IEEE P802.11  
Wireless LANs

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| 802.11  [TGaz SA1 Group CR Part 3]  (relative to P802.11az/D4.1) | | | | |
| Date: 2022-02-22 | | | | |
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**Abstract**

This submission contains resolutions for CIDs 7079, 7081, 7084, 7085, 7088, 7089, 7090, 7091, 7092, 7093

(total of 10).

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| **CID** | **Page/**  **Line** | **Clause** | **Comment** | **Proposed change** | **Resolution** |
| 7079 | 231.2 | 27.2.2 | Is the value of LTF\_REP common to all users? If not, need to create a new 'answer' other than Y/N/MU (MU-O?) which indicates that LTF\_REP has value for each user in case of 'multiple user' transmissions'. | Create a new 'answer' other than Y/N/MU (MU-O?) to indicates that LTF\_REP has value for each user in case of 'multiple user' transmissions'. | **Revise**. The TxVector and RxVector are used by both RSTA and ISTA. In the case of HE TB w/ secured LTF each ISTA has its own repetition, in the case of HE SU with secured LTF, each ISTA has its own LTF field i.e. again individual.  An ISTA PHY needs to be aware of only its own repetition, but an RSTA PHY needs to aware of the repetitions used by each ISTA. Need to have Multi STA receive. The need for support for multi STA was adopted as part of <https://mentor.ieee.org/802.11/dcn/22/11-22-0259-01-00az-some-sab1-cr-v2.docx>   TGaz editor, incorporate the changes identified for CID 7101. |
| 7081 | 233 | 27.2.2 | For secure ranging, shouldn't the parameter NUM\_USERS be always present, even if to indicate '1 user'? | Change "O" to "Y" in the row of "NUM\_USERS" | **Revise** Agree with commenter, already addressed in submission <https://mentor.ieee.org/802.11/dcn/21/11-21-1875-01-00az-comment-resolution-sa1-txvector.docx> and incorporated into D4.1.   TGaz editor in the heading to table 27-1 specify resolution for 7081 incorporated into table. |
| 7084 | 246.3 | 27.3.18a.4 | IEEE 802.11 uses "w" to represent the time domain windowing function. Hence, choose a different function name to represent the frequency domain windowing function to avoid confusion. | Choose a different function name to represent the frequency domain windowing function. | **Reject.**  Equation 27-126d uses the notation Wfd meaning Window frequency domain, furthermore it specifies WFD to be the frequency domain window function and the use of 802.11 of W for window in time domain in other parts of the standard is non-conflicting. |

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| **CID** | **Page/**  **Line** | **Clause** | **Comment** | **Proposed change** | **Resolution** |
| 7085 | 246.6 | 27.3.18a.4 | 27.3.9 and 27.3.11 do not cover the secure ranging scenarios. | Delete "Refer to 27.3.9 and 27.3.11 for details." | **Revised.**  The reference in P. 247L.6 is to mathematical description of signals (as stated in brackets) which is now 27.3.10 in the published 802.11ax amendment., clause 27.3.11 is the HE preamble which does not deal with the HE TB Ranging NDP and HE Ranging NDP but refers to those sections on their own hence not used by 27.3.18.a.4.  TGaz editor change reference in D4.0 P.247L.6 to 27.3.10 (mathematical description of signals), delete reference to 27.3.11 . |
| 7088 | 264 | B.4 | TB measurement sequence is not mandatory for HE STA | Change "CFHE:M" to "CFHE:O" in the NGPM2.1 row. | **Revise**.  TGaz editor change row NGPM2.1 as follows: delete CFHE:M only in the status column. |
| 7089 | 264 | B.4 | Protected LMR exchange in TB ranging exchange is not mandatory for HE STAs. | Change "CFHE:M" to "CFHE:O" in the NGPM2.2 row. | **Revise.**  Agree with the commenter that the NGPM2.2 feature is not mandatory to every HE STA, however it is not mandatory for every STA implementing Ranging TB operation (CFTB) to support secured mode. Thus should read CFTB: O and mandated for STAs that support secured LTF (CFPSEC) .  PC34 (RSNA) is not mandatory.  TGaz editor change NGPM2.2 Status column to read:  (CFTB AND  CFPASN): M  CFPSEC: M |

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| 7090 | 265 | B.4 | SAC exchange for TB operation is not mandatory for HE STAs. | Change "CFHE:M" to "CFHE:O" in the NGPM3.1 row. | **Revise**.  Agree with the commenter that the NGPM3.1 feature is not mandatory to every HE STA, however not all STAs supporting PASN need to implement the SAC just the CFPSEC STA.  **TGaz editor change** NGPM3.1 Status column to read:  CFTB: O  CFPSEC: M |
| 7091 | 265 | B.4 | Non-TB ranging exchange is not mandatory for HE STAs. | Change "CFHE:M" to "CFHE:O" in the NGPM4.1 row. | **Revise.**  Agree in principle with the commenter, NGPM4.1 is not mandatory for every HE STA, support for CFHE is already incorporated into CFNTB.  **TGaz Editor** **delete** CFHE:M from NGPM4.1 Status column. |
| 7092 | 265 | B.4 | Protected LMR exchange in non-TB ranging exchange is not mandatory for HE STAs. | Change "CFHE:M" to "CFHE:O" in the NGPM4.2 row. | **Revise.**  Agree with commenter regarding CFHE however not all STAs implementing PASN may be required to support NTB exchange.  However if PASN is supported and NTB is supported protected LMR Exchange in NTB is required.  TGaz editor change NGPM4.2 Status column to read:  (CFNTB AND  CFPASN): M  CFPSEC: M |
| 7093 | 265 | B.4 | SAC exchange for non-TB ranging operation is not mandatory HE STAs | Change "CFHE:M" to "CFHE:O" in the NGPM4.3 row. | **Revise**  Agree with commenter regarding CFHE, this is the counterpart of 7090 this time for TB operation.  Not all STAs supporting PASN need to implement the SAC just the CFPSEC STA.  **TGaz editor change** NGPM3.1 Status column to read:  CFNTB: O  CFPSEC: M |