



American National Standards Committee C63®

Electromagnetic Compatibility

Subcommittee 2

E3 Terminology Definitions and Best Practices

Chair: Bob Channas

Vice Chair: Pedro Mendoza

Secretary: Jerry Ramie

May 5, 2025; 3:15 PM- 4:15 PM EDT

TÜV Rheinland of North America

Boxborough, MA

WebEx meeting

Approved Minutes

1. **Call to Order: Chair** - The meeting was called to order at 3:30 PM-EDT
 - 1.1 **Announcements: Chair's remarks** - Welcome to the meeting!
 - 1.2 **Meeting logistics announcements: Host**
 - 1.3 **Introductions: Secretary – roll call** (record attending members with their affiliations and guests separately below) **Report any roster errors to the ASC-C63® Secretary** (insert [SC2 membership roster](#) from the website as shown below)

Subcommittee 2 Membership Roster

Name	Role in SC	Affiliation
Bob Channas	Chair Subcommittee 2	DISA/PEO Spectrum
Pedro Mendoza	Vice Chair Subcommittee 2	DISA/PEO Spectrum
Bob DeLisi	C63® Chair	Underwriters Laboratories
Andy Griffin	Chair Subcommittee 1	CISCO Systems
Ernesto Mendoza	Chair Subcommittee 3	Signify
Nicholas Abbondante	Chair Subcommittee 4	Intertek
Tom Braxton	Chair Subcommittee 5	ARRL
Doug Kramer	Chair Subcommittee 6	Apple, Inc.
Jason Coder	Chair Subcommittee 7	NIST
Dave Schaefer	Chair Subcommittee 8	Element Materials Technology
Janet O'Neil	Member	ETS - Lindgren
Harry Hodes	Member	Individual Member

Guests and Observers: (non-voting) Chris Moore, Tim Harrington, Randy Long, Henry Benitez, Aurelian Bria, David Schaefer, Ken Gjerde, Grace Lin, Craig Fanning, Richard Reitz, Victor Kuczynski, Dan Hoolihan

- 1.4 **Quorum: (50% of roster + 1) constitutes a quorum.** (rounding down) (**Example:** 10 roster members / 2 = 5 (therefore 5 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 [Minutes of the previous meeting](#)): **Secretary** - ([Approved Previous Minutes](#))

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

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

3.1 Review of Membership Guidelines: Secretary

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.

Working Groups:

For an individual to remain a member of a Working Group, active participation is required. Should a member fail to attend at least one of three consecutive scheduled meetings (in person or via web conference (when used)) their membership in that Working Group may be at risk. Individual Working Groups may establish additional participation criteria and/or modify this requirement.

Member Attendance Log:

Name	09/14/2021	05/17/2022	11/08/2022	05/10/2023	10/03/2023	05/15/2024	10/2/2024
Bob Channas							
Pedro Mendoza							
Bob DeLisi		X	X	X	X	X	X
Andy Griffin			X	X	X	X	X
Ernesto Mendoza			X	X		X	X
Nick Abbondante	X	X	X	X	X	X	X
Tom Braxton		X	X		X	X	X
Doug Kramer			X	X	X	X	X
Jason Coder	X	X	X	X	X	X	X
SC8 Chair						X	
Janet O'Neil				X	X	X	X
Harry Hodes		X				X	X

Any members at risk? None are at risk: (send a letter to each member at risk)

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

4. Display of the [Scope and Duties](#) (To Be Approved by SC2 at their [Spring Meeting](#))

Scope: E3 Terminology, Definitions, and Best Practices

Subcommittee 2 (SC2) is responsible for developing electromagnetic environmental effects (E3) terminology for C63® publications, and harmonizing the use of E3 terms with U.S. military and international standardization bodies. SC2 is also responsible for developing guidelines and best practices for application of C63®, other commercial, and U.S. military E3 standards.

Duties:

- (1) ANSI C63.14, "American National Standard Dictionary of Electromagnetic Compatibility (EMC) including Electromagnetic Environmental Effects (E3) "
- (2) ANSI C63.28, "American National Standard Guide to Best Practice Methodologies, Processes, and Procedures for Electromagnetic Compatibility (EMC)."- **Work suspended**.

4.1 Election of Officers –Current SC2 Officers and Terms:

- **Bob Channas, SC2 Chairman (12/31/2027)**
- **Pedro Mendoza, SC2 Vice Chair (12/31/2027)**
- **Jerry Ramie, SC2 Secretary (non-voting)**

The Scope, Duties and Roster were approved by acclamation.

5. Working Group reports - Chair - [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.

5.1 WG1, C63.14 – Definitions - Channas (no [WG report](#)) Verify accuracy of document [status matrix](#) content and report any errors to the ANSC-C63® Secretary.

C63.14-20XX Learn more	Definitions	SC 2	Channas, R.	C63.14 PINS	Standard under development
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C63.14: C63.14-202XX American National Standard Dictionary of Electromagnetic Compatibility (EMC) including Electromagnetic Environmental Effects (E3)

Contact: R. Channas (Subcommittee Chair)

Scope: This standard provides definitions of terms associated with electromagnetic environmental effects including electromagnetic compatibility (EMC), electromagnetic pulse (EMP), and electrostatic discharge (ESD). In addition to definitions, several symbols and abbreviations are included.

