**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 time efficient one-to-many ranging** | |
| Date Submitted | Jan. 2024 | |
| Sources | Bin Qian, Lei Huang, Rojan Chitrakar, David Xun Yang (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 #775 in 15-24-0010-09-04ab-cc-consolidated-comments***

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| **Index #** | **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| 775 | Carl Murray | 10.38.10.12 | 84 | 8 | Field description missing | Add field description |

**Discussion:**

The original text of Draft C is as follows



**Resolution: Revised**

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

**10.38.10.12 One-to-many Poll Compact frame**

*Change Line 8 on Page 84 as follows*

The Responder Address field identifies a responder participating in the following one-to-many ranging. The Responder Address field value shall represent an eligible responder’s RPA hash generated using the initiator’s RPA\_prand in the one-to-many Poll Compact frame along with the responder’s IRK.

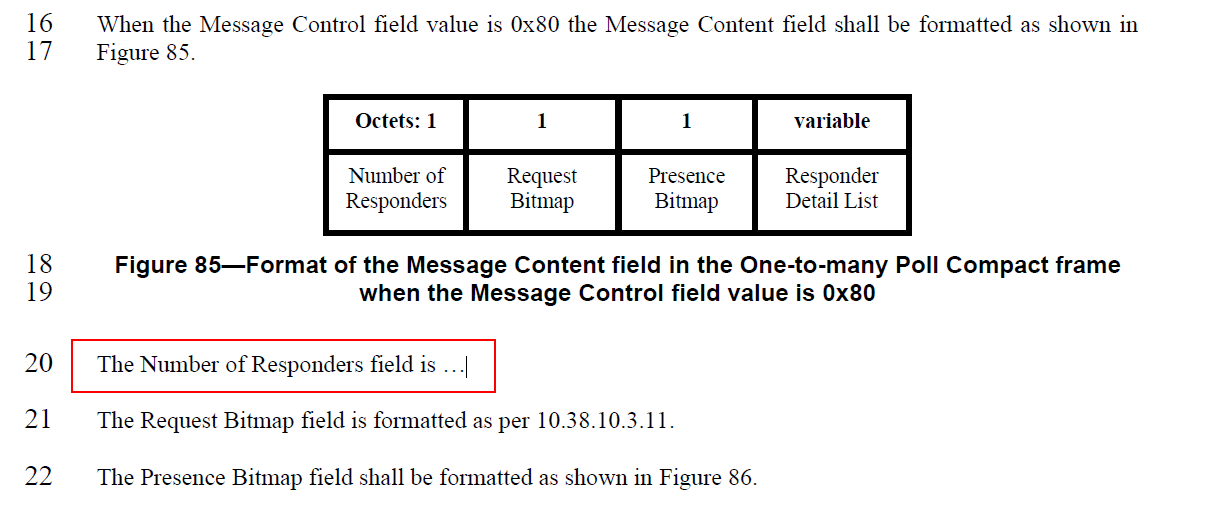
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***Comment Index #370, #776 in 15-24-0010-09-04ab-cc-consolidated-comments***

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| **Index #** | **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| 370 | Bin Qian | 10.38.10.12 | 84 | 20 | The description is not complete | As in the comment |
| 776 | Carl Murray | 10.38.10.12 | 84 | 20 | Field description missing | Add field description |

**Discussion:**

The original text of Draft C is as follows



**Resolution: Revised**

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

**10.38.10.12 One-to-many Poll Compact frame**

*Change Line 20 on Page 84 as follows*

The Number of Responders field indicates the number of responders to be involved in the following ranging session and determines the length of the Responder Detail List field.

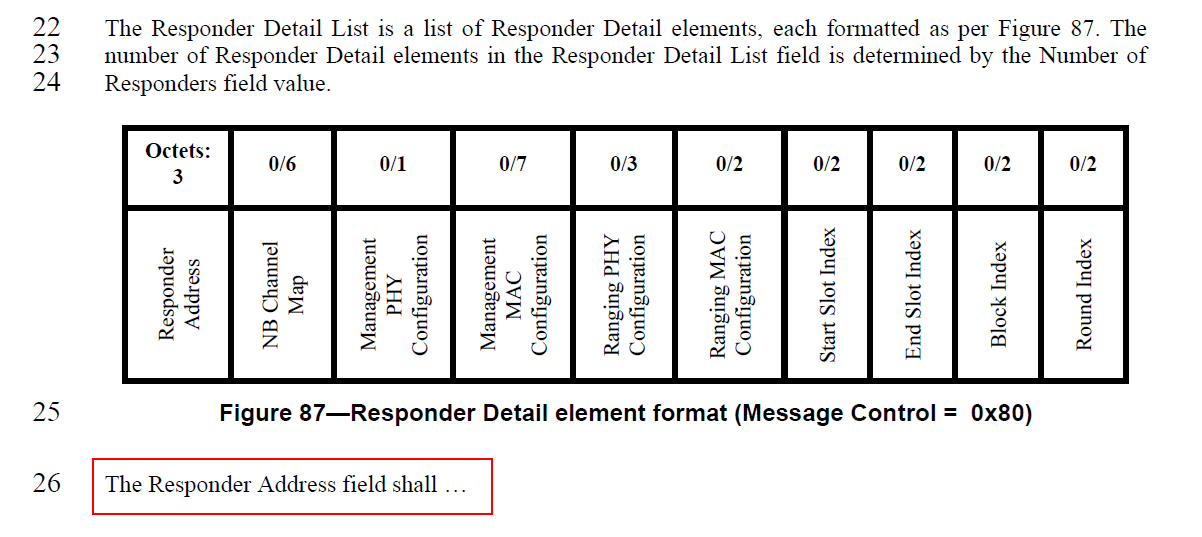
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***Comment Index #781 in 15-24-0010-09-04ab-cc-consolidated-comments***

