

Electromagnetic Compatibility

Subcommittee 3: International Standardization

Chair: Ernesto Mendoza Vice Chair: VACANT Secretary: Jerry Ramie

TÜV Rheinland of North America Inc., Boxborough, MA May 7, 2025; 1:00 PM – 2:15 PM - EDT

Approved Minutes

1. Call to Order: Chair - The meeting was called to order at 1:03 PM-EDT

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)

1.4 Present membership: Report any roster errors to the ANSC-C63® Secretary

Subcommittee 3 Membership Roster. See errors, absences and excused absences below: Mr. Mahn has retired and was removed from the roster. Updated 5/6/2025.

Name	Role within Subcommittee 3	Affiliation
Abbondante, Nick	Liaison Member, SC4 Chair US CISPR/A Technical Advisor	Intertek (Primary)
Braxton, Tom	Chair Subcommittee 5	ARRL (Expert)
Coder, Jason	Chair Subcommittee 7	NIST (Primary)
DeLisi, Bob	Chair ANSC-C63	UL LLC (Primary)
Fanning, Craig	Liaison Member CISPR/D Chair US CISPR/D Technical Advisor	Elite Electronic Engineering (Primary)
Griffin, Andy	Chair Subcommittee 1, TC77 TAG Advisor, US CISPR/H Technical Advisor	CISCO Systems (Primary)
Hodes, Harry	Member	Consultant (Individual)
<u>Hoolihan, Dan</u>	Member	Hoolihan EMC Consulting (Individual)
Klinger, Jeff	Member	Individual
Kramer, Doug	Chair Subcommittee 6	Apple Inc. (Technical Expert)
Mendoza, Ernesto	Chair Subcommittee 3 US CISPR Technical Advisor US CISPR/DTA US CISPR/F Technical Advisor US CISPR/TC-77A/DTA US CISPR/TC-77	Signify
Popovici, Horia	Member	Innovation, Science and Economic Development Canada (Alternate)
Potts, Nate	Member	Keysight Technologies (Primary)
Channas, Robert	Chair Subcommittee 2	DOD – Joint Spectrum Center (JSC) (Primary)
	Non-Voting Mem	bers
Arnett, Dave	Liaison Member US CISPR/I Technical Advisor	Garmin

Cibulka, Michael	Liaison Member	MC Lab Services	
Hofmann, H.R. (Bob)	Emeritus Member	Hofmann EMC Engineering	
Jones, Steve	Emeritus Member		
Pettit, Ghery	Liaison Member	Pettit EMC Consulting, LLC	
_	CISPR/I Chair		

Guests and Observers: (non-voting) Jerry Ramie, Ken Gjerde, Steve Anderson, Vignesh Rajamani, Aurelian Bria, Janet O'Neil, Henry Benitez, Bob Mitchell, David Schaefer, Victor Kuczynski, Grace Lin, Richard Decker, Art Wall

- 1.5 Quorum: (50% of roster) constitutes a quorum. (rounding up) (14 roster members / 2 = 7 >> 7 (therefore <u>7 people</u> 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 <u>Consent Agenda</u> (includes <u>Agenda</u> & <u>previous Minutes</u>): Secretary The consent agenda was approved by acclamation. (<u>Approved Previous Minutes</u>)
- **2.1** Review of the <u>patent slides</u> The patent slides were reviewed and all agreed to abide by the policies shown.
- 3. Review of <u>Subcommittee Membership</u>, 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?

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	10/3/23	5/15/24	10/2/24	Full Name
Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Χ	Х	Abbondante, Nick
									X	Х	Х	Braxton, Tom
Χ	Х	Χ	Х		Х	X	Х	X	X	X		Coder, Jason
X	Х	Χ	Х	Χ	Х	Х	Χ	Х	Χ	Χ	Х	DeLisi, Bob
	Х	Х	Х	Х	Х	Х		Х	Χ		Х	Fanning, Craig
	Х	Х		Х	Х	Х	X		Х		Х	Griffin, Andy
											Х	Hodes, Harry
X	Х	Χ	Х	Х	Х	Х	Χ	Χ		Χ	Х	Hoolihan, Dan
				Х	Х	Х	Χ	Х	Х	Х		Klinger, Jeff
X	Х		Х	Х	Х	Х	Х	Х	Х		Х	Kramer, Doug
X	Х	а	Х	Χ	а	Χ	а	Χ	Х	Χ	Х	Mendoza, Ernesto
	Х	а	Х	Χ	Х		Х			Χ		Popovici, Horia
X	Х	Х	Х		Х	Х		Х	Х		Х	Potts, Nate
X		Х			Х		Х	Х			Х	Channas, Robert
			Х								Х	Arnett, Dave
X	Х	Χ		Χ				Χ			Х	Cibulka, Michael
	Х		Х	Х			Х					Hofmann, H.R.
	Х	Х		Х	Х	Х		Х				Jones, Steve
												Mahn, Terry
X	Х		а	Х	Х		Х		Х			Pettit, Ghery
X	Х	Х	Х	Χ	Х		Х	Χ	X	Х	Х	Ramie, Jerry

Any members at risk? None are at risk.

