IEEE P802.11
Wireless LANs

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| LB286 Comment Resolutions for CIDs part 1 |
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Abstract

This document provides LB279 comment resolutions to CIDs in section 11 based on **11bkD2.0, 11beD5.0, and REVmeD5.0 references**. The CIDs including 17, 18, 23, 95, 24, 45, 46, 47, 48, 79, 80, 86, 87, 129, and 130 (15 total).

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| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 17 | 11.21.6.3.3 | 34.21 | "If the IFTM frame or the FTM frame" - the IFTM frame is a certain FTM frame, so it is subsumed in the set of all FTM frames. | Change to "If an FTM frame" - this covers all the cases. | Accept |
| 18 | 11.21.6.4.3.3 | 40.23 | "NOTE--The 320 MHz bandwidth of the Ranging NDP Announcement frame", several issues: i) this is baseline behavior, ii) why is this pointed out for 320 MHz and not for 160/80/40/20 ? iii) The sentence makes it sounds that NDP-As are always sent in 320 MHz (?) | Remove the note, or clarify that NDP-A is not always sent in 320 MHz and/or add description for 160 MHz and lower bandwidths. | Revise<https://mentor.ieee.org/802.11/dcn/24/11-24-0787-01-00bk-lb286-comment-resolution-for-cids-part-1-11.docx> |
| 23 | 11.21.6.4.3.3 | 43.06 | "Begin with a TB ranging measurement exchange(s) that solicit(s) EHT TB Ranging NDP or EHT (TB) Ranging NDP," - not sure why there is an \*or\* and two mentions of EHT NDPs. If it is TB NDP and regular NDP, the regular NDP is not solicited and also it's not "or" - but "and" | Change to "Begin with a TB ranging measurement exchange(s) that solicit(s) EHT TB Ranging NDP," | ReviseThe cited text with “or” is intended for Passive TB ranging measurement exchanges hence proposing to add a Note to clarify it.<https://mentor.ieee.org/802.11/dcn/24/11-24-0787-01-00bk-lb286-comment-resolution-for-cids-part-1-11.docx> |
| 95 | 11.21.6.4.3.3 | 43.02 | "When a TXOP includes both a TB ranging measurement exchange 3 soliciting both an EHT (TB) Ranging NDP and a TB ranging measurement exchange soliciting 4 (#1126, #1272) an HE (TB) Ranging NDP" -- the parenthetical (TB)s are not clear. Can it be any combination of one of { EHT Ranging NDP and EHT TB Ranging NDP } and one of { HE Ranging NDP and HE TB Ranging NDP }? | Clarify | ReviseThe cited text with “or” is intended for Passive TB ranging measurement exchanges hence proposing to add a Note to clarify it.<https://mentor.ieee.org/802.11/dcn/24/11-24-0787-01-00bk-lb286-comment-resolution-for-cids-part-1-11.docx> |
| 24 | 11.21.6.4.3.3 | 43.10 | "Perform measurement exchange(s) that solicit(s) an HE TB Ranging NDP or an HE Ranging NDP after all the TB ranging measurement exchanges" see above, why \*or\* for TB NDP and NP, if should be \*and\* | Change to "Perform measurement exchange(s) that solicit(s) an HE TB Ranging NDP after all the TB ranging measurement exchanges" | ReviseThe cited text with “or” is intended for Passive TB ranging measurement exchanges hence proposing to add a Note to clarify it.<https://mentor.ieee.org/802.11/dcn/24/11-24-0787-01-00bk-lb286-comment-resolution-for-cids-part-1-11.docx> |
| 45 | 11.21.6.3.3 | 33.11 | Should "all ones" be reserved or changed to "all zero" since notation of '1' in the Disabled subfield channel is indicating punctured BW as the intent for this statement is not to puncture | As per comment | Revise<https://mentor.ieee.org/802.11/dcn/24/11-24-0787-01-00bk-lb286-comment-resolution-for-cids-part-1-11.docx> |
| 46 | 11.21.6.3.3 | 34.18 | Should we add "FTM frame" in addition to this paragraph since the following paragraph has 'FTM" frame. | As per comment | Revise<https://mentor.ieee.org/802.11/dcn/24/11-24-0787-01-00bk-lb286-comment-resolution-for-cids-part-1-11.docx> |
| 47 | 11.21.6.3.4 | 35.25 | Change "IFTMR" to "IFTM" as the frame is sent by RSTA | As per comment | Accept |
