## Electromagnetic Compatibility Subcommittee 4: Wireless and ISM Equipment

Chair: Bob DeLisi
Vice Chair: Dave Case Secretary: Jerry Ramie
September 9, 2021; 2:00 PM - 4:00 PM - EDT
Webinar
Approved Minutes

1. Call to Order: Chair - The Chair called the meeting to order at 2:03PM-EDT
1.1 Announcements: Chair's remarks - Thanks for attending! We may not need all the time today.
1.2 Meeting logistics announcements: Host - N/A
1.3 Introductions: Secretary - roll call (record attending members with their affiliations and guests separately below) Report any roster errors to the C63 ${ }^{\circledR}$ Secretary (SC4 membership roster from the website is shown below) Grayed-out names did not attend. Green names were excused.

## Subcommittee 4 Membership Roster

| Name | Role in SC $\quad$ Affiliation |  |
| :--- | :--- | :--- |
| Abbondante, Nicholas | Member | Intertek |
| Antola, Michael | Member | UL LLC |
| Case, David | Vice Chair | Consultant |
| Chamberlain, David | Member | Innovation, Science \& Economic Development Canada |
| Chen, Zhong | Member | ETS-Lindgren |
| Coder, Jason | Member | NIST |
| 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 |
| Nixon, Jason | Member | Innovation, Science and Economic Development Canada |
| Pino, Dan | Member | PCTEST Engineering Laboratory |
| Sigouin, Dan | Member | DHS-EMC |
| Skoglund, Kenth | Member | Ericsson AB |
| Ward, Dennis | Member | PCTEST Engineering Laboratory |
| Zimmerman, Dave | Member | Spectrum EMC, LLC |

1.4 Quorum: (50\% of roster) constitutes a quorum. (rounding up) (26 roster members / $2=13$ >> therefore 13 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)
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 - 20210527 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?

| 20170510 | 20171108 | 20180502 | 20181128 | 20190501 | 20191120 | 20200602 | 20200924 | 20210225 | 20210527 | SC4 Roster: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | X | X | X | X | Abbondante, Nicholas |
|  |  |  |  |  |  |  |  | X | X | Antola, Michael |
|  | X | X | X | X | X | X | X | X | X | Case, David |
|  |  | X | X | X | X | X | X | X | X | Chamberlain, David |
| X | X |  |  | X | X |  |  | X | X | Chen, Zhong |
|  |  |  |  |  |  |  |  | X | X | Coder, Jason |
| X | X | X | X | X | X | X | X | X | X | DeLisi, Bob |
| X | X |  | X | X | X | X | X | X | X | Elliott, William (Mac) |
|  |  |  |  | X |  | X |  |  |  | Friden, Jonas |
|  |  | X | X | X | X |  |  | X |  | Graff, William |
| X | X | X | X | X | X | X | X | X | X | Hoolihan, Dan |
| X | X | X | X | X | X | X | X | X | X | Jones, Steve |
|  | X | X |  |  | X | X | X | X | X | Kiemel, Greg |
| X | X | X |  | X | X | X |  | X | X | Klinger, Jeff |
|  | X | X | X | X | X | X | X |  |  | Kramer, Doug |
|  |  |  |  | X | X |  | X | X | X | Lee, Edmund |
|  |  |  |  |  |  | X |  |  | X | Mahn, Terry |
|  |  |  |  | X |  | X |  |  | X | Mansergh, Dan |
|  |  | a | X |  |  | X | X | X | X | Mendoza, Ernesto |
|  |  |  |  |  | X | X | X | X | X | Molaei, Nima |
| X | X | X | X | X | X | X | X | a |  | Nixon, Jason |
|  |  | p |  | X |  |  |  | X |  | Pino, Dan |
| X | X | X | X |  | X |  | X |  | X | Sigouin, Dan |
|  |  | X | X | X | X | X | X |  | X | Skoglund, Kenth |
|  | X | X | X | X | X | X | X | X | X | Ward, Dennis |
|  | X | X |  |  | X | X |  | X | X | Zimmerman, Dave |

Any members at risk? Jonas Friden is at risk. Mr. Friden attended today and is no longer at risk.
3.2 Consideration of new members? Application for C63 ${ }^{\circledR}$ Subcommittee Membership

The voting on SC4 membership for Dr. Jody House was completed yesterday, but is not counted yet.

