



ANSI-Accredited Standards Committee C63[®] Electromagnetic Compatibility

Oct 10, 2016 – 8:30 AM to 4:00 PM-PST
Hilton Orange County, Costa Mesa, CA

Chair: [Dan Hoolihan](#)

Vice-Chair: [Dan Sigouin](#)

Secretary: [Jerry Ramie](#)

Approved Minutes

1. **Call to Order - Chair** - The meeting was called to order at 8:30AM-PST.

1.1. **Introductions (roll call) - Secretary** - Members in attendance are shown:

MEMBER	PRIMARY	ALTERNATE	INTEREST
ACIL	Reitz, Richard		TA
Advanced Compliance Solutions, Inc.			TL
Apple, Inc.		O'Dwyer, Michael	M
ARRL – The National Assoc. for Amateur Radio	Hare, Ed		TA
Bay Area Compliance Laboratories Corp.	Hodes, Harry		TL
Blackberry Corporation			M
Bureau Veritas			TL
CISCO Systems	Griffin, Andy		M
Dell Inc.		Vacant	M
Ericsson AB	Bazhanov, Vladimir		M
ETS – Lindgren	Chen, Zhong		M
Federal Communications Commission		Jones, Steve	GV
Food and Drug Administration	Silberberg, Jeffrey L		GV
Hearing Industries Association			M
Innovation, Science & Economic Development Canada	Nixon, Jason		GV
Information Technology Industry Council	Hirvela, John		TA
IEEE – EMC Society	Norgard, John	Benitez, Henry	PS
Liberty Labs	Howard, Mike	Potts Nate	CL
Motorola Mobility		Vacant	M
Motorola Solutions	Zakharia, Deanna	Vacant	M
National Institute of Standards & Technology		Coder, Jason	GV
Nokia	Moongilan, Dheena	Vacant	M
Northwest EMC	Ghizzone, Dean	Kiemel, Greg	TL
PCTEST Engineering Laboratory			TL
Qualcomm Technologies, Inc.	Forrester, John		M

Society of Automotive Engineers			PS
SPAWAR - US Navy	Dilay, Chris	Wojtaszek, Tomasz	GV
Telecomm. Certif. Body (TCB) Council	Wall, Art		G
TÜV SÜD America, Inc.	Schaefer, David		TL
UL-LLC			TL
US Department of Defense - Joint Spectrum Ctr.	Shellman, Marcus	Duncanson, Michael	GV
Individual Members:			
INDIVIDUAL Member	Hoolihan, Daniel	None	G
INDIVIDUAL Member	Lichtig, John	None	G
INDIVIDUAL Member		None	G
INDIVIDUAL Member	Zimmerman, Dave	None	G
INDIVIDUAL Member	Berger, Stephen	None	G
INDIVIDUAL Member	Heirman, Don	None	G
INDIVIDUAL Member	Sigouin, Dan	None	G
Emeritus Members:			
MEMBER Emeritus		None	
MEMBER Emeritus		None	
MEMBER Emeritus		None	

Observers: Jerry Ramie, Sue Vogel, Randy Long, Beth Hackett, Mario Guerrero, Victor Kuczynski, Jeremiah Darden, Aurelian Bria, Bob Spehalski,

Quorum: 31 organizations + 7 individual members = 38 total. A quorum is 50% +1; which is 20 or more members in attendance. Quorum was achieved with 28 members in attendance.

2. Approval of the Agenda

- 2.1 **Approval of [agenda](#) - Chair** - Mr. Heirman moved, seconded by Mr. Hare, to accept the agenda. There was no objection. The Agenda was accepted.
- 2.2 **Presentation of [Patent](#) slides - Chair** - The patent slides were shown and no patent issues were raised.

3. Chairman's Report – Hoolihan

- 3.1 **General** - HIA has been added as a new member.
- 3.2 **FCC Interactions** - ET docket 1324 received comments, testing labs in non-MRA countries will need to be accredited for legal testing. C63.26 has not been adopted into the rules yet. The FCC is exploring a KDB publication to include C63.26.
- 3.3 **C63 Standards anticipated to be published:**
C63.2 - December, 2016
C63.5 - January, 2017

4. Vice-Chairman's Report - Sigouin

- Dan has received comments from the members on the schedule for our meetings this week. We decided not to go to a five day schedule, so the next meeting will have tighter scheduling.