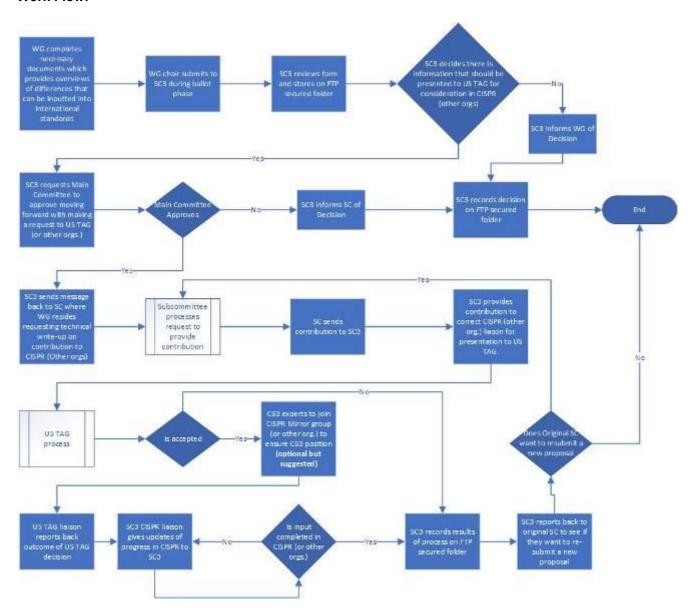
3.2 Consideration of new members? Application for C63[®] Subcommittee Membership

Dave Schaefer was elected SC8 Chair today. Al-167: Jerry to add Dave Schaefer to the SC3 Membership roster and SC8 Membership roster.

4. Review of Scope, Duties and Membership - Chair (Spring Meeting only) Scope

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

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 05/06/2025

Subcommittee 3 Membership Roster

Name	Role within Subcommittee 3	Affiliation
Abbondante, Nicholas	Liaison Member, SC4 Chair	Intertek (Primary)
	US CISPR/A Technical Advisor	
Braxton, Tom	Chair Subcommittee 5	ARRL (Expert)
Coder, Jason	Chair Subcommittee 7	NIST (Primary)
<u>DeLisi, Bob</u>	Chair ANSC-C63®	UL LLC (Primary)
Fanning, Craig	Liaison Member CISPR/D Chair US CISPR/D Technical Advisor	Elite Electronic Engineering (Primary)
Griffin, Andy	Chair Subcommittee 1, TC77 TAG Advisor, US CISPR/H Technical Advisor	CISCO Systems (Primary)
Hodes, Harry	Member	Consultant (Individual)
<u>Hoolihan, Dan</u>	Member	Hoolihan EMC Consulting (Individual)
Klinger, Jeff	Member	Individual
Kramer, Doug	Chair Subcommittee 6	Apple Inc. (Technical Expert)
Mendoza, Ernesto	Vice Chair Subcommittee 3 US CISPR Technical Advisor US CISPR/DTA US CISPR/F Technical Advisor US CISPR/TC-77A/DTA	Signify

	US CISPR/TC-77	
Popovici, Horia	Member	Innovation, Science and Economic Development Canada (Alternate)
Potts, Nate	Member	Keysight Technologies (Primary)
Channas, Robert	Chair Subcommittee 2	DOD – Joint Spectrum Center (JSC) (Primary)
	Non-Voting Members	
Arnett, Dave	Liaison Member US CISPR/I Technical Advisor	Garmin
Cibulka, Michael	Liaison Member	MC Lab Services
Hofmann, H.R. (Bob)	Emeritus Member	Hofmann EMC Engineering
Jones, Steve	Emeritus Member	
Pettit, Ghery	Liaison Member CISPR/I Chair	Pettit EMC Consulting, LLC

Motion to approve Scope, Duties and Membership? - Craig Fanning moved, seconded by Andy Griffin, to accept the Scope, Duties and Membership of SC3. No discussion. No objections. The Scope, Duties and Membership were approved.

5. 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®			Status		
Document	sc	Subject	Document	Document Harmonization Goal	
C63.16	SC5	ESD Guide	IEC 61000-4-2	* Proposed Annex H is C63.16-2016 Clause 7 * Proposed Annex I subclause I.2 contains material from the fourth paragraph of C63.16-2016 Clause 9 and an excerpt from Figure 11. * Proposed Annex I subclause I.3 is C63.16-2016 subclause 6.4.5.2. * Proposed Annex I subclause I.4 is adapted from C63.16-2016 Annex A and includes Table A.2 and Table A.3.	Rejected by TC77 by 1/24/23
C63.9	SC5	High-field Radiated Immunity	IEC 61000-4-3	Smaller UFA	SC5 has not recommended C63.9 for harmonization with IEC 61000- 4-3
C63.29	SC4	High- power dimmers	CISPR-15	proposal in summary slides this time; recognized US practice; Canada also has two classes of products (A&B)	Ernesto will update after Oct.

