IEEE P802.11
Wireless LANs

|  |
| --- |
| Minutes of the May meetings of the Coexistence Standing Committee |
| Date: 2018-07-02 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Guido R. Hiertz | Ericsson | Ericsson GmbHEricsson Allee 152134 HerzogenrathGermany | +49-2407-575-5575 | hiertz@ieee.org |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Andrew Myles | Cisco | Australia | +61 418 656587 | amyles@cisco.com |

Abstract

This document contains the minutes of the May meetings of the IEEE 802.11 Coexistence Standing Committee (SC).

R1 updates R0 by condensing most of the “he said, she said” content into summaries

Using Word’s “Track Changes” feature, this document shows all modifications applied by Andrew Myles to 11-18/1016r0.

# Wednesday, 2018-05-09

At 2018-05-09T13:33+02:00 the Chair of the Coexistence Standing Committee (SC) called the meeting of the Coexistence SC to order. Andrew Myles was the Chair of the SC. Guido R. Hiertz was the Recording Secretary of the meeting.

At 2018-05-09T13:34+02:00 the Chair presented slides 4 and 5 of 11-18/659r5. He noted that 11-18/659r5 is equivalent to 11-18/659r4 on the server, and 11-18/659r5 will be uploaded if changes to 11-18/659r5 are made during the meeting.

At 2018-05-09T13:35+02:00 the Chair presented the proposed agenda for this week (see slide 7 of 11-18/659r5).

At 2018-05-09T13:37+02:00 the SC approved the proposed agenda by unanimous consent.

At 2018-05-09T13:37+02:00 the Chair asked for approval of the minutes of the March 2018 meetings of the SC contained in document 11-18/671r0.

One attendee objected to approving the minutes by unanimous consent, stating that he did not attend the March meeting and so he wanted to abstain on the approval of the March meeting minutes. The Chair asked for other objections. Nobody objected. Therefore, the Chair declared the SC’s March 2018 meeting minutes approved by unanimous consent except for one person abstaining.

At 2018-05-09T13:39+02:00 the Chair presented, starting from page 13 of 11-18/659r5. The material reviewed the ETSI BRAN meeting held in March 2018.

At 2018-05-09T13:48+02:00 an attendee asked about availability of the ETSI Technical Committee (TC) BRAN submissions referenced on page 21 of 11-18/659r5. It was explained that TC BRAN submissions are available from the IEEE 802.11 Members Area, after the 802.11 Working Group Chair copies them to that location.

At 2018-05-09T13:49+02:00 the Chair continued the review of the ETSI BRAN meeting from page 21 of 11-18/659r5.

At 2018-05-09T13:55+02:00 the SC discussed page 23 of 11-18/659r5. The discussion highlighted differences in opinion between attendees in relation to the accuracy of the assertions by Cisco at the ETSI BRAN meeting

At 2018-05-09T14:00+02:00 the Chair continued from page 25 of 11-18/659r5.

At 2018-05-09T14:04+02:00 the Chair stopped at page 27 of 11-18/659r5. Discussion highlighted that an ETSI Harmonized Standard (HS) is used to authorize the introduction of products to the European market, and that a new HS does not revoke the authorization of existing products.

At 2018-05-09T14:06+02:00 the Chair presented page 28 of 11-18/659r5. Discussion clarified that Ericsson objected at the ETSI BRAN meeting to the modifications proposed in BRAN(18)097004r1 by Intel, Broadcom, HPE, and Cisco. It further clarified that Ericsson prefers the next version of EN 301 893 to use the same harmonized ED threshold for all technologies, aligned with what Ericsson believes was previously agreed in ETSI TC BRAN, although Ericsson is currently internally discussing the extending an ED related exception to 802.11ax because of the advanced stage of the related draft standard.

At 2018-05-09T14:10+02:00 the Chair continued from page 28 of 11-18/659r5.

At 2018-05-09T14:23+02:00 the Chair reached page 32 of 11-18/659r5. Discussion highlighted similarities in the simulations presented by Ericsson at the ETSI BRAN meeting and simulations previously presented to the SC in 11-17/348r1. However, there was not consensus on the conclusions that should be drawn from the different simulations.

At 2018-05-09T14:24+02:00 the Chair continued from page 34 of 11-18/659r5.

At 2018-05-09T14:28+02:00 the Chair continued from page 35 of 11-18/659r5. After it was noted the characterization of companies as being either LTE or 802.11 stakeholders is probably inaccurate in some cases, the Chair removed the term “802.11 and LTE stakeholders” and replaced it with “all stakeholders.”

At 2018-05-09T14:29+02:00 the Chair continued from page 36 of 11-18/659r5.