| 48 | 11.21.6.4.3.3 | 42.18 | Add the word "sounding" before bandwidth | As per comment | Revise<https://mentor.ieee.org/802.11/dcn/24/11-24-0787-01-00bk-lb286-comment-resolution-for-cids-part-1-11.docx> |
| 79 | 11.21.6.3.3 | 31.22 | " -- The Max R2I NSS field is set to the maximum number of spatial streams the ISTA is23 capable of receiving in the R2I NDP for a 320 MHz bandwidth minus 1.2425 -- The Max I2R NSS field is set to the maximum number of spatial streams the ISTA is 26 capable of transmitting in the I2R NDP for a 320 MHz bandwidth minus 1.2728 -- The Puncturing Pattern Support field is set to 1 to indicate support of all puncturing 29 patterns, or it is set to 0 to indicate support of only the subset of puncturing patterns 30 defined in Table 11-14aa (Subset of puncturing patterns in 320 MHz Ranging when 31 Puncturing Pattern Support field set to 0).3233 -- The Max R2I Repetition field is set to the maximum number of LTF repetitions it is 34 capable of receiving in the preamble of the R2I NDP for 320 MHz bandwidth. " is duplication of Clause 9, which gives the field meanings and encodings: " The Max R2I NSS field indicates the maximum number of spatial streams to be used in an R2I 3 NDP for 320MHz PPDU bandwidth transmissions in the session. (#1226)4 The Max I2R NSS field indicates the maximum number of spatial streams to be used in an I2R 5 NDP for 320MHz PPDU bandwidth transmissions in the session. (#1226)6 The Puncturing Pattern Support field is set to 1 to indicate support of all valid puncturing patterns 7 as listed in Table 36-30 (Definition of the Punctured Channel Information field in the U-SIG for8 an EHT MU PPDU using non-OFDMA transmissions); it is set to 0 to indicate support of only9 the subset of puncturing patterns defined in Table 11-14aa (Subset of puncturing patterns in10 320MHz Ranging when Puncturing Pattern Support field set to 0).11 The Puncturing Pattern field is used by the RSTA to convey the disabled subchannel bitmap to12 the ISTA in the IFTM frame. It is reserved when included in the IFTMR frame by the ISTA. " | Delete the cited text and following bullets, and the preceding "In the subelement:" | Accept/Reject?Could be either, what is TG’s preference? |
| 80 | 11.21.6.3.3 | 32.37 | "-- The Max R2I NSS field is set to either the maximum number of spatial streams it is38 capable of transmitting in the R2I NDP for 320 MHz bandwidth minus 1" contradicts Clause 9, which has no minus 1 | Do not duplicate material from Clause 9 in other clauses. Change to "... is set to either indicate the maximum number of spatial streams it is capable of transmitting in the R2I NDP for 320 MHz bandwidth" | Accept/Reject?Could be either, what is TG’s preference? |
| 86 | 11.21.6.3.3 | 33.28 | "the RSTA shall not assign a 320 MHz29 bandwidth option " -- it is not clear what it means to assign a "bandwidth option", whatever that is | Clarify | Revise<https://mentor.ieee.org/802.11/dcn/24/11-24-0787-01-00bk-lb286-comment-resolution-for-cids-part-1-11.docx> |
| 87 | 11.21.6.3.3 | 32.21 | "the bandwidth may 22 be assigned as 320 MHz" -- it is not clear who is assiging the bandwidth and where, or indeed what it means to assign a bandwidth | Clarify | RejectParameter assignments are done by RSTA in the IFTM frame. An ISTA including a 320 MHz Ranging subelement does not always result in a 320MHz BW assignment as the RSTA might not be able to support the punctured pattern that ISTA supports. |
| 129 | 11.21.6.3.3 | 0.00 | Clause 9 is where the format and encoding is specified | Delete "-- Maximum number of space-time streams it is capable of receiving in the R2I NDP for 160 MHz bandwidth, in the 160MHz Max R2I STS subfield. " | Accept/Reject?Could be either, what is TG’s preference? |
| 130 | 11.21.6.4.3.2 | 39.01 | Despite CID 1259, it is still not clear what has changed in this subclause | Make the changes clear, so they can be reviewed | Revise<https://mentor.ieee.org/802.11/dcn/24/11-24-0787-01-00bk-lb286-comment-resolution-for-cids-part-1-11.docx> |

