



ANSI-Accredited Standards Committee C63[®]
Electromagnetic Compatibility

May 4, 2018 – 8:00 AM to 3:00 PM-EDT
 IEEE Headquarters, Piscataway, NJ

Chair: [Dan Hoolihan](#)

Vice-Chair: [Dan Sigouin](#)

Secretary: [Jerry Ramie](#)

Approved Minutes

1. **Call to Order - Chair** - The meeting was called to order at 8:09AM-EDT.
 - 1.1. **Introductions (roll call) - Secretary** (Roster Revised: 19 March, 2018)

MEMBER	PRIMARY	ALTERNATE
ACIL	Reitz, Richard	Vacant
Apple, Inc.	Chen, Jyun-cheng	O'Dwyer, Michael
ARRL – The National Assoc. for Amateur Radio	Hare, Ed	Carlson, Kermit
Bay Area Compliance Laboratories Corp.	Hodes, Harry	Tang, Lisa
Bureau Veritas	Stewart, Jonathan	Faziloglu, Yunus
CISCO Systems	Griffin, Andy	Case, Dave
Dell Inc.	Worley, Richard	Vacant
Element Materials Technology	Kiemel, Greg	Darden, Jeremiah
Ericsson AB	Skoglund, Kenth	Liska, Bruno
ETS – Lindgren	Chen, Zhong	Kramer, Doug
Federal Communications Commission	Jones, Steve	Vacant
Food and Drug Administration	Silberberg, Jeffrey L	Witters, Don
Hearing Industries Association	Becker, John	Vacant
Honeywell	Antola, Michael	Roussin, Andrew
Innovation, Science & Economic Development Canada	Nixon, Jason	Popovici, Horia
Information Technology Industry Council	Hirvela, John	Rosenberg, Joshua
IEEE – EMC Society	Norgard, John	Benitez, Henry
Keysight Technologies	Potts, Nate	Terrien, Mark
Motorola Solutions, Inc.	Zakharia, Deanna	Ho, Sze Khian
National Institute of Standards & Technology	Coder, Jason	Janezic, Michael
Nokia Bell Labs	Moongilan, Dheena	Vacant
PCTEST Engineering Laboratory	Snyder, Greg	Ward, Dennis
Qualcomm Technologies, Inc.	Forrester, John	Klerer, Mark
Society of Automotive Engineers	Lombardi, Rick	Andersen, Poul
SPAWAR - US Navy	Dilay, Chris	Wojtaszek, Tomasz
Telecommunications Certification Body (TCB) Council	Wall, Art	
TÜV SÜD America, Inc.	Schaefer, David	Elliott, William (Mac)

UL-LLC	DeLisi, Bob	Moser, Jeffery
US Department of Defense - Joint Spectrum Ctr.	Shellman, Marcus	Duncanson, Michael
Individual Members:		
INDIVIDUAL Member	Hoolihan, Daniel	None
INDIVIDUAL Member	Lichtig, John	None
INDIVIDUAL Member	Schaefer, Werner	None
INDIVIDUAL Member	Zimmerman, Dave	None
INDIVIDUAL Member	Berger, Stephen	None
INDIVIDUAL Member	Heirman, Don	None
INDIVIDUAL Member	Sigouin, Dan	None
INDIVIDUAL Member	Howard, Mike	None
Emeritus Members:		
MEMBER Emeritus	Mertel, Herbert	None
MEMBER Emeritus	Hofmann, H. R. (Bob)	None

Observers: Jerry Ramie, Jennifer Santulli

Quorum: 29 organizations + 8 individual members = 37 total. A quorum is 50% +1 (rounding down); which is 19 or more members in attendance. Quorum was achieved with **23** members attending.

2. Administrative Issues

2.1 Approval of agenda - Chair - Mr. Sigouin moved, seconded by Mr. Zimmerman, to accept the Agenda There were no objections. The [Agenda](#) was accepted.