6. Other Old Business: Chair

6.1 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 wide. Prior to the SC3 meeting, the SC report shall be provided to the projectionist for showing on the screen at the SC3 meeting.

- **6.2 Liaison needs** Identify needs and potential candidates for liaisons to facilitate harmonization projects. Jason Coder proposed a liaison to ETSI for coexistence and unlicensed personal communication services. (C63.17 & C63.27) Did we take this up at the <u>SC7 meeting</u> last time? Jason noted it would be "nice" but we don't have a candidate.
 - **6.3 CISPR Reports Chair** see Ernesto Mendoza's <u>report</u>.

C63®

American National Standards Committee C63 - EMC

C63 SC3 International

Ernesto Mendoza May 2025

Henry Benitez suggested a closer relationship with SACCom in the IEEE-EMC Society. (mostly US-based members) Nick noted that WG chairs used to produce reports for us. He asked which stakeholders are present. Are they members of the National Committee? Ernesto noted that we are not replacing the National Committees. Bob agreed with Nick and noted that the SC Chairs are the stakeholders here. We may need to filter who's reporting on what. We don't need to know everything going on in CISPR, just the relevant efforts. Horia questioned why CISPR D (automotive) was on the list, since we don't address that topic. AI-168: Jerry to add Bob Mitchell and Dave Schaefer to the SC3 webex invitation list.

Dave Arnett discussed CISPR/I efforts in his report.







Andy Griffin, Cisco Systems, May 2025

	61000-6-3 (FDIS)
Power line	AC Power line emission requirements added below 150 kHz (9 kHz to 150 kHz). Most devices will pass
Magnetic Limits	For WPT / Plasma devices (implementing CISPR 14-1) limits. CISPR 11 (informative limits for large devices)
Radio	Requires testing with RF transmitters active
Transformation	Improvements in the model for the transformation 3 m to 10 m to 30 m.

Limits between 6 GHz and 40 GHz Class B limits Limit Derivation using CISPR TR 16-4-4 Limit Derivation using CISPR TR 16-4-4

	61000-6-8 Work Started
Power line	AC Power line emission added below 150 kHz (9 kHz to 150 kHz). Will implement JWG TC77/CISPR H
Magnetic Limits	To be discussed
Radio	Will requires testing with RF transmitters active
	61000-6-4
_	No new work started

CISPR-4-4 Work Started				
Model	New version has published. Model has changed a lot.			

Nick gave a verbal report on CISPR/A.

7. New Business: Chair -

- **7.1 New harmonization projects –** Discuss new harmonization projects for documents under development by the Subcommittees. See Table 1 above.
 - 7.11 New Harmonization Project open see above (C63.29) New version started.
 - 7.2 Officer Appointment Chair We need a Vice Chair, appointed by the Chair. Candidates?

- **8.** <u>C63.org</u> website use and updates: Secretary We normally post documents to the <u>SC3</u> <u>protected area</u>. If any SC or WG needs help with this posting, a Technical Secretary is available to assist.
- 9. Review of the Action Items: Secretary
 - 9.1 Review of Action Items from previous meeting:

Consolidated Action Items from 10/02/24 Meeting of SC3

Al #	Task	Responsible party	Due Date	Status
AI-161:	Ross to write to the liaisons to make them aware of SC3 efforts.	Ross Carlton E. Mendoza	Next meeting	Closed
AI-164:	Ernesto to prepare a three-paragraph letter of new work for circulation to SC3 Members.	E. Mendoza	Next meeting	Open
AI-166:	Jerry to post the new links above provided by Ernesto	J. Ramie	Next meeting	Closed Links sent to Shannon for posting 10/7

- **9.2 Review of Action Items from this meeting—Secretary** Two new Action Items were reviewed.
- 10. Next meeting: Chair Week of Oct. 5 on West Coast
- **11. Closing remarks and Adjournment: Chair -** The Chair thanked the presenters and attendees and adjourned the meeting at 2:38 PM-EDT

Consolidated Action Items from 5/7/25 Meeting of SC3

Al #	Task	Responsible party	Due Date	Status
AI-164:	Ernesto to prepare a three-paragraph letter of new work for circulation to SC3 Members.	E. Mendoza	Next meeting	Open
AI-167:	Jerry to add Dave Schaefer to the SC3 Membership roster and SC8 Membership roster	Jerry Ramie	Next meeting	Closed added 5/10
AI-168:	Jerry to add Bob Mitchell and Dave Schaefer to the SC3 webex invitation list	Jerry Ramie	Next meeting	Closed added 5/10