IEEE P802.11 Wireless LANs

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| Resolution for CIDs 2355 and 2356 | | | | |
| Date: April 29, 2022 | | | | |
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Abstract

This submission proposes resolutions for CIDs 2355 and 2356.

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Editorial change
* Rev 2: Document revision number update
* Rev 3: Revised text of resolution per comment in 802.11me Ad Hoc meeting

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| **CID** | **Section** | **Pg/Ln** | **Comment** | **Proposed Change** |
| 2355 | 26.15.6 | 4264/41 | It should indicate the parameter NUM\_STS for group addressed frame sent from HE AP. | Add NUM\_STS parameter |

**Discussion**

In clause 26.15.5 Additional rules for ER beacons and group addressed frames, it specifies the rule of ER beacon and group addressed frame: 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 4xHE-LTF and GI\_TYPE to 3u2s\_GI
* FEC\_CODING to BCC\_CODING
* STBC to 0
* DCM to 0
* 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)

Additional rules for HE beacons and group addressed frames should be same as the rules of ER beacons and group addressed frame including NUM\_STS setting, except for ER-RU-242 for CH\_BANDWIDTH.

**Proposed Resolution**

Revised.

Agree in principle with the comment. Please make the changes in this document for CID 2355 as described below

**Proposed Specification Text**

**26.15.6 Additional rules for HE beacons and group addressed frames**

**….**

***TGme Editor: Please change the clause as shown below.***

If the HE SU PPDU contains a group addressed frame intended for at least one STA that is not associated to the AP, then the HE AP shall set the TXVECTOR parameters for the HE PPDU as follows:

* CH\_BANDWIDTH to CBW20
* HE\_LTF\_TYPE to 2xHE-LTF and GI\_TYPE to 0u8s\_GI or 1u6s\_GI, or HE\_LTF\_TYPE to 4xHE-LTF and GI\_TYPE to 3u2s\_GI
* FEC\_CODING to BCC\_CODING
* STBC to 0
* DCM to 0
* DOPPLER to 0
* BEAMFORMED to 0
* (#2355) 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)

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| **CID** | **Section** | **Pg/Ln** | **Comment** | **Proposed Change** |
| 2356 | 26.15.6 | 4264/34 | A Beacon frame is the broadcast frame. Why a group addressed frame includes Beacon frame? | Change "including" to "or" |

**Discussion**

A group address is defined as “A medium access control (MAC) address that has the group bit equal to 1. Syn: multicast address.” It can be

* Multicast-group address. An address associated by higher level convention with a group of logically related STAs.
* Broadcast address. A distinguished, predefined group address that always denotes the set of all STAs on a given LAN. All 1s are interpreted to be the broadcast address. This group is predefined for each communication medium to consist of all STAs actively connected to that medium.

The Individual/Group bit is always transferred first and is bit 0 of the MAC address (for individual address).

Beacon is a frame type of management frame. Typically, it is transmitted by an AP in broadcast.

A broadcast addressed frame may include Beacon frame, broadcast Probe Response frame or other Action frames.

To make it clear, suggest to change the text to align with the title of this sub-clause.

**Proposed Resolution**

Revised.

Agree in principle with the comment. Please make the changes in this document for CID 2356 as described below

**Proposed Specification Text**

**26.15.6 Additional rules for HE beacons and other group addressed frames**

**….**

***TGme Editor: Please change the clause as shown below.***

(#2356) A HE beacon or other group addressed frame transmitted in an HE SU PPDU shall be sent as an S-MPDU (see Table 9-534), except for group addressed Data frames, which are not required to be sent as an S-MPDU but are required to follow the rules in 10.12.4 (A-MPDU aggregation of group addressed Data frames).