IEEE P802.11  
Wireless LANs

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| IEEE 802.11bd January 2021 TC meeting minutes | | | | |
| Date: 2021-01-05 | | | | |
| Author(s): | | | | |
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Abstract

This document includes minutes of all IEEE 802.11bd teleconferences on January 5th and January 8th.

Version Tracking:

R0: January 5th and 8th teleconference sessions 9:00-11:00 am ET

# Tuesday 5 January 2021 @ 9:00-11:00 am ET

## Opening (IEEE 802.11-20/1923r1)

* 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 17)

## Agenda (IEEE 802.11-20/1923r1)

* 1. Chair presented the agenda: https://mentor.ieee.org/802.11/dcn/20/11-20-1923-01-00bd-tgbd-teleconference-agenda-for-jan-2021.pptx. (slide 19):
     + 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 19)
     + Presentations and discussion (Call for submission)
       - SP for 11-20/1947，Resolutions to 32.3.9.9 Midambles, Yujin Noh (Newracom)
       - SP for 11-20/1949， Resolutions to 32.3.12 NGV transmit procedure, Yujin Noh (Newracom)
       - SP for 11-20/1950， Resolutions to 32.3.13 NGV receive procedure, Yujin Noh (Newracom)
       - 11-21/0003r1, cr-d1-0-clause-32-2, Bo Sun (ZTE)
       - 11-20/1990, comment-resolution-for-receiver-specification, Rui Cao (NXP)
       - 11-21/0016, comment-resolution-for-mathematical-description-and-related, Rui Cao (NXP)
     + Next teleconference on Jan 8th
     + Adjourn
  2. Agenda was approved without objection

## SP for 11-20/1947, Resolutions to 32.3.9.9 Midambles, Yujin Noh (Newracom)

* 1. Do you agree on the comment resolution to following 2 CIDs and proposed spec text modification to IEEE P802.11bd D1.0 as in 11-20/1947r0?
     + - CID 1833 and 1834
     + 9Y/0N/2A

## SP for 11-20/1949, Resolutions to 32.3.12 NGV transmit procedure, Yujin Noh (Newracom)

* 1. Do you agree on the comment resolution to following 3 CIDs and proposed spec text modification to IEEE P802.11bd D1.0 as in 11-20/1949r0?
     + - CID 1836, 1598 and 1837
     + 9Y/0N/3A

## SP for 11-20/1950, Resolutions to 32.3.13 NGV receive procedure, Yujin Noh (Newracom)

* 1. Do you agree on the comment resolution to following 12 CIDs and proposed spec text modification to IEEE P802.11bd D1.0 as in 11-20/1950r0?
     + - CID 1096, 1118, 1238, 1239, 1293, 1475, 1500, 1506, 1513, 1549, 1688 and 1730
     + 8Y/0N/3A

## 11-21/0003r1, cr-d1-clause-32-2, Bo Sun (ZTE)

* 1. CID 1433, 1794, 1629, 1630, 1796, 1797, 1632, 1798, 1799, 1572, 1573, 1306, 1637, 1638, 1640, 1784, 1433, 1577, 1644, 1645 discussions: no discussion
  2. CID 1304, 1155, 1173, 1631, 1548, 1795, 1570 are reassigned to Yujin.
  3. CID 1632 discussions: A question was asked whether we need to change radio environment vector parameter num\_of\_repetition. The presenter answered that it is not needed since 11az does not have radio environment vector.
  4. CID 1434 discussions: A comment was made that resolution does not reflect that the additional transmissions are the same PPDU transmission. It is suggested to add “after the initial transmission” at the end of the original text.
  5. CID 1571 discussions: A question was asked what it means 20MHz channel overlapping, i.e., channel overlapping among different regions. The presenter answered that it is in one region, two 20MHz channels may overlap on one 10MHz channel. A comment was made that AP can advertise channelization in traditional WLAN networks. However, NGV is OCB, it may be up to 1609 high layer to do some advertisement to communicate channelization. TGbd also need to do some work to complete the procedure.
  6. CID 1432 discussions: A comment was made that it is better to add a reference for aSIFSTime in the text.

## 11-20/1990, comment-resolution-for-receiver-specification, Rui Cao (NXP)

* 1. CID 1194, 1090, 1185, 1005, 1188, 1786, 1111, 1187, 1190, 1591, 1592, 1679, 1680, 1192, 1547, 1091, 1596, 1092, 1597, 1186 discussions: no discussion
  2. CID 1590 discussions: A comment was made that 256QAM, 5/6 and 10MHz is N/A for Nss = 1 and 2 in Table 32-18, hence it may not need to include it in sensitivity table.

## Closing

* 1. Any other business
     + None
  2. Chair announced the next TGbd teleconference will be on Jan. 8 at 9:00 am ET
  3. Chair adjourned the teleconference at 11:00 am ET

**Attendance from IMAT**

| **Name** | **Affiliation** |
| --- | --- |
| Sun, Bo | ZTE Corporation |
| Cao, Rui | NXP Semiconductors |
| Kenney, John | TOYOTA infoTechnology Center U.S.A |
| Kim, Youn-Kwan | The Catholic University of Korea |
| Sand, Stephan | German Aerospace Center (DLR) |
| Yan, Zhang | NXP |
| Orlando, Christian | IEEE staff |
| Montemurro, Michael | Huawei Technologies Co. Ltd |
| Motozuka, Hiroyuki | Panasonic Corporation |
| Noh, Yujin | Newracom Inc. |
| Sosack, Robert | Molex Incorporated |
| Yee, Peter | NSA-CSD |

# Friday 8 January 2021 @ 9:00-11:00 am ET

## Opening (IEEE 802.11-20/1923r3)

* 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 24)

