IEEE P802.11
Wireless LANs

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| March 2019 minutes |
| Date: 2019-03-15 |
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Abstract

This document contains the minutes of the IEEE 802.11 Coexistence Standing Committee (SC) meetings in March 2019. The SC met during the IEEE 802 plenary in Vancouver, BC, Canada.

# Wednesday, 2019-03-13

At 2019-03-13T13:32-07:00 the chair calls the meeting of Standing Committe (SC) Coexistence to order. Andrew Myles acts as chair of the SC. Guido R. Hiertz acts as secretary of the SC.

At 2019-03-13T13:33-07:00 the chair introduces 11-19/232r2. R1 of this presentation is available from Mentor server. At 2019-03-13T13:35-07:00 the SC approves the agenda for the week as shown on page 8 of the document.

At 2019-03-13T13:37-07:00 the SC approves the meeting minutes (11-19/271r0) of the previous meeting in January by unanimous consent.

At 2019-03-13T13:38-07:00 the chair starts presenting from page 37 of 11-19/232r2. Attendees start to discuss.

Comment: Too many rules in EN 301 893 have the risk of damaging innovation.

Comment: Restrictions may hit back on us. We cannot eveolve

Comment: No rules are not helpful. Restrictive rules are not good either.

Comment: We really want to find a balance.

Comment: Is HARQ allowed in EN 301 893?

Comment: I believe TC BRAN is about right in what they do.

Comment: This argument about innovation has been always there.

Comment: Once there are multiple industries there have to be rules. Rules always harm innovation.

Comment: The more there is competition the more rigid rules we need.

Comment: In an ideal world, the coexistence workshop would help harmonize.

Comment: EN 301 893 does not allow implementing HARQ.

Comment: Yes, you are right. HARQ may be allowed under the proposed rules for next version.

At 2019-03-13T13:52-07:00 a debate begins from page 48 of 11-19/232r2.

Comment: Your observation is biased. Both proposals are equivalent. One proposal is a deny-all solution with white-listing of permitted behavior and the other solution is a permit-all solution some black-listing of unwanted behavior. Both is equal.

Comment: Products in Europe will be affected by the proposed changes.

Comment: What is “the lack of evidence of success?”

Comment: Let me explain in the context of LAA. The ACK from UE comes through the licensed channel and arrives after 4 ms. So, the question is, what does the eNB in the mean time?

Comment: It could either keep the CW or double. They have a delayed ACK in LAA.

Comment: If we use NACK with HARQ in the future, do we need to double?

Comment: The proposed description is very restrictive.

Comment: Broadcast messages are essential for all 802 networks. This needs to be considered in the Harmonized Standard.

Comment: Currently, EN 301 893 does not consider broadcast transmissions.

Comment: There are various ACK schemes in 802.11, now.

Comment: EN 301 893 should consider them.

At 2019-03-13T14:05-07:00 the chair presents page 53

Comment: Within the Athens meeting of RAN1, 3GPP agreed to define LBT. Now, 3GPP says the “may use no LBT”.

Comment: Some of the things you mentioned does come from RAN2 and not RAN1.

Comment: Nobody in 3GPP could actually identify any use of no-LBT.

Comment: The restriction of short LBT is contentious in various organizations.

Comment: There was no consensus in TC BRAN to support the proposed restrictions.

At 2019-03-13T14:11-07:00 the chair presents from page 55

Comment: It’s the RAN meeting next week that will accept the feasibility study next week.

At 2019-03-13T14:16-07:00 chair continues from page 59

Comment: There is a movement to have some of the top of 6 GHz to have for licensed use.

Comment: Less than a year from now the rules in RAN1 will be finished.

At 2019-03-13T14:26-07:00 David Boldy presents 11-19/485r0.

Comment: Send your liaison directly to the 3GPP chair. The 3GPP submission deadline was already a week ago.

Comment: In a particular scenario, we now have evidence that NR-U using short LBT is harmful to Wi-Fi performance with beacon frames and VoIP.

Comment: So, you are proposing to create a potential liaison statement that asks RAN to continue the discussion of the 802.11a preamble in RAN1?

Comment: If RAN1 takes it off list list, it’s gone for NR-U.

Comment: Has IEEE any representation in RAN1?

Comment: No, it’s just some individuals and their companies being in RAN1, too.

Comment: We just invite them to continue their discussion.

Comment: In 3GPP, I believe there is also Blackberry supporting the preamble.

Comment: On the other hand, there are 21 companies against.

Comment: There is heavy tendency to close this item.

Comment: Most LAA LTE deployments do not qualify as Wireless Access System (WAS). LAA LTE is supplemental downlink. There is no permission to be deploy this.

Comment: As long as a radio does not access the channel it is not a WAS.

Comment: Then, it is not allowed in Europe.

Comment: The Commission of the European Union very much in favor of a common preamble.

Comment: Certainly, we have to address European regulators.

Comment: We have the European Commission wanting that we use a common preamble for all technologies.

Comment: In our context, if we get the discussion going for 6 GHz then this can lead to have the preamble also continued to be discussed in 5 GHz.

Comment: In 5 GHz we must force 3GPP to implement the 802.11a preamble.

Comment: In 6 GHz, it must be the 802.11ax preamble.

Comment: In 6 GHz, we do not know the regulatory requirements. We need to address this from 5 GHz because we don’t know what 6 GHz will be. The primary priority is to study coexistence with incumbent services.

At 2019-03-13T14:54-07:00 the chair presents page 67 of 11-19/232r2.

At 2019-03-13T15:00-07:00 the chair continues from page 92.

Comment: This is mostly out of scope.

Comment: We should invite people to come here.