5. Secretary's Report – Ramie

5.1 [Minutes of the last Meeting](#) (May 12 - 2016) – **Ramie** - **AI-29**: Hoolihan to add financial report to previous [Minutes](#) by end of 2016. Heirman moved, seconded by Hare, to accept the [Minutes](#) with the addition of the financial report. BACL abstained. The Motion carried.

5.2 Summary of Interpretation Requests since last meeting – Ramie **AI-30**: Jerry to insert headers and date information in [master file](#).

Interpretations circulated or posted

Posted "use of attenuators" interpretation	No ballot called	
Posted "Clause 5.4.1 & 5.4.2 RSM / NSA"	Ballot passed	6 Ayes, 0 Nays, 2 Abstain
Circulated "Clause 4.5 Horn antenna aperture"	Ballot failed	2 Ayes, 4 Nays, 2 Abstain

5.3 Electronic Motions since last meeting - Ramie **AI-31**: Jerry to show motion source in the future.

Date	Main Committee motion or action	Result	Comments
5/31/2016	Is C63.27-rev 0.54b ready for ballot?	Motion passed	12 Ayes, 2 Nays, 18 Abstain
9/10/2016	Send C63.4a draft to Main Committee	Sent 9/10	Ballot closed 10/21
9/21/2016	Motion to Table "Dated References" Motion	Motion failed	18 Ayes, 1 Naye, 18 - Did not vote
9/21/2016	Comment period begins on dated references	Oct. 1 ballot	Comment period remains open
9/22/2016	C63.5 sent to ANSI for BSR-8	Comments requested	Announced in ANSI Standards Action - October 7, 2016. Comments are due on November 21, 2016
9/22/2016	C63.2 comments are resolved	Approved	Approved by ANSI Board of Standards Review (BSR) Published in ANSI Standards Action on 10/21/2016
9/30/2016	C63.4a ballot closes, does not go to IEEE	Motion failed	13 Ayes, 7 Nays w/ comments, 7 Abstain, 7 No-vote

6. [Secretariat Report](#) – IEEE – Sue Vogel - The Secretariat report was shown. **AI-32**: Mr. Hoolihan to check in our procedures for ability to reaffirm a Standard without a written ballot at a face-to-face meeting.

6.1 - Status of C63[®] published standards

6.1.1 Fourth Anniversary standards - Mr. Hodes thought that ANSI should not indicate a document is not active when a PINS exists and work is progressing. Mr. Hare noted we can reaffirm a Standard any time we want, including a reaffirmation and a revision at the same time.

6.1.2 Ten-years or older standards - **AI-33**: Jerry to change item 6.1.2 to eight years or older in future Agendas.

There was discussion of the permission request that was sent to SAE regarding our use of eleven citations from their Standards. We must not modify the SAE text under the terms of the release. (The term "DUT" was used, rather than our typical use of "EUT," for instance)

Steve Jones noted that the C63.26 PINS was approved at the working group level, but there was confusion about 500 characters vs. 500 words in the PINS application. The restriction of 500 characters he felt was too restrictive. **AI-34**: Sue to ask ANSI if we can expand the number of characters we can submit or if we can include a URL for additional explanatory text. What do they recommend in a PINS?

6.2 – Status of PINS and PINS-C

7. Subcommittee reports (Brief written reports to include actions needed by C63[®], and items of particular interest during SC meetings). **Note:** Reports should be provided on the [C63 Power Point template](#) and should include Scope, Duties, and Membership for 2016 for each Subcommittee

7.1. SC1: Measurement and Instrumentation- Chen - The [SC1 report](#) was shown. Mr. Chen moved to send the edited C63.4a draft to the Main Committee to review

and approve for Standards balloting by the IEEE. No second was required. Discussion ensued. If the motion is approved, Jerry would circulate the edited document with the comment resolution matrix to the Main members for approval. Mr. Hoolihan suggested a three-week review. Comments would be collected and forwarded to the Working Group chair, Mr. Heirman, for consideration by the Working Group. The roll-call vote tally on the Motion is shown below:

MEMBER	PRIMARY	ALTERNATE	VOTE
ACIL	Reitz, Richard		Yes
Advanced Compliance Solutions, Inc.			
Apple, Inc.		O'Dwyer, Michael	No
ARRL – The Nat'l. Assoc. for Amateur Radio	Hare, Ed		Yes
Bay Area Compliance Laboratories Corp.	Hodes, Harry		Yes
Blackberry Corporation			
Bureau Veritas			
CISCO Systems	Griffin, Andy		No
Dell Inc.		Vacant	
Ericsson AB	Bazhanov, Vladimir		Yes
ETS – Lindgren	Chen, Zhong		Yes
Federal Communications Commission		Jones, Steve	Abs
Food and Drug Administration	Silberberg, Jeffrey L		Yes
Hearing Industries Association			
ISED Canada	Nixon, Jason		Abs
Information Technology Industry Council	Hirvela, John		No
IEEE – EMC Society	Norgard, John		Yes
Liberty Labs	Howard, Mike		Yes
Motorola Mobility		Vacant	
Motorola Solutions	Zakharia, Deanna	Vacant	No
National Institute of Standards & Technology		Coder, Jason	Yes
Nokia	Moongilan, Dheena	Vacant	No
Northwest EMC	Ghizzone, Dean	Kiemel, Greg	Yes
PCTEST Engineering Laboratory			
Qualcomm Technologies, Inc.	Forrester, John		Abs
Society of Automotive Engineers	Lombardi, Rick	Andersen, Poul	
SPAWAR - US Navy	Dilay, Chris	Wojtaszek, Tomasz	Yes
Telecomm. Certif. Body (TCB) Council	Wall, Art	Stumpf, Bill	Abs
TÜV SÜD America, Inc.	Schaefer, David	Lilla, Derek	Yes
UL-LLC			
US DoD - Joint Spectrum Ctr.	Shellman, Marcus		Yes
Individual Members:			

INDIVIDUAL Member	Hoolihan, Daniel	None	Abs
INDIVIDUAL Member	Lichtig, John	None	Yes
INDIVIDUAL Member		None	
INDIVIDUAL Member	Zimmerman, Dave	None	No
INDIVIDUAL Member	Berger, Stephen	None	Yes
INDIVIDUAL Member	Heirman, Don	None	Yes
INDIVIDUAL Member	Sigouin, Dan	None	Abs

Vote tally: 16 yes, 6 no, 6 abstain

The Motion to forward the C63.4a draft to the Main Committee with comment resolutions carried.

- 7.2. **SC2: Definitions – Dilay** - The [SC2 report](#) was shown.
- 7.3. **SC3: International Standardization – Heirman** - The [SC3 report](#) was shown.
- 7.4. **SC4: Wireless and ISM Equip. - Wall** - The [SC4 report](#) was shown.
- 7.5. **SC5: Immunity testing – Whitesell / Hare** - The [SC5 report](#) was shown. Mr. Hare moved to appoint Ed Hare as Chair and Steve Whitesell as Vice Chair. Mr. Sigouin seconded the Motion. The Motion passed by acclamation. Mr. Hare then moved to circulate the C63.15 draft to the Main Committee, seconded by Mr. Hodes. Discussion ensued. The Motion carried by voice vote. **AI-35:** Jerry to send the finished C63.15 draft to the Main Committee for a Consensus ballot and consideration for formal Standards balloting for ANSI approval. **AI-36:** Don Heirman to provide the C63.15 draft to Jerry for this purpose.
- 7.6. **SC6: Laboratory Accreditation – Long** - The [SC6 report](#) was shown. **AI-37:** Jerry to correct BACL affiliation text in the SC6 roster. Mr. Long moved to add Megan McConnell as SC6 Vice-Chair. Since the Motion came from the Subcommittee, no second was needed. The motion carried by voice vote. **AI-38:** Dan H. to solicit Standards Council Canada regarding membership. **AI-39:** Mr. Hodes to provide contact info for SCC to Dan H.
- 7.7. **SC7: Spectrum Etiquette – Bazhanov** - The [SC7 report](#) was shown. **AI-40:** Vladimir Bazhanov to provide SC7 roster edits to Jerry for correcting the SC7 roster page.
- 7.8. **SC8: Medical Equipment Testing – Berger** - The [SC8 report](#) was shown.

