



American National Standards Committee C63®

Electromagnetic Compatibility

Subcommittee 7: Spectrum Etiquette

Chair: Jason Coder

Vice Chair: OPEN

Secretary: Jeff Evans

TÜV Rheinland of North America Inc.,
Boxborough, MA
May 7, 2025; 2:45 PM – 4:30 PM EST

Approved Minutes

1. **Call to Order - Chair** - The meeting was called to order at 2:50PM-EDT
 - 1.1 **Announcements - Chair** - A replacement Secretary, Jerry Ramie, will be taking the minutes today.
 - 1.2 **Meeting logistics announcements - Chair: Restrooms, etc.**
 - 1.3 **Introductions - Secretary:** (note attendees, absences, excused absences & errors below) Report any roster errors to the ANSC-C63® Secretary

Subcommittee 7 Membership Roster We will leave the Vice Chair open. AI-31: Jerry to send info on Individual Membership to Omar (same as Corporate) with fee schedule <mailto:omar@inovectrum.com>

Name	Role within SC 7	Affiliation
<u>Al-Kalaa, Omar</u>	<u>Vice Chair</u>	<u>FDA (Expert)</u>
<u>Case, Dave</u>	Member	Consultant
<u>Coder, Jason</u>	Chair	NIST (Primary Rep)
<u>DeLisi, Bob</u>	Member	UL LLC (Primary Rep)
<u>Evans, Jeff</u> (non-voting)	Secretary	Consultant
<u>Hoolihan, Dan</u>	Member	Hoolihan EMC Consulting (Individual)
<u>Jankovics, Richard</u>	<u>Member</u>	<u>UL Solutions (Expert)</u>
<u>Rajamani, Vignesh</u>	Member	Rohde & Schwarz USA
<u>Refai, Hazem</u>	Observer	University of Oklahoma
<u>Rison, Justin</u>	Member	FCC Lab (FCC Alternate Rep)
<u>Salem, Pelin</u>	Member	Cisco Systems, Inc.
<u>Schaefer, Dave</u>	Member	Element Materials Tech. (Primary)
<u>Shumakov, Denys</u>	Member	ISED - Canada (Expert)

Guests and Observers: (non-voting): Jeff Silberberg, Yao Ma, Ken Gjerde, Megan McConnell, Tom Braxton, Susanna Mosleh, Omar Al-Kalaa, Dusmantha Tennakoon, Randy Long, Henry Benitez, Andy Griffin, Nick Abbondante, Aurelian Bria, Ernesto Mendoza, Bill Graff, Art Wall, Richard Decker, Grace Lin, David Chamberlain, Craig Fanning, Bob Mitchell

- 1.4 **Quorum: (roster - abstentions) / 2 (rounding up) constitutes a quorum.** (Example: 10 roster members / 2 = 5 >> rounding up = 5 (therefore 7 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 and Previous Minutes) **Secretary** - The Consent Agenda was approved by acclamation. (Approved Previous Minutes)

2.1 **Review of the [patent slides](#)** - Secretary - The patent slides were shown and all agreed to the policies presented.

3. **Review of [Subcommittee Membership](#): Chair - Report any errors to the ASC-C63® Secretary**

3.1 **Review of Membership Guidelines** – Any members at risk?

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: (insert member attendance log) Any **errors** in the log?

Name	5/18/21	9/21/21	2/14/22	5/18/22	11/9/22	5/11/23	10/4/23	5/16/24	10/02/24
Mohamad Al-Kalaa	X	X	X	X	X	X	X	A	X
Case, Dave	X	X	X	X	X			A	X
Coder, Jason	X	X	X	X	X	X	X	X	X
DeLisi, Bob		X	X	X	X	X	X	X	X
Evans, Jeff									
Hoolihan, Dan		X	X	X	X	X		X	X
Jankovics, Rich									
Rajamani, Vignesh								X	X
Refai, Hazem		X	X	X	X	X			
Rison, Justin								X	X
Salem, Pelin				X	X			A	X
Schaefer, Dave								X	X
Shumakov, Denys									

Any members at risk? These members are at risk: [Hazem Refai](#) **AI-32:** Jerry to remove Mr. Refai from the SC7 roster.

