**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)**

i-224

*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 valueb1 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)**

i-231

*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)**

i-232

*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 TimeRequest | TOF Request | AOA Azimuth Request | AOA Elevation Request | Ranging Control Information | AddressSize | RRMC Address List Length | RRMC AddressList |

**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)**

i-233

*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)**

i-234

*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*