IEEE P802.11
Wireless LANs

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| Comment resolutions for UORA |
| Date: 2019-09-18 |
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Abstract

This submission proposes resolutions for multiple comments related to TGax D4.3 with the following CID:

* 21173

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.***

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| **CID** | **Commenter** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 21173 | Pooya Monajemi  | 190.30 | EOCWmin/max are only 3 bits wide while other ECWmin/max are 4 bits wide. Since slotted aloha degrades with > 36.8% utilization, that limits the competing STA in a BSS(s) to 47. | Recommend changing the fields to be 4 bits wide. | Revised –Agree in principle with the comment. Increasing the number of bits as proposed allows an increasing number (around 94 STAs instead of around 47 STAs) of STAs to contend for RA-RUs in an increased collision domain, given that the efficiency of an RA-RU is limited to 0.368. TGax editor to make the changes shown in 11-19/1682r0 under all headings that include CID 21173. |

**Discussion: *None.***

* + - 1. UL OFDMA-based Random Access (UORA) Parameter Set element

***TGax Editor: Revise the below paragraph as follows and update the Figure 9-772n (#CID 21173):***

The OCW Range field indicates the minimum and maximum values of the OCW (OFDMA contention window) derived from the fields defined in Figure 9-772n (OCW Range field format).

|  |  |  |  |
| --- | --- | --- | --- |
|  | B0             B3 | B4          B7     |  |
|  | EOCWmin | EOCWmax |  |
| Bits: | 4 | 4 |  |
| * OCW Range field format
 |

The EOCWmin subfield indicates the minimum value of OCW for the initial HE TB PPDU transmission using UL OFDMA-based random access. The maximum value in the EOCWmin subfield is 8. The *OCWmin* parameter is used by a STA either for an initial transmission or following a successful HE TB PPDU transmission and is derived as follows:

*OCWmin* = 2*EOCWmin* – 1

where

*EOCWmin* is the value in the EOCWmin subfield

The EOCWmax subfield indicates the maximum value of OCW for UL OFDMA-based random access. The maximum value in the EOCWmax subfield is 8. The *OCWmax* parameter used by a STA for its retransmission attempts of UL OFDMA-based random access and is derived as follows:

*OCWmax* = 2*EOCWmax* – 1

where

*EOCWmax* is the value in the EOCWmax subfield