IEEE P802.11
Wireless LANs

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| IEEE 802.11bd February 2021 TC meeting minutes  |
| Date: 2021-02-02 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Yan Zhang | NXP | 350 Holger Way, San Jose, CA,  |  | yan.zhang\_5@nxp.com |

Abstract

This document includes minutes of all IEEE 802.11bd teleconferences on from February 2nd to February 23rd.

Version Tracking:

R0: February 2nd, 5th, 9th, and 23rd teleconference meetings minutes

# Tuesday 2 February 2021 @ 9:00-11:00 am ET

## Opening (IEEE 802.11-21/0177r1)

* 1. Call to order 9:03 am ET
	2. Chair instructed members to record attendance in IMAT.
	3. Chair introduced the patent policy and meeting rules (slides 2-6).
	4. No response to the call for patents.
	5. Chair introduced IEEE-SA COPYRIGHT POLICY (slides 7-9)
	6. Chair reviewed other Guidelines for IEEE WG Meetings (slides 10-13)
	7. Chair reviewed current Teleconference plan, TGbd Documents Update, and current TGbd Timeline (slides 14-16)
	8. Chair introduced the task group leadership (slide 19)

## Agenda (IEEE 802. 11-21/0177r1)

* 1. Chair presented the agenda: https://mentor.ieee.org/802.11/dcn/21/11-21-0177-01-00bd-tgbd-teleconference-agenda-for-feb-2021. (slide 21):
		+ Call meeting to order and remind the group to record attendance on imat.ieee.org
		+ IEEE-SA IPR policies and meeting rules
		+ Approval of agenda (slide 21)
		+ Presentations and discussion (Call for submission)
			- SP for 11-21/0126r1, Comment resolution for 32-3-9-9, Miguel Lopez (Ericsson)
			- Continue submissions in submission list
		+ Next teleconference on Feb 5th
		+ Adjourn
	2. Agenda was approved without objection

## SP for 11-21/0126r1, Comment resolution for 32-3-9-9, Miguel Lopez (Ericsson)

* 1. Do you agree on the comment resolution to the following 3 CIDs and proposed spec text modification to IEEE P802.11bd D1.0 as in 11-21/0126r1?
		+ - CID 1504, 1505 and 1599
		+ 7Y/N/4A

## 11-20/1939r1, Resolution Clause 3 comments for LB-251, Joseph Levy (Interdigital)

* 1. CID 1515 discussions: The amendment title is discussed in 11-21/0054r1, and more discussions are needed to decide either resolve or reject this CID. A comment was made that this resolution should be aligned with the resolution in 11-21/0054r1. Another comment was made that the presenter’s resolution is good and it also includes the reference to 11-21/0054r1.
	2. CID 1516, 1689, 1138 discussions: No discussions.
	3. CID 1139, 1250 discussions: A comment was made that non-NGV 10MHz PPDU should be changed to 10MHz non-NGV transmission to align with 802.11 non-HT duplicate definition.
	4. CID 1378 discussions: A comment was made that in practice there is no STA only support OCB in 5.9GHz band with 20 MHz transmission although the spec does not have those texts, hence the reason for rejection is sufficient. Another comment was made that 106-tone ER PPDU has 20MHz preamble which is different than 10MHz NGV PPDU.
	5. CID 1073,1074, 1009 discussions: No discussions.
	6. CID 1196 discussions: A comment was made that only 30MHz band exists in 5.9 GHz band going forward, which essentially restricts legacy device OCB transmissions to 30MHz band. A suggestion was made to replace “in 5.9GHz band” with “using the Clause 17 OFDM PHY” since that is where the coexistence is. A follow-up comment was made that there are 5.9GHz in other places of the spec which need to be changed as well.
	7. CID 1010, 1168, 1380, 1382, 1732 discussions: No discussions.
	8. CID 1733 discussions: A comment was made to add “the definition is necessary as it is required in TGbd PAR to address coexistence” in the reason of rejection.
	9. CID 1197 discussions: A comment was made that the definition of NGV needs to be revised to make it clear that STA can transmit and receive, while the wording support is vague. The presenter answered that support includes both transmission and reception.

## Closing

* 1. Any other business
		+ None
	2. Chair announced the next TGbd teleconference will be on Feb 5th at 9:00 am ET
	3. Chair adjourned the teleconference at 11:02 am ET

**Attendance from IMAT**

| **Name** | **Affiliation** |
| --- | --- |
| Bahn, Christy | IEEE STAFF |
| Kain, Carl | USDoT |
| Kim, Youn-Kwan | Sync Techno |
| Edelmayer, Andras | Commsignia |
| Lansford, James | Qualcomm Technologies, Inc |
| Hong, Hanseul | WILUS Inc. |
| Sun, Bo | ZTE Corporation |
| Lopez, Miguel | Ericsson AB |
| Kenney, John | TOYOTA infoTechnology Center U.S.A |
| Levy, Joseph | InterDigial, Inc. |
| Rosdahl, Jon | Qualcomm Technologies, Inc |
| Sand, Stephan | German Aerospace Center (DLR) |
| Yan, Zhang | NXP |
| Montemurro, Michael | Huawei Technologies Co. Ltd |
| Unterhuber,Paul | German Aerospace Center (DLR) |
| Motozuka, Hiroyuki | Panasonic Corporation |
| Sosack, Robert | Molex Incorporated |
| Yee, Peter | NSA-CAD |
| Petrick, Albert | Interdigital, Inc. |

