**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 Comments Resolution on 10.39.7.4** | |
| Date Submitted | Jan. 2024 | |
| Sources | Bin Qian (Huawei) |  |
| Re: |  | |
| Abstract |  | |
| Purpose | To propose comments resolution for “P802.15.4ab™/D (pre-ballot) C 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 #229, #438, #439, #230 in 15-24-0010-01-04ab-cc-consolidated-comments***

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| --- | --- | --- | --- | --- | --- | --- |
| **Index #** | **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| 229 | Billy Verso | 10.39.7.4 | 131 | 5 | "Sensing Responder List field" would be better named "Sensing Responder List Present" | Change it in figure 151 and line below where it is described / used. |
| 438 | Bin Qian | 10.39.7.4 | 131 | 5 | Since the sensing request device address will exist in the MHR as the destination address, it is suggested to remove the Sensing Requesting Device Address Presence field, the Sensing Requesting Device Address, and the corresponding description | As in the comment |
| 439 | Bin Qian | 10.39.7.4 | 131 | 5 | The sensing session ID should have 4 octets | As in the comment |
| 230 | Billy Verso | 10.39.7.4 | 131 | 19 | Is "Sensing Requesting Device Address" needed? Why is it different to the source address in the MAC frame carrying this IE?. | Either remove it, or add text to say what it is. And, since it is an optional parameter, there is probably also a need for some text to say what to do when it is not present. |

**Discussion:**

1. As in the ARC IE, the session ID should have 4 octets instead of 2 octets
2. Since the address of the sensing request device is already in the MHR, it is better to remove it.
3. "Sensing Responder List field" would be renamed "Sensing Responder Address List Present" to better match the Sensing Responder Address List field

**Resolution: revised**

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

*Change 10.39.7.4 as follows*

**10.39.7.4 SBP Response IE**

The SBP Response IE is used by the sensing initiator to send the SBP parameters and sensing control parameters as well as the status code parameters to the sensing requesting device. The content field of the SBP Response IE shall be formatted as shown in Figure 151.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Bits: 0** | **1-2** | **3-6** |  | **7** |  | **Octets: 4** |  | **Variable** | **Variable** |
| Address Size | SBP Status Code | Number of Sensing Responders |  | Sensing Responder Address List Present |  | Sensing Session ID |  | Sensing Control | Sensing Responder Address List |

**Figure 151—SBP Response IE Content field format**

The Address Size field indicates the size of the addresses contained in the Sensing Responder Address List field. This field shall be set to zero when short addresses are used, and shall be set to 1 when extended addresses are used.

The SBP Status Code field shall have one of the values specified in Table 33.

**Table 33—Values of the SBP Status Code field in the SBP Response IE**

|  |  |
| --- | --- |
| Sensing Mode field value | Meaning |
| 0 | SUCCESS |
| 1 | REJECT |
| 2 | REJECTED\_WITH\_SUGGESTED\_CHANGES |
| 3 | Reserved |

The Number of Sensing Responders field indicates the actual number of sensing responders used in the sensing procedure initiated by the sensing initiator to satisfy the SBP request if the SBP Status Code field is SUCCESS. The Number of Sensing Responder field indicates a suggested number of sensing responders if the SBP Status Code field is REJECTED\_WITH\_SUGGESTED\_CHANGES.

The Sensing Responder Address List Present field when one indicates that the Sensing Responder Address List field is present, and when zero indicates the Sensing Responder Address List field is not present.

The Sensing Session ID field contains a 4-octet session identifier of the sensing session corresponding to the SBP procedure.

The Sensing Control field has the same meaning as the Sensing Control field of the AC IE (10.39.7.1).

The Sensing Responder Address List field is present only if the Sensing Responder Address List Present field is set to one. The Sensing Responder Address List field contains the address list that indicates the set of sensing responders involved in the sensing session corresponding to the SBP procedure if the SBP Status Code field is SUCCESS. The Sensing Responder Address List field indicates a set of suggested sensing responders if the SBP Status Code field is REJECTED\_WITH\_SUGGESTED\_CHANGES.