IEEE P802.11
Wireless LANs

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| Minutes of the May 2019 meetings of the IEEE 802.11 Coexistence Standing Committee |
| Date: 2019-06-12 |
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Abstract

This document contains the minutes of the May 2019 meetings of the IEEE 802.11 Coexistence Standing Committee.

Meeting location: Grand Hyatt Atlanta In Buckhead, Atlanta, Georgia, USA

# Wednesday, 2019-05-15, PM1

At 2019-05-15T13:31-04:00 the chair calls the meeting of the Coexistence Standing Committee (SC) to order. Andrew Myles act as chair of the SC. Guido R. Hiertz acts as secretary. The chair introduces submission 11-19/571r3, which contains the proposed agenda for the SC’s meetings during this week. Version 11-19/571r2 is available from Mentor server. Revision 3 (R3) of the document will be uploaded after the meeting. R3 will contain all modifications that might occur during this meeting.

At 2019-05-15T13:33-04:00 the chair presents the proposed agenda contained on page 7 of document 11-19/571r3. At 2019-05-15T13:35-04:00 the SC approves the agenda by unanimous consent. At 2019-05-15T13:37-04:00 the SC approves the minutes of the previous meeting contained in document 11-19/635r0 by unanimous consent.

At 2019-05-15T13:38-04:00 the chair continues presenting from page 15 of 11-19/571r3. At 2019-05-15T13:43-04:00 an attendee asks a question regarding page 19:

Question: Who is reviewing the papers?

Chair: We do the review here in the SC. We don’t have a time problem at the moment.

At 2019-05-15T13:44-04:00 the chair continues from page 20 of 11-19/571r3. At 2019-05-15T13:51-04:00 Guido R. Hiertz volunteers to act as secretary of the IEEE 802.11 coexistence workshop in July 2019. The chair asks if there are other volunteers. Nobody else volunteers. The chair declares that Guido R. Hiertz shall act as official secretary of the workshop.

At 2019-05-15T13:52-04:00 the chair continues from page 27 of his submission. At 2019-05-15T14:04-04:00 the chair asks for opinions on page 43 of his document. There is no opposition to considering this submission. Attendees comment on page 44 of the chair’s submission.

Comment: A lot of discussion is about NR-U, now.

Comment: We have not decided that we submit this to the workshop.

Comment: We have some observations and identified issues.

Comment: We have not decided if we submit here or to the workshop.

Comment: NR-U does recognize LAA as its baseline and brings more aggressive schemes.

Comment: It is relevant as the coexistence simulation results consider LAA.

Comment: There is good reason to extrapolate from LAA to NR-U.

Comment: It cannot be decided that NR-U is fair, if LAA was fair.

The chair presents page 45 of 11-19/571r3 at 2019-05-15T14:09-04:00. There are no comments. The chair presents page 46 at 2019-05-15T14:11-04:00. There are no comments. The chair presents page 47 of 11-19/571r3 at 2019-05-15T14:12-04:00.

Comment: I believe the submission is in the scope. But I believe you have another submission with the same content.

Comment: There is another submission from somebody else that is very similar.

Comment: There could be a panel discussion among presenters that address similar topics.

The chair presents page 48 of document 11-19/571r3 at 2019-05-15T14:15-04:00. There are no comments. The chair presents page 49 at 2019-05-15T14:16-04:00. There are no comments. The chair presents page 50 at 2019-05-15T14:18-04:00. There are no comments. The chair presents page 51 at 2019-05-15T14:19-04:00. There are no comments. The chair presents page 52 at 2019-05-15T14:20-04:00. There are no comments. The chair presents page 53 at 2019-05-15T14:20-04:00. There are no comments. The chair presents page 54 of submission 11-19/571r3 at 2019-05-15T14:21-04:00.

Comment: We want to show and discuss the use of 802.11a as common preamble.

Comment: I encourage you to talk to RAN1.

The chair presents page 55 of document 11-19/571r3 at 2019-05-15T14:23-04:00.

Comment: This is not in the focus of the workshop. The focus was on regular Wi-Fi and NR-U.

Attendees further debate page 56.

Chair: Maybe we can get these two authors to talk to TGbd.

Chair: We might allow them talking at the very end.

Comment: They are not in the scope.

Comment: I believe they should not talk at the workshop.

Comment: I agree it is out of scope for this workshop.

Comment: ASFiNAG is an Austrian, government owned company that is responsible for roads etc.

Chair: Anyone disagreeing that the two are out of scope?

Nobody objects to the chair’s question.

