IEEE P802.11
Wireless LANs

|  |
| --- |
| Proposed resolution for CID 22058 |
| Date: 2019-11-13 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Kaiying Lu | Mediatek Inc. | 2840 Junction Ave. San Jose, CA | (408) 3872160 | Kaiying.lu@mediatek.com |
|  |  |  |  |  |

Abstract

This submission proposes resolutions for comments related to TGax D5.0 CID 22058

Revisions:

Rev 0: Initial version of the document.

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 TGax Draft. This introduction is not part of the adopted material.

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

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CID** | **commenter** | **Section** | **Pg / Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 22058 | Kaiying Lu | **26.17.2.2** | 451/26 | The path-loss in the mid 6 GHz band is approximately 1.5 dB higher than in the mid 5 GHz band. The use case where the two bands need to achieve range parity should not be excluded for multi-band operation. HE ER SU PPDU with DCM can provide additional link budget and is suitable for PPDUs containing group addressed frames without the limitation of antenna configuration. | Add rules to allow HE ER SU PPDU format with DCM to be used for Beacon and group addressed frame transmission. | RevisedAgree with the commenter in principle. **TGax editor, please make changes as shown in 11-19/2075r0 CID 22058** |

***TGax editor: please change the following paragraph in 26.17.2.2 (D5.0 page451/ line1) as follows:***

**26.17.2.2 Beacons in the 6 GHz band** (#**22058)**

An HE AP 6G transmits Beacon frames as defined in 11.1 (Synchronization), which may be contained in a non-HT PPDU, non-HT duplicate PPDU, HE SU PPDU or HE ER SU PPDU.

An HE AP 6G that transmits a Beacon frame in a non-HT PPDU follows the rules in 10.6.5.1 (Rate selection for non-STBC Beacon and non-STBC PSMP frames).

An HE AP 6G that transmits a Beacon frame in a non-HT duplicate PPDU shall follow the rules in 10.6.5.1 (Rate selection for non-STBC beacon and non-STBC PSMP frames) and shall set the TXVECTOR parameter CH\_BANDWIDTH of the PPDU to a value that is up to the operating channel width of the BSS.

If an HE AP 6G schedules a Beacon frame for transmission in a non-HT duplicate PPDU then it shall set the Duplicate Beacon subfield to 1 in the 6 GHz Operation Information field of the HE Operation element it transmits; otherwise the AP shall set the Duplicate Beacon subfield to 0.

An HE AP 6G that transmits a Beacon frame in an HE SU PPDU shall follow the rules defined in 26.15.6 (Additional rules for HE SU beacons and group addressed frames).

If an HE AP 6G schedules a Beacon frame for transmission in an HE ER SU PPDU then it shall follow the rules defined in 26.15.5 (Additional rules for ER beacons and group addressed frames)

An AP shall not transmit a Beacon frame in an HE SU PPDU or non-HT duplicate PPDU in the 2.4 GHz or 5 GHz bands.

**26.15.5 Additional rules for ER beacons and group addressed frames** (#**22058)**

An AP that transmits a Beacon frame or group addressed frames in an HE ER SU PPDU shall transmit the HE ER SU PPDU with an <HE-MCS, NSS> tuple where the HE-MCS is a mandatory HE-MCS and NSS = 1.

A Beacon frame or a group addressed frame transmitted in an HE ER SU PPDU shall be sent as an S-MPDU (see Table 9-532 (A-MPDU contents in the S-MPDU context)), except for group addressed Data frames, which may also be sent as an A-MPDU subject to the rules in 10.12.4 (A-MPDU aggregation of group addressed Data frames).

The HE AP transmitting the HE ER SU PPDU shall set the TXVECTOR parameters as follows:

CH\_BANDWIDTH to ER-RU-242

— HE\_LTF\_TYPE to 2xHE-LTF and GI\_TYPE to 0u8s\_GI or 1u6s\_GI, or HE\_LTF\_TYPE to 4xHELTF and GI\_TYPE to 3u2s\_GI

— FEC\_CODING to BCC\_CODING

— STBC to 0

— DCM to 1

— DOPPLER to 0

— BEAMFORMED to 0

— NUM\_STS to 1

— NOMINAL\_PACKET\_PADDING to 16 μs

— NO\_SIG\_EXTN to false in the 2.4 GHz band and true otherwise

— BEAM\_CHANGE as defined in 26.11.3 (BEAM\_CHANGE)