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| **Index #** | **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| 781 | Carl Murray | 10.38.10.12 | 85 | 26 | Field description missing | Add field description |

**Discussion:**

The original text of Draft C is as follows



**Resolution: Revised**

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

**10.38.10.12 One-to-many Poll Compact frame**

*Change Line 26 on Page 85 as follows*

The Responder Address field identifies a responder participating in the following one-to-many ranging. The Responder Address field value shall represent an eligible responder’s RPA hash generated using the initiator’s RPA\_prand in the one-to-many Poll Compact frame along with the responder’s IRK.

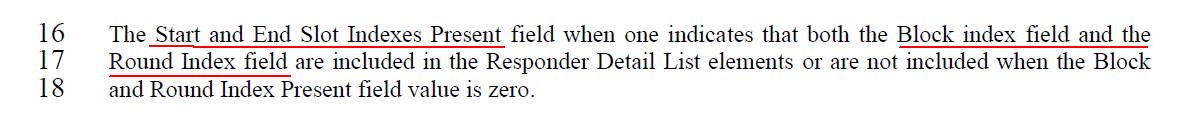
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***Comment Index #372 in 15-24-0010-09-04ab-cc-consolidated-comments***

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| **Index #** | **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| 372 | Bin Qian | 10.38.10.12 | 85 | 16-18 | The paragraph is contradictory | As in the comment |

**Discussion:**

The original text of Draft C is as follows



**Resolution: Revised**

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

**10.38.10.12 One-to-many Poll Compact frame**

*Change Line 16-18 on Page 85 as follows*

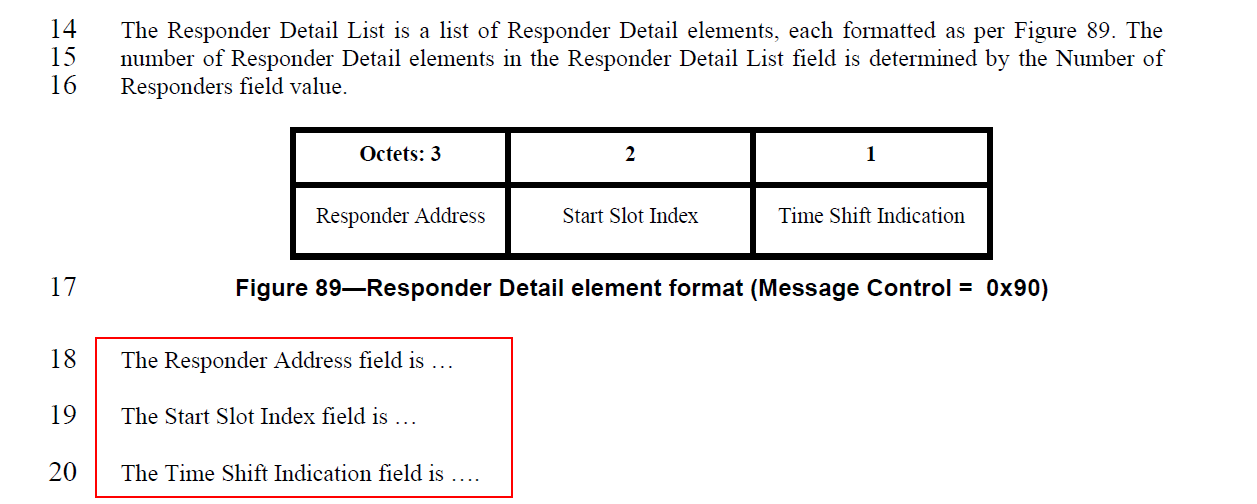
The Start and End Slot Indexes Present field when one indicates that both the Start Slot index field and the End Slot Index field are included in the Responder Detail List elements or are not included when the Start and End Slot Indexes Present field value is zero.

***Comment Index #785, #786, #374 in 15-24-0010-09-04ab-cc-consolidated-comments***

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| **Index #** | **Commenter** | **Sub-Clause** | **Page** | **Line** | **Comment** | **Proposed Change** |
| 785 | Carl Murray | 10.38.10.12 | 86 | 18 | Field description missing | Add field description |
| 786 | Carl Murray | 10.38.10.12 | 86 | 19 | Field description missing | Add field description |
| 374 | Bin Qian | 10.38.10.12 | 86 | 18, 19, 20 | The description is not complete | As in the comment |

**Discussion:**

The original text of Draft C is as follows



**Resolution: Revised**

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

**10.38.10.12 One-to-many Poll Compact frame**

*Change Line 18-20 on Page 86 as follows*

The Responder Address field identifies a responder participating in the following one-to-many ranging.The Responder Address field value shall represent an eligible responder’s RPA hash generated using the initiator’s RPA\_prand in the one-to-many Poll Compact frame along with the responder’s IRK.

The Start Slot Index field is a 16-bit index of the first ranging slot of a ranging sub-round.

The Time Shift Indication field when zero indicates the corresponding responder transmits the first fragment at *RpRsfOffset*/*RpRifOffset* + 400 RSTU into the ranging phase, and when one indicates the corresponding responder transmits the first fragment at *RpRsfOffset*/*RpRifOffset* + 800 RSTU RSTUs into the ranging phase.