At 2018-05-09T14:30+02:00 the Chair continued from page 36 of 11-18/659r5. There was some disagreement, from at least one attendee, with the reasons articulated for why the SC previously rejected the Alt 4 concept.

At 2018-05-09T14:34+02:00 the Chair continued from page 38 of 11-18/659r5. During discussion it was clarified that vendors may choose lower ED thresholds than those specified in EN 301 893, or lower PD thresholds than IEEE 802.11-2016 Clause 17.3.

At 2018-05-09T14:40+02:00 the Chair continued from page 39 of 11-18/659r5. During discussion, it was clarified that Alt 3 and Alt 4 are different because Alt 3 defines a common preamble (defined in IEEE 802.11-2016 clause 17.3) that can be used by all technologies, whereas Alt 4 allows the use of a different preamble by each technology. It was noted that some people are concerned the use of a non-common preamble (Alt 4) will result in poor sharing outcomes.

At 2018-05-09T14:45+02:00 the Chair introduced 11-18/708r0 as a possible LS to ETSI BRAN supporting Alt 3, but justified by the Alt 2 motivations. There was discussion of the tradeoffs of the various alternatives, with no conclusion

At 2018-05-09T15:28+02:00 the Chair declared the meeting to be in recess, after asking participants to consider options for the approval of a LS to ETSI BRAN during the Thursday meeting.

# Thursday, 2018-05-10

At 2018-05-10T13:34+02:00 the Chair called the meeting of the Coexistence SC to order. Andrew Myles was the Chair. Guido R. Hiertz was the Recording Secretary.

The Chair showed document 11-18/659r7, containing the agenda of the SC. Revision 6 of the document was on the server. Revision 7 was identical to revision 6 except for modifications that may be applied during the session.

At 2018-05-10T13:36+02:00 the Chair continued from page of 44 of document 11-18/659r7.

The Chair introduced 11-18/708r2, the proposed LS to ETSI BAN, and explained the modifications from r1 to r2.

At 2018-05-10T14:01+02:00 attendees discussed the differences between the proposed LS in 11-18/708r2 and the proposed alternative LS in 11-18/971r0, but could not come to consensus on which proposed LS to use as baseline.

The Chair proposed a straw poll:

*Do you prefer document 11-18/971r0 or document 11-18/708r2 as baseline for a liaison letter to ETSI TC BRAN?*

Attendees debated the straw poll and at 2018-05-10T14:10+02:00 attendees decided to use 11-18/708r2 as the baseline by a vote of 10 to 7.

The SC modified 11-18/708r2 after further discussion, with the revised proposed LS in 11-18/708r3.

At 2018-05-10T14:27+02:00 a motion *to adopt 11-18/708r3 as proposed liaison letter to ETSI TC BRAN* was moved and seconded. There is no discussion of the motion.

Moved: Stephen McCann

Second: Jeff Jones

Results: Yes: 11, No: 0, Abstain: 10

At 2018-05-10T14:29+02:00 Girish Madpuwar presented 11-18/916r0 on behalf of Shubhodeep Adhikari and Sindhu Verma. The document provided a status update of NR-U activity in 3GPP RAN1. In particular it highlighted potential impact of NR-U on Wi-Fi in terms of coexistence, and yet the lack of participation in 3GPP by Wi-Fi stakeholders. It noted the *chances of failure, i.e. of not being able to ensure fair coexistence between 802.11 and NR-U, are high if Broadcom continues to be the only participant from the Coexistence SC in NR-U standardization*.

At 2018-05-10T14:55+02:00 the Chair presented pages 48-51 of 11-18/659r7, which discuss the issue of coexistence with LTE technology in the 6GHz band. Discussion highlighted a variety of views about coexistence in the 6 GHz band, and also some uncertainty about what 3GPP are assuming or planning for 6GHz coexistence.

At 2018-05-10T15:07+02:00 the Chair presented page 54-57 of 11-18/659r7, which discuss the possibility of a workshop with 3GPP RAN1 to discuss sharing of 6GHz band.

There was an objection to the inclusion of material on page 57 from an anonymous source. The Chair ruled that the citing of anonymous sources are allowed and advised the objector to contact the IEEE 802.11 WG Chair to appeal the ruling.

At 2018-05-10T15:14+02:00 discussion highlighted the difficulties of liaising with 3GPP. It was noted that in the past 3GPP has declined to recognize 802.11 reps and often just notes LS’s rather than taking action. There was hesitation in organizing a workshop but there was some interest in inviting the RAN and RAN1 Chairs to present to the SC.

At 2018-05-10T15:23+02:00 the Chair quickly skimmed through pages 59 to 92 of document 11-18/659r7.

The Chair declares the meeting of the Coexistence SC adjourned at 2018-05-10T15:29+02:00.