**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **Resolution Proposals for the Assigned Comments** | |
| Date Submitted | September 2023 | |
| Sources | Mingyu Lee, Taeyoung Ha, Youngwan So (Samsung Electronics) |  |
| Re: |  | |
| Abstract |  | |
| Purpose | To propose simple changes to “P802.15.4ab™/D (pre-ballot) B Draft Standard for Low-Rate Wireless Networks” to make the text inclusive of UWB-only MMS. | |
| Notice | This document does not represent the agreed views of the IEEE 802.15 Working Group or IEEE 802.15.4ab Task Group. It represents only the views of the participants listed in the “Sources” field above.It is offered as a basis for discussion and is not binding on the contributing individuals. The material in this document is subject to change in form and content after further study. The contributors reserve the right to add, amend or withdraw material contained herein. | |

***Comment Index #78 and #150 in 15-23-0475-05-04ab-cc-consolidated-comments***

***--------------------------------------------------------------------------------------------------------------------------------***

**10.29.3.5 Hyper block mode**

**…**

**(*pp. 21 line #22*)**

Hyper block keeps the same structure repeated in every hyper block~~, typically~~. Round Hopping is optional in hyper block mode. When ~~bitmap-based block scheduling or~~ block assignment scheduling (as specified by the Scheduling IE, see 10.29.9.10) is not used, to do round hopping, the controlee should hop to one of round at the block having the same Block Index number in the next hyper block.

**…**

***--------------------------------------------------------------------------------------------------------------------------------***

***Comment Index #83 in 15-23-0475-05-04ab-cc-consolidated-comments***

***--------------------------------------------------------------------------------------------------------------------------------***

***Change from***

**(*pp. 27 line #5*)**

The Starting Slot Index field marks the first transmission slot after trigger step of multiple RSF transmission in the recurring periodic transmission pattern in unit of slots.

***To***

The Starting Slot Index field indicates the first slot of the RSF transmission.

***--------------------------------------------------------------------------------------------------------------------------------***

***Comment Index #85 in 15-23-0475-05-04ab-cc-consolidated-comments***

***--------------------------------------------------------------------------------------------------------------------------------***

**(*pp. 27 line #12*)**

**Change from**

The Sequence Index field indicates the code index of MMRS that allocated to the device in this Scheduling List element relate to…

***To***

The Sequence Index field indicates the code index in Table 16-8, Table 16-9, and Table 32 that allocated to the device in this Scheduling List element relate to..

***--------------------------------------------------------------------------------------------------------------------------------***

***Comment Index #154 in 15-23-0475-05-04ab-cc-consolidated-comments***

***--------------------------------------------------------------------------------------------------------------------------------***

**(*pp. 21 line #7*)**

The configuration for the hyper block structure can be repeatedly transmitted in every RCM by the controller. The Hyper Block Structure IE (HBS IE), as defined in 7.4.4.56, can be used to signal the durations of each of the ranging blocks in the hyper block. The RCM with HBS IE may be transmitted in the first slot in every hyper block. The HBS IE specifies the index of the corresponding ranging block and includes a list of the durations of all the ranging blocks within the hyper block.

***--------------------------------------------------------------------------------------------------------------------------------***

***Comment Index #157 in 15-23-0475-05-04ab-cc-consolidated-comments***

***--------------------------------------------------------------------------------------------------------------------------------***

**(*pp. 34 line #16*)**

For coordination of channel use, the initiator may scan the ~~O-QPSK initialization channel~~ *macMmsNbInitChannel* and the ~~default UWB channel~~ default value of *MMS UWB ranging channel*. before transmitting the SOR packet.

***--------------------------------------------------------------------------------------------------------------------------------***

***Comment Index #87 - #89, #159 - #161 in 15-23-0475-05-04ab-cc-consolidated-comments***

***--------------------------------------------------------------------------------------------------------------------------------***

**(*pp. 27 line #2*)** 10.35.3.6 Coordination

This coordination mechanism may be used by initiator to discover ~~for the discovery of~~ UWB sessions nearby and ~~the avoidance of~~ to avoid collisions resulting from the overlap of blocks. Support for coordination is optional for all devices. The higher layer determines whether the coordination is active or not. If coordination is active, the initiator opportunistically or periodically transmits an acquisition packet (AP) with information about its UWB channel usage after a session is configured. The transmission of these AP may start before the start of the first block. The initiator sends these AP using either the O-QPSK PHY (NB AP) or the HRP UWB PHY (UWB AP) or both. The initiator transmits NB AP in the initialization channel specified by the macMmsNbInitChannel attribute and transmits the UWB AP in the default value of *MMS UWB ranging channel*. NB AP ~~is described in 1.7.1~~ and UWB AP ~~is~~ aredescribed in ~~1.7.2~~ 10.35.9.20. To provide the information of UWB channel usage, both NB AP and/or UWB AP include UWB Per-Session Info Fields described in ~~1.7.3~~10.35.9.20. The higher layer determines the suitable interval between APs.

If coordination is active, before starting a new session, the initiator scans for AP ~~packets~~ on the initialization channel specified by the macMmsNbInitChannel attribute and/or the ~~default ranging channel~~ default value of *MMS UWB ranging channel*. The length of the scanning period is implementation dependent. The initiator thus obtains information of UWB channel usage from other initiators, and with this knowledge, the initiator may select values in for configuring its new session to minimize the overlap with active periods of other sessions nearby. The details of this implementation specific.

Otherwise, the initiator starts the control phase without scanning for APs.

***--------------------------------------------------------------------------------------------------------------------------------***

***Comment Index #64, #67 in 15-23-0475-05-04ab-cc-consolidated-comments***

***--------------------------------------------------------------------------------------------------------------------------------***

***Replace 10.35.9.20, 10.35.9.21, and 10.35.9.22 by the contents of 15-23-0510-01-04ab.***

***--------------------------------------------------------------------------------------------------------------------------------***

***Comment Index #100 in 15-23-0475-05-04ab-cc-consolidated-comments***

***--------------------------------------------------------------------------------------------------------------------------------***

**(*pp. 70 line #4*)**

**…**

|  |  |  |  |
| --- | --- | --- | --- |
| NB PHY report phase mode | 1-9 (Table 28)  16 (Set #1 in [Recommended Configurations of HPRF Data Packets of Section 16.7]) |  | Mode for report phase (if used) |

**(*pp. 54 line #1*)**

The Report Phase Config field specifies NB PHY Config in the NB Report Phase. Valid values in Table 28. If the value of The Report Phase Config field is 16, Set #1 in [Recommended Configurations of HPRF Data Packets of Section 16.7] with Code index #32 in Table 15-7a [IEEE 802.15.4z] is used.

***--------------------------------------------------------------------------------------------------------------------------------***