IEEE P802.11
Wireless LANs

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| CC36 CR for CID 5675 7793 |
| Date: 2021-11-02 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Zinan Lin | InterDigital Inc. | 111 West 33rd StreetNew York, NY 10120USA |  | zinan.lin@interdigital.com |
| Rui Yang |  |  |
| Hanqing Lou |  |  |
| Junghoon Suh | Huawei |  |  |  |
| Xiaogang Chen | Intel |  |  |  |
| Yanjun Sun | Qualcomm |  |  |  |

Abstract

This submission proposes the resolution for CID 5675 and 7793. The baseline for this comment resolution document is 802.11be Draft 1.3.

**Revisions:**

Rev 0: first draft of the document

Rev 1: minor editorial change

Rev 2: make changes on the resolutions

Rev 3: add option to the resolution of 7793

Rev 4: update the words of Option 1

Rev 5: update the resolution of 7793 and clean up the version

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| **CID** | **Commenter** | **Clause** | **Page** | **Comment** | **Proposed change** | **Resolution** |
| 5675 | JUNG HOON SUH | 35.5.2 | 289.43 | "The Puncturing Channel Information fields in U-SIG shall match with the Partial BW Info subfield in the EHT NDP Announcement frame." should be re-written to make sure the Partial BW info would be the subset of puncturing pattern indication in U-SIG. | The paragraph needs to be updated to reflect the comment | Revised:Clarification has been added in 802.11be D1.3 P400L21: “In an EHT non-TB sounding sequence case, the occupied bandwidth indicated by the BW field and Puncturing Channel Information fields in the U-SIG field(#5657) of NDP shall be the same as the feedback RU/MRU size indicated in the Partial BW Info subfield in the EHT NDP Announcement frame.”Hence, Partial BW info in NDPA as a subset (except when they are equal) of puncturing pattern indication in the U-SIG of NDP is no longer possible.  |
| 7793 | Yanjun Sun | 35.5.2 | 289.47 | In case any static puncturing pattern is indicated in beacons, please clarify whether the non-TB sounding sequence may use a puncturing pattern which is different from the one indicated in beacons | As in comment | Revised: agree in principle with the comment. As indicated in 35.5.2(P402L28) in 802.11be D1.3, “an SU beamformer shall not solicit partial bandwidth SU feedback from an SU beamformee in an EHT non-TB sounding sequence.” This sentence combined with the full bandwidth feedback definition (P399L43) implies no additional puncturing on top of the pattern indicated in beacons for non-TB sounding is allowed. Therefore, there is a need to add additional sentence to explicitly specify that the punctured subchannel(s) indicated by the BW and Puncturing Channel Information fields in the U-SIG field of the NDP shall not include other punctured subchannel(s) in addition to those indicated in the Disabled Subchannel Bitmap field in the EHT Operation element for non-TB sounding. It also needs to specify that the occupied subchannel(s) indicated by the BW field and Puncturing Channel Information fields in the U-SIG field of NDP is/are the same as the requested subchannel(s) indicated in Partial BW Info subfield in the EHT NDP Announcement frame. TGbe editor: please incorporate changes shown in 11-21/2019r5 under the tag 7793 |

Discussions:

It is indicated in P400L20 in 802.11be D1.3 that “In an EHT non-TB sounding sequence case, the occupied bandwidth indicated by the BW field and Puncturing Channel Information fields in the U-SIG field(#5657) of NDP shall be the same as the feedback RU/MRU size indicated in Partial BW Info subfield in the EHT NDP Announcement frame.” However, as shown in Table 9-42c of 802.11be D1.3, one Feedback RU/MRU size may correspond to multiple patterns of requested subchannel(s) for a given bandwidth of the EHT NDP Announcement frame. Therefore, it is not sufficient to indicate that the occupied bandwidth of NDP shall be the same as the feedback RU/MRU size indicated in the EHT NDP Announcement frame. It needs to specify that the occupied subchannel(s) indicated by the BW field and Puncturing Channel Information fields in the U-SIG field of NDP is/are the same as the requested subchannel(s) indicated in Partial BW Info subfield in the EHT NDP Announcement frame.

**Discussion end**

***TGbe Editor: Please modify Clause 35.5.2 EHT sounding protocol as follows (802.11be Draft 1.3 P400L17)***

An SU beamformer may solicit full bandwidth SU feedback from an SU beamformee in an EHT non-TB sounding sequence. An SU beamformer shall not solicit partial bandwidth SU feedback from an SU beamformee in an EHT non-TB sounding sequence. In an EHT non-TB sounding sequence case, the occupied subchannel(s) indicated by the BW and Puncturing Channel Information fields in the U-SIG (#5657) field of the NDP shall be the same as the requested subchannel(s) indicated in the Partial BW Info subfield of the immediately preceding EHT NDP Announcement frame. Furthermore, the punctured subchannel(s) indicated by the BW and Puncturing Channel Information fields in the U-SIG field of the NDP shall not include other punctured subchannel(s) in addition to those indicated in the Disabled Subchannel Bitmap field of the most recent EHT Operation element for non-TB sounding (#7793).

NOTE: In the EHT TB sounding sequence, the punctured subchannel(s) indicated by the BW and Puncturing Channel Information fields in the U-SIG field of the NDP might include other punctured subchannel(s) in addition to those indicated in the Disabled Subchannel Bitmap field of the most recent EHT Operation element, following the rules defined in 35.14.3 (Preamble puncturing operation).