

C63[®] American National Standards Committee

C63[®] on Electromagnetic Compatibility

Oct. 9, 2025 – 8:30 AM to 3:30 PM - PDT

Qualcomm
San Diego, CA

Chair: [Bob DeLisi](#)

Vice-Chair: [Zhong Chen](#)

Secretary: [Jerry Ramie](#)

Approved Minutes

1. Call to Order - Chair - The meeting was called to order at 8:38 AM-PDT.

1.1. Introductions (roll call) - Secretary (Revised: 09/26/2025) ([Absent](#))

MEMBER	PRIMARY	ALTERNATE
A2LA (American Assoc. for Laboratory Accreditation)	McConnell, Megan	
ACIL (American Council of Independent Laboratories)	Reitz, Richard	Koster, Steven
ANAB (ANSI National Accreditation Board)	Long, Randy	Quan, Ross
Apple, Inc.	Kiemel, Greg	Cuevas, Jose
ARRL – The National Assoc. for Amateur Radio	Trautmann, Conrad	
CISCO Systems	Griffin, Andy	
DISA		
Element Materials Technology	Molaei, Nima	
Elite Electronic Engineering Inc.	Fanning, Craig	Cardenas, Javier
Ericsson AB	Skoglund, Kenth	
ETS – Lindgren	Chen, Zhong	Vacant
Federal Communications Commission		
Food and Drug Administration	Vacant	Vacant
Google, LLC		
IEEE – EMC Society	Norgard, John	Benitez, Henry
Information Technology Industry Council		
Innovation, Science & Economic Development Canada	Chamberlain, David	
Intertek	Abbondante, Nick	Vacant
Keysight Technologies	Potts, Nate	Vacant
Motorola Solutions, Inc.	Zakharia, Deanna	
National Institute of Standards & Technology		Vacant
Qualcomm Technologies, Inc.	Forrester, John	
Rohde & Schwarz	Rajamani, Vignesh	
TCB Council, Inc.	Graff, William	
TIMCO Engineering Inc., an IIA Company		
TÜV Rheinland of North America	Mitchell, Robert	Decker, Richard
TÜV SÜD America, Inc.	Elliott, William (Mac)	Vacant

UL LLC Solutions	DeLisi, Bob	Michael Antola
Individual Members:		
INDIVIDUAL Member	Hoolihan, Daniel	None
INDIVIDUAL Member	Lichtig, John	None
INDIVIDUAL Member		None
INDIVIDUAL Member		None
INDIVIDUAL Member		None

Observers: Ken Gjerde, Tom Braxton, Jeff Silberberg, Bill Hurst, Janneth Marcelo, Omar Al-Kaala, Victor Kuczynski, Denys Shumakov

Quorum: 28 organizations + 5 individual members = 32 total. A quorum is 50% (rounding up); which is 16 or more members in attendance. Quorum was achieved with 23 members attending the meeting.

2. Approval of the Agenda

2.1 Approval of Agenda - Chair - Randy Long moved, seconded by Bill Graff to accept the modified Agenda. No objections or abstentions. The modified Agenda was approved.

2.2 Presentation of Patent & Ethics slides – Chair - The patent/ethics slides were read and all Members agreed to the terms shown.

3. Chairman’s Report – Chair - A moment of silence was observed for Jeff Evans. (insert photo)
A report was shown. There was discussion of moving to a different website and replacing our FTP site.
AI-127: Bob will talk to Jennifer about what IEEE Web services are available for us and their cost.
AI-128: Vignesh will look into IEEE web hosting services.

3.1 Review of Membership Guidelines - Members at risk?

Main Committee:

For an Organization or Individual to remain a member of the Main Committee, in-person attendance by the Primary (or Alternate) Representative at Main Committee meetings and voting on procedural votes is required. Failure to attend at least one meeting per year **or** respond to two consecutive remote administrative/procedural votes may place membership at risk. Failure to participate in at least some of the technical document balloting groups indicates a lack of interest in the activities of C63® and may place membership at risk.