2.2 Presentation of [Patent](#) slides - Chair - The patent slides were shown and no patent issues were raised. (C63.26 and C63.19 have current patent issues)

2.3 Consideration of new members - Chair - The Membership Committee has approved of the candidate **Mits Samoto** for consideration by the voting Members of ASC-C63®. ([Application](#) / [Resume-CV](#)) Mr. Ramie cannot sponsor this application. Mr. Hare has agreed to sponsor it. Hare moved, seconded by Mr. DeLisi, to approve of his Membership. Mr. Hodes wanted to know why he did not join as a Institutional Member. Mr. Hodes abstained. The motion carried. The Steering committee approved **Art Wall** for Member Emeritus. Mr. Sigouin moved, seconded by Mr. Hare to accept Art Wall as Member Emeritus. The motion carried unanimously.

3. Chairman's Report – Hoolihan

3.1 General - We encourage collegiality and good manners among our members. We appreciate the support of the IEEE and our Secretariat, Jennifer Santulli. Our next meeting is Nov. 26-30 in Boulder, CO. We appreciate the hospitality of the National Institute of Standards & Technology.

3.2 FCC Interactions (see [Chairman's report](#))

3.3 Standards published - (see [Chairman's report](#)) C63.15 is the only Standard we have published since the last meeting. There was discussion of the FCC Report & Order published 11/2/17. Are the users of C63.26 (labs) responsible for liability for performing the tests in C63.26. **AI-52:** Santulli will get a written answer regarding liability of third-party users of C63.26 and report on it.

3.4 Awards - The people below were recognized for their contributions to ASC-C63® Standards development.

C63.4A

Chair- Don Heirman

V. Chair- Harry Hodes
 Secretary- Jerry Ramie
 Technical Editor- Horia Popovici
 Special Editor- Tim Harrington

Certs of Appreciation for Major Technical Contributor:

Zhong Chen
 Robert DeLisi
 Werner Schaefer

C63.15-2017

WG Chair- Don Heirman
 V. Chair- David Zimmerman
 Secretary- Jerry Ramie
 Technical Editor- Tim Harrington

Certs of Appreciation For Major Technical Contributor:

Harry Hodes
 Rick Lombardi
 Jeffrey Silberberg
 Mark Terrien

4. Vice-Chairman’s Report - Sigouin - If you receive a ballot from Janet or Jerry on a new Standard, please vote or abstain. Please read the draft Standard BEFORE the ballot. We are considering making non-responses considered as Abstentions in our new Procedures. We get people who want to be on the balloting pool, but then do not vote. This makes passage of the ballot much more difficult. Mr. Kiemel noted that sometimes votes are not counted. We are considering using a web-based voting mechanism. Mr. Hodes liked the idea of using a web-based tool as he is behind a firewall.

5. Secretary’s Report – Ramie

5.1 [Minutes of the last Meeting](#) (20171110) – **Ramie** - Mr. Sigouin moved, seconded by Mr. Zimmerman, that the previous Minutes be [approved](#). The motion carried.

5.2 Disposition of Interpretation Requests since last meeting – Ramie

Date	Interpretations circulated or posted	Source	Result	Comments
11/16/2017	Comments closed C63.5 (2017) Clause 5.1.1e attenuator selection	Janet O’Neil	Posted 11/16	no comments
11/17/2017	Circulated draft Interp. C63.4 (2014) Annex N 1b2 antenna symmetry	Janet O’Neil	Closed 12/1	Ballot called by Mr. Hirvela
11/18/2017	Forward Interpretation Request from Alexander Kriz to SC1 Secretary	Bob DeLisi	sent 11/18	to SC1 for TG formation
12/4/2017	Call for a Second to Mr. Hirvela’s Motion to Vote	D. Hoolihan	No second	Motion failed, draft Interp. OK
12/11/2017	Post draft C63.4 (2014) Annex N 1b2 antenna symmetry	D. Hoolihan	Posted 12/11	closed
12/11/2017	Received draft Interp. C63.5 (2006) Annex H Antennas for NSA	Janet O’Neil	Closed 1/17	No comments; posted 1/19
12/22/2017	Forward Interpretation Request from Dave Schaefer to SC1 Secretary	D. Schaefer	sent 12/23	
3/7/2018	Sent C63.4 (2014) Annex N vs. C63.5 re/ symmetry to SC1	N. Potts	sent 3/8	

The steering committee has decided to postpone responding to further Interpretation Requests for six months until our Procedures are updated. Mr. Sigouin noted that we will have motions related to this issue in New Business.

