

Electromagnetic Compatibility

Subcommittee 7: Spectrum Etiquette

Chair: Jason Coder

Vice Chair: Omar Al-Kalaa

Secretary: Jerry Ramie

Qualcomm, San Diego, CA
October 8, 2025; 1:00 PM – 2:30 PM PDT
Hybrid meeting

Approved Minutes

1. **Call to Order - Chair** - The meeting was called to order by Omar Al-Kalaa at 1:00 PM-PDT.
 - 1.1 **Announcements - Chair** - Our new Secretary, Jerry Ramie, will be taking the minutes today.
 - 1.2 **Meeting logistics announcements - Chair:** **Restrooms, etc. end of the hall on the right**
 - 1.3 **Introductions - Secretary:** (note attendees, absences, **excused absences** & **errors** below) Report any roster errors to the ANSC-C63[®] Secretary

Subcommittee 7 Membership Roster

Name	Role within SC 7	Affiliation
<u>Al-Kalaa, Omar</u>	Vice Chair	Inovectrum
<u>Case, Dave</u>	Member	Consultant
<u>Coder, Jason</u>	Chair	NIST (Primary Rep)
<u>DeLisi, Bob</u>	Member	UL LLC (Primary Rep)
<u>Ferrer, Michael</u>	Member	UL LLC (Expert)
<u>Hoolihan, Dan</u>	Member	Hoolihan EMC Consulting (Individual)
<u>Rajamani, Vignesh</u>	Member	Rohde & Schwarz USA
<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)
<u>Silberberg, Jeff</u>	Member	Member Emeritus

Guests and Observers: (non-voting): Jerry Ramie, John Forrester, Richard Reitz, Ken Gjerde, Conrad Trautmann, Tom Braxton, Hemish Parikh, David Chamberlain, Jason Nixon, Henry Benitez, Andy Griffin, Bill Graff, Ernesto Mendoza, Janet O'Neil, Randy Long,

1.4 **Quorum: (roster - abstentions) / 2 (rounding up) constitutes a quorum.** (Example: 12 roster members / 2 = 6 >> rounding up = 6 (therefore **6 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 ANSC-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	5/18/2021	9/21/2021	2/14/2022	5/18/2022	11/9/2022	5/11/2023	10/4/2023	5/16/2024	10/2/2024	5/7/2025
Mohamad Al-Kalaa	X	X	X	X	X	X	X	A	X	X
Case, Dave	X	X	X	X	X			A	X	
Coder, Jason	X	X	X	X	X	X	X	X	X	X
DeLisi, Bob		X	X	X	X	X	X	X	X	X
Ferrer, Michael										
Hoolihan, Dan		X	X	X	X	X		X	X	X
Rajamani, Vignesh								X	X	X
Rison, Justin								X	X	X
Salem, Pelin				X	X			A	X	X
Schaefer, Dave								X	X	X
Shumakov, Denys										X
Silberberg, Jeff										X

Any members at risk? These members are at risk: None

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

Jeff Silberberg was approved at the last meeting 5/7/2025

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.~~

~~**Any changes required?** (Approved or Changed to read:)~~

~~**4.1 Election of Officers** (as required) The Chair’s second term expires end of 2025. Jason cannot continue. Any volunteers for Chair? We need a motion to affirm Omar Al-Kalaa as the Chair:~~

~~**MOTION:** Vignesh has nominated Omar Al-Kalaa as our new Chair, seconded by Jeff S. - any discussion? No objections / no abstentions, Omar Al-Kalaa was approved as the **new Chair of SC7** for 3 years starting 1/1/2026.~~

5. Working Group reports More information about each standard is available on the [Standards Status Matrix page](#) of the [C63® web site](#). 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](#).

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	Coder, Jason	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: [Coder, Jason](#)

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.

Is this information correct? (Yes) (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.

C63.27-2022 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

Is this information correct? (Yes)

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). **Where is IEEE with this corrigendum?** (re-sent Oct. 10 to Jennifer)

5.4 C63.36-TPC – Evaluation of Transmit Power Control in Wireless Devices ([insert link to WG report](#)) [Verify accuracy of document status matrix content and report any errors](#) to the ASC-C63[®] Secretary.

C63.36-TPC Learn more	American National Standard for Evaluation of Transmit Power Control in Wireless Devices	SC 7	Coder, Jason	C63.36-TPC PINS	New Standard, draft is being written
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C63.36-TPC: American National Standard for Evaluation of Transmit Power Control in Wireless Devices

Scope: This project will develop a new standard for the evaluation of wireless devices that use 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.

Status: Draft is being written.

Purchase: Not yet available for sale.

Is this information correct? (Yes). We are ready for our first meeting. David Chamberlain noted that ISED is interested in progress on this Standard. They can provide any needed testing. They will decide on a meeting date. Omar will issue a call for participants in the SC7 report to the Main Committee.

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 ASC-
- 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.
- 6.4 Updates on Action Items** - All were closed

7. New Business (Chair):

7.1 Update on status of [C63.27-Corrigendum](#) - Final draft sent to Jennifer 10/10/2025

7.2 Discuss new version of C63.27 - needs a new PINS. The Scope was expanded. Emerging wireless technologies need to address coexistence. FDA has no assigned representatives yet, they should be involved. David had a list of minor items to include in the PINS.

7.3 Call for participation for C63.36 - TPC - a Call was issued to the attendees present. Any interest? [David Chamberlain](#) volunteered to participate; others? Bob DeLisi mentioned that someone from UL will participate. Pelin wanted to learn more about this. John F. noted that Qualcomm would

like to participate. **AI-37:** Jerry to send an email from Omar to SC4 & SC7 soliciting for members in the C63.36-TPC Working Group. **AI-38:** Omar will draft the email solicitation for Jerry to send out.

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) **AI-39:** Omar to set a meeting date for the kick-off of C63.36TPC **AI-40:** Jason will draft a PINS for the new revision of C63.27

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 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	Closed	Next meeting	The revision was tabled at the last meeting
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

10. Next meeting date/location: Week of May 4 @ NIST / Boulder, CO

11. Closing remarks and Adjournment: Omar thanked the group for their participation and adjourned the meeting at 1:43 PM-PDT.

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

Consolidated Action Items from 20251008 Meeting of SC7

Action Item #	Subject	Responsible Person(s)	Status	Delivery Date	Comments
AI-37:	Jerry to send an email from Omar to SC4 & SC7 soliciting for members in the C63.36-TPC Working Group.	Jerry Ramie	Open	Next meeting	
AI-38:	Omar will draft the email solicitation for Jerry to send out.	Omar Al-Kalaa	Open	Next meeting	
AI-39:	Omar to set a meeting date for the kick-off of C63.36TPC	Omar Al-Kalaa	Open	Next meeting	
AI-40:	Jason will draft a PINS for the new revision of C63.27	Jason Coder	Open	Next meeting	