(R)

## Accredited Standards Committee C63 ${ }^{\circledR}$

## Electromagnetic Compatibility

Subcommittee 4: Wireless and ISM Equipment

Chair: Bob DeLisi

Vice Chair: Dave Case<br>Secretary: Jerry Ramie

September 24, 2020; 2:00 PM - 4:00 PM - EDT
Webinar
Approved Minutes

1. Call to Order: Chair - The Chair called the meeting to order at 2:04PM-EDT
1.1 Announcements: Chair's remarks - Thank you for attending!
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 ${ }^{\text {® }}$ Secretary (SC4 membership roster from the website is shown below) Grayed-out names did not attend.

Subcommittee 4 Membership Roster

| Name | Role in SC |  |
| :--- | :--- | :--- |
| Affiliation |  |  |
| Abbondante, Nicholas | Member | Intertek |
| Case, David | Vice Chair | Cisco Systems |
| Chamberlain, David | Member | Innovation, Science \& Economic Development Canada |
| Chen, Zhong | Member | ETS-Lindgren |
| DeLisi, Bob | Chair | UL LLC |
| Elliott, William (Mac) | Member | TÜV SÜD America, Inc. |
| Friden, Jonas | Member | Ericsson AB |
| Graff, William | Member | TÜV Rheinland of North America |
| Hoolihan, Dan | Member | Hoolihan EMC Consulting |
| Jones, Steve | Member | FCC Laboratory |
| Kiemel, Greg | Member | Apple Inc. |
| Klinger, Jeff | Member | Compatible Electronics |
| Kramer, Doug | Member | ETS-Lindgren |
| Lee, Edmund | Member | Apple Inc. |
| Mahn, Terry | Member | Fish \& Richardson P.C. |
| Mansergh, Dan | Member | Apple Inc. |
| Mendoza, Ernesto | Member | Signify |
| Molaei, Nima | Member | PCTEST Engineering Laboratory LLC |
| Nixon, Jason | Member | Innovation, Science and Economic Development Canada |
| Pino, Dan | Member | PCTEST Engineering Laboratory LLC |
| Sigouin, Dan | Member | TIMCO ENGINEERING, INC. |
| Skoglund, Kenth | Member | Ericsson AB |
| Terrien. Mark | Member | Keysight Technologies |
| Ward, Dennis | Member | PCTEST Engineering Laboratory |
| Zimmerman, Dave | Member | Spectrum EMC, LLC |

Guests and Observers: (non-voting) Jerry Ramie,
1.4 Quorum: (50\% of roster) constitutes a quorum. (rounding up) ( 25 roster members / $2=12.5$ >> 13 (therefore 13 people are required for a quorum) Was quorum achieved? (Yes)
1.5 Review of the patent slides - Secretary - The patent slides were shown and no potentially essential patents or I.P. issues were declared.
2. Approval of the Agenda: Secretary - The Agenda was approved by acclamation.

### 2.1 Approval of the previous Minutes - The previous Minutes were reviewed in a line-by-

 line manner and approved by acclamation.
## 3. Review of Subcommittee Membership: Secretary - Report any errors to the ASC-C63 ${ }^{\text {® }}$ Secretary

### 3.1 Review of Membership Guidelines - 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: Any errors in the log?

| SC4 Roster: | 20160511 | 20161109 | 20170510 | 20171108 | 20180502 | 20181128 | 20190501 | 20191120 | 20200602 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abbondante, Nick |  |  |  |  |  |  |  |  | X |
| Case, David | X |  |  | X | x | X | X | X | X |
| Chamberlain, David |  |  |  |  | X | X | X | X | X |
| Chen, Zhong |  | X | X | X |  |  | X | X |  |
| DeLisi, Bob | X | X | X | X | X | X | X | X | X |
| Elliott, William (Mac) | X | X | X | X |  | X | X | X | X |
| Friden, Jonas |  |  |  |  |  |  | X |  | X |
| Graff, William |  |  |  |  | X | X | X | X |  |
| Hoolihan, Dan | X | X | X | X | X | X | X | X | X |
| Jones, Steve | X | X | X | X | X | X | X | X | X |
| Kiemel, Greg |  |  |  | X | X |  |  | X | X |
| Klinger, Jeff |  | X | X | X | X |  | X | X | X |
| Kramer, Doug |  |  |  | X | X | X | X | X | X |
| Lee, Edmund |  |  |  |  |  |  | X | X |  |
| Mahn, Terry |  |  |  |  |  |  |  |  | X |
| Mansergh, Dan |  |  |  |  |  |  | X |  | X |
| Mendoza, Ernesto |  |  |  |  | a | X |  |  | X |
| Molaei, Nima |  |  |  |  |  |  |  | X | X |
| Nixon, Jason | X | X | X | X | x | X | X | X | X |
| Pino, Dan |  |  |  |  | p |  | X |  |  |
| Sigouin, Dan | X | X | X | X | X | X |  | X |  |
| Skoglund, Kenth |  |  |  |  | X | X | X | X | X |
| Terrien, Mark |  |  |  |  |  | X | X | X | X |
| Ward, Dennis | X |  |  | X | X | X | X | X | X |
| Zimmerman, Dave | X |  |  | X | X |  |  | X | X |

Any members at risk? None are at risk.