5.3 Open Interpretation requests - Ramie ([Interpretations Log 20180418](#)) Open are in red:

Date	Requestor	e-mail address	Project name	SC #	Rc’vd by Se	Sent to SC	Back fm SC
5/7/2016	Charles Wang	charles@champrotek.com	C63.4 (2014) Clause 4.5 Horn antenna aperture	SC1	5/7/2016	5/7/2016	6/11/2016
8/29/2017	Charles Wang	charles@champrotek.com	C63.4 (2014) 20170829_D3_NSA_vertical_3_meters	SC1	8/29/2017	8/29/2017	open
11/14/2017	Alexander Kriz	Alexander.Kriz@seibersdorf-laboratories.at	C63.4 (2014) Annex N.1 antenna symmetry	SC1	11/14/2017	11/18/2017	open
12/22/2017	Dave Schaefer	dschaefer@tuvam.com	C63.4 (2014) Clauses 5.5.1 & 8.2.4 sVSWR	SC1	12/22/2017	12/23/2017	open
3/7/2018	Nate Potts	nate.potts@keyinsight.com	C63.4 (2014) Annex N vs. C63.5 re/ symmetry	SC1	3/7/2018	3/8/2018	open

5.4 Electronic Motions since last meeting - Ramie ([Electronic Motions log](#)) (protected)

Date	Main Committee motion or action	Source	Result	Comments
12/19/2017	Consensus Ballot C63.5 (2017) D01 corrigendum (4 weeks)	Janet O'Neil	Passed 1/17/18	20 Affirm, 1 negative , 2 abstain
2/5/2018	Motion to admit Mike Howard as Individual Member Main Committee	D. Hoolihan	discussed 2/22	Motion carried 3/12/18 (19-0)
2/8/2018	John Hirvela changed his vote to Affirmative after receiving the file	J. Hirvela	Final sent 2/13	Sent to IEEE / J. Santulli
2/17/2018	Consensus Ballot C63.25.1 (20171114) (4 weeks)	D. Hoolihan	Passed 3/22/18	Sent to IEEE / J. Santulli
3/6/2018	C63.15-2017 published by IEEE	D. Heirman	published 3/6/18	Stds. Store & Xplore

