**IEEE P802.15**

**Wireless Personal Area Networks**

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| --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | IEEE 802.15.4z comment resolutions on IEs |
| Date Submitted | 01/15/2020 |
| Source | Mingyu Lee (Samsung), Aditya Vinod Padaki (Samsung), Billy Verso (Decawave) |
| Re: |  |
| Abstract | This contribution proposes updated text for the baseline draft P802.15.4z-D5 |
| Purpose | Provision of the text to facilitate its incorporation into the draft text of the IEEE 802.15.4z standard currently under development in TG4z. |
| Notice | This document does not represent the agreed views of the IEEE 802.15 Working Group. It represents only the views of the participants listed in the “Source(s)” field above. 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 |  |
| Patent Policy | The contributor is familiar with the IEEE-SA Patent Policy and Procedures:  <http://standards.ieee.org/guides/bylaws/sect6-7.html#6> and  <http://standards.ieee.org/guides/opman/sect6.html#6.3>.  Further information is located at <http://standards.ieee.org/board/pat/pat-material.html> and  <http://standards.ieee.org/board/pat>. |

* **Page 79 (7.4.4.32)**

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*Replace the following figure with Figure 49*

|  |  |  |
| --- | --- | --- |
| **Bit: 2** | **6** | **Octets: Variable** |
| Address Mode | RRTI List Length | RRTI List |

**Figure xx—RRTI IE Content field format**

*Add the following text and table between line 8 and line 9 (the following table will be referred in other resolutions in this document)*

The Address Mode field specifies the size of all addresses in the RRTI List elements of the RRTI List field.

**Table XX— Values of Address Mode field**

|  |  |
| --- | --- |
| **Address mode value b1 b0** | **Description** |
| 00 | Address field is not present. |
| 01 | Reserved |
| 10 | Address field contains a short address (16 bit). |
| 11 | Address field contains an extended address (32bit). |

* **Page 89 (7.4.4.41)**

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*Replace the following figure with Figure 61*

|  |  |  |  |
| --- | --- | --- | --- |
| **Bit: 1** | **1** | **6** | **Octets: Variable** |
| SIU | Address Size | RDM List Length | RDM List |

**Figure xx—RDM IE Content field format**

*Add the following text between line 6 to line 7*

The Address Size field specifies the size of all addresses in the RDM List elements of the RDM List field. If the Address Size field is zero, all addresses in the RDM List elements are short addresses. If the Address Size field is one, all addresses are extended addresses.

*Replace the following text with line 16 to line 20*

The Address field identifies each participating device. The size of the Address field can be determined from the Address Size field value of the RDM IE. A network of mixed address sizes can be catered for by using two RDM IEs, one for the short address devices and the other for the extended address devices.

* + - 1. Format of Nested IE
      2. TSCH Synchronization IE
      3. TSCH Slotframe and Link IE
      4. TSCH Timeslot IE
      5. Hopping timing IE
      6. Enhanced Beacon Filter IE
      7. MAC Metrics IE
      8. All MAC Metrics IE
      9. Coexistence Specification IE
      10. SUN Device Capabilities IE
      11. SUN FSK Generic PHY IE
      12. Mode Switch Parameter IE
      13. PHY Parameter Change IE
      14. O-QPSK PHY Mode IE
      15. PCA Allocation IE
      16. LECIM DSSS Operating Mode IE
      17. LECIM FSK Operating Mode IE
      18. TVWS PHY Operating Mode Description IE
      19. TVWS Device Capabilities IE
      20. TVWS Device Category IE
      21. TVWS Device Identification IE
      22. TVWS Device Location IE
      23. TVWS Channel Information Query IE
      24. TVWS Channel Information Source IE
      25. CTM IE
      26. Timestamp IE
      27. Timestamp Difference IE
      28. TMCTP Specification IE
      29. RCC PHY Operating Mode IE
      30. Vendor Specific Nested IE
      31. Channel hopping IE

***Insert the following new sub-clauses (7.4.4.32 to 7.4.4.66) after 7.4.4.31:***

* **Page 89-90 (7.4.4.42)**

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*Replace the following figure instead of Figure 63*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Bit: 1** | **1** | **1** | **1** | **1** | **2** | **1** | **Octets: 0/1** | **Variable** |
| Reply Time Request | Round-trip Time Request | TOF Request | AOA Azimuth Request | AOA Elevation Request | Ranging Control Information | Address Size | RRMC Address List Length | RRMC Address List |

**Figure xx—RRMC IE Content field format**

Add the following text between line 14 and line 15

The Address Size field specifies the size of all addresses in the RRMC Address List elements of the RRMC Address List field. If the Address Size field is zero, all addresses in the RRMC Address List elements are short addresses. If the Address Size field is one, all addresses are extended addresses.