Comment: I was wondering if discussion of these problems of sharing between C-V2X and 802.11p can be helpful for our problems, too? Hence, can we ask them to focus their conclusion on the 6 GHz band?

Chair: If they talk about V2X they are out of scope for the workshop.

Chair: I hear you saying, if there are lessons that are relevant to the workshop, they should be allowed to be present.

Comment: I believe it is impossible to expect that they extrapolate from their conclusions.

Chair: I will have e-mail conversations with both authors. I will focus on encouraging them to approach TGbd.

Chair: If they insist that their submissions are in scope, I will work on it with Dorothy.

Comment: It would be unfair to have them at the workshop; we also did not want UWB at the workshop.

Comment: This coexistence group focuses on unlicensed spectrum. 5.9 GHz is not a license-exempt spectrum.

The chair presents page 57 of 11-19/571r3 at 2019-05-15T14:33-04:00.

Comment: There are couple of technical and organizational topics.

The chair presents page 58 at 2019-05-15T14:34-04:00.

Comment: We may put this in the deployment measurement category.

The chair presents page 60 at 2019-05-15T14:36-04:00. There are no comments. The chair presents page 61 of 11-19/571r3 at 2019-05-15T14:37-04:00. There are no comments. The chair presents page 62 at 2019-05-15T14:39-04:00. There are no comments. At 2019-05-15T14:43-04:00, the chair arrives at page 66.

Comment: The author confuses many different terms. We should clarify the relation between IEEE 802.11, Wi-Fi Alliance, the Wi-Fi brand, ETSI TC BRAN etc.

Comment: I volunteer to write some lines about 802.11 and WFA.

The chair presents page 70 of 11-19/571r3 at 2019-05-15T14:45-04:00. There are no comments. The chair presents page 71 at 2019-05-15T14:46-04:00. There are no comments. The chair presents page 73 of document 11-19/571r3 at 2019-05-15T14:47-04:00.

Comment: There seems to be some wrong interpretation of the ETSI spec.

Comment: I don’t know if they are talking about the option of 8 ms.

Comment: We should ask them if they understood EN 301 893 correctly.

Comment: You have forgotten all Broadcom submissions. This is a composite submission instead of covering everything separately.

Chair: Is is it possible to break up your presentation in multiple contributions on LBT, CW etc.?

Comment: We are aware of many such small issues. That’s why we have collapsed them into a single docoument.

Comment: I was wondering why there are so many presentations by Andrew Myles?

Chair: While I will present, I intend to hand the chair to Dorothy.

Chair: The invited submissions will be held together in the beginning.

Comment: Is there a logical portioning emerging?

Chair: Yes. There hasn’t been time to group them. There is some obvious grouping.

Chair: We may find logical orders.

The chair presents page 74 at 2019-05-15T14:59-04:00. There are no comments. The chair presents page 77 of 11-19/571r3 at 2019-05-15T15:00-04:00.

Comment: These are restrictions that are problematic for existing products and solutions.

Comment: You are quoting from a private e-mail conversation between two other persons, you, and me. It did not make this statement in a public teleconference.

Chair: I don’t remember where it was coming from. There is so much that was said.

Comment: Today, EN 301 893 already defines several restrictions that prohibit the use of various 802.11 innovations in Europe.

Comment: We need to decide between progressing and restricting us to the status quo.

Chair: Thank you for this philosophical view.

Chair: We agree there is a problem we need to solve.

The chair presents page 78 of submission 11-19/571r3 at 2019-05-15T15:11-04:00.

Comment: If you are employed at at company that is an ETSI member, you may use your company e-mail address to join the ETSI BRAN mail server.

Comment: Please read about a related e-mail discussion yourself and form your own opinion.

The chair presents page 79 at 2019-05-15T15:13-04:00. There are no comments.

Comment: Guido explained at the midweek Working Group plenary that he will present a document related to 11-19/693 during the WG closing plenary on Friday. Several of us won’t attend the closing plenary. If time permits, can we have Guido’s presentation in tomorrow’s SC meeting?

Comment: Yes, I will add this to the agenda. He can present if time permits.

Comment: We want to present tomorrow, too. We will bring simulation results.

Comment: Okay. I will add you to the agenda.

At 2019-05-15T15:22-04:00 the chair declares the meeting in recess.

# Thursday, 2019-05-16, PM1

At 2019-05-16T13:33-04:00 the chair calls the meeting of the Coexistence Standing Committee (SC) to order. Andrew Myles act as chair of the SC. Guido R. Hiertz acts as secretary. The chair introduces contribution 11-19/571r5, which contains the proposed agenda for the SC’s meetings during this week. Version 11-19/571r4 is on the server. R5 of the document will be uploaded after the meeting. R5 will contain all modifications that occur during this meeting.

