IEEE P802.11
Wireless LANs

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| Meeting minutes of the March 2017 PDED ad hoc sessions |
| Date: 2017-03-15 |
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Abstract

This document contains the minutes of the IEEE 802.11 PDED ad hoc group meetings on 2017-03-14 and 2017-03-15.

# Tuesday, 2017-03-14

At 2017-03-14T10:30-07:00 the Chairman calls the meeting to order. Andrew Myles acts as Chairman of the IEEE 802.11 PDED ad hoc group. The Chairman reviews submission 11-17/291r5. Guido R. Hiertz volunteers to act as secretary.

At 2017-03-14T10:32-07:00 the Chairman asks attendees for approval of the agenda set out on slide 8 of 11-17/291r5. At 2017-03-14T10:34-07:00 the Chairman declares the agenda as approved. Afterwards, the group approves the meeting minutes of the previous January meeting contained in 11-17/152r0 and 11-17/162r0.

At 2017-03-14T10:35-07:00 the Chairman starts presenting his slides 11-17/291r5. At 2017-03-14T10:55-07:00 the Chairman reaches presenting page 44 of his submission 11-17/291r5. A discussion follows.

* Comment: 3GPP never talks never about PD. Right?
* Response: Yes
* Comment: In 802.11ax we talk about having smaller areas. We want to increase the PD level to ED. Current proposal is to cut power if PD is raised. I don’t see this expressed or discussed here. This could be very complicated with dynamic levels of PD.
* Response: I don’t know if spatial reuse has come up in our discussions. In Europe, EN 301 893 does not provide room for any exception. Frequency reuse is all about deciding to change the PD or ED threshold if you know what you are doing. This is my understanding. Normally, I defer but with spatial reuse feature I don’t defer because I know better from some information.
* Comment: The things that occur in 802.11ax are totally ignored, you are assuming a fixed level of −72 dBm, which is different from what is happening in 802.11ax.
* Response: 3GPP is not proposing anything to us. I believe what is really powerful, is happening at ETSI BRAN in Europe.
* Comment: It’s about lowering ED and not about raising ED. We are stepping on each other’s far away stations.
* Response: When interacting with LAA LTE we are going back to an older technology.
* Comment: Yes, I agree. We bring this back to ETSI BRAN. They should mandate using preamble detection.
* Comment: With regards to other technologies we should not defer to them at any lower values than we currently do.
* Response: I propose to keep the reuse questions away from the coexistence.
* Comment: We must be careful as the context of this story comes back to us in the regulatory domain.

At 2017-03-14T11:05-07:00 the Chairman continues presenting from page 44 of his slides. At 2017-03-14T11:10-07:00 the Chairman presents his submission 11-17/292r2.

* Comment: In 1.1 you are not interested in preambles in general but you are interested in LAA LTE implementing 802.11 preambles.
* Response: Please send me text.
* Comment: Remove last sentence on page 4.
* Response: I have some sympathy for your comment.
* Comment: Yesterday you presented a ten pages’ document in 802.19. Now you are presenting another nine pages’ document. There is much overlap.
* Response: The issues 3 and 13 are not covered. There is overlap of complicated issues. I believe it is valid to have two liaison letters.
* Comment: Don’t you think a single liaison letter is sufficient to cover everything?
* Response: I believe the two WGs have independent responsibilities. 802.11 and 802.19 work side by side. In an ideal world one liaison letter would be sent. This is a pragmatic way to get out what we want to send.
* Comment: 802.19 is generally chartered with coexistence. The PDED is just an ad hoc group.
* Response: There is confusion about the responsibility of the various groups.
* Comment: Everything regulatory related should go through 802.18. ETSI BRAN should be handled through 802.18 since its Chairman knows the regulators.
* Comment: In 1.5 delete the last sentence of the third paragraph.
* Response: I will look at it. You are right this might be subjective.
* Comment: Remove “disappointed” in Section 2 before the bullet list.
* Response: I will look for alternative text. I agree this is not the best text here.
* Comment: Remove “regardless of history” on page 6.
* Response: Agreed.
* Comment: There is no approved 802.11ax standard.
* Response: Agreed, let’s call it future 802.11ax standard.
* Comment: We should not have the last sentence in the second last paragraph on page 7.
* Comment: A statement like “it appears” is unclear.
* Response: I don’t think this sentence should be deleted.
* Comment: What do you mean by “pre-deployment” in 5?
* Response: You are right; this should be deleted.
* Comment: Do we have any reference for stating that Wi-Fi often operates below −72 dBm?
* Comment: Do you want to address this to RAN 1 or RAN 4?
* Response: It should be going to RAN also.

The Chairman closes reviewing the proposed draft letter at 2017-03-14T11:58-07:00. The Chairman asks for comments to be sent to him. The Chairman intends to approve this letter during the next PDED session. Afterwards, the liaison letter will be proposed for approval by 802.11. The Chairman believes the liaison letter should be sent by IEEE 802 EC.

