**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 for Discovery** |
| Date Submitted | February 2025 |
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| Re: |   |
| Abstract | Kangjin’s proposed Resolutions for CIDs 745, 746, 752, 753 754 |
| Purpose | To propose resolution for “P802.15.4ab™/D01 Draft Standard for Low-Rate Wireless Networks” |
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| Tero Kivinen | 745 | 163 | 10.40.4.1 | 9 | The text "Addressing Mode field shall be set to same mode as indicated by the AC IE" does not make sense. AC IE does not have modes indicating the address mode fields, and if it is trying to say that use same source and destination addressing modes than what was used to AC IE then that does not work, as the if the AC IE is using short address then the device transmitting association request can't use short address, as it has not yet been given short address. | Specify how the source and destination addressing fields are to be used in association request command. | Revise |
| Disposition details:Change second paragraph of 10.40.4.1 to:“The Source Addressing Mode field and the Destination Addressing Mode field shall be set according to the address type being used as specified in 10.40.3.” Explanation: The determination of when to use extended addressing or short addressing is described in the second paragraph of 10.40.3. The addressing mode follows from this determination. Draft 1 text: |
| Tero Kivinen | 746 | 163 | 10.40.4.1 | 17 | The macShortAddress cannot be used before device has been associated and given a short address, using this mac command. | Source address needs to be extended address always as device do not yet have short address. | Revise |
| Tero Kivinen | 752 | 165 | 10.40.4.2 | 11 | Status value 2 does not make any sense, as this is association request, thus by definition device does not yet have short address, that could be updated.  | Remove status value 2. | Revise |
| Tero Kivinen | 753 | 165 | 10.40.4.2 | 11 | Status value 3 does not make any sense, as this is association request, thus by definition device does not yet have short address, that could be duplicate as the request does not provide short address request.  | Remove status value 3. | Revise |
| Disposition details for 746, 752 and 753:When Controlees use short addresses for association request message, they should generate the short address. The procedure is well described in the second paragraph of 10.40.3.Change “a controlee shall generate a short address and use the short address for the HRP UWB Association Request command. How to generate the short address is out of scope of this standard.” in page 162 line 12 to “a controlee shall use a short address which is set according to the address specified by the corresponding primitive.”Insert “ShortAddress” into Table 10-104 (page 33 line 23) as follows:

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| Name | Type | Valid range | Description |
| ShortAddress | Integer | 0x0000-0xffff | The short address generated by controlee. |

Change the last paragraph of 10.40.4.2 as indicated:The Association Response command shall convey the Updated Short Address field if the Association Status field value is two~~.~~, and the controlee shall update mac *macShortAddress* with the value of the Updated Short Address field. Explanation: In this association scheme, short address assignment is distributed, and is not done exclusively by the controller, as described in 10.40.3. Each associating controlee is responsible for the initial choice of short address, and the controller detects address collisions and if needed provides an updated short address to the device. With this association method, short addresses can be used during association. Status values 2 and 3 provide the means for the controller to signal to the associating controlee an address collision. The association response also provides for the controller to inform the controlee of an address collision and resolve the collision with a updated address. Draft 1 text:[2nd paragraph of 10.40.3] |
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| Tero Kivinen | 754 | 165 | 10.40.4.2 | 9 | The response command should include the short address the controller assigned to the controlee not just updated short address.  | Change "Updated Short Address" to "Short Address". | Reject |
| Disposition details:Controller already uses short address in MAC header. There is no reason to repeat. The Updated Short Address field is used only when the controller intends to signal the controlee of the need to use a different short address than supplied in the association request. The association method differs from the legacy 802.15.4 association process, and the short address is initially chosen by the associating controlee; the controller only needs to update the short address when a collision is detected.   |
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