**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **Proposed Resolution on SBP Comments** |
| Date Submitted | October 2023 |
| Sources | Bin Qian, Lei Huang, David Xun Yang (Huawei), Li Ma, Li-Hsiang Sun (Mediatek)  |  |
| Re: |   |
| Abstract |  |
| Purpose | To propose resolution to SBP comments for “P802.15.4ab™/D (pre-ballot) B Draft Standard for Low-Rate Wireless Networks”  |
| 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 #38 and # 39 in 15-23-0475-13-04ab-cc-consolidated-comments***

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| --- | --- | --- | --- | --- | --- |
| **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| Li-Hsiang Sun | 10.36.6.1 | 76 | 7 | “ A device supporting SBP shall set the SBP field of the UWB HRP Capability Informationfield in the HRP UWB Association Request command to one.” Is this the capability of performing as proxy and initiator? SBP requesting device does not seem need to indicate SBP capabilityHow does a SBP requesting device discover which address has the capability of being the proxy? | Clarify this is the capability of being a sensing initiator, i.e. the proxyController may need to announce controlee’s SBP capability to other controlees |
| Li-Hsiang Sun | 10.36.6.1 | 76 | 7 | whether controller also need a capability indication of SBP? | Add SBP capability in association response command |

**Discussion**：

SBP is an optional feature for SDEV. Thus, it is needed for the SDEV to indicate its SBP capability when the SDEV request to associate to the controller.

The sensing requesting device does not need to indicate the SBP capability.

**Resolution: Revised**

**Proposed text changes on P802.15.4ab™/D (pre-ballot) B:**

**10.36.6 Sensing by Proxy**

**10.36.6.1 General**

Sensing by proxy (SBP) allows an SDEV to request another SDEV to perform sensing on its behalf. Support for SBP is optional. An SDEV supporting SBP shall set the SBP field of the UWB HRP Capability Information field in the HRP UWB Association Request command to one or set the SBP field of the Session Configuration field in the HRP UWB Association Response command to one.

Note: The SBP operation is not supported between two SDEVs which are controlees.

**10.37.4.2 HRP UWB Association Response command**

*Change Figure 97 as follows:*

|  |  |  |
| --- | --- | --- |
| **Bits: 0-1** | **2** | **3-7** |
| AIFS | SBP | Reserved |

*Add a sentence after Line 4 on page 94 as follows*

The SBP field shall be set to one if the controller supports of SBP. Otherwise, it shall be set to zero.

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***Comment Index #49 in 15-23-0475-13-04ab-cc-consolidated-comments***

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| **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| Li-Hsiang Sun | 10.36.7.3 | 88 | 5 | Why the sensing initiator Address is needed in SBP request IE if this IE is sent to sensing initiator? | As in comment |

**Discussion**：

The sensing initiator address could be included in the MHR as the destination address, it could be removed from the SBP Request IE

**Resolution: Revised**

**Proposed text changes on P802.15.4ab™/D (pre-ballot) B:**

**10.36.7.3 SBP Request IE**

*Change Figure 90 as follows:*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Bits:****0** | **1-2** | **3** | **4-7** | **8** |  | **9** | **10-13** | **14** | **15** |  | **Octets: Variable** | **Variable** |
| Address Size | SBP Procedure Expiry Exponent | Sensing Responder | Number of Sensing Responders | Mandatory Number of Sensing Responders |  | Preferred Sensing Responder List | Number of Preferred Sensing Responders | Mandatory Preferred Sensing Responders | Reserved |  | Sensing Control | Sensing Responder Address List |

*Change Line 5 on page 88 as follows:*

Change Line 29 on page 88 as follows:

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***Comment Index #50 in 15-23-0475-13-04ab-cc-consolidated-comments***

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| **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| Li-Hsiang Sun | 10.36.7.5 | 90 | 9 | not clear why destination address is in IE not in MAC header | remove destination address field |

**Discussion**：

The MHR may contain the destination address, which could be removed from the SBP Termination IE

**Resolution: Revised**

**Proposed text changes on P802.15.4ab™/D (pre-ballot) B:**

**10.36.7.5 SBP Termination IE**

*Change Figure 92 and the corresponding description as follows:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  | **Octets:****4** |
|  |  |  |  | Sensing Session ID |

The Sensing Session ID field specifies the session ID of the sensing session corresponding to the SBP procedure to be terminated.