5.5 Membership Changes since last meeting - Ramie

Date	Membership changes	Source	Result	Comments
11/9/2017	Added Jason Nixon to SC6 roster	D. Zimmerman	added 11/16	on SC6 roster only
11/9/2017	Updated Mario Guerero link on SC6 roster	M. Guerero	updated 11/16	on SC6 roster only
11/10/2017	Removed Steve Coston from SC8 roster	D. Zimmerman	removed 11/16	from SC8 roster only
11/17/2017	Removed Steve Whitesell from SC7 roster	W. Young	removed 11/17	from SC7 roster only
11/17/2017	Changed Guerero & Hackett affiliations to NIST/NVLAP	B. Hackett	changed 11/17	on public, private & SC6 roster
11/20/2017	Added new kick-off Members to C63.24 roster & WebEx invitation list	D. Heirman	updated 11/21	on C63.24 roster only
11/28/2017	Removed Allen Crumm from C63.19 roster	A. Crumm	removed 11/28	from C63.19 roster only
11/29/2017	Added Mike Antola to SC1 and SC4 rosters	J. O'Neil	added 11/29	on SC1 & SC4 rosters only
11/29/2017	Added Ken Carrigan to C63.27 roster	K. Carrigan	added 11/29	on C63.27 roster only
11/30/2017	Removed Chris Davlantes from C63.30 roster	H. Popovici	removed 11/30	from C63.30 roster only
12/7/2017	Removed Steve Whitesell from SC4 roster	S. Whitesell	removed 12/7	from SC4 roster & WebEx list
1/1/2018	Changed Bazhanov affiliation	V. Bazhanov	changed 12/28	Public/Private & SC7 rosters
1/1/2018	Changed Ericsson Primary rep. to Kenth Skoglund	K. Skoglund	changed 12/30	Member, Public/Private rosters
1/3/2018	Changed Allen Crumm affiliation to SSC Labs	A. Crumm	changed 1/3	on SC1 & SC4 rosters only
1/3/2018	Moved Nate Potts to Vice Chair of C63.5WG	D. Kramer	moved 1/3	on SC1 roster only
1/3/2018	Added David Knight as a Member of C63.5WG	D. Kramer	added 1/3	on SC1 roster only
1/20/2018	Balloted Dave Case nomination for SC4 Vice Chair	B. DeLisi	closed 2/2	Motion to confirm passed
1/23/2018	Added Rich Worley and Ed Hare to C63.28 roster	C. Dilay	added 1/23	on C63.28 roster only
1/24/2018	Removed Mark Briggs & Ed Yandek from C63.29WG roster	E. Mendoza	removed 1/24	from C63.29 roster only
1/29/2018	Updated C63.25 roster on SC1 roster page	D. Sigouin	updated 1/29	on C63.25 roster only
2/2/2018	Added Allen Crumm as SC8 Secretary (non-voting)	A. Crumm	added 2/2	on SC8 roster only
2/2/2018	Changed Mike Howard email and affiliation	M. Howard	changed 2/2	Main, SC4, C63.26 & C63.30
2/2/2018	Added Billy Manning to C63.30 & C63.31 Working Groups	A. Crumm	added 2/2	C63.30 & C63.31 rosters only
2/2/2018	Added Scott Ortiz to C63.29 Working Group roster & WebEx list	D. Walton	added 2/2	on C63.29 roster only
2/2/2018	Dave Case confirmed as SC4 Vice Chair	B. DeLisi	added 2/5	on SC4 roster only
2/5/2018	Moved Nate Potts to Keysight Primary, Mark Terrien as Alternate	N. Potts	changed 2/6	Main, Public & Private rosters
2/7/2018	Removed A. Wall and added B. DeLisi to SC3 roster (as SC4 Chair)	D. Heirman	changed 2/7	on SC3 roster only
2/8/2018	Removed Clif Barber from C63.30 roster	A. Crumm	removed 2/9	on C63.30 roster only
2/12/2018	Added Allen Crumm as SC6 Secretary (non-voting)	D. Hoolihan	added 2/12	on SC6 roster only
2/14/2018	Changed affiliation and e-mail address for Hans Mellberg	H. Mellberg	changed 2/15	on C63.30 and C63.31 rosters
2/20/2018	Added Jeff Evans (Intel) to the C63.30 roster	J. Evans	added 2/20	on C63.30 roster only
2/26/2018	Received Membership App from Kenth Skoglund for SC3 & SC4	K. Skoglund	fwd to Chairs	SC3 & SC4 chairs
3/15/2018	Removed Bill Young from Members, Public & Private rosters	W. Young	removed 3/15	Member, Public/Private rosters
3/15/2018	Added Mike Howard to Members, Public & Private rosters	J. Ramie	added 3/15	Member, Public/Private rosters
3/15/2018	Added Mike Janezic as NIST Alternate, Jason Coder as Primary	J. Coder	added 3/19	Member, Public/Private rosters
3/19/2018	Removed Mike Dreher from C63.30 roster	T. Thul	removed 3/19	on C63.30 roster only
3/28/2018	Removed Bill Stumpf from C63.29 roster	E. Mendoza	removed 3/28	on C63.29 roster only
4/11/2018	Added Dominique Bovey of HEIG-VD to C63.30 roster	A. Crumm	added 4/16	on C63.30 roster only