***** Lunch Break *****

8. New Business

- 8.1. **Dated Standards versus Undated Standards** - We had an open electronic Motion on the floor from Dan Sigouin. Mr. Griffin wanted C63[®] Standards to indicate only dated references. Mr. Heirman then motioned to amend the Motion to allow dated or undated references to be used in C63[®] documents as approved by the Subcommittee that is responsible for the Standard. The motion was seconded by Mr. Hare. Discussion ensued. The Amendment was approved by voice vote. The Amended Motion was then voted on by roll-call vote as shown below:

MEMBER	PRIMARY	ALTERNATE	Vote
ACIL	Reitz, Richard		Abs
Advanced Compliance Solutions, Inc.			
Apple, Inc.		O'Dwyer, Michael	No
ARRL – The National Assoc. for Amateur Radio	Hare, Ed		Yes
Bay Area Compliance Laboratories Corp.	Hodes, Harry		Yes
Blackberry Corporation			

Bureau Veritas			
CISCO Systems	Griffin, Andy		No
Dell Inc.		Vacant	
Ericsson AB	Bazhanov, Vladimir		Yes
ETS – Lindgren	Chen, Zhong		Abs
Federal Communications Commission		Jones, Steve	Abs
Food and Drug Administration	Silberberg, Jeffrey L		Yes
Hearing Industries Association			
Innovation, Science & Economic Development Canada	Nixon, Jason		Abs
Information Technology Industry Council	Hirvela, John		No
IEEE – EMC Society	Norgard, John	Benitez, Henry	Yes
Liberty Labs	Howard, Mike	Potts Nate	Yes
Motorola Mobility		Vacant	
Motorola Solutions	Zakharia, Deanna	Vacant	Yes
National Institute of Standards & Technology		Coder, Jason	Yes
Nokia	Moongilan, Dheena	Vacant	Abs
Northwest EMC	Ghizzone, Dean	Kiemel, Greg	Yes
PCTEST Engineering Laboratory			
Qualcomm Technologies, Inc.	Forrester, John		Yes
Society of Automotive Engineers			
SPAWAR - US Navy	Dilay, Chris	Wojtaszek, Tomasz	Yes
Telecomm. Certif. Body (TCB) Council	Wall, Art		Yes
TÜV SÜD America, Inc.	Schaefer, David		
UL-LLC			
US Department of Defense - Joint Spectrum Ctr.	Shellman, Marcus	Duncanson, Michael	
Individual Members:			
INDIVIDUAL Member	Hoolihan, Daniel	None	Abs
INDIVIDUAL Member	Lichtig, John	None	Yes
INDIVIDUAL Member		None	
INDIVIDUAL Member	Zimmerman, Dave	None	
INDIVIDUAL Member	Berger, Stephen	None	
INDIVIDUAL Member	Heirman, Don	None	Yes
INDIVIDUAL Member	Sigouin, Dan	None	

Vote tally: 14 yes, 3 No, 6 abstentions

The Motion to allow dated or undated references to be used in C63® documents, as approved by the Subcommittee that is responsible for the Standard, passed.

AI-41: The steering committee is to adopt a style guide. Mr. Hodes moved that the Main committee adopt [IEC Guide 107](#) (current edition, annex C) as our only style guide for provisional guidance on using dated or undated references. Mr. Heirman seconded the motion. Discussion ensued. **AI-42:** Jerry to circulate this motion on adopting a style guide with the [annex to Guide 107](#) to the Members for a future vote.

9. Other Administrative Matters

9.1. Web Page – Ramie - none

9.2. Administrative matters from the Steering Committee - none

9.3 C63 Membership fees. Organizational memberships will rise to \$3,150 and Individual memberships and SC memberships will rise to \$1,050; this is a 5% increase.

10. Other Business

10.1 Future Seminars and Workshops – Heirman - The [Education Report](#) was shown. We had a request for C63.26 and C63.4a content to be added to our offerings.

10.2 Newsletter report – Zimmerman - Please submit your SC reports within 30 days (December 10, 2016) for inclusion in the next newsletter.)

10.3. Next meeting – Hoolihan -

May 8-11, 2017 – A2LA – Frederick, Maryland – The Steering Committee agreed that we will stay with 4-day meetings with longer days.