*Resolution for CID 18*

*TGbk editor: Change the text on P40L23-25 as follows:*

NOTE—~~The~~ A 320 MHz bandwidth of the Ranging NDP Announcement frame is indicated based on rules in 17.3.5.2 (SERVICE field) if the frame is transmitted in a non-HT duplicate PPDU, or based on rules in Table 36-28 (U-SIG field of an EHT MU PPDU) if the frame is transmitted in an EHT MU PPDU.

*Resolution for CID 23, 24 and 95*

*TGbk editor: Change the following text on P43L1-L12:*

values or if the RSTA wants to limit the time duration of each range measurement sounding instance. ~~If the RSTA intends to initiate~~ When a TXOP includes both a TB ranging measurement exchange soliciting ~~both~~ an EHT ~~(~~TB~~)~~ Ranging NDP or an EHT Ranging NDP and a TB ranging measurement exchange soliciting (#**1126**, #**1272**) an HE ~~(~~TB~~)~~ Ranging NDP or an HE Ranging NDP in a same TXOP, the RSTA shall:

— (#**1080**)Begin with a TB ranging measurement exchange(s) that solicit(s) an EHT TB Ranging NDP or an EHT ~~(TB)~~ Ranging NDP, that use(s) non-HT duplicate PPDU for the Ranging Trigger frames, and that set(s) the More TF subfield to 1 in the Ranging Trigger frames.(#**1273**)

— Perform measurement exchange(s) that solicit(s) an HE TB Ranging NDP or an HE Ranging NDP ~~A~~after all the TB ranging measurement exchanges that solicit(s) an EHT ~~(~~TB~~)~~ Ranging NDP or an EHT Ranging NDP are completed~~.~~ (#**1155**), then perform the TB ranging measurement exchange that solicits an HE ~~(~~TB~~)~~ Ranging NDP or an HE Ranging NDP~~s~~. (#**1273**) (#23, #24, #95)

NOTE—The solicitation of HE Ranging NDP or EHT Ranging NDP is relevant to the Passive TB ranging measurment exchange. (#23, #24, #95)

*Resolution for CID 45*

*TGbk editor: Change the text on P33L9-11 as follows:*

If the RSTA has included the Disabled Subchannel Bitmap subfield in the EHT Operation element, the Puncturing Pattern field is set to the same value; otherwise the Puncturing Pattern field is set to all ~~ones~~ zeros. (#45)

*Resolution for CID 46*

*TGbk editor: Change the text on P33L17-20 as follows, making it consistent with P33P21-24 after resolution for CID 17*

If an RSTA is a standard power AP or an indoor standard power AP, the RSTA shall include at least one Transmit Power Envelope element in an ~~I~~FTM frame. If an RSTA is neither a standard power AP nor an indoor standard power AP, the RSTA should include at least one Transmit Power Envelope element(s) in an ~~I~~FTM frame. (#**1250**) (#46)

*Resolution for CID 48*

*TGbk editor: Change the text on P42L17-19 as follows:*

The R2I NDP is transmitted a SIFS after the Ranging NDP Announcement frame; if the sounding (#48) bandwidth is equal to 320 MHz, the R2I NDP shall be formatted as an EHT Ranging NDP, as described in 36.3.4.1

*TGbk editor: Change the text on P77L18-21 as follows:*

if the sounding (#48) bandwidth indicated by the frame is less than or equal to 160 MHz, the ISTA shall respond with an HE Ranging NDP instead of an HE TB Ranging NDP; if the sounding (#48) bandwidth indicated by the frame is equal to 320 MHz, the ISTA shall respond with an EHT Ranging NDP instead of an EHT TB Ranging NDP

*Resolution for CID 86*

*TGbk editor: Change the text on P33L26-31 as follows:*

If the RSTA is an EHT AP that has included the Disabled Subchannel Bitmap subfield in the EHT Operation element, and the ISTA has set the Puncturing Pattern Support field in the 320 MHz Ranging subelement of the IFTMR frame to 0, the RSTA shall not assign a 320 MHz bandwidth ~~option~~ (#86) unless the Disabled Subchannel Bitmap subfield in the EHT Operation element corresponds to one of the entries of Table 11-14aa (Subset of puncturing patterns in 320 MHz Ranging when Puncturing Pattern Support field set to 0).(#**1045**)

*TGbk editor: Change the text on P34L9-14 as follows:*

Upon reception of an IFTMR frame with the Ranging Parameters element including a 320 MHz Ranging subelement(#**1247**), the RSTA shall respond with the value of 8 in the Format And Bandwidth subfield in the Ranging Parameters element and include a 320 MHz Ranging subelement in the IFTM frame, if it supports the requested 320 MHz bandwidth ~~option~~ (#86) with the corresponding puncturing pattern included in the Disabled Subchannel Bitmap subfield in the EHT Operation element.(#**1046**, #**1246**).

*Resolution for CID 130*

*TGbk editor: Change the text on P39L6-12 as follows:*

Any ISTA addressed by a User Info field in a TF Ranging Poll frame that intends to participate in the measurement sequence within this availability window shall send a CTS-to-self in an S-MPDU within an ~~HE~~ TB PPDU (#1259) (#130) in its designated RU allocation as identified in the TF Ranging Poll frame, otherwise shall not send a CTS-to-self to avoid resource allocation in this measurement sequence; see Figure 11-49 (TB ranging availability window with two instances of polling/sounding/reporting triplets in separate TXOPs).

**References: 11bkD2.0, 11beD5.0, and REVmeD5.0**