Accredited Standards Committee C63®

Electromagnetic Compatibility

Subcommittee 3: International Standardization

C63®

Chair: Ross Carlton	Vice Chair: **VACANT**	Secretary: Jerry Ramie

Webinar
May 26, 2021; 2:00 PM – 4:00 PM - EDT
Draft Meeting Minutes

1. **Call to Order: Chair** - The meeting was called to order at 2:01PM-EDT

    1.1 **Announcements: Chair's remarks –** We had a moment of silence for Herb Mertel and Don Sweeney. We will continue to review the comparison reports and to review 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) Gray highlights were absent

    1.4 **Present membership:** Report any roster errors to the ASC-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
Klinger, Jeff	Member	Compatible Electronics
Kramer, Doug	Member	ETS-Lindgren
Long, Randy	Chair Subcommittee 6	ANAB (ANSI National Accreditation Board)
Mendoza, Ernesto	Member US CISPR Technical Advisor US CISPR/F Technical Advisor	Signify
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)
Thul, Travis	Member	2T2J, Inc.
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
Pettit, Ghery	Liaison Member CISPR/I Chair	Pettit EMC Consulting, LLC

Guests and Observers: (non-voting) Jerry Ramie, Jeff Silberberg, Mike Duncanson,

1.5   Quorum: (50% of roster) constitutes a quorum. (rounding up) (16 roster members / 2 = 8 >> 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 Agenda: Secretary - The Agenda was approved by acclamation.
2.1   Approval of the previous Minutes -   20210303 The previous minutes were shown in a line-by-manner and approved by acclamation.
2.2   Review of the patent slides – The patent slides were shown and all in attendance agreed to abide by the patent policies.

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 <u>one of three</u> 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?

5/3/18	9/19/18	11/29/18	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	**Full Name**
									x	x	x	Carlton, Ross
						x	x	x	x	x	x	Coder, Jason
x	x	x		x		x	x	x	x		x	DeLisi, Bob
x	x			x		x			x			Dilay, Chris
x		x		x			x	x		x		Griffin, Andy
x		x		x		x				x	x	Hare, Ed
x		x		x		x		x	x	x	x	Hoolihan, Dan
x	x	x		x	x	x		x	x	x	x	Klinger, Jeff
x	x	x	x	x				x			x	Kramer, Doug
x		x		x		x		x	x	x	x	Long, Randy
x	x	x	x		x		x	x	x	x	x	Mendoza, Ernesto
x	x	x					x	x	x	x		Popovici, Horia
x			x	x	x	x	x			x	x	Potts, Nate
	x	x	x	x	x		x				a	Samoto, Mits
					x	x	x		x		a	x	Shellman, M.
					a	a	a	a	(red)	(red)	(red)	Thul, Travis
										x	x	Abbondante, Nick
x	x		x									Arnett, Dave
x	x	x	x	x			a	x	x	x	x	Cibulka, Michael
x			x	x			x	x				Fanning, Craig
x	x		x		x	x				x		Hofmann, H.R.
	x			x		x	x					Jones, Steve
x												Mahn, Terry
										x	x	Pettit, Ghery
x	x	x	x	x	x	x	x	x	x	x	x	Ramie, Jerry

Any members at risk? **Travis Thul** is at risk. Travis is assigned to the White House and is excused. (Mr. Samoto is excused due to illness)

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

Any volunteers ready for appointment as our Vice Chair?

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 16-1-6; 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, there will be time to review what is in their report using the comparison report template

Access to ASC-C63® documents available here:https://app.box.com/s/tv8akgqrjncb3qwbbkdyobk6mgpiuwci (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	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 *(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)*	Bob DeLisi	5/26/21	Closed Sent 2/2018
RA-15	Compare C63.5-2017 to CISPR 16-1-6 (2019)	Nate Potts Zhong Chen	5/26/21	Closed
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-17B	Compare C63.25.1 to CISPR 16-1-4	Dan Sigouin	5/26/21	Open New comparison
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
RA-22 through RA-29 awaiting publication of the cited C63 standards before comparisons can be made				
RA-17A	Compare C63.25 (C63.25.2) to CISPR 16-1-4	Dan Sigouin	5/26/21	Open Wait until a version comes out
RA-17C	Compare C63.25.3 to CISPR 16-1-4	Abbondante	5/26/21	Open Wait until a version comes out
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	Compare C63.31 draft to CISPR 11	Bob DeLisi Abbondante	5/26/21	Open Wait until new version comes out
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 Wait until new version comes out

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

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 Evaluation of Horia's reports - Horia - Members of SC3 are to evaluate Horia's reports and pick the top two or three items to move to the IEC. ~~Contained within AI-100B~~ (Review reports to see if they are sufficient and show the need for action to harmonize) The next step would be to ask in the reverse direction, moving from IEC to C63 documents. Discussion: Nick noted we need to present a proposal through the US - National Committee. No agendas are currently being presented in CISPR-A. Submissions are to be in ANSI comment format, including the proposed changes. Plenary meeting in November. Nick suggested we have WG chairs come up with recommendations. Several steps are necessary, who is responsible? Our Scope tells us to make recommendations to the Main Committee. If we recommend to CISPR, it becomes a US position. If we point out differences, it isn't. We have reports showing differences, we could come up with a decision to "push" to CISPR by recommendation. We make recommendations to the Main, which issues direction back down to the Subcommittees to take action. (we will delete this Agenda item for the next meeting) Bob suggested we make a flow-chart for how our SC3 process works. (form a Task Group?) How does work come in? How is it processed? How is the output routed? Bob volunteered to run this task group. Ernesto will assist. Nick, Jason

