### IEEE P802.11Wireless LANs

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| **CBF contents padding to 8bits** |
| Date: 2019-09-13 |
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Abstract

Currently in 11ax D4.x, there is no spec text to define the padding rules for 11ax CBF contents of HE Compressed Beamforming Report field, and HE CQI Report field. This contribution provides the spec text to define the padding rules to pad them to the integers of multiple of 8bits.

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| CID | Commenter | P.L | Clause | Comment | Proposed changes | Proposed resolution |
| 20618 | Mark RISON | 128.55 | 9.4.1.65 | This subclause is missing some of the material in the subclause on the VHT CBR field, e.g. the "where Na is the number of angles used for the compressed beamforming feedback matrix subfield" (i.e. Na is not actually defined anywhere) and "No padding is present between angles in the VHT Compressed Beamforming Report information, even if they correspond to different subcarriers. If the size of the VHT Compressed Beamforming Report information is not an integer multiple of 8 bits, up to seven zeros are appended to the end of the field to make its size an integer multiple of 8 bits." (i.e. the padding is not defined - there are some SU cases where 4 zero bits need to be appended) | Insert the cited text (changing VHT to HE) in the locations that parallel their locations in the subclause on the HE CBR field | Revised.Na is defined in Table 9-74, which is referenced from Table 9-93b (HE Compressed Beamforming Report information).Add the spec text of padding up to 7 zeros to for HE Compressed Beamforming Report, and HE CQI Report to make their sizes as integers of multiple of 8 bits |

**Revision log:**

R1: initial.

R2: resolve CID 20618

**Discussion:**

In REVmd D2.3, subclause 9.4.1.4.9, it has explicit text defining the padding rule for VHT Compressed Beamforming Report field:

“No padding is present between angles in the VHT Compressed Beamforming Report information, even if they correspond to different subcarriers. If the size of the VHT Compressed Beamforming Report information is not an integer multiple of 8 bits, up to seven zeros are appended to the end of the field to make its size an integer multiple of 8 bits.”

11ax CBF HE Compressed Beamforming Report field and HE CQI Report field, their sizes may not be integers multiple of 8 bits as well, so we need to add spec text to explicitly define the padding rules to make their sizes as integers multiple of 8 bits.

***TGax editor: within TGax D4.0, in subclause 9.4.1.66, modify the text as shown:***

Page 147.66 add a paragraph as shown:

No padding is present between angles in the HE Compressed Beamforming Report information, even if they correspond to different subcarriers. If the size of the HE Compressed Beamforming Report information is not an integer multiple of 8 bits, up to seven zeros are appended to the end of the field to make its size an integer multiple of 8 bits. (CID: 20618)

***TGax editor: within TGax D4.0, in subclause 9.4.1.67, modify the text as shown:***

Page 151.6 add a paragraph as shown:

No padding is present between per-RU average SNRs of each space-time stream information, even if they correspond to different RUs and space-time streams. If the size of the HE CQI Report information is not an integer multiple of 8 bits, up to seven zeros are appended to the end of the field to make its size an integer multiple of 8 bits. (CID 20618)