IEEE P802.11
Wireless LANs

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| LB 200 Comment Resolution for Clause 8.7.6 |
| Date: 2013-12-10 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Alfred Asterjadhi | Qualcomm Inc. | 5775 Morehouse Dr, San Diego, CA 92109 | +1-858-658-5302 | aasterja@qti.qualcomm.com |
| Amin Jafarian | Qualcomm Inc. |  |  | jafarian@qti.qualcomm.com |

Abstract

This submission proposes resolutions for comments in clause 8.7.6 of TGah Draft 1.0 with the following CIDs:

1461, 2442, 2443, 2444, 2445

Revisions

- Rev 0: Initial comment resolution document.

- Rev 1: Updated headers and some clarifications added.

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGah Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGah Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGah Editor: Editing instructions preceded by “TGah Editor” are instructions to the TGah editor to modify existing material in the TGah draft. As a result of adopting the changes, the TGah editor will execute the instructions rather than copy them to the TGah Draft.***

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| **CID** | **P.L** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1461 | 148.04 | 8.7.6 | Maximum size of an MSDU is currently undefined for 11ah. Hence it is undefined for A-MSDUs as well. Also is padding needed? The Length field has a resolution to the octet which means it can indicate a length of multiples of bytes. | In Figure 8-532l replace "0-2034" with "variable" and eventually remove the Padding field if not needed. | Agree in principle with the commenter. Proposed resolution is to not remove padding to keep compatibility with other A-MSDU frame formats.Revised – TGah editor to make changes shown in 13/1513r1 under the heading for CIDs from 1461 to 2445. |
| 2442 | 147.52 | 8.7.6 | A Dynamic A-MSDU subframe consists of more than the header, and that figure doesn't describe just the header either | Change to "Each Dynamic A-MSDU subframe consists of a Dynamic A-MSDU subframe header followed by an MSDU and 0 to 3 octets of padding as shown in [...]" (or delete, since duplication). Add an arrow to show the "A-MSDU subframe header" as in the baseline | Agree with the commenter.Revised – TGah editor to make changes shown in 13/1513r1 under the heading for CIDs from 1461 to 2445. |
| 2443 | 148.04 | 8.7.6 | "2034" | "2304" | Agree in principle with the commenter.Revised – TGah editor to make changes shown in 13/1513r1 under the heading for CIDs from 1461 to 2445. |
| 2444 | 148.16 | 8.7.6 | I can't see "Long version" and "Short version" actually being used anywhere else | Delete (or if actually used somewhere, isn't "Medium version" also needed?) | Agree with the commenter. Revised – TGah editor to make changes shown in 13/1513r1 under the heading for CIDs from 1461 to 2445. |
| 2445 | 147.47 | 8.7.6 | This new subclause on Dynamic A-MSDUs conflicts with the baseline subclause 8.3.2.2 which says things like "Two A-MSDU subframe formats are defined: the Basic A-MSDU subframe described in 8.3.2.2.2 (Basic AMSDUsubframe format) and the Short A-MSDU subframe described in 8.3.2.2.3 (Short A-MSDUsubframe format)." | Merge 8.7.6 into 8.3.2.2 (with appropriate caveats about not using Dynamic A-MSDUs in non-S1G STAs) | Agree with the commenter. Revised – TGah editor to make changes shown in 13/1513r1 under the heading for CIDs from 1461 to 2445. |

**Discussion:** *None.*

**Proposed Changes:**

* **Aggregate MSDU(11ad) (A-MSDU) format**
* **General(11ad)**

**Instructions to TGah Editor*: Change this subclause as follows (@802.11REVmc D2.0):***

An A‑MSDU is a sequence of A‑MSDU subframes as shown in Figure 8-45 (A-MSDU structure). Each A‑MSDU subframe consists of an A‑MSDU subframe header followed by an MSDU and 0 to 3 octets of padding as shown in Figure 8-46 (Basic A-MSDU subframe structure), Figure 8-48 (Short A-MSDU subframe structure) (in 8.3.2.2.3 (Short A-MSDU subframe format)), and Figure 8.532l (Dynamic A-MSDU subframe structure) (in 8.3.2.2.4 (Dynamic A-MSDU subframe format)).(11ad)

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| --- | --- | --- | --- |
| A-MSDU subframe 1 | A-MSDU subframe 2 | … | A-MSDU subframe n |
| * **A-MSDU structure**
 |