Status: Current. New Standard under development.

Purchase: Not available for purchase

Is this information correct? (Yes) (repeat this verification for all Standards covered by this Subcommittee) Jerry asked the IEEE for a copy of [C63.14-2023](#) in PDF and [C63.14-2023](#) as DOCX file on 4/12/2025.

5.1.1 - C63.14 Approved PINS - need to form working group - A new [C63.14 PINS](#) was approved by the Main Committee at their October, 2024 meeting. [C63.14-2023](#) as a PDF file. [C63.14-2023](#) as DOCX file. Any volunteers for this group?

Definition reviews to be considered for the next revision of C63.14: (These definitions need to be added to the next draft of C63.14)

[MIL-STD 461H definition review 8/22/2024](#) -

[C63.27 definition review 6/2/2021](#) -

[C63.4/D2 definition review Jan. 2023](#) -

[C63.29 definition review 9/30/2021](#) -

[C63.25.2/D017 definition review](#) -

[C63.9/D16 definition review](#) -

[C63.26/D3 definition review](#) -

Call for Volunteers - We define terminology used in our Standards or in MIL-STD documents. If we don't use the word "resilience" then we don't need to add it. Bob C., Pedro, Chris & Jerry (secretary). **AI:20250505-1** Jerry to populate the C63.14 roster and arrange a web-meeting.

5.2 WG2, C63.28 – Best Practices for Electromagnetic Compatibility - Shellman

(insert link to [WG report](#)) Verify accuracy of document [status matrix](#) content and report any errors to the ANSC-C63® Secretary.

We don't need to go to the Main Committee. The work is suspended so it just doesn't get worked on and can be removed from future agendas after the status matrix is confirmed at this meeting. At the Main Committee report it should be reported that per the October 2024 meetings work is suspended and if new interest arises work will be resumed.

C63.28-draft Learn more	Best Practices for Electromagnetic Compatibility	SC 2	Dilay, Chris	C63.28 PINS	Work has been suspended.
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C63.28-draft: American National Standard Guide for Best Practices for Electromagnetic Compatibility

Contact: [Dilay, Chris](#) [Bob Channas](#) (Working Group Chair)

Scope: This guide provides comparisons of best practices that, based on past successes in a wide variety of settings and performed consistently, result in better performance, lower costs, and higher quality products with respect to EMC compliance.

Status: Work has been suspended.

Purchase: Not available for sale.

Is this information correct? (**No**)

5.3 ANSC-C63® Subcommittees & EMC Standards Projects

SC1: C63.2, C63.4, C63.4A, C63.5, C63.5 Corrigendum 1, C63.7, C63.23, C63.25.1, C63.25.2, C63.25.3

SC2: C63.14, C63.28

SC3: C63.12

SC4: C63.10, C63.10.DTS.UNII, C63.10 Corrigendum, C63.10 Amendment 1, C63.26, C63.29, C63.30, C63.31, Millimeter-Wave Massive MIMO Distance Study

SC5: C63.9, C63.15, C63.16, C63.24

SC6: C63.34

SC7: C63.17, C63.27, C63.27 Corrigendum

SC8: C63.18, C63.19, C63.33

6. Other Old Business: Chair

6.1 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 ANSC-C63® [Newsletter editor](#).

6.2 Coordination with SC2 for definitions - Before any Working Group draft can be submitted to Subcommittee for approval, the document must be provided to the SC2 Chair for evaluation and coordination of the definitions used.

7. New Business: Chair -

7.1

8. C63.org website use and updates: Secretary - We normally post documents to the [SC2 protected area](#). 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 this meeting: Secretary - (read Action Items to Members, who must agree that they understand their meaning)

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

Consolidated Action Items from previous Meetings of SC2

Action Item #	ACTION ITEM	Disposition
20200624-4	Mr. Duncanson to explore the placement of all IEEE / C63® definitions preparation criteria on the C63® website with the standards development support materials. C63 Standards Definitions Development Criteria	Closed
20231003-1	Mr. Duncanson provide Mr. Ramie with the approved SC2 agenda from today's meeting and the approved minutes from the 05/10/2023 meeting.	Closed
20231003-2	Mr. Duncanson to provide Mr. Ramie with corrections to the SC2 membership to show Mr. Abbondante as the Chair of SC4.	Closed
20231003-6	Mr. Duncanson to update paragraph 5.3 of the SC2 Agenda to include all SC standards related projects.	Closed

9.3 Review Newsletter input: The SC Presentation and any written report shall also be sent by the Subcommittee Chair to the ANSC-C63® [Newsletter editor](#).

10. Time and place of next meeting: Chair - Week of Oct. 5 (West coast)

11. Closing remarks and Adjournment: Chair - The Chair thanked the group for attending and adjourned the meeting at 4:15 PM-EDT.

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

Consolidated Action Items from the 20250505 Meeting of SC2

Action Item #	Subject	Responsible Person(s)	Status	Delivery Date	Comments
20250505-1	Jerry to populate the C63.14 roster and arrange a web-meeting	Jerry Ramie	Open	Next meeting	Added Chris Moore & Jerry Ramie