IEEE P802.11  
Wireless LANs

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| |  |  |  |  |  | | --- | --- | --- | --- | --- | | CC40 CR for CIDs on NDP | | | | | | Date: 2022-09-28 | | | | | | Author(s): | | | | | | Name | Affiliation | Address | Phone | email | | Mahmoud Kamel | InterDigital |  |  | mahmoud.kamel@interdigital.com | | Zinan Lin | InterDigital |  |  |  | | Rui Yang | InterDigital |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |

Abstract

This submission proposes resolutions for 3 CIDs (172, 545, 563) in subclause 11.21.18 in P802.11bf D0.1:

NOTE – Set the Track Changes Viewing Option in the MS Word to “All Markup” to clearly see the proposed text edits.

**Revision History:**

R0: Initial version

R1: Added PDT for SI2SR and SR2SI NDP formats

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| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 172 | 11.21.18.7 | 71.57 | The formats of I2R NDP and R2I NDP are not decided yet. | Decide the format of I2R NDP and R2I NDP | **Revised**  The formats of SI2SR and SR2SI NDPs are decided to follow HE Ranging NDP and HE TB Ranging format when PPDU BW <=160 MHz and EHT Sounding NDP when PPDU BW = 320 MHz as proposed and SPed in DCN 11-22/1380 and motioned in (Motion 141 20/1874r73)  TGbf editor: please incorporate changes shown in 11-22/1673r1 below. |
| 545 | 11.21.18.6 | 68.64 | In TB sensing measurement, R2I NDP and I2R NDP is used for senssing measurement. But, the format of those NDP is not defined. Pleae define the R2I NDP and I2R NDP format. | As in comment. | **Revised**  The formats of SI2SR and SR2SI NDPs are decided to follow HE Ranging NDP and HE TB Ranging format when PPDU BW <=160 MHz and EHT Sounding NDP when PPDU BW = 320 MHz as proposed and SPed in DCN 11-22/1380 and motioned in (Motion 141 20/1874r73)  TGbf editor: please incorporate changes shown in 11-22/1673r1 below. |
| 563 | 11.21.18.7 | 71.54 | In the Non-TB sensing measurement, I2R NDP and R2I NDP is used, however, I could not find how to configure those type of NDP. Please define each type of NDP in the 11bf spec. | As in comment | **Revised**  The formats of SI2SR and SR2SI NDPs are decided to follow HE Ranging NDP and HE TB Ranging format when PPDU BW <=160 MHz and EHT Sounding NDP when PPDU BW = 320 MHz as proposed and SPed in DCN 11-22/1380 and motioned in (Motion 141 20/1874r73)  TGbf editor: please incorporate changes shown in 11-22/1673r1 below. |

DISCUSSION:

Tables 36-28 and 36-29 from 802.11be D2.2 below indicates that the transmission of EHT sounding NDP is supported in both uplink (addressed to AP STA) and downlink (not addressed to an AP STA).

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END OF DISCUSSION

# Motion to Adopt

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***TGbf Editor:***

* ***Modify the Editor’s Note in 11bf D0.3 P96L12 as follows***
  + ***“Editor’s Note: The format of Sensing NDP Announcement frame is TBD.”***
* ***Modify the Editor’s Note in 11bf D0.3 P96L54 as follows***
  + ***“Editor’s Note: The format of Sensing Sounding Trigger frame is TBD.”***
* ***Modify Clause 11.21.18.6.3 in 11bf D0.3 P96L12 as follows***

The AP shall transmit a Sensing NDP Announcement frame to one or more STAs that are sensing receivers

in this NDPA sounding phase and that are not assigned to be polled or have responded in the polling phase,

followed by a SIFS and SI2SR NDP transmission. The STA Info fields within the Sensing NDP Announcement

frame specify STAs that shall perform sensing measurements on the SI2SR NDP sent by the AP(#763,

#476, #621, #125, #863).

In TB sensing measurement instances, the SI2SR NDP format shall have the format of HE Ranging NDP for below 7 GHz band when the PPDU bandwidth ≤ 160 MHz and shall have the format of EHT sounding NDP including the specified preamble puncturing patterns when the PPDU bandwidth = 320 MHz. In TB sensing measurement instances, the SR2SI NDP format shall have the format of HE TB Ranging NDP for below 7 GHz band when the PPDU bandwidth ≤ 160 MHz.

Note: EHT TB sounding NDP is not defined which is out of scope of this amendment.

In non-TB sensing measurement instances, the SI2SR NDP format and the SR2SI NDP format shall have the same format of HE Ranging NDP for below 7 GHz band when the PPDU bandwidth ≤ 160 MHz and shall have the same format of EHT sounding NDP including the specified preamble puncturing patterns when the PPDU bandwidth = 320 MHz.

The preamble puncturing patterns to be supported for the SI2SR NDP or SR2SI NDP when the PPDU bandwidth = 320 MHz are TBD.