At 2019-05-16T13:34-04:00 the chair presents page 91 of 11-19/571r5. At 2019-05-16T13:36-04:00 the chair continues from page 100. At 2019-05-16T13:40-04:00 attendees comment on page 103.

Comment: The modification of the short control signaling rule impacts testing in EN 301 893 and could impact the compliance of 802.11 devices.

Comment: This week, we saw at the WNG session that devices do not operate as specified in the 802.11 standard. Further restricting the use of short control signalling in EN 301 893 will decide if these products can be offered in Europe.

Comment: Further restrictions will prohibit devices entering the European market. Also, the cost of testing and necessary modifications may be too high for certain products and markets.

Comment: Yes, agreed. Vendors should consider their own implementations.

At 2019-05-16T13:42-04:00 chair continues from page 141. At 2019-05-16T13:44-04:00 the chair presents 11-19/563.

Chair: Please review this document and consider if any actions are needed.

At 2019-05-16T13:47-04:00 James Wang presents 11-19/895r1. At 2019-05-16T14:06-04:00 attendees comment on the presentation.

Comment: Your assumptions seem to be unrealistic. This week, a presentation in WNG revealed that products do not adhere to the TXOP limits defined in the EDCA default parameter set.

Comment: You should simulate assuming products use TXOPs of 15 ms. Then, compare to the European rules.

Comment: Have you consider that LAA may transmit at fixed instances only?

Comment: LAA can also transmit earlier than the symbol times since they use reservation signals.

Chair: You raise interesting issues. Will you present during the workshop?

Comment: We will disccuss with my colleagues.

Comment: With fixed packet sizes and full buffer conditions you may run into a steady-state in your simulations.

Comment: I believe it is good to consider airtime usage in your simulation. What if one system uses 802.11 ACK and no ACK transmission?

Comment: We believe that all data traffic always comes with ACK.

Comment: Your ACK-timeout assumptions do not comply with the 802.11 standard. Please see the standard.

Comment: The 802.11 standard allows operating a No-ACK policy.

Comment: So, you consider the “normal” policy only?

Comment: There is in fact a policy of “no ACK” that can be attached to any AC.

Comment: It is in fact an allowed option.

Comment: From a practical perspective we should focus on the aspects that are used.

Comment: Who decides what is being used?

Comment: We should respond that PCF and HCCA are not used.

Comment: One quarter of all management frames are transmitted after PIFS because the contention window for access category voice is so small.

At 2019-05-16T14:15-04:00 Sindhu Verma presents 11-19/920r0. At 2019-05-16T14:34-04:00 attendees make comments:

Comment: We see that the same provisions for LAA LTE are used for NR-U. Now, with NR-U even a UE may share its COT with a gNB.

Comment: It does seem that there is no need for reservation signals. We should push them back to basic LBT.

Comment: We send an LS for keeping the discussion open on common preambles. Was there any discussion about the workshop and waiting until then?

Comment: At the RAN plenary it was decided that RAN1 would no longer support a common preamble.

Comment: Does that mean if we have the preamble discussion at the workshop, it can be taken back into RAN?

Comment: There may be other ways to change the view.

Comment: Let’s assume we can agree on an optional preamble.

Comment: RAN is the gatekeeper now.

Comment: RAN1 works only the topics in scope.

At 2019-05-16T14:40-04:00 Sindhu Verma presents 11-19/563r0. At 2019-05-16T14:46-04:00 attendees discuss the presentation.

Comment: Are you happy with the situation at 3GPP?

Comment: We are not fully satisfied but it’s better more than before.

Comment: You mentioned that LAA does not necessarily follow all ETSI regulation. Does 3GPP know about it?

At 2019-05-16T14:49-04:00 Guido R. Hiertz presents 11-19/921r0. At 2019-05-16T15:13-04:00 Guido ends his presentation.

Comment: When will the next revision of EN 301 893 be published?

Comment: This is difficult to say. The TC BRAN chair said that he would like to close the work in December. Afterwards, ETSI and national voting follow. Potentially, there is another round of comment resolution needed.

Comment: Do declararions replace testing?

Comment: A product must be compliant with all requirements in EN 301 893 regardless if a vendor declares or tests. You cannot cheat by declaring.

At 2019-05-16T15:17-04:00 the chair declares the meeting of the IEEE 802.11 Coexistence SC adjourned.