# Tuesday 9 February 2021 @ 9:00-11:00 am ET

## Opening (IEEE 802.11-21/0177r1)

* 1. Call to order 9:03 am ET
	2. Chair instructed members to record attendance in IMAT.
	3. Chair introduced the patent policy and meeting rules (slides 2-6).
	4. No response to the call for patents.
	5. Chair introduced IEEE-SA COPYRIGHT POLICY (slides 7-9)
	6. Chair reviewed other Guidelines for IEEE WG Meetings (slides 10-13)
	7. Chair reviewed current Teleconference plan, TGbd Documents Update, and current TGbd Timeline (slides 14-16)
	8. Chair introduced the task group leadership (slide 23)

## Agenda (IEEE 802. 11-21/0177r1)

* 1. Chair presented the agenda: https://mentor.ieee.org/802.11/dcn/21/11-21-0177-01-00bd-tgbd-teleconference-agenda-for-feb-2021. (slide 25):
		+ Call meeting to order and remind the group to record attendance on imat.ieee.org
		+ IEEE-SA IPR policies and meeting rules
		+ Approval of agenda (slide 25)
		+ Presentations and discussion (Call for submission)
			- 11-21/0070r3, comment resolution for clause 31.2.2, Hanseul Hong (WILUS)
		+ Next teleconference on Feb 23rd
		+ Adjourn
	2. Agenda was approved without objection

## 11-21/0070r3, comment resolution for clause 31.2.2, Hanseul Hong (WILUS)

* 1. CID 1224, 1494, 1754 are updated from last revision.
	2. CID 1754 discussion: A question was asked what rules STA will follow if it does not follow rules defined in 11.15.9. The presenter answered that STA should follow the rules in this subclause. A comment was made that it is better to state it in the note. The presenter agreed to change the note.
	3. CID 1487 texts are modified. MAC MIB dot11VirtualCSonOCBSecondaryImplemented is defined. A question was asked whether it is true that if the STA has dot11VirtualCSonOCBSecondaryImplemented set to 1, then STA will implement preamble decoding instead of energy detection on the secondary channel. The presenter answered that it is true. A comment was made that this parameter has to be added in other two places. The presenter agreed to revise the text accordingly.

## Closing

* 1. Any other business
		+ None
	2. Chair announced the next TGbd teleconference will be on Feb 23rd at 9:00 am ET
	3. Chair adjourned the teleconference at 9:50 am ET

**Attendance from IMAT**

| **Name** | **Affiliation** |
| --- | --- |
| Goto, Fumihide | DENSO |
| Kain, Carl | USDoT |
| Kim, Youn-Kwan | Sync Techno |
| Edelmayer, Andras | Commsignia |
| McCann, Stephen | Huawei Technologies Co. Ltd |
| Hong, Hanseul | WILUS Inc. |
| Sun, Bo | ZTE Corporation |
| Ozbakis, Basak | VESTEL |
| Kenney, John | TOYOTA infoTechnology Center U.S.A |
| Petrick, Albert | InterDigial, Inc. |
| Sand, Stephan | German Aerospace Center (DLR) |
| Yan, Zhang | NXP |
| Montemurro, Michael | Huawei Technologies Co. Ltd |
| Sadeghi, Bahareh | Intel Corporation |
| Motozuka, Hiroyuki | Panasonic Corporation |
| Sosack, Robert | Molex Incorporated |
| Yee, Peter | NSA-CAD |
| Stanley, Dorothy | Hewlett Packard Enterprise |

# Tuesday 23 February 2021 @ 9:00-11:00 am ET

## Opening (IEEE 802.11-21/0177r1)

* 1. Call to order 9:03 am ET
	2. Chair instructed members to record attendance in IMAT.
	3. Chair introduced the patent policy and meeting rules (slides 2-6).
	4. No response to the call for patents.
	5. Chair introduced IEEE-SA COPYRIGHT POLICY (slides 7-9)
	6. Chair reviewed other Guidelines for IEEE WG Meetings (slides 10-13)
	7. Chair reviewed current Teleconference plan, TGbd Documents Update, and current TGbd Timeline (slides 14-16)
	8. Chair introduced the task group leadership (slide 26)

