**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **Resolution to CIDs 1360 and 1362 for 15.4ab Draft 1.0** |
| Date Submitted | February 2025 |
| Sources | Pooria Pakrooh (Qualcomm)  |  |
| Abstract | Resolution to comments: 1360, 1362 |
| Purpose | To propose comments resolution for “P802.15.4ab™/D (pre-ballot) C Draft Standard for Low-Rate Wireless Networks”  |
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***Comment Indices #1362 in 15-24-0371-13-04ab-consolidated-comments\_draft\_1.0***

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| **CID** | **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| 1360 | Pooria Pakrooh | 10.38.9.3.11 | 85 | 3 | Why number of RSF/RIF MAC param? it is part of the MMS PHY packet. Clarify whether these are Phy or MAC parameters. | as in comment |

**Discussion:** Agree with the suggestion. Id DCN69/r1, I suggested merging these parameters into the PHY parameters. Feedback from some 4ab members was that they prefer to keep these in a separate message, and just rename the field. This is the direction I am pursuing here.

**Resolution: Revised**

**Notes to the Editor:**

1. Change the title of subclause 10.38.9.3.11 as follows:

“10.38.9.3.11 The MMS Number of Fragments field”

1. In draft 1.0, change all instances of “The ranging MAC Configuration” to “The MMS Number of Fragments”.

***Comment Indices #1360 in 15-24-0371-13-04ab-consolidated-comments\_draft\_1.0***

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| **CID** | **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| 1362 | Pooria Pakrooh | 10.38.9.3.17 | 88 | 16 | This sequence mapping can be applied to control sequence since it is HPRF, but SYNC/SFD sequence for the MMRS packet is better to be 127 for RSF=127 to keep PRF consistent.. | as in comment |

**Discussion:** This comment is aimed for the MMS packets during the ranging phase of UWB-driven MMS. Therefore, the correct page/line number is page 84, line 10. The text in in Pre-ballot draft-C (page 70, lines 16-21) was already consistent with the commenter’s suggestion, but it was changed in D01. In that draft, control phase contained SYNC/SFD.

As also suggested by the commenter during the pre-ballot draft-C comment resolution, for the UWB driven MMS mode, where RSF sequence is based on Ipatov codes, it makes more sense to select the same SYNC/SFD sequences matching with the code indices used in the RSFs.

**Resolution: Revised**

**Notes to the Editor:**

Change Page 84 line 10 as follows:

“In UWB driven UWB MMS, the preamble code index used for the SYNC and SFD in the HRP UWB PHY MMS packets is based on the Sequence Code Index field of the Ranging PHY Configuration field defined in 10.38.9.3.10. Sequence Code Index field values 9 to 32, directly indicate the UWB fragment preamble code index from Table 16-9, while for Sequence Code Index field values 33 to 48, the UWB fragment preamble code index is selected by the expression: 25 + (Sequence Code Index field value - 1) modulo 8, i.e., selecting one of the length-91 ternary codes from Table 16-9.”