*Replace the following text with line 18 and line 20*

The RRMC Address List field contains a list of addresses to which the RRMC IE is directed. The size of the RRMC Address List field can be determined from the Address Size field value of the RRMC IE.

* + - 1. Format of Nested IE
      2. TSCH Synchronization IE
      3. TSCH Slotframe and Link IE
      4. TSCH Timeslot IE
      5. Hopping timing IE
      6. Enhanced Beacon Filter IE
      7. MAC Metrics IE
      8. All MAC Metrics IE
      9. Coexistence Specification IE
      10. SUN Device Capabilities IE
      11. SUN FSK Generic PHY IE
      12. Mode Switch Parameter IE
      13. PHY Parameter Change IE
      14. O-QPSK PHY Mode IE
      15. PCA Allocation IE
      16. LECIM DSSS Operating Mode IE
      17. LECIM FSK Operating Mode IE
      18. TVWS PHY Operating Mode Description IE
      19. TVWS Device Capabilities IE
      20. TVWS Device Category IE
      21. TVWS Device Identification IE
      22. TVWS Device Location IE
      23. TVWS Channel Information Query IE
      24. TVWS Channel Information Source IE
      25. CTM IE
      26. Timestamp IE
      27. Timestamp Difference IE
      28. TMCTP Specification IE
      29. RCC PHY Operating Mode IE
      30. Vendor Specific Nested IE
      31. Channel hopping IE

***Insert the following new sub-clauses (7.4.4.32 to 7.4.4.66) after 7.4.4.31:***

* **Page 91 (7.4.4.43)**

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*Replace the following figure instead of Figure 64*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Bit : 1** | **1** | **1** | **1** | **1** | **1** | **1** | **2** | **7** | **Octets : Variable** |
| Reply Time Present | Round-trip  Time Present | TOF Present | AOA Azimuth Preset | AOA Elevation Present | AOA FOM Present | Deferred Mode | Address Mode | RMI List Length | RMI List |

**Figure xx—RMI IE Content field format**

Remove line 11 to line 12

Add the following text between line 28 and line 29

The Address Mode field specifies the size of all addresses in the RMI List elements of the RMI List field. The Address Mode field values are specified in **Table XX**

*Replace the following text with line 30 and line 34*

When the RMI IE is conveyed in a broadcast data frame, then the Address field shall be present in each RMI List element. The size of the Address field can be determined from the Address Mode field value of the RMI IE.

* + - 1. Format of Nested IE
      2. TSCH Synchronization IE
      3. TSCH Slotframe and Link IE
      4. TSCH Timeslot IE
      5. Hopping timing IE
      6. Enhanced Beacon Filter IE
      7. MAC Metrics IE
      8. All MAC Metrics IE
      9. Coexistence Specification IE
      10. SUN Device Capabilities IE
      11. SUN FSK Generic PHY IE
      12. Mode Switch Parameter IE
      13. PHY Parameter Change IE
      14. O-QPSK PHY Mode IE
      15. PCA Allocation IE
      16. LECIM DSSS Operating Mode IE
      17. LECIM FSK Operating Mode IE
      18. TVWS PHY Operating Mode Description IE
      19. TVWS Device Capabilities IE
      20. TVWS Device Category IE
      21. TVWS Device Identification IE
      22. TVWS Device Location IE
      23. TVWS Channel Information Query IE
      24. TVWS Channel Information Source IE
      25. CTM IE
      26. Timestamp IE
      27. Timestamp Difference IE
      28. TMCTP Specification IE
      29. RCC PHY Operating Mode IE
      30. Vendor Specific Nested IE
      31. Channel hopping IE

***Insert the following new sub-clauses (7.4.4.32 to 7.4.4.66) after 7.4.4.31:***

* **Page 93 (7.4.4.44)**

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*Replace the following figure instead of Figure 64 in 7.4.4.44*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Bits : 2** | **2** | **1** | **1** | **1** | **1** | **Octets : 0/2/8** | **0/2/8** |
| Requestor Address Mode | Provider Address Mode | RAOA | RRT | RRTT | RTOF | Requestor Address | Provider Address |

**Figure 66—SRRR IE Content field format**

*Replace the following text with line 6 to line 7*

The Requestor Address Mode field specifies the size of the Requestor Address field. The Requestor Address Mode field values are specified in **Table XX**

*Replace the following text with line 8 to line 9*

The Provider Address Mode field specifies the size of the Provider Address field. The Provider Address Mode field values are specified in **Table XX**

*Remove line 21*