IEEE P802.11  
Wireless LANs

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| Minutes 802.11 be PHY ad hoc Telephone Conferences,  Nov 2021 - Jan 2022 | | | | |
| Date: 2021-12-13 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Tianyu Wu | Apple |  |  | tianyu@apple.com |

Abstract

This document contains the PHY ad hoc meeting minutes for TGbe teleconferences held on:

* Nov 22, 2021
* Nov 29, 2021
* Dec 6, 2021
* Dec 13, 2021

**Monday Nov 22nd, 2021 19:00 – 21:00 ET**

**Introduction**

1. The Chair (Sigurd schelstraete, MaxLinear) calls the meeting to order at 19:00 PM ET.
2. The Chair follows the agenda in 11-21/1775r5.
3. The Chair goes through the IPR policy and asks if anyone is aware of any potentially essential patents. Nobody speaks up.
4. The Chair goes through the Copyright policy.
5. The Chair reminds everyone to report their attendance by using IMAT system and by sending an e-mail to the Co-chair, Tianyu Wu (Apple) or the Chair himself if unable to record attendance via IMAT system.
6. Announcements:
7. Discussions on the agenda.

Technical Submissions**: CRs**

* + [1614r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1614-00-00be-cr-for-36-3-13-5-segment-parser.docx) CR for 36.3.13.5 (Segment Parser)                      Sigurd Schelstraete       [29C]
  + [1513r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1513-01-00be-resolution-for-cid-5421.doc) Resolution for CID 5421                                    Ross Jian Yu                 [1C]
  + [1578r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1578-01-00be-cc36-cr-on-annex-z-320mhz-example.doc) CR on Annex Z 320MHz example                      Ross Jian Yu                 [1C]
  + [1677r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1677-00-00be-cr-for-cids-on-36-3-2-1.docx) CR for CIDs on 36.3.2.1                                    Yan Xin                        [13C]
  + [1712r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1712-00-00be-cr-for-cc36-mu-mimo.docx) CR for CC36 MU-MIMO                                   Junghoon Suh               [10C]
  + [1693r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1693-00-00be-d1-0-comment-resolution-for-non-ht-duplicate-transmission.docx) D1.0 comment-resolution-for-non-ht-dup-tx            Rui Cao                    [7C]
  + [1694r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1694-00-00be-d1-0-comment-resolution-for-ofdm-modulation.docx) D1.0 comment-resolution-for-ofdm-modulation      Rui Cao                     [1C]
  + [1696r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1696-01-00be-cc36-cr-for-cid-4665-and-6902.docx) CR for CID 4665 and 6902                                 Dongguk Lim               [2C]
  + [1725r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1725-00-00be-cc36-cr-for-eht-service-field.docx) CR for EHT SERVICE field                               Chenchen Liu               [1C]
  + [1726r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1726-00-00be-cc36-cr-for-the-eht-phy-data-scrambler-and-descrambler.docx) CR 4 EHT PHY DATA scrambler&descrambler     Chenchen Liu           [5C]

**Attendance**

The following people recorded their attendance for this call:

|  |  |  |  |
| --- | --- | --- | --- |
| TGbe (PHY) | 11/22 | Amalladinne, Vamsi | Qualcomm Incorporated |
| TGbe (PHY) | 11/22 | Anwyl, Gary | MediaTek Inc. |
| TGbe (PHY) | 11/22 | B, Hari Ram | NXP Semiconductors |
| TGbe (PHY) | 11/22 | Barr, David | MaxLinear |
| TGbe (PHY) | 11/22 | Cao, Rui | NXP Semiconductors |
| TGbe (PHY) | 11/22 | CHUN, JINYOUNG | LG ELECTRONICS |
| TGbe (PHY) | 11/22 | Duan, Ruchen | SAMSUNG |
| TGbe (PHY) | 11/22 | Gao, Ning | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (PHY) | 11/22 | Hsieh, Hung-Tao | MediaTek Inc. |
| TGbe (PHY) | 11/22 | Huang, Lei | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (PHY) | 11/22 | Kim, Youhan | Qualcomm Incorporated |
| TGbe (PHY) | 11/22 | Lanante, Leonardo | Ofinno |
| TGbe (PHY) | 11/22 | Levesque, Chris | Qorvo |
| TGbe (PHY) | 11/22 | Li, Yapu | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbe (PHY) | 11/22 | Lim, Dong Guk | LG ELECTRONICS |
| TGbe (PHY) | 11/22 | Montreuil, Leo | Broadcom Corporation |
| TGbe (PHY) | 11/22 | noh, yujin | Senscomm |
| TGbe (PHY) | 11/22 | Park, Eunsung | LG ELECTRONICS |
| TGbe (PHY) | 11/22 | Schelstraete, Sigurd | MaxLinear |
| TGbe (PHY) | 11/22 | Sherlock, Ian | Texas Instruments Inc. |
| TGbe (PHY) | 11/22 | Sun, Bo | ZTE Corporation |
| TGbe (PHY) | 11/22 | Tian, Bin | Qualcomm Incorporated |
| TGbe (PHY) | 11/22 | Varshney, Prabodh | Nokia |
| TGbe (PHY) | 11/22 | Wei, Dong | NXP Semiconductors |
| TGbe (PHY) | 11/22 | Wu, Tianyu | Apple Inc. |
| TGbe (PHY) | 11/22 | Xin, Yan | Huawei Technologies Co., Ltd |
| TGbe (PHY) | 11/22 | YANG, RUI | InterDigital, Inc. |
| TGbe (PHY) | 11/22 | Yang, Steve TS | MediaTek Inc. |
| TGbe (PHY) | 11/22 | Yu, Jian | Huawei Technologies Co., Ltd |

