IEEE P802.11  
Wireless LANs

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| LB259 Comment Resolution | | | | |
| Date: 2022-01-11 | | | | |
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|  |  |  |  |  |

Abstract

This submission discusses resulotions to the following 12 CIDs from WG LB 259 of TGbd D3.0.

The CID list is: 3001, 3002, 3012, 3017, 3018, 3051, 3052, 3061, 3063, 3064, 3077, 3103

Proposed changes in this document are with reference to TGbd D3.0.

Revisions:

* Rev 0: Intitial version of the document, CR of CID 3002 not included
* Rev 1: Update of CIDs 3001, 3018 after discussion during TGbd Telco

Proposed comment resolution

Presented and discussed, no open discussion points

Under discussion

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CID** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 3061 | 19.31 | Change "higher" to "better" or "lower" to reflect the intended objective. | As in comment. | Rejected  As explained by the commenter of CID 2053 in LB254 of 11bd D2.0, “The number that represents the sensitivity is lower (more negative) but the sensitivty is higher (more sensitive).” Since “higher sensitivity” is technical more accurate than “better sensitivity”, the proposed change is rejected. |
| 3077 | 19.42 | Fairness is not a defined 802.11 term and does not seem to clearly define that an NGV STA will fairly contend with non-NGV STAs for the medium. | Replace "fairness" With: "fairness in contending for the medium" | Accepted |
| 3063 | 19.65 | Not clear about what "the same Channel" is meant. Does it mean the allocated DSRC spectrum or something else? Please clarify. | As in comment. | Rejected  The terms channel and channel spacing are defined in 802.11-2020 in Subclause 3.1. An NGV STA is using either a channel with 10 MHz or 20 MHz channel spacing and corresponding PPDU width. The possible channel allocations in the 5.9 GHz band are defined in Annex E.1 of 802.11-2020.  See also CID 3064 |
| 3064 | 20.14 | Not clear about what "the same Channel" is meant. Does it mean the allocated DSRC spectrum or something else? Please clarify. | As in comment. | Rejected  The terms channel and channel spacing are defined in 802.11-2020 in Subclause 3.1. An NGV STA is using either a channel with 10 MHz or 20 MHz channel spacing and corresponding PPDU width. The possible channel allocations in the 5.9 GHz band are defined in Annex E.1 of 802.11-2020.  See also CID 3063 |
| 3002 | 38.09 | In 9.3.1.19 the title now suggest there are 3 kinds of NDPA: VHT HE and NGV Ranging this is not correct because 11az has its own NDPA type of Ranging NDP and it is not NGV Ranging | Adjust the name to separate the NGV Ranging NDPA from the Ranging NDPA |  |
| 3001 | 40.18 | The Format and BW is an ordered list, meaning support for a BW suggests support for lower BWs. The additions 11bd made break this rule. As a result the support during negotiation of the STA is unclear. | Insert text in the element description that clarifies that support for values 6 and 7 does is limited to NGV formats only. i.e. support for 7 suggests support for 6 but not to 5 and below. | Revised  Agree with comment.  **TGbd editor**:  Please add the following sentence after Table 9-322h23fb and add “\*” after NGV in the Format column:  \* Values 6 and 7 may only be supported when dot11NGVActivated is true. |
| 3012 | 40.22 | The last two columns in the last row of Table 9-322h23fb have not the same entries as in Table 9-322h23fb on P77 in 11az D4.0. | In the last row of Table 9-322h23fb change the FORMAT and Bandwidth value to "Reserved" as in 11az D4.0. | Accepted |
| 3051 | 66.39 | It is not clear which paragraph(s) indicates "the following differences". | Please apply any marking (such as indent) to the paragraph(s) that indicates "the following differences". | Revised  In principle agree with comment.  **TGbd editor**:  Please incorporate the changes in <https://mentor.ieee.org/802.11/dcn/22/11-22-0007-01-00bd-lb259-comment-resolution.docx> |
| 3052 | 67.08 | It is not clear which paragraph(s) indicates "the following rules". | Please apply any marking (such as indent) to the paragraph(s) that indicates "the following rules". | Revised  In principle agree with comment.  **TGbd editor**:  Please incorporate the changes in <https://mentor.ieee.org/802.11/dcn/22/11-22-0007-01-00bd-lb259-comment-resolution.docx> |
| 3017 | 122.49 | Table 32-11 defined NNGV-LTF newley in 11bd D3.0 compared to 11bd D2.0. Hence Figure 32-18 needs to be updated. | Remove the factor "(LTF\_REP+1)" above the brace of the NGV-LTF symbols | Accepted |
| 3103 | 123.01 | As NGV ranging NDP can only use "NGV-LTF-2x", so MCS 15 cannot be signaled in NGV-SIG for ranging NDP. We can either set some rules for NGV-SIG when transmitting ranging NDP or make NGV-MCS field reserved and set to a default value, like 0. | As in the comment. | Revised  In principle agree with comment.  **TGbd editor**:  Please add the following bullet to the end of the bullet list on P122L60:   * The TXVECTOR parameter NGV-MCS shall be set to 0. |
| 3018 | 123.26 | Table 32-11 defined NNGV-LTF newley in 11bd D3.0 compared to 11bd D2.0. Hence Figure 32-19 needs to be updated. | 1. Replace "NNGV-LTF" by "NSS" on L26 twice. 2. Remove the factor "(LTF\_REP+1)" after "NNGV-LTF" on L28. | Revised  **TGbd editor**:  Please incorporate the changes in <https://mentor.ieee.org/802.11/dcn/22/11-22-0007-01-00bd-lb259-comment-resolution.docx>  In addition to the proposed changes by the commentor, please change L6 “NUM\_SS” to “the TXVECTOR parameter NUM\_SS” |