* Comment: You started from the Atlanta straw poll result. Do you want to close the back and forth with this letter?
* Response: We understand that each side has different opinions. This sets up for gathering further evidence.
* Comment: Usually a request calls for a response.
* Response: Yes, that’s right. Point taken. Let’s focus on things we can do together. Does that make sense?
* Comment: No, does not make sense. This will just keep the discussion going to achieve more back and forth.
* Response: I believe this is an important issue in terms of coexistence.
* Comment: We have reached a tipping point from a regulatory view. In Europe they are going to say that there is a universal preamble for all technologies. This is the view of the desk at the EC. We have reached a point that neither regulatory authorities are further interested in our story.
* Response: I cannot predict the future. I hope to create a new discussion. Our summary could be used in the future. Europe is a developing story. We have chances there.
* Comment: Are we at a point there we say that if they stick with −72 dBm they kill Wi-Fi? I know that FCC only looks for consensus. This is a rehash of everything that we had in the past. It lacks a statement saying that if you stick with −72 dBm you are causing tremendous problems for our industry. If you insist on sticking to −72 dBm, the world will end. This should be our message.
* Response: I believe we are too nice. We have to be unfriendly and aggressive. Many of us have a concern to just go back to an ED of −72 dBm.
* Comment: Remove extreme statements because we want to be trusted and not just alarming. We don’t want our reputation and credibility being harmed.
* Response: I agree with you. We should have balanced language.

At 2017-03-14T12:16-07:00 the Chairman highlights page 66 in his submission in 11-17/291r5. At 2017-03-14T12:18-07:00 the Chairman declares the meeting to be in recess.

# Wednesday, 2017-03-15

At 2017-03-15T13:30-07:00 the Chairman calls the meeting to order. The Chairman reviews page 8 of 11-17/291r5. At 2017-03-15T13:31-07:00 the Chairman continues reading his submission from page 48. The Chairman reviews 11-17/292r3, which is the latest version of a proposed liaison draft letter to 3GPP. At 2017-03-15T13:38-07:00 the Chairman reads out the motion on page 49.

James E. Petranovich moves and Steve Pope seconds the motion presented on this page.

The motion passes with the following result:

Yes/No/Abstain: 10/2/2

At 2017-03-15T13:41-07:00 the Chairman continues presenting from page 51 of his submission. At 2017-03-15T13:41-07:00 Kosuke Aio presents 11-17/348r1. At 2017-03-15T14:09-07:00 Kosuke completes his presentation.

* Question: Is the flowchart on page 24 compliant with 3GPP? The scheme presented here looks way more aggressive than what is permitted.
* Response: We believe it is okay. Will check our code.
* Response: I believe this matters for the first packet only. I believe the flowchart is correct if the device runs through the backoff process with packets following the initial one.
* Question: Is this MAC or PHY simulation?
* Response: It’s a MAC simulation only.
* Comment: I believe a rough PHY model is enough for this simulations. We can abstract here. That will be enough. Otherwise it never ends.
* Comment: If we don’t have the PHY considered we lose the preamble part that makes up the PD aspects.
* Comment: Without preamble information we don’t have the SIGNAL field of the transmission.
* Comment: This simulation tells us only when you can transmit but it does not look at the receiver side.

At 2017-03-15T14:26-07:00 the Chairman continues presenting from page 55 of his submission 11-17/291r5. At 2017-03-15T14:34-07:00 an attendee explained that DKE represents Germany at ETSI. German regulatory authority BNetzA is one member of DKE. At 2017-03-15T14:38-07:00 the Chairman continues his presentation.

At 2017-03-15T14:44-07:00 attendees discuss page 60 where various rumors and gossip centering around EN 301 893 is discussed.

* Comment: We should confront such rumor so that our band is not taken away.
* Comment: Is this slide really needed? I think it is wrong to have it here. What does this have to do with this group and the coexistence debate?
* Comment: The French authority did not come up with any comments. Their military wants ED at −82 dBm for all technologies.

At 2017-03-15T14:52-07:00 the Chairman continues from page 61.

* Comment: There are other groups like 802.18. We are overlapping with them.
* Response: It’s partially regulatory but it’s also about our future of 802.11ax.
* Comment: Standing Committees usually exist as long as they have business to conduct.
* Comment: I am not convinced that this group should be become an SC. It’s too complicated for this tiny group. It’s not healthy or useful to separate this coexist debate from 802.19.
* Comment: I believe the interaction between ETSI BRAN and 802.11 is appropriate to continue this group as SC.
* Comment: We should continue as ad hoc group until May. I will request Adrian to permit us to do so.
* Comment: 802.11 does have interactions with ETSI BRAN for historical reasons. HiperLAN/2 and 802.11a share the same PHY. Maybe we should have an SC consulting 802.18.
* Comment: 802.18 needs input from technical experts in the WGs.
* Comment: I don’t care if 802.11 or 802.18 handles the interaction with ETSI BRAN.
* Comment: I like the previous commenter statement about our interactions with ETSI BRAN.
* Comment: What is the structure we want to use?
* Comment: 802.18 should continue to interact with ETSI ERM and copy ETSI BRAN.
* Comment: I want a single, strong voice of 802 to the outside.
* Chairman: Please send me information how to proceed in this group or send it to the e-mail reflector or upload to Mentor.

At 2017-03-15T15:16-07:00 the Chairman adjourns the meeting.

After the meeting, Kosuke Aio stated to the author of these meeting minutes that his statement about his simulation tool was incorrect. Kosuke explained that his simulation tool considers PHY aspects and implements a PHY channel model.