**CR contributions**

1. **11-21-1614r0 – CR for 36.3.13.5 (Segment Parser) –** Sigurd Schelstraete (MaxLinear)

SP#1:

Do you agree to the resolution of the following CIDs as in 11-21/1614r1?

* CIDs 4575, 5492, 6826, 7296, 5493, 5494, 6828, 4576, 6827, 7292, 6829, 7303, 7010, 7288, 7290, 7295, 7297, 7298, 7291, 7293, 7289, 7294, 7299, 7300, 7302, 7304, 7305, 7306, 7657

No objection

1. **11-21-1513r1 – Resolution for CID 5421 –** Ross Jian Yu (Huawei)

SP#2:

Do you agree to the resolution of the following CID as in 11-21/1513r1?

* CID 5421

No objection

1. **11-21-1578r1 – CR on Annex Z 320MHz example –** Ross Jian Yu (Huawei)

SP deferred for offline proposal check.

1. **11-21-1677r0 – CR for CIDs on 36.3.2.1 –** Yan Xin (Huawei)

SP#3:

Do you agree to the resolution of the following CID as in 11-21/1677r1?

* CIDs 4636, 4637, 4638, 4680, 4790, 5401, 5402, 5403, 5404, 5463, 6782, 7132, 7133

No objection

1. **11-21-1712r0 – CR for CC36 MU-MIMO –** Junghoon Suh (Huawei)

SP#4:

Do you agree to the resolution of the following CID as in 11-21/1712r1?

* CIDs 4591, 4654, 4688, 4802, 5092, 5400, 5468, 5469, 6899

NOTE: CID 4993 is deferred

No objection

**Adjourn**

The meeting is adjourned at 21:00 PM ET

**Monday Nov 29th, 2021 19:00 – 21:00 ET**

**Introduction**

1. The Chair (Sigurd Schelstraete, MaxLinear) calls the meeting to order at 19:00 PM ET.
2. The Chair follows the agenda in 11-21/1775r7.
3. The Chair goes through the IPR policy and asks if anyone is aware of any potentially essential patents. Nobody speaks up.
4. The Chair goes through the Copyright policy.
5. The Chair reminds everyone to report their attendance by using IMAT system and by sending an e-mail to the Co-chair, Tianyu Wu (Apple) or the Chair himself if unable to record attendance via IMAT system.
6. Announcements:
7. Discussions on the agenda.

Technical Submissions**: CRs**

* [1578r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1578-01-00be-cc36-cr-on-annex-z-320mhz-example.doc) CR on Annex Z 320MHz example                      Ross Jian Yu             [1C-SP]
* [1693r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1693-00-00be-d1-0-comment-resolution-for-non-ht-duplicate-transmission.docx) D1.0 comment-resolution-for-non-ht-dup-tx            Rui Cao                        [7C]
* [1694r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1694-00-00be-d1-0-comment-resolution-for-ofdm-modulation.docx) D1.0 comment-resolution-for-ofdm-modulation       Rui Cao                        [1C]
* [1696r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1696-00-00be-cc36-cr-for-cid-4665-and-6902.docx) CR for CID 4665 and 6902                                 Dongguk Lim                [2C]
* [1733r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1733-00-00be-cc36-cr-on-ppdu-encoding-process-part-2.docx) CR on PPDU Encoding Process-Part 2                Youhan Kim                 [8C]
* [1725r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1725-00-00be-cc36-cr-for-eht-service-field.docx) CR for EHT SERVICE field                               Chenchen Liu               [1C]
* [1726r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1726-00-00be-cc36-cr-for-the-eht-phy-data-scrambler-and-descrambler.docx) CR for EHT PHY DATA scrambler&descrambler   Chenchen Liu               [5C]
* [1672r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1672-01-00be-some-mac-phy-layering-issues.docx) Some MAC-PHY Layering Issues                      Brian Hart                     [3C]