MEMBER	20241004	20250508
A2LA (American Assoc. for Laboratory Accreditation)		
ACIL (American Council of Independent Laboratories)	Koster & Reitz	Reitz, Richard
ANAB (ANSI National Accreditation Board)	Quan & Long	Long, Randy
Apple, Inc.	Cuevas & Kimmel	
ARRL – The National Assoc. for Amateur Radio	Anderson, Steve	Anderson, Steve
CISCO Systems	Salem & Griffin	Griffin, Andy
DISA	Shellman	
Element Materials Technology	Molaei, Nima	Schaefer, David
Elite Electronic Engineering Inc.	Cardenas & Fanning	Fanning, Craig
Ericsson AB	Bria, Aurelian	Bria, Aurelian

ETS – Lindgren	Chen, Zhong	
Federal Communications Commission	Tarditi, Alfonso	
Food and Drug Administration	Silberberg, Jeffrey	
Google, LLC		He, George
IEEE – EMC Society	Benitez & Norgard	Benitez, Henry
Information Technology Industry Council	Hirvela, John	
Innovation, Science & Economic Development Canada	Popovici & Nixon	Chamberlain, David
Intertek	Abbondante, Nick	Abbondante, Nick
Keysight Technologies	Potts, Nate	
Motorola Solutions, Inc.	Ho & Zakharia	Zakharia, Deanna
National Institute of Standards & Technology	Coder, Jason	
Qualcomm Technologies, Inc.		Forrester, John
Rohde & Schwarz	Rajamani, Vignesh	Rajamani, Vignesh
TCB Council, Inc.	Harvey & Graff	Graff, William
TIMCO Engineering Inc., an IIA Company	Royer, Tim	
TÜV Rheinland of North America	Mitchell, Robert	Mitchell & Decker
TÜV SÜD America, Inc.	Elliott, William	Elliott, William
UL LLC	Antola & DeLisi	DeLisi, Bob
Individual Members:		
INDIVIDUAL Member (Hoolihan)	Hoolihan, Daniel	Hoolihan, Daniel
INDIVIDUAL Member (Lichtig)		Lichtig, John
INDIVIDUAL Member (Schaefer)		Schaefer, Werner
INDIVIDUAL Member (Zimmerman)	Zimmerman, Dave	Zimmerman, Dave
INDIVIDUAL Member (Hodes)	Hodes, Harry	Hodes, Harry

Members at risk? [None](#) [Qualcomm voted](#) this year and [Google voted](#) in 2025

4. Secretary’s Report – Secretary

4.1 Approval of the Minutes of the last Meeting ([20250508 Main Mins 3.doc](#)) Randy moved, Reitz seconded to approve the previous Minutes. No objections, no abstentions. The previous Minutes were approved by acclamation

4.2 Interpretations received, circulated or posted - ([Electronic motions 2025 3Q](#))

Date	Interpretations received, circulated or posted	Source	Result	Comments
12/15/2023	Received C63.4-2014 Annex F insulating ground plane	B. Hobbs	sent to SC1	open
5/21/2025	Received C63.5-2017 Annex F dipole antenna factors	J. Kim	sent to SC1	open

