IEEE P802.11
Wireless LANs

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| Comment Resolution Spatial Reuse |
| Date: 2024-11-11 |
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Abstract

This submission proposes to address the following CIDs I-2, I-3, and I-35, changes are relative to Draft P802.11be\_D0.0, Draft P802.11REVme\_D6.0, and Draft P802.11bk D3.0.

Revisions:

1. Specify CIDs and add links
2. Add CID I-35
3. Changes made during presentation to include feedback.
4. More edits and fix resolution box text
5. Move text to Clause 11 and make “should” for HE format
6. Add a note and more word smithing

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGbk Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbk Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGbk Editor: Editing instructions preceded by “TGbk Editor” are instructions to the TGbk editor to modify existing material in the TGbk draft. As a result of adopting the changes, the TGbk editor will execute the instructions rather than copy them to the TGbk Draft.***

**The text preceded by “Discussion” is not part of the adopted changes.**

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| **CID** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| **I-2** | 24.5 | 9.3.1.23.2 | Add text to specifcy how to set the Spatial Reuse subfield | Add "The UL Spatial Reuse subfield is set to PSR\_AND\_NON\_SRG\_OBSS\_PD\_PROHIBITED" | **Revised**TGbk editor, make the changes identified in document [**https://mentor.ieee.org/802.11/dcn/24/11-24-1921-06-00bk-comment-resolution-spatial-reuse.docx**](https://mentor.ieee.org/802.11/dcn/24/11-24-1921-06-00bk-comment-resolution-spatial-reuse.docx) |
| **I-3** | 81.6 | 11.21.6.4.6 | The setting of the SPATIAL\_REUSE parameter for TB frames should be controlled by parsing the common info of the Trigger Frame. | Remove this line and instead add the requirement that the Sounding Ranging Trigger Frame should set this value in the common info field. | **Revised**The suggested text was added to specify the setting in the Sounding Ranging Trigger frame; the group preferred to keep this text still.TGbk editor, make the changes identified in document [**https://mentor.ieee.org/802.11/dcn/24/11-24-1921-06-00bk-comment-resolution-spatial-reuse.docx**](https://mentor.ieee.org/802.11/dcn/24/11-24-1921-06-00bk-comment-resolution-spatial-reuse.docx) |
| **I-35** | 80.27 | 11.21.6.4.6 | "The CH\_BANDWIDTH parameter is set to the same value as the RXVECTOR parameter CH\_BANDWIDTH or CH\_BANDWIDTH\_IN\_NON\_HT in the preceding Ranging Sounding Trigger frame." - shouldn't that be similar to previous two bullets, in TB frame, do as TF says? | Change to "The CH\_BANDWIDTH parameter is set to the value indicated by the UL BW field in the Common Info field of the preceding Ranging Sounding Trigger frame." | **Rejected**The bandwidth needs to be set both based on the UL BW field in the Common Info, but also based on the Special User Info (for EHT 320 MHz). The text turns (unnecessarily) complicated. The current text is more concise. |

1. **11.21.6.4.3.3 Measurement ~~S~~sounding phase of TB ranging**
2. ***TGbk Editor: Change subclause 11.21.6.4.3.3 as follows (on page 44, 11bk Draft3.0):***

The RSTA shall set the TXVECTOR parameter CH\_BANDWIDTH of the ~~Trigger frame~~ Sounding Ranging Trigger frame to ~~that same~~ the sounding bandwidth, and shall use the same value for the UL BW subfield of the Common Info field ~~of said Trigger frame~~. If the sounding bandwidth is 320 MHz, the RSTA shall include a Special User Info field and set the UL Bandwdith Extension field accordingly. When transmitting the Ranging NDP Announcement frame and R2I NDP, the RSTA shall set the TXVECTOR parameter CH\_BANDWIDTH to that same bandwidth value. (#**1163**, #**1124, #1392**)

In the ~~TF Ranging Sounding~~Sounding Ranging Trigger frame, the RSTA shall set the SS Allocation subfield and the I2R Rep subfield of the User Info fields corresponding to each ~~of the~~ triggered ISTA~~s triggered by the Trigger frame~~in the following way:

* The Number of Spatial Streams ~~i~~In ~~e~~Each SS Allocation subfield shall not exceed the assigned value *~~RSTA Assigned I2R STS~~ ~~≤ 80 MHz~~* for the ~~corresponding~~ sounding bandwidth ~~ISTA~~; i.e., if the ~~UL BW subfield in the Common Info field indicated a~~ sounding bandwidth is less than or equal to 80 MHz, the *RSTA assigned I2R STS* ≤ 80 MHz, if the sounding bandwidth is 160 MHz, ~~and not exceed~~ the *160 MHz RSTA ~~A~~assigned I2R STS ~~> 80 MHz~~* ~~for the corresponding ISTA otherwise~~, and if the sounding bandwidth is 320 MHz, the *320 MHz RSTA assigned I2R NSS*.
* All the I2R Rep subfields in the User Info fields of the ~~TF Ranging Sounding~~Sounding Ranging Trigger frame shall be set to the same value. This value indicates the number of LTF repetitions in the I2R NDP preamble and shall not exceed the assigned value of any of the *~~RSTA Assigned I2R Rep~~* ~~corresponding to the~~ triggered ISTA ~~triggered by this Trigger frame~~; i.e., the *RSTA assigned I2R rep* if the sounding bandwidth is less than 320 MHz or the *320 MHz RSTA assigned I2R rep otherwise*.
* (#**1059**) The product of the number of LTF repetitions, indicated in ~~each of~~ the I2R Rep subfield~~s~~ of the User Info field~~s~~, and the number of ~~HE-~~LTF symbols, indicated in the Number Of HE~~-~~LTF (#**2073**) Symbols And Midamble Periodicity subfield or the Number Of HE/EHT-LTF Symbols subfield in the Common Info field, shall not exceed the assigned value *~~RSTA Assigned I2R LTF Total~~* for any of the triggered ISTA ~~triggered by this Trigger frame~~; i.e., the *RSTA assigned I2R LTF Total* if the sounding bandwidth is less than 320 MHz or the *320 MHz RSTA assigned I2R LTF Total* otherwise.(#**1163**, #**1124**)

The RSTA shall set the UL Spatial Reuse subfield to PSR\_AND\_NON\_SRG\_OBSS\_PD\_PROHIBITED in the EHT variant Common Info field of the Sounding Ranging Trigger frame, and the RSTA should set it to the same value in the HE variant Common Info field. (#i-2)

NOTE: Setting the UL Spatial Reuse subfield in the HE variant Common Info field to PSR\_AND\_NON\_SRG\_OBSS\_PD\_PROHIBITED matches the setting in the preamble of the HE TB Ranging NDP.