**Attendance**

The following people recorded their attendance for this call:

**CR contributions**

1. **11-21-1578r1 – CR on Annex Z 320MHz example –** Ross Jian Yu (Huawei)

SP#1:

Do you agree to the resolution of the following CID as in 11-21/1578r1?

* CID 5496

No objection

1. **11-21-1693r0 – D1.0 comment-resolution-for-non-ht-dup-tx –** Rui Cao (NXP)

SP#2:

Do you agree to the resolution of the following CIDs as in 11-21/1693r1?

* CIDs 5532, 8141, 4911, 5569, 6903, 4694, 5019

No objection

1. **11-21-1694r0 – D1.0 comment-resolution-for-ofdm-modulation –** Rui Cao (NXP)

SP#3:

Do you agree to the resolution of the following CID as in 11-21/1694r1?

* CID 7252

No objection

1. **11-21-1696r0 – CR for CID 4665 and 6902 –** Dongguk Lim (LGE)

SP#4:

Do you agree to the resolution of the following CIDs as in 11-21/1696r1?

* CID 4665, 6902

No objection

1. **11-21-1733r0 – CR on PPDU Encoding Process-Part 2 –** Youhan Kim (Qualcomm)

SP#5:

Do you agree to the resolution of the following CIDs as in 11-21/1733r1?

* CID 5471, 8095, 4619, 4620, 4547, 5472, 5527, 4549

No objection

1. **11-21-1725r0 – CR for EHT SERVICE field –** Chenchen Liu (Huawei)

SP#6:

Do you agree to the resolution of the following CID as in 11-21/1725r0?

* CID 7009

No objection

1. **11-21-1726r0 – CR for EHT PHY data scrambler & descrambler –** Chenchen Liu (Huawei)

SP#7:

Do you agree to the resolution of the following CIDs as in 11-21/1726r0?

* CID 7004, 7239, 7240, 7241, 7753

No objection

1. **11-21-1672r1 – Some MAC-PHY Layering Issues –** Brian Hart (Cisco)

Deferred for further discussion.

**Adjourn**

The meeting is adjourned at 21:00 PM ET

**Monday Dec 6th, 2021 19:00 – 21:00 ET**

**Introduction**

1. The Chair (Sigurd Schelstraete, MaxLinear) calls the meeting to order at 19:00 PM ET.
2. The Chair follows the agenda in 11-21/1775r9.
3. The Chair goes through the IPR policy and asks if anyone is aware of any potentially essential patents. Nobody speaks up.
4. The Chair goes through the Copyright policy.
5. The Chair reminds everyone to report their attendance by using IMAT system and by sending an e-mail to the Co-chair, Tianyu Wu (Apple) or the Chair himself if unable to record attendance via IMAT system.
6. Announcements:
7. Discussions on the agenda.

Technical Submissions**: PDTs**

* + [1583r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1583-00-00be-proposed-draft-text-additional-changes-to-sounding-fb.docx) PDT: Additional Changes to Sounding FB Sigurd Schelstraete

Technical Submissions**: CRs**

* + [1538r3](https://mentor.ieee.org/802.11/dcn/21/11-21-1538-03-00be-cid-4630.docx) CID 4630 Brian Hart [1C SP]
  + [1672r2](https://mentor.ieee.org/802.11/dcn/21/11-21-1672-02-00be-some-mac-phy-layering-issues.docx) Some MAC-PHY Layering Issues Brian Hart [3C SP]
  + [1759r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1759-00-00be-cc36-cr-eht-sig-misc.doc) CR-EHT-SIG-misc Ross Jian Yu [5C]
  + [1763r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1763-00-00be-36-2-3-trigvector-parameters-cr-d1-0.docx) 36.2.3-TRIGVECTOR-parameters-cr-d1.0 Bo Gong [6C]
  + [1762r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1762-00-00be-d1-0-crs-on-36-2-4-phy-config-vector-parameters.docx) CRs on 36.2.4 PHY CONFIG\_VECTOR parameters Bo Gong [3C]
  + [1760r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1760-00-00be-36-1-1-introduction-to-the-eht-phy-cr-on-d1-0.doc) 36.1.1\_introduction\_to\_the\_EHT\_PHY\_CR\_on\_D1.0 Bo Gong [11C]
  + [1740r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1740-00-00be-cc36-cr-for-cid-7019-and-7378.docx) CR for CID 7019 and 7378 Dongguk Lim [2C]
  + 1777r0 CR on 36.3.20 Genadiy Tsodik [5C]
  + [1600r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1600-01-00be-cr-for-clause-36-3-2-2-subcarriers-and-resource-allocation-for-multiple-rus-part-1.doc) CR for 36.3.2.2 Subcarriers and resource allocation for multiple RUs-part 1 Myeongjin Kim [24C]