4.3 Open Interpretation requests - ([Interpretations log 20250521.xls](#)) Open are in red:

Date	Requestor	e-mail address	Project name	SC #	Rec by Sec	Sent to SC	Back fm SC
12/13/2023	Brandon Hobbs	thesmartone057@gmail.com	C63.4 (2014) Annex F Insulating Ground Plane	SC1	12/13/2023	12/15/2023	open
6/27/2024	Mike Antola	Michael.Antola@ul.com	C63.10_2013&2020_CI 11.12.2.5.2.3 Avg w/ <VBW	SC4	6/27/2024	6/27/2024	5/6/2025
7/31/2024	David Zimmerman	dzimmerman@spectrumemc.com	C63.4-2014, Clause 10.2.7 special software	SC1	7/31/2024	7/31/2024	10/4/2024
11/6/2024	Mark Briggs	Mark.Briggs@ul.com	C63.26-2015 Annex I measurement bandwidth	SC4	11/6/2024	11/6/2024	5/6/2025
5/21/2025	Jeong Hwan Kim	jeonghwan.kim@trescal.com	C63.5 (2017) Annex F dipole_antenna_factors	SC1	5/21/2025	5/21/2025	open

4.4 Electronic Motions since last meeting - ([Electronic motions 2025 3Q](#))

Date	Main Committee motion or action	Source	Result	Comments
7/28/2025	Approval of draft C63.27 Corr 1 to form a balloting group	B. DeLisi	Passed 8/2625	Yes=17; Com=0, Neg=0, Abst=7

4.5 Membership - ([Electronic motions 2025 3Q](#))

4.5.1 Membership Changes since last meeting:

Date	Membership changes (Main & SCs)	Source	Result	Comments
5/6/2025	Added N. Johnson to SC4 roster	Abbondante	added 5/6	to SC4 roster only
5/8/2025	Removed S. Sellergren from Public & Private rosters	W. Elliott	removed 5/9	from Main, Public & Private rosters
5/8/2025	Added D. Schaefer & J. Silberberg to SC8 roster	D. Schaefer	added 5/9	to SC8 Leadership & roster
5/8/2025	Removed B. DeLisi from SC8 roster	D. Schaefer	removed 5/9	from SC8 roster only
5/8/2025	Removed S. Berger from C63.19 & C63.33 Working Groups	D. Schaefer	removed 5/9	from SC8 roster only
5/8/2025	Added M. Ferrer to SC7 roster	J.Coder	added 5/9	to SC7 roster only
5/8/2025	Removed H. Refai from SC7 roster	J.Coder	removed 5/9	from SC7 roster only
5/8/2025	Added N. Johnson, A. McDonald & R. Reitz to SC6 roster	R. Long	added 5/9	to SC6 roster only
5/8/2025	Added D. Schaefer to SC2 roster	D. Schaefer	added 5/9	to SC2 roster only
5/8/2025	Added R. Reitz to SC1 roster	A. Griffin	added 5/9	to SC1 roster only
5/9/2025	Added J. Silberberg to SC7 roster	J. Coder	added 5/9	to SC7 roster only
5/22/2025	Received SC App. from Al-Kaala for SC7 & SC8 Membership	O. Al-Kaala	closed 6/12	Unanimous for SC7 & SC8
5/29/2025	Removed K. Zainal from C63.4 roster	A. Griffin	removed 5/29	from C63.4 roster only
6/4/2025	Removed K. Zainal & N. Suryadevara from C63.10.DTS.UNII	Chamberlain	removed 6/4	from C63.10.DTS.UNII roster only
6/5/2025	Received SC App. from A. Escamilla for SC4 Membership	A. Escamilla	closed 7/2	Approved Y=18, N=0, A=1
6/13/2025	Added O. Al-Kaala to SC7 & SC8 rosters	J. Ramie	added 6/13	to SC7 & SC8 rosters only
6/21/2025	Removed George He / Google from all rosters	J. Ramie	removed 6/21	on Main, Pub, Priv, & C63.2 rosters
7/2/2025	Added A. Escamilla (Element Materials) to SC4 roster	J. Ramie	added 7/7	to SC4 roster only
7/3/2025	Added R. Mitchell (TUV Rheinland) to C63.4 roster	J. Ramie	added 7/3	to C63.4 roster only
7/7/2025	Added A. Escamilla (Element Materials) to C63.26 roster	W. Elliott	added 7/7	to C63.26 roster only
7/9/2025	Added Bo Li as Google LLC Alternate rep	W. Wong	added 7/9	to Main, Public & Private rosters
7/21/2025	Replaced ARRL Primary & Alternate w/ Trautmann & Ciervo	S. Anderson	replaced 7/22	on Main, Public & Private rosters
7/22/2025	Removed S. Anderson from C63.29 roster	S. Anderson	removed 7/24	from C63.29 roster only
7/24/2024	Added A. Escamilla & C. Beattie to C63.10.DTS.UNII roster	Chamberlain	added 7/24	to C63.10.DTS.UNII roster only
7/24/2024	Added C. Beattie to C63.10 roster	C. Beattie	added 7/24	to C63.10 roster only
7/24/2024	Removed D. Case from C63.10.DTS.UNII roster	D. Case	removed 7/24	from C63.10.DTS.UNII roster only
7/27/2025	Added A. Escamilla (Element Materials) to SC1 roster	J. O'Neil	added 7/30	to SC1 roster only
8/5/2025	Added A. Escamilla (Element Materials) to 3 Working Groups	J. Ramie	added 8/5	C63.10, C63.10.DTS.UN & C63.26
8/13/2025	Added R. Mitchell (TUV Rheinland) to SC1 roster	J. O'Neil	added 8/13	to SC1 roster only
8/29/2025	Added A. Escamilla & R. McGann to C63.4 roster	A. Griffin	added 8/29	to C63.4 roster only
9/3/2025	Changed Channas, Mendoza & Moore affiliation to DISA	R. Channas	changed 9/3	on Main, Public, Priv & SC2 rosters
9/25/2025	Replaced Qualcomm Alternate with Hemish Parikh	J. Forrester	changed 9/26	on Main, Public & Private rosters