6. [Secretariat Report](#) – IEEE – Jennifer Santulli

6.1 - Status of C63[®] published standards

6.1.1 Fourth Anniversary standards

6.1.2 Eight-years or older standards

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

Steve Jones could not state what the FCC policy is on citing corrigendum, which correct mistakes in the Standard. Discussion ensued. The Chair noted that if we petition the FCC, it should come from the Main Committee after discussion.

Harry asked why C63.24 has a PINS from 2001, but new work has begun on the document. The previous re-affirmation effort had comments, which cannot be addressed in a re-affirmation. Mr. Heirman noted that

we have begun looking at the document and will seek a PINS-C when we feel that we have stabilized the joint work with IEEE-473 on the next version.

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](#) (protected) and should include Scope, Duties, and Membership for 2017 for each Subcommittee. NOTE – EACH COMMITTEE REPORT WILL BE LIMITED TO A MAXIMUM OF 15 MINUTES.

7.1. SC1: Measurement and Instrumentation - Chen - The [report](#) was shown. Mr. Chen move to accept the Title, Scope and Duties as shown. No second was needed. The motion carried unanimously. Mr. Chen showed the [PINS_C63.4_corrigendum_r1_20180320](#) draft PINS. Mr. Chen moved to accept the PINS as shown, no second was required. Mr. Griffin voted no. Mr. Moongilan abstained. The motion carried by voice vote.

From the Steering Committee minutes:

Jennifer will check with ANSI regarding the ANSI Essential Requirements regarding Interpretations process. Mr. Berger felt that we could model our procedure after the FCC complaint process, requiring the complainant to try to work with a WG Chair on a resolution. Mr. Berger moved to allow the SC Chair and WG Chair to attempt to resolve the Interpretation question informally. Mr. Hare seconded. Don Heirman opposed. The motion carried.

Mr. DeLisi moved that the Steering Committee recommend to the Main Committee that we be allowed to temporarily postpone answering Interpretation Requests while our C63 procedures are being reviewed. Mr. Sigouin seconded. The motion carried.

Discussion ensued. Mr. Hodes noted that our last change in procedures, written under Dean Ghizzone, took many months for ANSI to approve. He questioned the wisdom of this postponement. Mr. Sigouin noted that the procedure for Interpretations was embedded from another document into the current procedures. Interpretations will come in to the Secretary, who will acknowledge receipt and inform the requestors that we have postponed replying to requests for six months. Harry noted we have several Interpretation responses in process, which will be finished. Only new requests would be affected by this proposed postponement. Mr. Griffin thought that the IEC had no particular process to address "interpretation sheets." A vote was called. Mr. Hodes opposed. The motion to postpone answering interpretation requests for six months while our procedures are being reviewed carried.

7.2. SC2: Definitions – Shellman - The [report](#) was shown. Mr. Shellman moved to accept the Title, Scope and Duties of SC2. The motion carried unanimously. The cut-off date for submission of new definitions for inclusion in the next C63.14 draft will be August, 2018.

7.3. SC3: International Standardization – Heirman - The [report](#) was shown. We are moving parts of our C63.16 Recommended Practice for ESD into IEC-TC-77 and into the next IEC 61000-4-2. The [SC3 Membership Roster](#) was shown in a document. Mr. Shellman was listed as a new member. The liaison members were shown. Mr. Heirman showed the [SC3 Scope](#) in a document. **AI-53:** Don will report any movement of C63 material into a US National committee. The [SC3 Duties](#) were shown. Don moved to approve the Title, Scope, Duties and Membership of SC3. No second was needed. The motion carried unanimously by voice vote. The Standards comparison tables were shown. **AI-54:** Don & Jerry to add C63.25.1 and C63.25.2 to the comparison tables. Work that is being considered for input to CISPR included a tolerance table, equivalency of site validation and a repeat measurements approach that was shown. Work in progress was reviewed. **AI-55:** Don to add a column to SC3-Table 2 to list which target committee the report is being sent to.