## Agenda (IEEE 802.11-20/1923r3)

* 1. Chair presented the agenda: https://mentor.ieee.org/802.11/dcn/20/11-20-1923-03-00bd-tgbd-teleconference-agenda-for-jan-2021.pptx. (slide 26):
     + 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 26)
     + Presentations and discussion (Call for submission)
       - 11-13/0230r5, comment resolution Tutorial, Dorothy Stanley (HPE)
       - 11-20/1946r1,Resolutions to 32.3.15 Parameters for NGV-MCSs, Yujin Noh (Newracom)
       - 11-20/1945r1,Resolutions to 32.3.5 NGV modulation and coding schemes, Yujin Noh (Newracom)
       - 11-20/1948r1,Resolutions to 32.3.10 Transmit specification, Yujin Noh (Newracom)
       - SP for 11-21/0003r1, cr-d1-0-clause-32-2, Bo Sun (ZTE)
       - SP for 11-20/1990r1, comment-resolution-for-receiver-specification, Rui Cao (NXP)
       - Complete submission list as many as possible
     + Next teleconference on Jan 11th
     + Adjourn
  2. Agenda was approved without objection

## 11-13/0230r5, comment resolution Tutorial, Dorothy Stanley (HPE)

* 1. The presenter presented best practice and poor practice of comment resolution.

## 11-20/1946r1, Resolutions to 32.3.15 Parameters for NGV-MCSs, Yujin Noh (Newracom)

* 1. CID 1075 discussion: A question was asked if Table 32-19 MCS 9 is not valid. The presenter confirmed that it is not valid. A question was asked what the difference between Not valid and Reserved for MCS index. The presenter answered that reserved means that it can be used in the future, while not valid means the entries cannot be used. The comment was made that not valid entry should be changed to “reserved” since it may become valid if we change the formula. A member answered that reserved entry may use other QAM can make it valid. A following comment was made that NGV might not use the QAM value as defined in other 802.11 amendments. Then those reserved entries are also not valid. It is cleaner if we make MCS 9-14 to reserved entries. The presenter commented that MCS9 should have the same modulation and coding rate as in other 802.11 amendments, then the entry is not valid. If it uses other modulation or coding rate than the ones in other 802.11 amendments, it may cause confusions. The chair asked if this comment resolution only relates to MCS10-14, then we don’t have to deal with MCS9 for now. The presenter commented that she will update the resolution in r2 with comment resolution best practice.

## 11-20/1945r1, Resolutions to 32.3.5 NGV modulation and coding schemes, Yujin Noh (Newracom)

* 1. CID 1785, 1304, 1155, 1631, 1173, 1548, 1795 and 1570 discussion: No discussions.
  2. All comment resolutions will be updated in r2 to comply with comment resolution best practice.

## 11-20/1948r1, Resolutions to 32.3.10 Transmit specification, Yujin Noh (Newracom)

* 1. CID 1587, 1588 and 1089 discussion : A editorial change was suggested for CID 1588.
  2. All comment resolutions will be updated in r2 to comply with comment resolution best practice.

## SP for 11-21/0003r1, cr-d1-clause-32-2, Bo Sun (ZTE)

* 1. Do you agree on the comment resolution to following 21 CIDs and proposed spec text modification to IEEE 802.11bd D1.0 as in 11-21/0003r1?
     + - CID 1306, 1432, 1433, 1434, 1572, 1573, 1577, 1629, 1630, 1632, 1637, 1638, 1640, 1644, 1645, 1784, 1794, 1796, 1797, 1798, and 1799
     + 12Y/0N/3A

## 11-20/1990r1, comment-resolution-for-receiver-specification, Rui Cao (NXP)

* 1. CID 1194 discussion: A comment was made that the resolution may not be correct due to different amendments have different regulatory, hence the change does not need to be made in 802.11REV. The presenter answered that he can delete the part related 802.11REV.
  2. CID 1188 discussion: A question was asked why 10MHz sensitivity has 3dB difference between BPSK and BPSK+DCM, while 20MHz sensitivity is the same for BSPK and BPSK+DCM. The presenter answered that there is power boost for preamble for 10MHz NGV, and no power boost for preamble for 20MHz NGV. A further comment was made that the data portion is boosted in BPSK+DCM even though preamble is not power boosted, and modern device should be detect at -85dBm sensitivity. The presenter answered that -82dBm is for minimum sensitivity requirement.

## Closing

* 1. Any other business
     + None
  2. Chair announced the next TGbd teleconference will be on Jan. 11 at 11:15 am ET
  3. Chair adjourned the teleconference at 11:02 am ET

**Attendance from IMAT**

| **Name** | **Affiliation** |
| --- | --- |
| An, Song-Haur | Independent |
| Coffey, John | Realtek Semiconductor Corp. |
| Edelmayer, Andras | Commsignia |
| Hong, Hanseul | WILUS Inc. |
| Sun, Bo | ZTE Corporation |
| Cao, Rui | NXP Semiconductors |
| Kenney, John | TOYOTA infoTechnology Center U.S.A |
| Levy, Joseph | InterDigial, Inc. |
| Stanley, Dorothy | Hewlett Packard Enterprise |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Kim, Youn-Kwan | Sync Techno |
| Sand, Stephan | German Aerospace Center (DLR) |
| Yan, Zhang | NXP |
| Bahn, Christy | IEEE staff |
| Montemurro, Michael | Huawei Technologies Co. Ltd |
| Motozuka, Hiroyuki | Panasonic Corporation |
| Noh, Yujin | Newracom Inc. |
| Sadeghi, Bahareh | Intel Corporation |
| Yee, Peter | NSA-CSD |