11. Old Business

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

Consolidated Action Items from Main Committee Meeting 5/12/16¹

Action Item #	Subject	Responsible Person	Status	Delivery Date	Comments
AI-14:	Each subcommittee chair should look over their Interpretations to see if they need to be converted to an Amendment or Corrigenda (called a "limited revision" under ANSI rules)	All Subcommittee Chairs	Closed	11/10/16	
New Action Items					
AI-21:	Sue will provide the Member Interest category of each member for inclusion in the C63® members table	Sue Vogel	Closed	11/10/16	
AI-22:	Sue will inform the Main Committee if a consolidated version of C63.4 (2014) and C63.4a (201x) will be available	Sue Vogel	Open	11/10/16	
AI-23:	Sue Vogel to copy the new C63.26 PINS content as shown into the ANSI on-line form	Sue Vogel	Closed	11/10/16	
AI-24:	Jerry to add Dave Case of Cisco to the SC7 roster page	Jerry Ramie	Closed	11/10/16	Added 6/28
AI-25:	Mr. Bazhanov to provide the C63.27 draft Standard to Mr. Ramie for circulation to the Main Committee for review and comments	Vladimir Bhazanov	Closed	11/10/16	Draft provided & circulated

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

AI-26:	An invitation to join this "Standards Date" task group will be sent to the voting Members of C63 by Mr. Sigouin, copying Lisa Perry.	Dan Sigouin	Closed	11/10/16	
AI-27:	The Chair asked Sue to look into the existence of a transitional period for normative matter.	Sue Vogel	Closed	11/10/16	NESC allows 180 days. (only example)
AI-28:	Mr. Chen and Mr. Hodes to contact Sue Vogel regarding VNA scripts as intellectual property or "work product" for copyright purposes	Zhong Chen Harry Hodes Sue Vogel	Open	11/10/16	

AI-43: Harry to ask Sue if VNA scripts for C63.25 need a copyright release.

Mr. Nixon asked about a note under the antennas table that the scope of accreditation include the Standard needed for calibrating the antenna. **AI-44:** Don H. will look at the paragraph in C63.4 on antenna calibration to determine if labs must be accredited to C63.5.

12. Adjournment - Hoolihan - The meeting was adjourned at 2:05PM-PST.

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

Consolidated Action Items from Main Committee Meeting 11/10/16²

Action Item #	Subject	Responsible Person	Status	Delivery Date	Comments
AI-22:	Sue will inform the Main Committee if a consolidated version of C63.4 (2014) and C63.4a (201x) will be available	Sue Vogel	Open	11/10/16	
AI-28:	Mr. Chen and Mr. Hodes to contact Sue Vogel regarding VNA scripts as intellectual property or "work product" for copyright purposes	Zhong Chen Harry Hodes Sue Vogel	Open	11/10/16	
New Action Items					
AI-29:	Hoolihan to add financial report to previous Minutes by end of 2016	Dan Hoolihan	Closed	12/31/16	Posted 11/18/16
AI-30:	Jerry to insert headers and date information in master file .	Jerry Ramie	Closed	5/11/17	Headers added 11/18/16
AI-31:	Jerry to show motion source in the future	Jerry Ramie	Closed	5/11/17	Column added 11/18/16
AI-32:	Mr. Hoolihan to check in our procedures for ability to reaffirm a Standard without a written ballot at a face-to-face meeting.	Dan Hoolihan	Open	5/11/17	
AI-33:	Jerry to change item 6.1.2 to eight years or older in future Agendas.	Jerry Ramie	Open	5/11/17	
AI-34:	Sue to ask ANSI if we can expand the number of characters we can submit or if we can include a URL for additional explanatory text. What do they recommend in a PINS?	Sue Vogel	Open	5/11/17	
AI-35:	Jerry to send the finished C63.15 draft to the Main Committee for a Consensus ballot and	Jerry Ramie	Open	12/31/16	

² Consolidated (re-numbered) action items are included here for reference, but are not a part of the minutes.