- 7.4. SC4: Wireless and ISM Equipment Measurements - DeLisi** - The [report](#) was shown. The Title, Scope & Duties were shown. New members were added as shown in 5.5 above, now up to 23 members. Mr. DeLisi moved to accept the SC4 Title, Scope & Duties. The motion carried unanimously by voice vote. Progress on individual Standards was reviewed.
- 7.5. SC5: Immunity testing – Hare** - The [report](#) was shown. The Title, (amended) Scope and Duties were shown. The Membership roster was shown, with one new member. (Ross Carlton) Mr. Hare moved to approve the Title, Scope & Duties as amended. No second was needed. The motion carried unanimously by voice vote. **AI-56:** The current edition of C63.9 uses arbitrary waveforms in digital form. Mr. Hare and Mr. Berger are to work with IEEE and the C63 Chair to determine how best to distribute these waveform files. Individual Standards activity was reviewed. The [C63.16 recommendation report](#) will be made part of the SC5 Minutes. C63.24 on in-situ RF immunity was discussed, with a joint working group formed with IEEE-473 on Site Surveys.
- 7.6. SC6: Laboratory Accreditation – Long** - The [report](#) was shown. The Title, Scope, Duties and Membership roster was shown. Doug Kramer was added and both NIST/NVLAP members were removed. Tim Rasinsky (NIST/NVLAP) will apply for membership later. Mr. Long moved to accept the Title, Scope, Duties and Membership. The motion carried by voice vote. Mr. Long noted that ANAB is now recognized by the FCC for non-RMA countries. Perry Johnson Lab Accreditation was invited to apply for membership.
- 7.7. SC7: Unlicensed Personal Comm. Services – Bazhanov** - The [report](#) was shown. The Title, Scope, Duties and Membership roster was shown. Mr. Bazhanov moved to accept the Title, Scope, Duties and (amended) Membership roster. The motion carried by voice vote. Progress on individual Standards was shown. An initiative to bring in more members was proposed.
- 7.8. SC8: Medical Equipment Testing – Berger** - The [report](#) was shown. Mr. Berger felt that they had a deficit of medical equipment manufacturers and has begun outreach efforts. Discussion of that outreach effort ensued. The FDA has noted that users of Bluetooth in medical applications were having some interference problems. C63.18 and C63.19 progress was discussed. He reported that up to 80% of wireless handsets deliver a negative experience for the hearing-impaired user. There was an understanding of how to fix the test for this deficit, which is now under discussion. The Title, Scope, Duties and Membership roster was shown. Mr. Berger moved to accept the Title, Scope, Duties and Membership roster. The motion carried by voice vote.

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

8. New Business

- 8.1 C63.4 and C63.4a - Mr. Heirman** noted that C63.4a is Annex D in the previous Standard. Our intention was that C63.4-2014 now is modified by this Annex. This annex is also included in the next 2019 edition of C63.4. Mr. Hodes reported that it allows labs to test products taller than 2m, up to 3m or other heights. We've always had requirements for NSA for tall products, so this is a great simplification to make testing easier. Harry discussed a motion to petition the FCC to adopt C63.4a. Mr. Hodes moved to have the Main Committee submit a petition to the FCC to adopt C63.4a as normatively incorporated in C63.4-2014. The motion was seconded by Don Heirman. Mr. Griffin proposed a transition period of two years be included in our petition to the commission. Discussion of the practical effect of this petition ensued. (only covers products over 2 meters high) Mr. Hoolihan thought a letter from the Chair may suffice. Mr. Hodes noted that he was told by Mr. Jones that they wanted a petition. Mr. Heirman thought we could approve the text in such a petition by electronic ballot. The motion carried unanimously by voice vote. **AI-57:** Mr. Heirman and Mr. Hodes will draft the FCC petition text for C63,4a and submit to the Chair for review and recirculation to the Main Committee for review and electronic ballot

approval.