4.5.2 Election of Officers - Bob DeLisi's and Zhong Chen's terms as Chair and Vice Chair end on 12/31/2025. Any nominations. Ernesto nominated, seconded by Randy Long, to extend Bob's term. (Bob left the room) Bob was accepted for a second term. Nick nominated Zhong for a second term as Vice Chair, seconded by Vignesh. No objections, no abstentions. Zhong was accepted for a second term. (3 year terms)

5. Secretariat Report – IEEE – A report was shown.

5.1 - Status of C63® published standards

5.1.1 Fourth Anniversary standards

5.1.2 Eight-years or older standards

5.2 – Status of PINS and PINS-C ([currently posted list](#))

6. Subcommittee reports (Brief written reports to include actions needed by C63®, and items of particular interest during SC meetings). **Note:** A short report from each Subcommittee using either the [C63 PowerPoint template](#) or the [C63 PowerPoint template wide](#). (no password required) **NOTE – EACH COMMITTEE REPORT WILL BE LIMITED TO A MAXIMUM OF 15 MINUTES.**

6.1. SC1: Measurement and Instrumentation - SC1 Chair - The Membership in SC1 was shown. No objections to accepting the roster, no abstentions. The SC1 Membership (with Silberberg added) was approved. **AI-129:** Jerry to circulate two new draft SC1 Interpretations to the Main Committee for approval. (Annex F dipole & Insulation on Ground Plane)

6.2. SC2: Definitions – SC2 Chair - no report (Officers were on furlough)

6.3. SC3: International Standardization – SC3 Chair -

6.4. SC4: Wireless and ISM Equipment Measurements - SC4 Chair -

AI-130: Bob to organize a Steering Committee (& guests) web meeting to discuss a

Standards Roadmap (Style Guide). Nick move to approve the SC4 Membership roster. Bill Koerner will be added by Jerry. No discussion, no objections, no abstentions. The SC4 roster was approved.