	consideration of formal Standards balloting by the IEEE.				
AI-36:	Don Heirman to provide the C63.15 draft to Jerry for this purpose.	Don Heirman	Open	12/31/16	
AI-37:	Jerry to correct BACL affiliation text in the SC6 roster.	Jerry Ramie	Closed	5/11/17	Roster corrected 11/15/16
AI-38:	Dan H. to solicit Standards Council Canada regarding membership.	Dan Hoolihan	Open	5/11/17	
AI-39:	Mr. Hodes to provide contact info for SCC to Dan H.	Harry Hodes	Open	5/11/17	
AI-40:	Vladimir Bazhanov to provide SC7 roster edits to Jerry for correcting the SC7 roster page	Vladimir Bazhanov	Open	5/11/17	
AI-41:	The steering committee is to adopt a style guide	Steering Committee	Open	5/11/17	
AI-42:	Jerry to circulate this motion on adopting a style guide with the annex to Guide 107 to the Members with their vote returned by Nov. 30	Jerry Ramie	Open	11/30/16	
AI-43:	Harry to ask Sue if VNA scripts for C63.25 need a copyright release	Harry Hodes Sue Vogel	Open	5/11/17	
AI-44:	Don H. will look at the paragraph in C63.4 on antenna calibration to determine if labs must be accredited to C63.5	Don Heirman	Open	5/11/17	

Attachments from Main Committee Meeting 11/10/16³

Item	Description	URL
2.1	Draft agenda	http://www.c63.org/documents/misc/minutes/2016_Nov/20161110_Main_Agenda1-%20DDH%20-%20final.doc
2.2	Patent slides	http://www.c63.org/documents/misc/patents/C63_Patent_Call_slideset_final_1.pdf
5.1	Approved Minutes of previous meeting	http://www.c63.org/documents/misc/minutes/2016_Nov/20160512_Approved_Main_Minutes.pdf
5.2	Interpretation requests since last meeting	http://www.c63.org/documents/misc/minutes/2016_Nov/Electronic_motions_inter_members_20161027.xls
5.3	Electronic motions since last meeting	http://www.c63.org/documents/misc/minutes/2016_Nov/Electronic_motions_inter_members_20161027.xls
6.0	Secretariat Report	http://www.c63.org/documents/misc/minutes/2016_Nov/C63_November_2016_Secretariat_Update.ppt
7.0	Slide Template	http://www.c63.org/pw/c63/C63_PowerPoint_template.ppt
7.1	SC1 Report	http://www.c63.org/documents/misc/minutes/2016_Nov/SC1%20update.ppt
7.2	SC2 Report	http://www.c63.org/documents/misc/minutes/2016_Nov/SC2_Report_to_Main_Committee_20161109_Rev0.pptx
7.3	SC3 Report	http://www.c63.org/documents/misc/minutes/2016_Nov/C63_Subcommittee_3_report_to_C63_20161110.ppt
7.4	SC4 Report	http://www.c63.org/documents/misc/minutes/2016_Nov/SC_4_report_20161110.ppt
7.5	SC5 Report	http://www.c63.org/documents/misc/minutes/2016_Nov/SC5_Report_20161110.ppt
7.6	SC6 Report	http://www.c63.org/documents/misc/minutes/2016_Nov/20161110_SC6_Report_to_Main.ppt
7.7	SC7 Report	http://www.c63.org/documents/misc/minutes/2016_Nov/SC7_Report2_20161110_v1.ppt
7.8	SC8 Report	http://www.c63.org/documents/misc/minutes/2016_Nov/SC8_Main_report_20161109_v1.ppt
8.1	Dated Standards	http://www.c63.org/documents/misc/minutes/2016_Nov/20161026_Pro_Comments_on_using_dated_references.docx
8.1	Undated Standards	http://www.c63.org/documents/misc/minutes/2016_Nov/20161026_Negative%20comments_on_using_dated_references_in_C63_documents.docx
8.1	IEC Guide 107 extract	http://www.c63.org/documents/misc/minutes/2016_Nov/IEC_Guide_107_extract.docx
10.1	Education & Training report	http://www.c63.org/documents/misc/minutes/2016_Nov/20161110_C63_education_report.ppt
10.2	2016-July Newsletter	http://www.c63.org/documents/c63/newsletters/C63_Newsletter_Jul_2016_40_Final.pdf

³ Attachments are not a part of the meeting minutes. They may be downloaded from the [Last Meeting Minutes](#) page of the [C63.org](#) website.