### 3.2 Consideration of new members? Application for $\mathbf{C 6 3}{ }^{\circledR}$ Subcommittee Membership

4. Working Group reviews - 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 Spring Subcommittee meeting. The WG reports shall be made using either the C63 PowerPoint template or the C63 PowerPoint template wide.
4.1 C63.10 - Unlicensed transmitters - Nixon (verbal report)
4.11 Status Matrix Review (Spring meeting only) Verify accuracy of document status matrix content and report any errors to the ASC-C63 ${ }^{\circledR}$ Secretary. Is this information correct? (No)

| C63.10- <br> 2013 <br> C63.10- <br> 2020 <br> Learn more | Procedures for compliance testing of unlicensed wireless devices | SC 4 | Nixon, Jason | $\begin{aligned} & \frac{\text { C63.10 }}{\text { PINS }} \\ & \hline \end{aligned}$ | Currently in balloting <br> Current. (approved 9/10/20) |
| :---: | :---: | :---: | :---: | :---: | :---: |

C63.10: C63.10-2013 American National Standard for Testing Unlicensed Wireless Devices
Contact: Nixon, Jason (Working Group Chair)
Scope: This standard is intended to cover procedures for testing the compliance of a wide variety of unlicensed wireless devices (also called unlicensed intentional radiators) including but not limited to: remote control and security unlicensed wireless devices, frequency hopping and direct sequence spread spectrum devices, anti-pilferage devices, cordless telephones, wireless medical unlicensed wireless devices, Unlicensed National Information Infrastructure devices, intrusion detectors, unlicensed wireless devices operating on frequencies below 30 MHz , automatic vehicle identification systems, and other unlicensed wireless devices authorized by a radio regulatory authority.
Status: Currently in balloting. Current. (approved 9/10/20)
Purchase: IEEE Store. To purchase individual standards, go to the IEEE store and search on the standard number. Draft revisions are not yet available for sale. Not yet published.

### 4.2 C63.26 - Licensed transmitters - Jones (C63.26 WG report)

4.21 Status Matrix Review (Spring meeting only) Verify accuracy of document status matrix content and report any errors to the ASC-C63 ${ }^{\circledR}$ Secretary. Is this information correct? (Yes)

| C63.26- <br> 2015 <br> Learn more | Procedures for compliance <br> testing of licensed transmitters | $\underline{\text { SC 4 }}$ | $\underline{\text { Jones, Steve }}$ | $\underline{\text { C63.26 }}$ | 2015 edition under revision |
| :--- | :--- | :--- | :--- | :--- | :--- |

C63.26-2015: American National Standard of procedures for compliance testing of transmitters used in licensed radio services
Contact: Jones, Steve (Working Group Chair)
Scope: This standard covers the procedures for testing a wide variety of licensed transmitters; including but not limited to transmitters operating under Parts 22, 24, 25, 27, 90, 95 and 101 of the FCC Rules, transmitters subject to the general procedures in Part 2 of the FCC Rules and procedures for transmitters not covered in the FCC Rules. The standard also addresses specific topics; e.g., ERP/EIRP, average power measurements and instrumentation requirements.
Status: New Standard published $1 / 15 / 16$. New work is pending.
Purchase: IEEE Store. To purchase individual standards, go to the IEEE store and search on the standard number.

### 4.3 C63.29 - Lighting equipment - Mendoza (C63.29 WG report)

4.31 Status Matrix Review (Spring meeting only) Verify accuracy of document status matrix content and report any errors to the ASC-C63 ${ }^{\text {® }}$ Secretary. Is this information correct? (Yes)

| C63.29- <br> draft <br> Learn more | Lighting products | $\underline{\text { SC 4 }}$ | Mendoza, <br> Ernesto | $\underline{\underline{\text { C63.29 }}}$ | New standard. Draft being <br> written. |
| :--- | :--- | :--- | :--- | :--- | :--- |

C63.29-draft: American National Standard of procedures for compliance testing of lighting products
Contact: Mendoza, Ernesto (Working Group Chair)
Scope: This standard is intended to include procedures for compliance testing of general illumination lighting products with applicable radio regulatory requirements. This standard encompasses various technologies, from traditional lighting like fluorescent or HID, as well as novel technologies like LED and others. Related national and international standards (e.g., CISPR 15, ANSI C63.4) will be reviewed and used to the extent possible.

Status: New standard. Draft being written. Purchase: Not yet available for sale.