**Attendance**

The following people recorded their attendance for this call:

**CR contributions**

1. **11-21-1583r0 – PDT: Additional Changes to Sounding FB –** Sigurd Schelstraete (MaxLinear)

SP deferred for further PDT spec text review.

1. **11-21-1538r3 – CID 4630 –** Brian Hart (Cisco)

SP#1:

Do you agree to the resolution of the following CID as in 11-21/1538r3?

* CID 4630

No objection

1. **11-21-1672r2 – Some MAC-PHY Layering Issues –** Brian Hart (Cisco)

Deferred for more discussions.

1. **11-21-1759r0 – CR EHT-SIG misc –** Ross Jian Yu (Huawei)

SP#2:

Do you agree to the resolution of the following CIDs as in 11-21/1759r0?

* CIDs 4859, 4860, 5481, 6437, 8121

No objection

1. **11-21-1763r0 – 36.2.3-TRIGVECTOR-parameters-cr-d1.0 –** Bo Gong (Huawei)

SP#3:

Do you agree to the resolution of the following CIDs as in 11-21/1763r0?

* CIDs 4535, 5462, 5715, 5809, 5810, 6825

No objection

1. **11-21-1762r0 – CRs on 36.2.4 PHY CONFIG\_VECTOR parameters –** Bo Gong (Huawei)

SP deferred to next call for offline updates based on some comments.

1. **11-21-1760r0 – 36.1.1\_introduction\_to\_the\_EHT\_PHY\_CR\_on\_D1.0 –** Bo Gong (Huawei)

SP#4:

Do you agree to the resolution of the following CIDs as in 11-21/1760r0?

* CIDs 4521, 4523, 4940, 4942, 6462, 6464, 6907, 7095, 7958, 7962, 7964

No objection

1. **11-21-1740r0 – CR for CID 7019 and 7378 –** Dongguk Lim (LGE)

SP#5:

Do you agree to the resolution of the following CIDs as in 11-21/1740r1?

* CIDs 7019, 7378

No objection

1. **11-21-1777r0 – CR on 36.3.20 –** Genadiy Tsodik (Huawei)

SP#6:

Do you agree to the resolution of the following CIDs as in 11-21/1777r0?

* CIDs 5099, 5100

No objection

1. **11-21-1600r1 – CR for 36.3.2.2 Subcarriers and resource allocation for multiple RUs-part 1 –** Myeongjin Kim (Samsung)

SP#7:

Do you agree to the resolution of the following CIDs as in 11-21/1600r2?

* CIDs 4983, 6426, 4984, 5405, 5464, 5524, 5811, 6424, 6425, 6427, 6783, 6784, 7143, 7134, 7135, 7136, 7137, 7141, 7746, 8092, 7138, 7139, 7140

NOTE: CID 4985 is deferred

No objection

**Adjourn**

The meeting is adjourned at 21:00 PM ET

**Monday Dec 13th, 2021 19:00 – 21:00 ET**

**Introduction**

1. The Chair (Sigurd Schelstraete, MaxLinear) calls the meeting to order at 19:00 PM ET.
2. The Chair follows the agenda in 11-21/1775r13.
3. The Chair goes through the IPR policy and asks if anyone is aware of any potentially essential patents. Nobody speaks up.
4. The Chair goes through the Copyright policy.
5. The Chair reminds everyone to report their attendance by using IMAT system and by sending an e-mail to the Co-chair, Tianyu Wu (Apple) or the Chair himself if unable to record attendance via IMAT system.
6. Announcements:
7. Discussions on the agenda.