Comment: We should not investigate this in the SC.

Comment: It’s not a PHY issue. It’s a system issue.

Comment: There is value in considering it.

Comment: I actually think it is out of scope for this group.

Comment: There are various technologies using a synchronized and distributed medium access. Think of DECT and various wireless mesh systems. There are benefits to synchronize in time. Currently, 802.11 synchronizes to the state of the wireless medium, only.

Comment: They are looking at a different use case. URLLC for example.

Comment: For industrial use case, they look at frame-based equipment.

At 2019-03-13T15:14-07:00 chair declares the meeting to be in recess.

# Thursday, 2019-03-14

At 2019-03-14T13:32-07:00 the chair calls the meeting of Standing Committe (SC) Coexistence to order. Andrew Myles acts as chair of the SC. Guido R. Hiertz acts as secretary of the SC.

The chair presents submission 11-19/232r3. It is the same as R2. R2 is stored on Mentor server.

The chair announces that document 11-19/500 contains the proposed liaison statement.

The chair starts from page 74 of his submission 11-19/232r3.

Comment: My advice is to invite RAN2 and RAN4 or otherwise they will not attend.

Comment: Please send me the details of their chairmen.

Comment: The workshop must be external to 802 or otherwise signage rights etc. are not possible.

Comment: Attendees should be encouraged to contribute, not just monitor.

Comment: Why is Andy Gowans invited?

Chair: I will explain this later

Comment: We should invite Austrian regulatory, too. After all, we meet in Vienna and he is very close by.

Comment: We have to manage very carefully invitations to regulators.

Comment: We’ll have a year delay if authorities see us talking about all the details and bandwidth etc.

Comment: There is some interesting game playing in having regulators turning up.

Comment: Is there any reason the satellite industry would not show up?

Comment: And the fixed industry.

Comment: The topic should be the sharing between non-incumbent technologies.

Comment: LTE is an outdoor technology. They should be afraid of satellite folks.

Comment: We have some control over what will be presented.

Comment: During the workshop I will cut off discussions that are not about sharing.

Comment: I fully speak against to invite regulators.

Comment: This might lead to have this topic on WRC-19

Comment: It’s awkward that we invite Ofcom UK but not the Austrian authority

Andrew Myles asks the following straw poll:

“Invite the Austrian authority?”

Response: Yes: 9 No: 13

Comment: We don’t have too many about regulators being present.

Comment: If you want this an open workshop, we should invite them.

Comment: You are not going to destroy the industry by inviting them.

Comment: I spoke against it before, because people played games to address the audience.

Comment: It may not help the dynamics of this workshop.

Comment: We want a workshop that gives us positions for the future.

Stuart Kerry Straw poll asks the following straw poll:

“802.11 WG should invite regulators to the Coex Workshop?”

Response: Yes: 4 No: 27

Comment: Andy Gowans is coming despite that we don’t want regulators.

Comment: He will attend as an individual. He will not attend as member of Ofcom UK.

Comment: I will remind him.

Comment: I am missing fairness criteria to be discussed.

Comment: Who will select?

Comment: This SC, not me.

Comment: Will you give guidance for the papers?

Comment: I believe each paper should gave some 15 min

Comment: I believe a deep coexistence workshop is not helpful as no regulatory framework is set.

Comment: The core coexistence is with existing incumbents in the band.

Comment: The secondary question is, how do we share that band?

Comment: A more useful use of time is to debate the general 6 GHz framework.

Comment: What is a successful workshop?

Comment: What is an unsuccessful workshop?

Nobody answers.

Comment: The worst possible outcome is that enough confusion arises for 6 GHz to become an agenda item for unlicensed and IMT designation.

Comment: European countries believe 5G is more important than Wi-Fi. They believe there is no shortfall of spectrum for 5 GHz.

Comment: We should get the band before the coexistence is studied.

Comment: We are going to highlight the nonsense of 5 GHz coexistence as we did it. We are shining light on something that does not help us.

Comment: My hope from this workshop was that we resolve some issues in 5 GHz. One thing we could do is focusing more on the past.

Comment: At 3GPP they make very good progress. There is growing interest from many parties.

Comment: Closing date for proposals is 2019-05-12

Comment: I strongly encourage you to submit proposals.

Comment: Your goal will be to stop me speaking. Otherwise, I submit something.

At 2019-03-14T14:27-07:00 the chair arrives at page 99 of his submission.

At 2019-03-14T14:29-07:00 the chair presents 11-19/500r0.

Comment: I suggest it to be send to RAN, RAN1, RAN2, and RAN4. You are missing RAN2.

At 2019-03-14T14:33-07:00 David Boldy continues presenting 11-19/500r0. The SC works on R0 of the document developing R1 of 11-19/500.

Comment: We don’t need to highlight specific bands. Remove the bands.

Comment: This will be uploaded as 11-19/500r1

At 2019-03-14T14:42-07:00 the chair presents the following motion:

“The 802.11 Coex SC reommends to the IEEE 802.11 WG that the contents of 11-19/500r1 be liaised to 3GPP RAN, RAN1, RAN2 & RAN4”

Moved: David Boldy

Seonded: Jeremy Foland

 Result: Yes: 22 No: 0 Abstain: 5

At 2019-03-14T14:43-07:00 chair presents page 108 of 11-19/232r3.

Comment: Registration for the coex workshop will go live before May 1st.

Comment: The Coex workshop is independent of the 802.11 meeting.

Comment: You should put all proposed topics on a webpage.

Comment: Also, as proposals and submission come in, put all of them on the 802.11 website.

At 2019-03-14T14:46-07:00 the chair adjournes the meeting.