8.2 Patent Issues - Art Wall Art noted that we have two open patent issues, so he can only discuss general patent issues, not specific ones. A manufacturer may have a patent and if other manufacturers want to incorporate the content, it causes a patent dispute. In C63.19, we should not mention the patent number in the document. Mr. Wall showed the [ANSI-ASC-C63® Generic Statement of Assurance](#) from our website. He noted that the WG Chair must ensure that any potential patent issues are raised at the beginning of a meeting and that the holder is referred to the Secretariat so she can contact ANSI and the IEEE legal department.

8.3 MEC from IEEE - Lisa Perry - Lisa Perry of IEEE discussed Mandatory Editorial Coordination (MEC) features. She looks at the Normative References to see if they are cited in the text. It's a quick review to try to clear up problem areas proactively. No review of syntax or wording is included. Mr. Heirman noted we are becoming more careful in our use of "modal verbs" such as shall/should. Mr. Berger asked how he could get an authoritative opinion on the use of the IEEE style guide. Mr. Hodes asked what degree does the Guide become mandatory. "Shall" was the most important verb, she noted.

Lisa discussed IEEE amendments, showing tracked-changes. This became a problem, as these changes obscured the final text. Moving forward, IEEE will only show the clean version. Mr. Hoolihan thought that an amendment should be 2-3 pages at most. (C63.4a was over 70 pages long) Mr. Hodes pointed out that the amendment was not available in clean form. He had complained to IEEE that the Amendment was unreadable and was ignored. Ms. Perry responded that clean versions will be available, and a clean unofficial version was also made available to Mr. Hodes.

9. Other Administrative Matters

9.1. Web Page – Ramie

9.1.1 new Generic Agendas for Subcommittees and Working Groups include a review of membership rosters, Quorum check, Membership Guidelines, attendance log, PINS & Status Matrix text. These Agendas will be modified such that the Status Matrix text and associated "Learn more" text will be reviewed at the Spring meeting only.

9.1.2 New Generic Agendas require that all Standards from all Subcommittees are copied to SC2 and SC3 for consideration before being considered at the Main Committee.

9.2. Administrative matters from the Steering Committee - Chair - The Chair agreed and noted that all of the Generic Agendas will be mandatory at the Spring meeting, and otherwise optional at the Fall or other meetings.

10. Other Business

10.1 Future Seminars and Workshops – Heirman - The [Education Report](#) was shown.

10.2 Newsletter report – Zimmerman - We need the reports with important aspects of their work from the SC Chairs within 30 days. (Newsletter page)

10.3 [Google & Laird Technologies](#) - The applications will be circulated electronically and we will ballot the applications electronically.

10.4 Financial report - The [report](#) was shown. We have asked our two Secretaries to cut back on their hours to reduce our expenses.

10.5 Next meeting – Hoolihan - November 26-30, 2018 – Boulder, Colorado

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 11/10/17¹

Action Item #	Subject	Responsible Person	Status	Delivery Date	Comments
AI-38:	Dan H. to solicit Standards Council Canada regarding membership.	Dan Hoolihan	Open	5/4/18	
AI-39:	Mr. Hodes to provide contact info for SCC to Dan H.	Harry Hodes	Open	5/4/18	Jerry to remind Harry
AI-51:	Update all Generic SC Agendas with a step requiring SC2 and SC3 coordination <u>before</u> a document goes to Mandatory Editorial Coordination (MEC) at the IEEE.	Jerry Ramie D. Zimmerman	Closed	5/4/18	New Generic SC agendas uploaded 1/26/18