Technical Submissions**: PDTs**

* + [1583r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1583-00-00be-proposed-draft-text-additional-changes-to-sounding-fb.docx) PDT: Additional Changes to Sounding FB S. Schelstraete [SP]

Technical Submissions**: CRs**

* + [1762r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1762-00-00be-d1-0-crs-on-36-2-4-phy-config-vector-parameters.docx) CRs on 36.2.4 PHY CONFIG\_VECTOR parameters Bo Gong [3C]
  + [1781r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1781-00-00be-updated-resolution-for-cid-7104.docx) Updated resolution for CID 7104 Kanke Wu [1C]
  + [1893r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1893-00-00be-cc36-crs-on-timing-related-parameters.docx) CRs on timing related parameters Lin Yang [18C]
  + [1912r1](https://mentor.ieee.org/802.11/dcn/21/11-21-1912-00-00be-cr-for-section-36-3-11-12-on-p802-11be-d1-3-part-3.doc) CR for Section 36.3.11.12 on P802.11be D1.3 Part 3 Oded Redlich [2C]
  + [1903r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1903-00-00be-cids-4558-and-4562.docx) CIDs 4558 and 4562 S. Schelstraete [2C]
  + [~~1927r0~~](https://mentor.ieee.org/802.11/dcn/21/11-21-1927-00-00be-cc36-cr-on-cid4860.docx) ~~CR on CID4860 Lei Huang [1C]~~
  + [1922r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1922-00-00be-cc36-comment-resolutions-for-4-cids.docx) CC36 Comment Resolutions for 4 CIDs Dongguk Lim [4C]
  + [1947r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1947-00-00be-cc36-cr-for-spatial-reuse-and-beamformed-in-txvector-and-rxvector.docx) CR for SR and BEAMFORMED in TX/RXVECTOR Mengshi Hu [7C]

Technical Submissions:

* + [1943r0](https://mentor.ieee.org/802.11/dcn/21/11-21-1943-00-00be-issue-of-large-bw-support.pptx) Issue of large BW support Wook Bong Lee

**Attendance**

The following people recorded their attendance for this call:

**CR contributions**

1. **11-21-1583r1 – PDT: Additional Changes to Sounding FB –** Sigurd Schelstraete (MaxLinear)

SP#1: Do you agree to accept the proposed draft text in 11-21/1583r2 in the next draft of the 802.11be standard?

No objection

1. **11-21-1762r1 – CRs on 36.2.4 PHY CONFIG\_VECTOR parameters –** Bo Gong (Huawei)

**Discussions:**

C: Replace cbw20 by 0.

C: Some editorial comments.

SP#2: Do you agree to the resolution of the following CIDs as in 11-21/1762r2?

* CID 4624, 7129, 7130

No objection

1. **11-21-1781r0 – Updated resolution for CID 7104** **–** Kanke Wu (Qualcomm)

SP#3: Do you agree to the resolution of the following CID as in 11-21/1781r0?

* CID 7104

NOTE: this replaces the resolution previously proposed in 11-21/1167r1

No objection

1. **11-21-1893r1 – CRs on timing related parameters –** Lin Yang (Qualcomm)

**Discussions:**

C: Suggest changing rejection reason for CID5815.

C: Some comments of revise the resolution and change the resolution from reject to revised for CID5815.

C: Defer CID 7658, 7659 and 8098.

SP#4: Do you agree to the resolution of the following CIDs as in 11-21/1893r1?

* CID 4550, 4657, 4995, 4996, 5813, 5814, 6822, 6925, 7190, 7191, 7193, 7312, 8100, 8101

Note: CIDs 5815, 7658, 7659, 8098 are deferred.

No objection

1. **11-21-1912r1 – CR for Section 36.3.11.12 on P802.11be D1.3 Part 3** **–** Oded Redlich (Huawei)

SP#5: Do you agree to the resolution of the following CIDs as in 11-21/1912r1?

* CID 7237, 7238

No objection

1. **11-21-1903r0 – CIDs 4558 and 4562 –** Sigurd Schelstraete (MaxLinear)

**Discussions:**

C: Some editorial comment. Update to r1.

SP#6: Do you agree to the resolution of the following CIDs as in 11-21/1903r1?

* CID 4558, 4562

No objection

1. **11-21-1922r0 – CC36 Comment Resolutions for 4 CIDs –** Dongguk Lim (LGE)

SP#7: Do you agree to the resolution of the following CIDs as in 11-21/1922r0?

* CID 4868, 4869, 5434, 5436.

No objection

1. **11-21-1947r0 – CR for SR and BEAMFORMED in TX/RXVECTOR –** Mengshi Hu (Huawei)

SP#8: Do you agree to the resolution of the following CIDs as in 11-21/1947r0?

* CID 4534, 5460, 6781, 6923, 7124, 7989, 7653

No objection

**Adjourn**

The meeting is adjourned at 21:00 PM ET