3.2 **Consideration of new members? [Application for C63® Subcommittee Membership](#)** Jeff Silberberg submitted his [application](#) and [CV/resume](#) for membership. Dan Hoolihan moved, seconded by Bob DeLisi, to accept the application. No objections. His membership application was approved. **AI-33:** Jerry to add Jeff Silberberg to the SC7 roster & Webex invitation list.

4. **Approval of [Scope](#): Chair - (Spring Meeting Only) (Report approval or any changes to the Main Committee)**

Scope: Subcommittee 7 develops standards addressing spectrum etiquettes, wireless coexistence, and related technical fields to provide new or amended measurement techniques to support efficient spectrum utilization. This scope includes areas related to coordinated or uncoordinated spectrum sharing schemes and dynamic spectrum access.

Duties: C63.17 and C63.27

Roster: see above

Any changes required? (None) The Scope, Duties and Roster were **approved**.

Dan Hoolihan moved, seconded by Vignesh to accept Michael Ferrer as a Member. No discussion. No objections. Mr. Ferrer was accepted for Membership. **AI-34:** Jerry to add Mr. Ferrer to the SC7 roster and Webex invitation list.

4.1 Election of Officers (as required) The Chair's second term expires end of 2025.

5. Working Group reports [More information about each standard](#) is available on the [Standards Status Matrix page](#) of the [C63® web page](#). This information will be reviewed for accuracy at each Subcommittee meeting. The **WG reports** shall be made using either the [C63 PowerPoint template](#) or the [C63 PowerPoint template wide](#). Jason submitted the [Working Group report](#) for all these groups.

5.1 C63.17 - Unlicensed Personal Communications Service (PCS) Devices - Chair ([insert link to WG report](#)) [Verify accuracy of document status matrix content and report any errors to the ASC-C63® Secretary.](#)

C63.17-2020 Learn more	Unlicensed Personal Communications Service (PCS) Devices	SC 7	Berger, Stephen J. Coder	C63.17 PINS	Reaffirmed 2020.
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C63.17: C63.17-2013 Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices

Contact: [Berger, Stephen](#) [Jason Coder](#) (~~Former Working Group Chair~~)

Scope: Revision of IEEE Std C63.17-1998. Specific test procedures are established for verifying the compliance of unlicensed personal communications services (UPCS) devices with applicable regulatory requirements regarding radio-frequency (RF) emission levels and spectrum access procedures.

Status: Reaffirmed 2020.

Purchase: [IEEE Store](#). To purchase individual standards, go to the IEEE store and search on the standard number. **AI-35:** Jerry to edit C63.17 Status Matrix content as shown above

Is this information correct? (No) ([repeat this verification for all Standards covered by this Subcommittee](#))

5.2 C63.27 – Evaluation of Wireless Coexistence - Coder ([insert link to WG report](#)) [Verify accuracy of document status matrix content and report any errors to the ASC-C63® Secretary.](#)

C63.27-2021 2022 Learn more	Evaluation of Wireless Coexistence	SC 7	Coder, Jason	C63.27 PINS	Published 5/17/22. Working Group disbanded.
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C63.27-2022: American National Standard for Evaluation of Wireless Coexistence

Contact: [Coder, Jason](#) (Working Group Chair)

Scope: This revision of the C63.27 standard provides improvements to the evaluation procedure and supporting test methods for wireless coexistence and evaluation of key performance indicators (KPI). The revised standard will provide evaluation procedures, test methods and other guidance necessary for performing the evaluation.

Status: Published 5/17/22. Current. Working Group disbanded.

Purchase: [Search IEEE Standards](#) - Enter C63 Standard number then Search (Enter) - Click on the version you want - Click on Purchase **AI-36:** Jerry to edit C63.27 Status Matrix content as shown above.

Is this information correct? (No)

5.3 C63.27 – Evaluation of Wireless Coexistence Corrigendum 1 ([insert link to WG report](#)) Verify accuracy of document [status matrix](#) content and report any errors to the ASC-C63® Secretary.