12. Adjournment - Hoolihan - The Chair adjourned the meeting at 1:49PM-EDT

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

Consolidated Action Items from Main Committee Meeting 05/04/18²

Action Item #	Subject	Responsible Person	Status	Delivery Date	Comments
AI-38:	Dan H. to solicit Standards Council Canada regarding membership.	Dan Hoolihan	Open	11/30/18	
AI-39:	Mr. Hodes to provide contact info for SCC to Dan H.	Harry Hodes	Open	11/30/18	Jerry to remind Harry
AI-52:	Hoolihan and Santulli will get a written answer regarding liability of third-party users of C63.26 and report on it.		Open	11/30/18	
AI-53:	Don will report any movement of C63 material into a US National committee	Don Heirman	Open	11/30/18	
AI-54:	Don & Jerry to add C63.25.1 and C63.25.2 to the comparison tables.	Don Heirman Jerry Ramie	Open	11/30/18	
AI-55:	Don to add a column to SC3-Table 2 to list which target committee the report is being sent to	Don Heirman	Open	11/30/18	
AI-56:	The current edition of C63.9 uses arbitrary waveforms in digital form. Mr. Hare and Mr. Berger are to work with IEEE and the C63 Chair to determine how best to distribute these waveform files	Ed Hare Stephen Berger Dan Hoolihan	Open	11/30/18	
AI-57:	Mr. Heirman and Mr. Hodes will draft the FCC petition text for review by Mr. Hoolihan and then to be circulated to the Main committee for electronic ballot approval.	Dan Hoolihan Don Heirman Harry Hodes	Open	11/30/18	

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

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

Attachments from Main Committee Meeting 05/04/18³

Item	Description	URL
2.1	Draft agenda	http://www.c63.org/documents/misc/minutes/2018_May/20180504_Main_Agenda2.doc
2.2	Patent slides	http://www.c63.org/documents/misc/patents/C63_Patent_Call_slideset_final_1.pdf
3.0	Chairman's Report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/Main/180504%20-%20DDH%20-%20Report%20-%20C63_PowerPoint.ppt
5.1	Approved previous Minutes	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/Main/20171110_Main_Approved_Mins.pdf
5.3	Interpretation requests since last meeting	http://www.c63.org/documents/misc/minutes/2018_May/Interpretations_log_20180418.xls http://www.c63.org/documents/misc/minutes/2018_May/Interpretations_log_20180418.xls
5.4	Electronic motions	http://www.c63.org/documents/misc/minutes/2018_May/Electronic_motions_2017Nov_2018May.xls
6.0	Secretariat Report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/Main/C63_May%202018%20Secretariat%20Update.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/2018_May/Main%20Committee%20attachments%202018-May/SC1/C63%20SC1%20update%2020180504.ppt
7.1	PINS C63.4 corrigendum r1	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/SC1/PINS_C63_4_corrigendum_r1_20180320.doc
7.2	SC2 Report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/SC2/SC2_Report_to_Main_Committee_20180504_Final.%20Rev1.pptx
7.3	SC3 Report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/SC3/SC3%20report%20to%20C63%20May%202018.doc
7.4	SC4 Report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/SC4/Main%20Committee%20Report%20-%20SC4%202018-05-02.ppt
7.5	SC5 Report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/SC5/SC5_Report_%2020180504.ppt
7.6	SC6 Report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/SC6/20180504%20SC6%20Main%20Report.ppt
7.7	SC7 Report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/SC7/C63%20SC7%20-%202018%20Report%201%20-%20180504%20-%20v1.ppt
7.8	SC8 Report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/SC8/Main%20Committee%20Report%20-%20SC8%20-%20180504%20-%20v1.ppt
8.2	C63 [®] Statement of Assurance	http://www.c63.org/documents/misc/patents/ANSI_C63_Statement_of_Assurance.doc
10.1	Education & Training report	http://www.c63.org/documents/misc/minutes/2018_May/Main%20Committee%20attachments%202018-May/Main/May%202018%20C63%20education%20committee%20report.ppt
10.2	Newsletters page	http://www.c63.org/documents/c63/list_of_newsletters.htm

³ Attachments are included here for reference, but are not a part of the Minutes