Add text

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# CID3051

The fine timing measurement procedure negotiation is performed by an NGV STAs as specified in 11.21.6.3 (Fine timing measurement procedure negotiation) with the following differences:

* For ranging in the 5.9 GHz band, in the Ranging Parameters element included in the IFTMR frame:  
  • Status indication field and value field is reserved.  
  • Secure LTF Req, Secure LTF Support is set to 0.  
  • Device Class field is reserved.  
  • Full BW UL MU-MIMO field is reserved.  
  • Max R2I STS > 80 MHz field is reserved.  
  • Max I2R STS > 80 MHz field is reserved.
* For ranging in the 5.9 GHz band, a non-TB ranging measurement exchange is used by NGV STAs as defined in 11.21.6.4.4 (Non-TB Ranging measurement exchange) with the following changes:  
  • An NGV Ranging NDP is transmitted instead of an HE Ranging NDP.  
  • An NGV Ranging NDP Announcement frame is transmitted instead of a VHT/HE/Ranging NDP  
   Announcement frame.

For ranging on IEEE Std 802.11 bands outside the 5.9 GHz band, whether PASN is required is indicated by the higher layers. Two STAs co-located with NGV STAs may establish PASN authentication if so indicated by the higher layer using the procedures as defined in 12.12 (Pre Association Security Negotiation) with the following change: the exchanges between ISTA and RSTA are done by two STAs each co-located with an NGV STA. Alternatively, the security association between the two STAs may be established by higher layer exchanges in the 5.9 GHz band.

# CID3052

When a member in radio environment request vector represents "selection within MAC sublayer," the NGV STA shall select the related member value by itself. Otherwise the following rules shall be applied:

* When transmitting an MPDU that encapsulates an MSDU, an NGV STA shall use the PPDU format indicated by the PPDU format member of the radio environment request vector related to the MSDU.
* When transmitting an MPDU that encapsulates an MSDU, an NGV STA shall use the data rate/NGV-MCS indicated by the data rate/NGV-MCS member of the radio environment request vector related to the MSDU in the initial transmission of the MPDU. In the retransmission of the MPDU, the data rate/NGVMCS shall be no more than data rate/NGV-MCS indicated by the data rate/NGV-MCS member of the radio environment request vector related to the MSDU.
* When transmitting an MPDU that encapsulates an MSDU, an NGV STA shall use the number of spatial streams indicated by the number of spatial streams member of the radio environment request vector related to the MSDU in the initial transmission of the MPDU. In the retransmission of the MPDU, the number of spatial streams shall be no more than the number of spatial streams indicated by the number of spatial streams member of the radio environment request vector related to the MSDU.
* An NGV STA shall transmit a frame that encapsulates an MSDU in an A-MPDU if the permitted aggregation member of the radio environment request vector related to the MSDU is equal to 1. Otherwise the NGV STA shall not aggregate the frame in an A-MPDU.
* An NGV STA shall set the lifetime of an MSDU to the value of expiry time member of the radio environment request vector related to the MSDU.
* An NGV STA shall transmit an MPDU that encapsulates an MSDU in the channel defined by the frequency band member, primary channel member and channel width member of the radio environment request vector related to the MSDU with the following exception:

~~—~~• If the channel width indicates 20 MHz channel width and the fallback enabled parameter indicates 1, the channel can be 10 MHz channel.

* An NGV STA shall transmit an MPDU that encapsulates an MSDU with the transmit power indicated by the transmit power spectral density member of the radio environment request vector related to the MSDU.

When reporting a received MSDU to the upper layer, an NGV STA shall report the radio environment status vector of the received MSDU as defined in 5.2.4 (MA-UNITDATA.indication).

# CID3017





# CID3018



