**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |
| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **Proposed comment resolution for CID 1329 from LB110** |
| Date Submitted | 11 November 2015 |
| Source | \*[Verotiana Rabarijaona, Fumihide Kojima], †[Hiroshi Harada]\*[NICT], †[Kyoto University]\*[3-4, Hikarino-oka, Yokosuka, 239-0847 Japan], †[36-1 Yoshida-Honmachi, Sakyo-ku, Kyoto 606-8501 Japan] | Voice: [+81-46-847-5075]Fax: [+81-46-847-5089]E-mail: [rverotiana@nict.go.jp] |
| Re: | 802.15.10 Consolidated Comment Entry Form, CID 1095 |
| Abstract | Provides a proposed resolution to CID 1095 |
| Purpose | To be used by the technical editor to apply the necessary changes to the draft to resolve CID 1095 |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. |

**Comment 1095**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Commenter** | **Page** | **Clause** | **Line** | **Comment** | **Proposed change** |
| Tero Kivinen | 50 | 6.1 | 19 | This document reserves 3 long nested IEs out of 16, this is quite a lot. Perhaps it would be better to use one IE and subtypes inside? |  |

**Resolution: Revise**

Create one LLIE (L2R long nested MLME IE) of Element ID=0x00. Add a one octet sub-group ID field at the beginning of the RA IE, L2R Routing IE and Dcat IE.

* ***Replace clause 6.1 with:***

This recommended practice uses the frame formats and the MLME IE provided by IEEE 802.15.4-2015. The MLME IE is used in an EB (IEEE 802.15.4-2015 7.3.1), an EBR (IEEE 802.15.4-2015 7.5.9), an MP frame (IEEE 802.15.4-2015 7.3.5) or a data frame.

The L2R functionalities are enabled with the use of one or more nested IEs inserted in the MLME IE. Short and long nested IEs are used and are formatted as described in IEEE 802.15.4-2015.

**6.1. Short nested IEs**

The short nested used in this recommended practice are listed in Table t1.

Table t1: Sub-ID allocation for the short nested IEs

|  |  |  |
| --- | --- | --- |
| Sub-ID | Name | Subclause |
| 0x37 | L2R-D IE | 6.1.1 |
| 0x38 | TC IE | 6.1.2 |
| 0x39 | NLM IE | 6.1.3 |
| 0x3A | SRA IE | 6.1.4 |
| 0x3B | P2P-RQ IE | 6.1.5 |
| 0x3C | P2P-RP IE | 6.1.6 |
| 0x3D | SLR IE | 6.1.7 |
| 0x3E | E2E ACK IE | 6.1.8 |
| 0x3F | A-RLS IE | 6.1.9 |
| 0x41 | AA-RQ IE | 6.1.10 |
| 0x42 | AA-RP IE | 6.1.11 |

**6.1.1. L2R-D IE**

*Insert 6.2.1 here*

**6.1.2. TC IE**

*Insert 6.2.2 here*

**6.1.3. NLM IE**

*Insert 6.2.3 here*

**6.1.4. SRA IE**

*Insert 6.2.5 here*

**6.1.5. P2P-RQ IE**

*Insert 6.2.6 here*

**6.1.6. P2P-RP IE**

*Insert 6.2.7 here*

**6.1.7. SLR IE**

*Insert 6.2.9 here*

**6.1.8. E2E ACK IE**

*Insert 6.2.10 here*

**6.1.9. A-RLS IE**

*Insert 6.2.12 here*

**6.1.10. AA-RQ IE**

*Insert 6.2.13 here*

**6.1.11. AA-RP IE**

*Insert 6.2.14 here*

**6.2. L2R Long nested IE (LLIE)**

An LLIE is defined to transmit information requiring more than 255 bytes that can be inserted in a short nested IE. The LLIE is a long nested IE with the Element-ID 0x00. The Content field is formatted as illustrated in Figure f1:

|  |  |  |
| --- | --- | --- |
| **Bits: 0-4** | **5-15** | **Variable** |
| Sub-Element ID | Length | Sub-Element Content |

Figure f1: LLIE format

The Sub-Element ID field identifies the sub-IE transmitted. The sub-elements of the LLIE are listed in Table t2.

The Length field contains the length of the Sub-Element Content field.

The Sub-Element Content field carries the content of each sub-IE.

Table t2 – ID allocation for the LLIE sub-elements

|  |  |  |
| --- | --- | --- |
| Sub-element ID | Name | Subclause |
| 0x00 | RA IE | 6.2.1 |
| 0x01 | L2R Routing IE | 6.2.2 |
| 0x02 | DCat IE | 6.2.3 |

**6.2.1. RA IE**

*Insert 6.2.4 here*

**6.2.2. L2R Routing IE**

*Insert 6.2.8 here*

**6.2.3. DCat IE**

*Insert 6.2.11 here*