- 6.5. **SC5: Immunity testing – SC5 Chair** - C63.15 & C63.24 need meetings to draft their PINS. **AI-131:** Tom & Jerry to set web-meetings to write new C63.15 and C63.24 PINS. Interest was expressed in "resilience" and "functional safety." Tom is working on obtaining a definition for "functional safety."
- 6.6. **SC6: Laboratory Accreditation – SC6 Chair** - Membership, Scope & Duties were shown. The SC6 roster, scope & duties were approved without discussion, objections or abstentions. Mr. Kramer's term as SC6 Chair ends at year-end.
- 6.7. **SC7: Spectrum Etiquette – SC7 Chair** - Omar Al-Kalaa gave the report. Jason Coder's term ends this year. The SC7 Members approved Omar as the next SC7 Chair. Omar was asked to leave the web-meeting. Bob D. asked for discussion. Bob and Jeff S. thought highly of him. His intent was to name Jason as the next Vice Chair. No objection, no abstentions. Mr. Al-Kalaa was approved as the next SC7 Chair.
- 6.8. **SC8: Medical Equipment Testing – SC8 Chair** - The roster, scope and duties are un-changed.

7. New Business

- ~~7.1. TBD after Subcommittee and Steering Committee meetings~~
- ~~7.2. Main Committee Chair position~~
- ~~7.3. Main Committee Vice Chair position~~
- 7.4. **FCC & ISED reports** - The FCC & ISED have given reports at the Main in the past. Approvals were needed. Bob will supply an outline for their use in generating a report. **AI-132:** Randy to send Bob the SC6 draft Agenda as an example of an outline for regulator reports.

***** BREAK *****

8. Other Administrative Matters

- 8.1. **Web Page – Ramie**
 8.1.1 The [Generic Agendas for Subcommittees](#) include a review of the Membership roster, a Quorum check, review of Membership Guidelines, Attendance Log and Members at Risk at each meeting. Spring meeting requires approval of the SC Membership. At each Spring meeting, a review is conducted for all PINS content, the Status Matrix text and the "Learn more" text for each Standard covered by that SC.
- 8.2. **Administrative matters from the Steering Committee** - The roadmap is a new item that will be addressed.

9. Other Business

- 9.1 **Future Seminars and Workshops** – The C63 Wireless Workshop that was deferred this summer will be delivered in Dallas during the first week of August, 2026.
- 9.2 **Newsletter report – Chair** – SC chairs to send summary of activities to the Editor.
- 9.3 **Next meeting – Chair** - **May 4-7, 2026 @ NIST, Boulder, CO** The Fall meeting will be at A2LA in Fredericksburg, MD. (not in the first 2 weeks of November)

10. Old Business

- 10.1 **Action item review on items not covered elsewhere on Agenda** – (as time permits) - **Secretary**

Consolidated Action Items from Main Committee Meeting 5/8/25¹

Action Item #	Subject	Responsible Person	Status	Delivery Date	Comments
AI-116:	Jerry to post the Definitions	Jerry Ramie	Closed	Next	Note sent to

¹ Consolidated (re-numbered) action items are included here for reference, but are not a part of the minutes.

	Process document on the SC2 landing page			meeting	Shannon 2/7; again on 5/7
AI-122:	All SC chairs to send a summary of their activities to the newsletter Editor	All SC chairs	Closed	Next meeting	
AI-123:	Bob will look into these various cloud storage services.	Bob DeLisi	Open	Next meeting	
AI-124:	Bob & Jerry to place links to the duties on the SC landing pages.	Bob DeLisi Jerry Ramie	Closed	Next meeting	Duties sent to Shannon 5/9/25 for posting
AI-125:	Bob will meet with Nick to acquire his past records	Bob DeLisi	Closed	Next meeting	C63.33 was obtained
AI-126:	Bob to inquire about adding an Agenda item for FCC & ISED reports to the Main Committee agenda	Bob DeLisi	Closed	Next meeting	

AI-133: Jerry to supply Mom's Apple Pie (all credentials) to Nick

11. Adjournment - Chair - The Chair thanked the Members for their contributions and adjourned the meeting at 11:56 AM-PDT

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