C63.27-202X-Corr1	Evaluation of Wireless Coexistence – Corrigendum 1	SC 7	Liu, Yongkang	C63.27-202x Corr1 PINS	Under development
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C63.27-202X Corr1: American National Standard for Evaluation of Wireless Coexistence - Corrigendum 1

Scope: This corrigendum will correct an error in Annex A of C63.27-2021 that appears to limit specifications of the unintended signal. It will also correct wording in Annex A that leads some readers to believe that other parts of the standard can be disregarded. Current recommendations require the user to generate a custom signal that can be overly burdensome. This corrigendum will make clear what the recommendations are, including the use of existing test signals standardized by others (e.g., 3GPP)

Status: Draft is being written.

Purchase: Not yet available for sale.

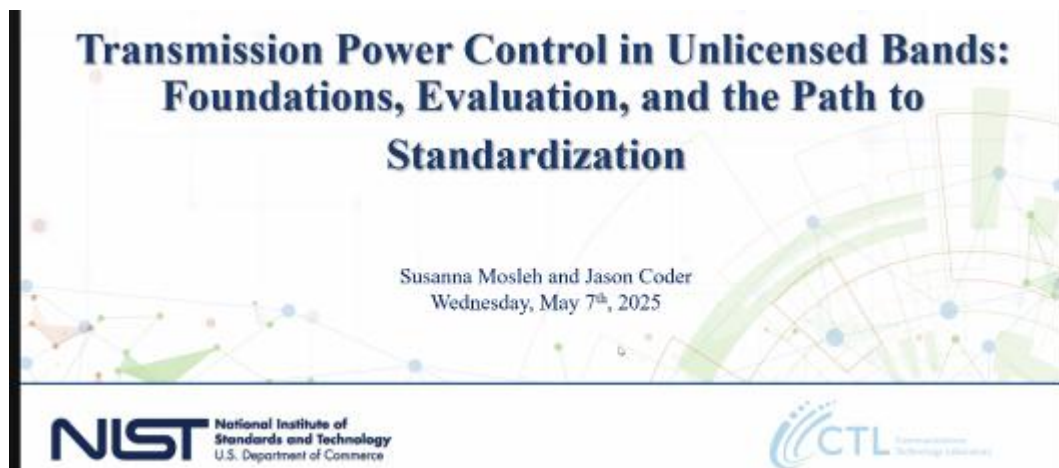
Is this information correct? (Yes). David Schaefer moved [C63.27-202x Corr1PINS](#) to the Main for review and to form a ballot group. Vignesh seconded. No discussion. No objections. Jason will send C63.27 to the Main.

6. Other Old Business: Chair

- 6.1 Written reports** - Written reports of the Subcommittee meeting shall be presented by the Subcommittee Chair at the Main Committee meeting. These reports should be made using the [C63 PowerPoint template wide](#) Prior to the Main Committee meeting, the [WG reports](#) and the [approved previous meeting minutes](#) shall be provided to the projectionist for showing on the projector screen at the meeting. The Presentation and any written reports shall also be sent by the Subcommittee Chair to the ANSC-C63 Secretary.
- 6.2 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.
- 6.3 Coordination with SC3 for harmonization** - Before any Working Group draft can be submitted to the Subcommittee for approval, the document must be provided to the SC3 Chair for evaluation and coordination of any harmonization effort.

7. New Business (Chair):

- 7.1 Discussion of **C63.27 Corrigendum** – Comments received from Subcommittee members and next steps. We approved moving this to the Main committee and forming a balloting group.
- 7.2 Discussion of work on **transmit power control** (TPC) – [Presentation from Dr. Susanna Mosleh](#) and a discussion of next steps (possible PINS). A Transmit power control TPC-PINS was drafted by Jason. A verbal report was given by Mr. Tennakoon. Dr. Mosley showed a [report](#):



ISED (Chamberlain) and NIST (Coder) expressed an interest in pursuing this topic. Justin Rison of the FCC thought it would be helpful for the lab and supports the work. Pelin from Cisco also wanted to participate. R&S also wished to participate. Jason showed a draft PINS:

8. Abstract of Project: Provide a one paragraph description of the standard. The information should clearly indicate what is covered by the standard in order to differentiate it from similar standards or projects on file at ANSI. As required, please note in the scope if this standard is intended to be submitted for consideration as an ISO, IEC or ISO/IEC JTC-1 standard.	This project will develop a new standard for the evaluation of wireless devices that utilize transmit power control as part of their function. The standard will detail measurement methods and procedures that enable evaluation of common transmit power control related functions of wireless devices and demonstrate compliance with governing regulations.
9. Project Need: Provide a brief explanation of the need for the project.	The use of transmit power control algorithms is now mandated in law/regulation for certain frequency bands in some countries. However, there is no standardized measurement method available for manufacturers to use when demonstrating compliance, or for regulatory agencies to reference when ensuring compliance with existing or new regulations.
10. Identify the stakeholders: List the relevant stakeholders, (e.g., telecom, consumer, medical, environmental, etc.) likely to be directly impacted by the standard.	EMC test laboratories, EMC test equipment manufacturers, Accreditation Bodies, EMC calibration laboratories, and authorities associated with ensuring products meet their regulatory emission limits. Also included are manufacturers of equipment subject to the use of this standard.

The draft TPC-PINS was marked up and is available [here](#). (the number C63.36-TPC is available) Bob DeLisi moved, seconded by Vignesh Rajamani to adopt the marked up PINS and submit it to the Main Committee. No discussion. No objections. **The motion carried.**

8. **C63.org website use and updates: Secretary** - We normally post documents to the [SC7 protected area](#). If any SC or WG needs help with this posting, the SC7 Technical Secretary is available to assist.

9. **Review of the Action Items: Secretary** -

9.1 **Review of Action Items from this meeting:** (read Action Items to Members, who must agree that they understand their meaning)

9.2 **Review of Action Items from previous meeting:** (insert consolidated Action Item table from the previous meeting Minutes as shown below)

Consolidated Action Items from 20241002 Meeting of SC7

Action Item #	Subject	Responsible Person(s)	Status	Delivery Date	Comments
A/I 26	Jerry to add Mr. Jankovics and other corrections to the SC7 roster (Jerry replaces Allen)	Jerry Ramie	Closed	Next Meeting	Added 10/10/24
AI-27:	Jason Coder to supply additional text and the PINS for C63.27-202x (Corr1) for Jerry to post on the	Jerry Ramie Jason Coder	Closed	Next Meeting	Need "Learn more" text

	Status of Standards matrix. (copy PINS to Jennifer)				PINS sent by Bob to Jennifer
AI-28:	Jerry to add a new C63.27 Corrigendum roster to bottom of the SC7 page and populate it with persons shown in SC7 Fall report (email addresses coming from Jason)	Jerry Ramie	Closed	Next Meeting	Added 10/10/24
AI-29:	Jason to develop a PINS to address TPC test methods	Jason Coder	Closed	Next Meeting	
AI-30:	Jason to present draft PINS for revision of C63.27 to SC7 at the Spring 2025 meeting	Jason Coder	Open	Next Meeting	For the revision

10. Next meeting date/location: **Week of Oct. 5 on West Coast**

11. Closing remarks and Adjournment: The Chair thanked the group for attending and contributing and adjourned the meeting at 4:22PM-EDT.

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

Consolidated Action Items from 20250507 Meeting of SC7

Action Item #	Subject	Responsible Person(s)	Status	Delivery Date	Comments
AI-30:	Jason to present draft PINS for revision of C63.27 to SC7 at the Spring 2025 meeting	Jason Coder	Open	Next meeting	For the revision
AI-31:	Jerry to send info on Individual Membership to Omar (same as Corporate) with fee schedule mailto:omar@inovectrum.com	Jerry Ramie	Closed	Next meeting	Sent 5/13
AI-32:	Jerry to remove Mr. Refai from the SC7 roster	Jerry Ramie	Closed	Next meeting	Removed 5/9
AI-33:	Jerry to add Jeff Silberberg to the SC7 roster & Webex invitation list	Jerry Ramie	Closed	Next meeting	Added 5/9
AI-34:	Jerry to add Mr. Ferrer to the SC7 roster and Webex invitation list	Jerry Ramie	Closed	Next meeting	Added 5/9
AI-35:	Jerry to edit C63.17 Status Matrix content as shown above	Jerry Ramie	Closed	Next meeting	Edited 5/13
AI-36:	Jerry to edit C63.27 Status Matrix content as shown above	Jerry Ramie	Closed	Next meeting	Edited 5/13