### 3.3 Review and approval of SC4 scope, membership, and duties - Spring Meeting

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 draft Corrigendum v1- Nixon

4.11 Status Matrix Review Verify accuracy of document status matrix content and report any errors to the ASC-C63 ${ }^{\circledR}$ Secretary. Is this information correct? (needs to be added) AI-38: Jerry \& Bob to add C63.10 Corr. \& "Learn more" text to Status Matrix.

| C63.10 <br> Corr1-202X | Procedures for compliance <br> testing of unlicensed wireless <br> Learn more | $\underline{\text { SC 4 }}$ | Nixon, Jason |  | Corrigendum to fix errors in the <br> standard. |
| :--- | :--- | :--- | :--- | :--- | :--- |

4.2 C63.10 - Unlicensed transmitters - Nixon AI-39: Jerry \& Bob to correct C63.10 date \& "Learn more" text in Status Matrix.
4.3 C63.26 - Licensed transmitters - Elliott (WG report)
4.4 C63.29 - Lighting equipment - Mendoza (WG report)
4.5 C63.30 - Wireless Power Transfer equipment - Thul (published)
4.6 C63.31 - ISM equipment - Abbondante - meeting monthly, making progress on Sections 9 \& 10. We reviewed earlier content in sections $1-3$. Both FCC and ISED Canada are represented. There is debate about in-situ testing at a manufacturer's premises. Is that similar to a "typical" installation?
4.7 C63.xx - Massive MIMO - PINS-C Project - Case (TG Report)

## 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. Bob asked Ernesto if his definitions have been sent to SC2 for review? (No) Al-40: Bob will provide the C63.29 draft to SC2 for their review.
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 evaluation and coordination of any harmonization effort. Al-41: Ernesto to provide the comparison report C63.29 to SC3 (Ross Carlton, Jerry Ramie) for their review. Al-42: Bob \& Travis to provide a comparison report on C63.30 to SC3.

## 6. New Business: Chair

6.1 - C63.30 FCC Petition - Mr. Mahn has drafted a petition to the FCC to adopt C63.30. ISED was on this working group (Horia) and internal discussions are underway.
6.2 - Interpretation request for C63.10-ISED doesn't want to move before the FCC on this document. We have received an Interpretation Request on C63.10 regarding Resolution Bandwidth. A call for interested members has been completed. A Task Group Chair needs to be appointed by Bob.
6.3 - Dated and undated references - Zimmerman - Current policy is that each working group decides if they will cite a dated or undated Standard. NSA will be under a new, different Standard that's not C63.4.

Al-43: Bob to bring up dated/undated references at the upcoming C63 Steering Committee Meeting. (see C63.30 for transition text)
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: The Action Items were reviewed and all affected agreed that they understood their meaning.
8.2 Review of Action Items from previous meeting: The Consolidated Action Item table from the previous meeting Minutes is shown below:

Consolidated Action Items from 5/27/21 Meeting of SC4

| Action <br> Item \# | Subject | Responsible <br> Person(s) | Status | Delivery <br> Date | Comments |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Al-37: | Jerry to correct C63.29 Status Matrix <br> text | Jerry Ramie | Closed | $9 / 9 / 21$ | Corrected 5/27 |

9. Time and place of next meeting: Chair - TBD Our Fall meeting is tentatively set for Nov 15-19, $\underline{2021}$ at IEEE headquarters in Piscataway, NJ. If this meeting is cancelled, we can meet in the first quarter.
10. Closing remarks and Adjournment: Chair - The Chair thanked the members for their attendance and adjourned the meeting at 3:05PM-EDT.
$\qquad$
Consolidated Action Items from 9/9/21 Meeting of SC4

| Action <br> Item \# | Subject | Responsible <br> Person(s) | Status | Delivery <br> Date | Comments |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Al-38: |  <br> "Learn more" text to Status Matrix | Jerry Ramie <br> Bob DeLisi | Closed | $9 / 9 / 21$ |  |
| Al-39: |  <br> "Learn more" text in Status Matrix | Jerry Ramie <br> Bob DeLisi | Closed | $9 / 9 / 21$ |  |
| Al-40: | Bob will provide the C63.29 draft to <br> SC2 for their review | Bob DeLisi | Closed | $9 / 9 / 21$ |  |
| Al-41: | Ernesto to provide the comparison <br> report C63.29 to SC3 (Ross Carlton, <br> Jerry Ramie) for their review. | Ernesto Mendoza | Open | Next <br> meeting |  |
| Al-42: | Bob \& Travis to provide a <br> comparison report on C63.30 to <br> SC3. | Bob DeLisi <br> Travis Thul | Open | Next <br> meeting |  |
| Al-43: | Bob to bring up dated/undated <br> references at the upcoming C63 <br> Steering Committee meeting. | Bob DeLisi | Open | Next <br> meeting | (see C63.30 for <br> transition text) |

