA-27 CISPR/B/672/DC (4/14/17); RA-28 CISPR/B/700/DC (2/2/18); RA-29

ASC-C63 Standards numbering: We discontinued C63.8 for calibration, which became C63.34. C63.32 was moved to C63.33, C63.32 & C63.35 are now reserved.

4.1 Status of reviewers and reports completed - This part of the agenda will be to identify the persons named for each RA and to update Table 2 for the minutes. For those named, we will review what is in their report using the [comparison report template](#)

Access to ASC-C63[®] documents available here: <https://app.box.com/s/tv8akggrjncb3qwbbkdyobk6mgpiuwci> (read-only) **Table 2** will be used to measure progress on receiving the comparison reports. The completed consolidated **RA table** will be sent to SC2 for use on the [C63.28 \(draft\)](#). New Actions in **yellow highlight**.

Table 2: Reviewer Actions from 3/3/21 Meeting of SC3

RA #	Task	Responsible party	Due Date	Status
RA-1	Compare C63.2 to CISPR 16-1-1	Ross Carlton Jens Medler	5/26/21	Closed Medler PPT
RA-2	Compare C63.4 to CISPR 16-2-X	Horia Popovici	5/26/21	Closed new submittal
RA-3	Compare C63.4 to CISPR 16-1-4	Horia Popovici	5/26/21	Closed new submittal
RA-4	Compare C63.4 to CISPR 32	Nate Potts	5/26/21	Closed
RA-5	Compare C63.5 to CISPR 16-1-6	Nate Potts	5/26/21	Closed
RA-6	Compare C63.5 to SAE ARP 958 Rev D (RDL) Compare C63.5 to SAE ARP 958 Rev D (DK)	R. Lombardi Doug Kramer	5/26/21	Closed
RA-7	Compare C63.5 to CISPR 16-1-4	Doug Kramer	5/26/21	Closed
RA-8	Compare C63.9 to IEC 61000-4-39 & IEC 61000-4-3	Jeff Evans	5/26/21	Closed Review the next draft of C63.9
RA-9	Compare C63.15 to IEC 61000-4-x	Don Heirman	5/26/21	Closed Subject to multiple people involved based on C63.15
RA-10	Compare C63.15 to CISPR 35	Ghery Pettit	5/26/21	Closed received submission
RA-11	Compare C63.16 to IEC 61000-4-2	Mike Cibulka	5/26/21	Closed
RA-12	Compare C63.16 to ISO 10605 (Automotive ESD)	Rich Worley R. Lombardi	5/26/21	Closed
RA-13	Compare C63.16 to SAE J1113-xx	R. Lombardi	5/26/21	Closed
RA-14	Compare C63.23 to CISPR 16-4-2 <i>(Record that if all the measurement uncertainty terms in the test procedure are not in CISPR 16-4-2, no MU can be calculated and hence MU does not apply, i.e. Ucispr cannot be fully computed to come up with the MU)</i>	Bob DeLisi	5/26/21	Closed Sent 2/2018
RA-15	Compare C63.5 to CISPR 16-1-6 Compare C63.23 to CISPR 16-1-4	Nate Potts Doug Kramer	5/26/21	Closed Appears to be a duplicate
RA-16	Compare C63.24 draft to IEEE 473	Don Heirman Chad Kiger	5/26/21	Closed C63.24 2019 draft C63.24 2020 w/comment resolution
RA-17A	Compare C63.25 (C63.25.2) to CISPR 16-1-4	Doug Kramer	5/26/21	Open New comparison
RA-17B	Compare C63.25.1 to CISPR 16-1-4	Doug Kramer	5/26/21	Open New comparison
RA-17C	Compare C63.25.3 to CISPR 16-1-4	Doug Kramer	5/26/21	Open upcoming new work from CISPR
RA-18	Compare C63.26 to ETSI wireless requirements mmWave possible	Bob DeLisi	5/26/21	Closed
RA-19	Compare C63.27 (2017) to IEC 62657-2	Jason Coder	5/26/21	Closed

RA-20	Compare C63.28 draft to "no equivalent"	Marcus Shellman	5/26/21	Closed No equivalents found
RA-21	Compare C63.29 draft to CISPR 15 Ed. 8; Compare C63.29 draft to CISPR 15 Ed. 9 Runway lighting under IEC 61827	Ernesto Mendoza	5/26/21	Open compare to Ed. 9, text is now stable
RA-22	Compare C63.30 draft to Draft amendments to CISPR 11	Travis Thul Horia & Bob	5/26/21	Open
RA-23	Compare C63.30 draft to CISPR 14-1	Travis Thul Horia & Bob	5/26/21	Open
RA-24	Compare C63.30 draft to CISPR 32	Travis Thul Horia & Bob	5/26/21	Open
RA-25	Compare C63.30 draft to CISPR 12	Travis Thul Horia & Bob	5/26/21	Open
RA-26 through RA-30 awaiting publication of the cited C63 standards before comparisons can be made				
RA-26	Compare C63.31 draft to CISPR 11	Bob DeLisi Abbondante	5/26/21	Open Wait until new version comes out in 6 mos.
RA-27	Compare C63.31 draft to CISPR 14-1 induction cooking	Bob DeLisi Abbondante	5/26/21	Open Wait until new version comes out
RA-28	Compare C63.31 draft to CISPR/B/672/DC (4/14/17)	Bob DeLisi Abbondante	5/26/21	Open Wait until new version comes out
RA-29	Compare C63.31 draft to CISPR/B/700/DC (2/2/18)	Bob DeLisi Abbondante	5/26/21	Open Wait until new version comes out
RA-30	Compare draft C63.2 vs. CISPR 16-1-1	Jens Medler	5/26/21	Open

AI-143: Jerry to add Jens Medler, Travis Thul and Jeff Evans to SC3 invitation list.

