IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Misc. TWT comment resolution | | | | |
| Date: 2016-07-08 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Zhou Lan | Broadcom Ltd. | 190 Mathilda Pl, Sunnyvale, CA 94086 | +1-408-922-3450 | zhou.lan@broadcom.com |
| Matthew Fischer | Broadcom Limited | 190 Mathilda Pl, Sunnyvale, CA 94086 |  | mfischer@broadcom.com |
| Yasuhiko Inoue | NTT | 1-1 Hikaro-no-oka, Yokosuka, Kanagawa 238-0847 Japan | +81-46-859-5097 | inoue.yasuhiko@lab.ntt.co.jp |
| Jayh Park | LGE | Seocho R&D Campaus, Seocho-gu, Seoul South Korea | +82-10-3646-7657 | hyunh.park@lge.com |

Abstract

This submission proposes resolutions for multiple TWT comments related to TGax D0.1 with the following CIDs (5 **CIDs**):

* 1315, 2424, 2589, 2590, 2591 ( CIDs)

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Reflect comments from Inoue san and Jayh
* Rev 2: Reflect comments from Alfred

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 TGax Draft. This introduction is not part of the adopted material.

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Commenter** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 1315 | Mark RISON | 9.3.3.10 | Wouldn't a TWT element be useful to allow a STA to pick up the next TWT? | Copy the row from Beacon frames | Revised –  Agree in principle with the comment. The proposed resolution is to allow TWT element to be present in Probe Response frame which will facilitate broadcast TWT operation for unassociated STA.  TGax editor to make changes shown in 11-16/869r1 under all headings that include CID 1315 |
| 2424 | Yongho Seok | 9.3.3.1 | The TWT element is already present in the Beacon frame as specified in TGah Draft 6.0. Remove the TWT element from Table 9-27. | As per comment | Rejected –  TGah Draft 6.0 and 8.0 don’t have TWT element present in Table 9-27.  TGah Draft 6.0 defines S1G Beacon frame as the Extension frame. The Frame Body field of Beacon frame contains the Minimum and full set of optional elements listed in Table 9-41a. In the Frame Body field as indicated in Table 9-27, TWT element is not present. |
| 2589 | Young Hoon Kwon | 9.3.3.6 | As unassociated STA can participate Trigger based random access, there's no reason not to inculde TWT element in Association Response frame for broadcast TWT operation. | In Table 9-30 of Tgah/D6.0, modify the Notes for TWT from "The TWT element is present if dot11TWTOptionActivated is true and the TWT element is present in the Association Request frame that elicited this Association Response frame." to "The TWT element is optionally present if dot11TWTOptionActivated is true.". | Revised –  Agree in principle with the comment that unassociated STA can participate Trigger Based Random Access. However putting TWT element in the Association Response frame will not help an unassociated STA. The proposed resolution is to allow TWT element to be present in Association Response to facilitate broadcast TWT operation which doesn’t have an individual TWT agreement established by TWT element in Association Request.  TGax editor to make changes shown in 11-16/869r1 under all headings that include CID 2589. |
| 2590 | Young Hoon Kwon | 9.3.3.8 | As unassociated STA can participate Trigger based random access, there's no reason not to inculde TWT element in Reassociation Response frame for broadcast TWT operation. | In Table 9-32 of Tgah/D6.0, modify the Notes for TWT from "The TWT element is present if dot11TWTOptionActivated is true and the TWT element is present in the Reassociation Request frame that elicited this Reassociation Response frame." to "The TWT element is optionally present if dot11TWTOptionActivated is true.". | Revised –  Agree in principle with the comment that unassociated STA can participate Trigger Based Random Access. However putting TWT element in the Reassociation Response frame will not help an unassociated STA. The proposed resolution is to allow TWT element to be present in Reassociation Response to facilitate broadcast TWT operation which doesn’t have an individual TWT agreement established by TWT element in Association Request.  TGax editor to make changes shown in 11-16/869r1 under all headings that include CID 2590. |
| 2591 | Young Hoon Kwon | 9.3.3.10 | As unassociated STA can participate Trigger based random access, there's no reason not to inculde TWT element in Probe Response frame for broadcast TWT operation. | Similar to Beacon frame, add the following new row into Table 9-34: Order: TBD Information: TWT Notes: The TWT element is optionally present when the dot11TWTOptionActivated is true; otherwise it is not present. | Revised –  Agree in principle with the comment. The proposed resolution is to allow TWT element to be present in Probe Response frame. In order to facilitate individual TWT operation for unassociated STA, TWT element should be added to both probe request and response.  TGax editor to make changes shown in 11-16/xxxr0 under all headings that include CID 2591 |

**Discussion:** None

**9.3.3.6 Association Response frame format**

**TGax Editor: *Change the row to Table 9-30 (Association Response frame body (#CID 2589):***

**Table 9-30—Association Response frame body**

|  |  |  |
| --- | --- | --- |
| **Oder** | **Information** | **Notes** |
| TBD | TWT | The TWT element is present if dot11TWTOptionActivated is true and the TWT element is present in the Association Request frame that elicited this Association Response frame.  The TWT element is optionally present if dot11TWTOptionActivated is true and the TWT Requester Supported field in the HE Capabilities in the Association Request frame that elicited this Association Response frame is one |

**9.3.3.8 Reassociation Response frame format**

**TGax Editor: *Change the row to Table 9-32 (Reassociation Response frame body (#CID 2590):***

**Table 9-32—Reassociation Response frame body**

|  |  |  |
| --- | --- | --- |
| **Oder** | **Information** | **Notes** |
| TBD | TWT | The TWT element is present if dot11TWTOptionActivated is true and the TWT element is present in the Reassociation Request frame that elicited this Reassociation Response frame.  The TWT element is optionally present if dot11TWTOptionActivated is true and the TWT Requester Supported field in the HE Capabilities in the Reassociation Request frame that elicited this Association Response frame is one |

**9.3.3.10 Probe Response frame format**

**TGax Editor: *Insert a new rows to Table 9-34 (Rrobe Response frame body (#CID 1315, 2591):***

**Table 9-34—Probe Response frame body**

|  |  |  |
| --- | --- | --- |
| **Oder** | **Information** | **Notes** |
| TBD | TWT | The TWT element is optionally present when dot11TWTOptionActivated and dot11HEOptionImplemented are true; otherwise it is not present. |