  ThreeA‑MSDU subframe formats are defined: the Basic A‑MSDU subframe described in 8.3.2.2.2 (Basic AMSDU subframe format), the Short A‑MSDU subframe described in 8.3.2.2.3 (Short A-MSDU subframe format), and the Dynamic A-MSDU subframe described in 8.3.2.2.4 (Dynamic A-MSDU subframe format). Unless otherwise noted, in this standard, the term A‑MSDU applies to any of the Basic A‑MSDU. the Short A‑MSDU, and the Dynamic A-MSDU. The Basic A‑MSDU uses only the Basic A‑MSDU subframe format, the Short A‑MSDU uses only the Short A‑MSDU subframe format, and the Dynamic A-MSDU uses only the Dynamic A-MSDU subframe format. (11ad)

* **Dynamic A-MSDU format**

**Instructions to TGah Editor*: Change this subclause as follows:***

. The structure of a Dynamic A-MSDU subframe is shown in Figure 8-532l (Dynamic A-MSDU subframe structure). In the Dynamic A-MSDU subframe, each A-MSDU subframe (except the last) is padded, so that its length is a multiple of 4 octets. The last A-MSDU subframe has no padding.

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| --- | --- | --- | --- | --- | --- |
| Octets: | 2 | 0 or 6 | 0 or 6 | variable | 0-3 |
|  | Subframe Control | DA (Optional) | SA (Optional) | MSDU | Padding |
|  |  A-MSDU subframe header |
| * **Dynamic A-MSDU subframe structure**
 |

The A-MSDU subframe header contains the Subframe Control field and optionally the DA and SA fields. A Dynamic A-MSDU subframe has 0, 1 or 2 addresses associated with it, as governed by the Subframe Control field.

The Subframe Control is defined in Figure 8-532m (Subframe Control field) and contains the Length, DA Present and SA Present subfields.

|  |  |  |  |
| --- | --- | --- | --- |
|  | B0 B13 | B14 | B15 |
|  | Length | DAPresent | SA Present |
| Bits: | 14 | 1 | 1 |
| * **Subframe Control field**
 |

The Length subfield contains the length in octets of the MSDU.

The DA Present bit is set to 1 when the DA field is present in the Dynamic A-MSDU subframe header and is set to 0 when the DA field is not present.

The SA Present bit is set to 1 when the SA field is present in the Dynamic A-MSDU subframe header and is set to 0 when the SA field is not present.

If present, the DA field of the Dynamic A-MSDU subframe header contains the destination address of the MSDU. When the DA field is not present, the DA of the MSDU is stored at the recipient of the frame or, if a DA is not stored at the recipient of the frame, the DA is equal to the A3 field (if present in the header of the MPDU that carries the Dynamic A-MSDU subframe), or, if an A3 field is not present in the short MAC header of the MPDU that carries the Dynamic A-MSDU subframe, the DA is equal to the address identified by the A1 field of the short MAC header of the MPDU that carries the Dynamic A-MSDU subframe.

If present, the SA field of the Dynamic A-MSDU subframe header contains the source address of the MSDU. When the SA field is not present in a Dynamic A-MSDU subframe, the SA is either stored at the recipient of the frame or, if an SA is not stored at the recipient of the frame the SA is equal to the A4 field (if present in the short MAC header of the MPDU that carries the Dynamic A-MSDU subframe), or, if an A4 field is not present in the short MAC header of the MPDU that carries the Dynamic A-MSDU subframe, the SA is equal to the address identified by the A2 field of the short MAC header of the MPDU that carries the Dynamic A-MSDU subframe.

The MSDU field contains the MSDU that is carried in the Dynamic A-MSDU subframe.

The Padding field contains 0-3 octets of padding, so that the length of the Dynamic A-MSDU subframe is a multiple of 4 octets, except for the last Dynamic A-MSDU subframe in a Dynamic A-MSDU, which has no padding.

**Instructions to TGah Editor*: After applying all the above changes to subclause 8.7.6, please move subclause 8.7.6 and its content, immediately after subclause 8.3.2.2.3 as a new subclause 8.3.2.2.4 (Dynamic A-MSDU format) (@802.11REVmc D2.0).***

**Instructions to TGah Editor*: Add the following paragraph at the end of subclause 9.11:***

A non-S1G STA transmitting an A-MSDU shall not use the Dynamic A-MSDU frame format.