AI-144: Jerry to send comparison form to Jens, Bob, Horia & Travis.

There was discussion of coordination to US-NC, Ernesto to advise on possibilities for coordination.

5 Other Old Business: Chair

5.1 Written reports - Written reports of this Subcommittee meeting shall be presented by the Subcommittee Chair at the Main Committee meeting. These reports shall be made using either the [C63 PowerPoint template](#) or the [C63 PowerPoint template wide](#). Prior to the Main Committee meeting, the [SC report](#) and [approved previous SC meeting minutes](#) shall be provided to the projectionist for showing on the screen at the Main meeting. The Presentation and any written report shall also be sent by the Subcommittee Chair to the ASC-C63® [Newsletter editor](#) AI-145: Jerry to change the title header of the two PPT templates.

5.2 Coordination with SC2 for definitions - Before any Working Group draft can be submitted to the Subcommittee for approval, the document must be provided to the SC2 Chair for evaluation and coordination of the definitions used. Since there is no new activity on C63.12, there are no definitions to forward to SC2 as no other standard is being developed in this Subcommittee. **C63.12 will be allowed to expire in 2025.**

5.3 SC3 Process Revision - DeLisi – Ross described the outcome of the webinars organized by Bob and provided the resulting process flowchart to the members. This [flowchart](#) is specifically for Task 4, which relates to publishing C63 content in the standards of other SDOs, such as the IEC. Ross asked the membership to review the [flowchart](#) in advance of detailed discussion at the next meeting. The desire is to create a flowchart and supporting guidance for each Duty of SC2.

6. New Business: Chair -

6.1 No new C63.12 PINS: C63.12 will be allowed to expire in 2025.

6.2 SC3 Scope, Duties and Tasks – Ross walked through a [presentation](#) for discussing potential changes to the SC3 Scope, Duties, and Tasks. The current Scope, Duties and Tasks repeat the same information without providing additional clarity. Options for a revised Scope and Duties were discussed. The Tasks may be removed since they seem to be covered by Duties. Only a Scope and Duties are required by

policy. Ross asked the membership to consider their recommendations for a new Scope and Duties for consideration at the next meeting. A recommendation needs to be complete in advance of the next Main Committee meeting planned for the May 2022 timeframe.

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 8/25/21 Meeting of SC3

AI #	Task	Responsible party	Due Date	Status
AI-102:	Jerry & Ross to look at reports already received and <u>list in a table</u> the conflicts, similarities and identical ones	Jerry Ramie Ross Carlton	Next meeting	CLOSED N/A
AI-126:	Ross to establish a priority of significant items shown in RA-2 & RA-3 .	Ross Carlton	Next meeting	CLOSED N/A
AI-128:	Jeff to place this C63.9 content into the comparison report template and keep the PowerPoint for an annex.	Jeff Evans	Next meeting	CLOSED
AI-141:	Jerry & Ross to meet to edit the two tables to reflect the new workflow. (invite authors & Bob) Consolidate the two tables into one spreadsheet. (Travis, Ernesto, Doug, Horia) Set for 9/23 @ 2:00PM - EDT.	Jerry Ramie Ross Carlton Bob DeLisi Travis Thul E. Mendoza Doug Kramer H. Popovici	9/23/21	CLOSED Meeting set 8/25
AI-142:	Ross to speak with Mr. Hoolihan regarding SC3 involvement in the white paper on wireless coexistence. (Mr. Hoolihan was supportive)	Ross Carlton Dan Hoolihan Jason Coder	Next meeting	CLOSED

8.2 Review of Action Items from this meeting—Secretary - The **Action Items** from this meeting were reviewed and understood.

9. Next meeting: Chair – March 2, 2022 @ 2:00PM-EST (2 hours) (meeting set 12/15)

10. Closing remarks and Adjournment: Chair - The completed consolidated **RA table** will be sent to SC2 when all the reports are received. We may modify the report format. The meeting was adjourned at 3:58PM-EST.

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

Consolidated Action Items from 12/15/21 Meeting of SC3

AI #	Task	Responsible party	Due Date	Status
AI-143:	Jerry to add Jens Medler, Travis Thul and Jeff Evans to SC3 invitation list.	Jerry Ramie	3/2/22	CLOSED added 12/15
AI-144:	Jerry to send comparison form to Jens, Bob, Horia & Travis	Jerry Ramie	3/2/22	CLOSED sent 12/15
AI-145:	Jerry to change the title header of the two PPT templates	Jerry Ramie Jason Coder	3/2/22	CLOSED posted 12/15