### 4.4 C63.30 - Wireless Power Transfer equipment - Thul (WG report)

4.41 Status Matrix Review (Spring meeting only) Verify accuracy of document status matrix content and report any errors to the ASC-C63 ${ }^{\circledR}$ Secretary. Is this information correct? (No)

| C63.30- <br> draft <br> Learn more | Wireless Power Transfer <br> Products | $\underline{\text { SC 4 }}$ | $\underline{\text { Thul, Travis }}$ | $\underline{\text { C63.30 }}$ <br> PINS | Balloting group being formed by <br> IEEE secretariat |
| :--- | :--- | :--- | :--- | :--- | :--- |

C63.30-draft: American National Standard of procedures for compliance testing of Wireless Power Transfer products Contact: Thul, Travis (Working Group Chair)
Scope: This standard is intended to include procedures for compliance testing of several different types of Wireless Power Transfer (WPT) products with applicable electromagnetic compatibility (EMC) and radio regulatory requirements. Test procedures will focus on radiated field and conducted measurements and may reference established standards. WPT RF exposure compliance procedures will not be included, although standards pertaining to laboratory EMF safety may be referenced. WPT testing methods may consider, but are not limited to, large in-situ installations, charging systems for electric vehicles (including impact of host on electromagnetic fields), house-hold appliances, and desktop chargers. Consideration will also be given to appropriate testing distances and test locations (such as Semi-Anechoic Chambers, Open Area Test Sites, ground plane, and earth sites). Related national and international standards (e.g., CISPR, SAE, etc.) will be reviewed and used to the extent possible.
Status: Balloting group being formed by IEEE secretariat
Purchase: Not yet available for sale.

### 4.5 C63.31 - ISM equipment - Abbondante (C63.31 WG report)

### 4.51 Status Matrix Review (Spring meeting only) Verify accuracy of document status

 matrix content and report any errors to the ASC-C63 ${ }^{\circledR}$ Secretary. Is this information correct? (Yes)| C63.31- <br> draft <br> Learn more | ISM equipment (MP-5) | $\underline{\text { SC 4 }}$ | $\underline{\text { Abbondante, }}$ | $\underline{\text { C63.31 }}$ | New standard. Draft being <br> written. |
| :--- | :--- | :--- | :--- | :--- | :--- |

C63.31-draft: American National Standard for compliance testing of Industrial, Scientific and Medical (ISM)
Equipment
Contact: Abbondante, Nicholas (Working Group Chair)
Scope: This standard is intended to include procedures for compliance testing of traditional ISM equipment (industrial heaters, dielectric heaters, food tempering equipment, microwave ovens, medical diathermy equipment, etc.) with applicable EMC and radio regulatory requirements. Related national (FCC/OET MP-5) and international standards (e.g., CISPR, IEEE) will be reviewed and used to the extent possible.
Status: New standard. Draft being written.
Purchase: Not yet available for sale.

## 5. Old Business: Chair

5.1 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 ASCC63 ${ }^{\circledR}$ Newsletter editor

### 5.2 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.5.3 Coordination with SC3 for harmonization - Before any Working Group draft can be submitted to the to Subcommittee for approval, the document must be provided to the SC3 Chair for ovaluation and coordination of any harmonization effort.

## 6. New Business: Chair

6.1 Chair is ending his first term - Our procedures allow for a second term, but we welcome a new Chair if anyone is interested. (we should decide by the end of this year)
6.2 Vice Chair going into 2021 and beyond - Mr. Case is retiring as Vice Chair. He will continue as Massive MIMO Chair. Let Mr. DeLisi know if anyone is interested in this position.
7. C63.org website use and updates: Secretary - We normally post documents to the SC4 protected area. If any SC or WG needs help with this posting, a Technical Secretary is available to assist.

## 8. Review of the Action Items: Secretary

### 8.1 Review of Action Items from this meeting: none

8.2 Review of Action Items from previous meeting: (consolidated Action Item table from the previous meeting Minutes is shown below)

Consolidated Action Items from 6/2/20 Meeting of SC4

| Action <br> Item \# | Subject | Responsible <br> Person(s) | Status | Delivery <br> Date | Comments |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Al-28: | Jerry to remove Werner Schaefer <br> and Art Wall from the C63.26 web <br> roster | Jerry Ramie | Closed | Next <br> meeting | Removed 6/3 |
| Al-29: | Bob DeLisi will contact SC2 with <br> definitions for C63.30 | Bob DeLisi | Closed | Next <br> meeting | At IEEE for <br> balloting |

9. Time and place of next meeting: Chair - We would like to wait for a few weeks to see if the Working Groups need to report to SC4. Dan H. suggested setting a meeting in the first quarter of 2021. Meeting date: Feb. 25, 2021 2:00PM - 4:00PM Eastern time (meeting set 9/24)
10. Closing remarks and Adjournment: Chair - The Chair thanked the members for their attendance and adjourned at 2:47PM-EDT.

Consolidated Action Items from 9/24/20 Meeting of SC4

| Action <br> Item \# | Subject | Responsible <br> Person(s) | Status | Delivery <br> Date | Comments |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Al-30: |  |  |  |  |  |
|  |  |  |  |  |  |