Coder, Ross to attend. Bob will host the webinars. AI-140: Bob to set up Task Group for formation of a flow chart for our work that meets our General Tasks. (Ernesto, Nick, Jason C., Ross)

6. New Business: Chair -

6.1 Review of draft C63.12 PINS: Chair - new C63.12 PINS C63.12 PowerPoint - Setting real immunity levels may require Use Cases and is not trivial. Ross noted we have "entrenched limits/levels" that won't change soon. Can we just use case-by-case mitigation instead of this document? Do we want to take on a revision of this Standard? Ghery thought we could withdraw the Standard. For immunity, are we a "solution looking for a problem?" Ross asked if there are users for this Standard? Ed stated that it would require significant work, particularly in immunity levels. We will take this up in SC1 and SC5 and gather their reactions. Ross pointed out that SC3 does not have the expertise to do this work. Ed recommended that we hold off on further activity on this document until this is reviewed in SC1 & SC5. Dan H. pointed out that the document will be around until 2025, so there's no hurry to act now. Action will be deferred until the next meeting.
Sales of C63.12 since 2015 = 159 PDF downloads & 8 single sales. **Consensus**: allow the document to expire or retire it now. Dan H pointed out that we don't have another document to replace this, so allowing it to expire seems better. We will delete this item in the next Agenda. Ed moved to allow the document to expire, seconded by Bob. Discussion? Any opposed to the motion? (none) The motion carried by acclamation.
C63.12 will be allowed to expire in 2025.

6.2 Review of draft C63.16 PINS - Input to CISPR - Jeff Silberberg - PINS & Problems PPT - FDA ballot - Discussion: Ross noted that SC3 supports this work. (delete from next Agenda)

7. C63.org website use and updates: Secretary - We normally post our 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 3/3/21 Meeting of SC3

AI #	Task	Responsible party	Due Date	Status
AI-102:	Jerry & Ross to look at reports already received and list in a table the conflicts, similarities and identical ones	Jerry Ramie Ross Carlton	5/26/21	OPEN
AI-125:	Members of SC3 to evaluate Horia's reports and pick the top two or three items to move to the IEC. Contained within AI-100B (Review reports to see if they are sufficient and show the need for action to harmonize) AI: Jerry to place this item AI-125 on the next Agenda	All members	5/26/21	Closed The next step would be to ask in the reverse direction, moving from IEC to C63 documents.
AI-126:	Ross to establish a priority of significant items shown in RA-2 & RA-3.	Ross Carlton	5/26/21	OPEN
AI-127:	Jerry & Ross to pull first two columns in Table 2 into a stand-alone document (finished items only)	Jerry Ramie Ross Carlton	5/26/21	Closed we re-formatted Table 1
AI-128:	Jeff to place this C63.9 content into the comparison report template and keep the PowerPoint for an annex.	Jeff Evans	5/26/21	OPEN
AI-130:	Jerry & Ross will assemble the RA matrix into a single document. See AI-127	Jerry Ramie Ross Carlton	5/26/21	Closed we re-formatted Table 1
AI-137:	Jerry to send credentials and a copy of these Minutes to Marcus & Nick.	Jerry Ramie	5/26/21	Closed Sent 3/3/21

AI-138:	Jerry to ask Jennifer about the number of individual sales of C63.12 since 2015 (159 PDF downloads & 8 single sales)	Jerry Ramie	5/26/21	Closed Sent 3/3/21 Rcvd 3/5/21
AI-139:	Jerry to place item AI-125 on the next Agenda	Jerry Ramie	5/26/21	Closed Added 5/19

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

9. Next meeting: Chair – August 25, 2021 (2:00PM-EDT) (meeting set 5/26)

10. Closing remarks and Adjournment: Chair - The completed consolidated **RA table** will be sent to SC2 when <u>all</u> the reports are received. The Chair thanked the group for their efforts and adjourned the meeting at 3:58PM-EDT.

*** End of Meeting ***

Consolidated Action Items from 5/26/21 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	8/25/21	OPEN
AI-126:	Ross to establish a priority of significant items shown in RA-2 & RA-3.	Ross Carlton	8/25/21	OPEN
AI-128:	Jeff to place this C63.9 content into the comparison report template and keep the PowerPoint for an annex.	Jeff Evans	8/25/21	OPEN
AI-140:	Bob to set up Task Group for formation of a flow chart for our work that meets our General Tasks. (Ernesto, Nick, Jason C., Ross)	Bob DeLisi	8/25/21	OPEN meeting set for 6/22