## Agenda (IEEE 802. 11-21/0177r1)

* 1. Chair presented the agenda: https://mentor.ieee.org/802.11/dcn/21/11-21-0177-01-00bd-tgbd-teleconference-agenda-for-feb-2021. (slide 28):
		+ Call meeting to order and remind the group to record attendance on imat.ieee.org
		+ IEEE-SA IPR policies and meeting rules
		+ Approval of agenda (slide 28)
		+ Presentations and discussion (Call for submission)
			- SP for 11-21/0070r5, D1.0 Comment Resolution for Clause 31.2.2, Hanseul Hong (WILUS)
			- 11-20/1939r2, Resolution Clause 3 comments for LB-251, Joseph Levy (InterDigital)
			- 11-21/0083r1, LB251 CR for 11bd D1.0 Clause 4, Stephan Sand (German Aerospace Center (DLR))
		+ Next teleconference on Mar 2nd
		+ Adjourn
	2. Agenda was approved without objection

## SP for 11-21/0070r5, D1.0 Comment Resolution for Clause 31.2.2, Hanseul Hong (WILUS)

* 1. Do you agree on the comment resolution to the following 13 CIDs and proposed spec text modification to IEEE P802.11bd D1.0 in 11-21/0070r5?
		+ - CD 1021, 1022, 1224, 1225, 1227, 1422, 1423, 1486, 1487, 1494, 1754, 1789 and 1790.
	2. 8Y/0N/1A:

## 11-20/1939r2, Resolution Clause 3 comments for LB-251, Joseph Levy (InterDigital)

* 1. CID 1515 discussion: This comment is removed since it is in another CR document 0097.
	2. CIDs 1507 discussions: no discussion.
	3. CID 1508 discussion: A question was asked about the definition of TXVECTOR FORMAT Non\_NGV\_10. The presenter answered that it means legacy format.
	4. CID 1734 discussion: A question was asked why we don’t need the definition of NGV STA in 3.2, but need the definition of non-NGV STA in 3.2. The presenter answered that NGV STA is defined in 4.3.17a part, so it is not needed to define it again in 3.2. But the definition of non-NGV STA is needed for coexistence purpose since non-NGV STA is a special type of STA.
	5. CID 1383 discussion: A question was asked if the first sentence of the resolution is a complete sentence. The presenter answered that the sentence is a definition of OCB primary 10MHz channel. A comment was made that OCB is usually referred to as an operation, but OCB channel concept has never been used. The commentor does not agree with the concept of defining OCB channel. Another comment was made that definition of OCB channels helps convey the NGV operations.
	6. CID 1384 discussion: A question was asked if the resolutions are related to the comments. The presenter answered that some definitions are removed in the second paragraph to address the comments.
	7. CID 1385 discussion: A question was asked if the resolution addressed comment. The presenter answered that NGV 10MHz channel is used for coexistence which is different than the normal primary or secondary channel definition in other 802.11 amendments.
	8. CID 1011 discussion: A comment was made that OCB operation can be operated on a larger bandwidth than 10MHz or 20MHz channels. An answer to the comment was given that we need to define the mode compatible with the PAR of our amendment which is the mode within 20MHz interoperable with 11p. A question was asked if it is true that OCB primary and secondary channels are only 10MHz, and why. The presenter answered that the OCB primary and secondary channels are defined for coexistence with legacy devices in our amendment.
	9. CID 1735, 1240, 1439 discussions: A question was asked if we need the definition of non-NGV. The presenter answered that we need the definition of non-NGV to assure the coexistence.
	10. CID 1196 discussion: take it to offline discussions.

## 11-21/0083r1, LB251 CR for 11bd D1.0 Clause 4, Stephan Sand (German Aerospace Center (DLR))

* 1. CID 1181, 1101, 1268 discussions: No discussion.
	2. CID 1013 discussion: A comment was made that resolution makes it seems that NGV STAs only capable of transmitting and receiving when OCB is activated. The presenter answered that he will modify the resolution by adding “capable of”. Another comment was made that we need to avoid wording of operating OCB.
	3. CID 1269 discussion: A comment was made to change “or” to “and”. Another comment was made to change “operating” to “communicating”. A question was asked if we need “high mobility channel environment” in the text. The presenter answered that the high mobility channel environment was mentioned in PAR and it will be a feature to differentiate NGV STA. Another comment was made that if this introduction text is needed here.

## Closing

* 1. Any other business
		+ None
	2. Chair announced the next TGbd teleconference will be on March 2nd at 9:00 am ET
	3. Chair adjourned the teleconference at 9:50 am ET

**Attendance from IMAT**

| **Name** | **Affiliation** |
| --- | --- |
| Bahn, Christy | IEEE STAFF |
| Kain, Carl | USDoT |
| Kim, Youn-Kwan | Sync Techno |
| Edelmayer, Andras | Commsignia |
| Sun, Bo | ZTE Corporation |
| Kenney, John | TOYOTA infoTechnology Center U.S.A |
| Petrick, Albert | InterDigial, Inc. |
| Sand, Stephan | German Aerospace Center (DLR) |
| Yan, Zhang | NXP |
| Cao, Rui | NXP |
| Sadeghi, Bahareh | Intel Corporation |
| Motozuka, Hiroyuki | Panasonic Corporation |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Levy, Joseph | InterDigial, Inc. |