IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Remaining CIDs on sounding | | | | |
| Date: 2016-11-01 | | | | |
| 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 |
| George Cherian | Qualcomm Inc. |  |  |  |
| Abhishek Patil | Qualcomm Inc. |  |  |  |
| Raja Banerjea | Qualcomm Inc. |  |  |  |
| Bin Tian | Qualcomm Inc. |  |  |  |
| Sameer Vermani | Qualcomm Inc. |  |  |  |

Abstract

This submission proposes resolutions for multiple comments related to TGax D0.1 with the following CIDs (6 CIDs):

* 969, 1517, 1558, 1560, 1917, 2180

Revisions:

* Rev 0: Initial version of the document.

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** |
| 969 | kaiying Lv | 61.00 | There is no UL MU capable field in the HE Capabilities element. | Please clarify it | Revised –  Agree in principle with the comment. The sentence is part of the old draft D0.1 that survived removal during the comment resolutions proposed by document 16/773r2 as pointed out by: “Editor’s Note: Editing instructions in 16/773r2 do not mention the existing text in this subclause. I’ll leave it here until the group decides what they want to do with it (delete, modify, move)”. The proposed resolution is to remove that paragraph as the description of the sounding protocol starts from subclause 25.6.1 (General).  TGax editor to make the changes shown in 11-16-1357r0 under all headings that include CID 969. |
| 1517 | Mark RISON | 61.31 | "the UL MU Capable field of the most recently received HE Capabilities element" -- another non-existent field | Refer to a field that exists | Revised –  Agree in principle with the comment. The sentence is part of the old draft D0.1 that survived removal during the comment resolutions proposed by document 16/773r2 as pointed out by: “Editor’s Note: Editing instructions in 16/773r2 do not mention the existing text in this subclause. I’ll leave it here until the group decides what they want to do with it (delete, modify, move)”. The proposed resolution is to remove that paragraph as the description of the sounding protocol starts from subclause 25.6.1 (General).  TGax editor to make the changes shown in 11-16-1357r0 under all headings that include CID 1517. |
| 1558 | Mark RISON | 61.32 | "the most recently received HE Capabilities element" -- capabilities are static | Delete "most recently" | Revised –  Agree in principle with the comment. The sentence is part of the old draft D0.1 that survived removal during the comment resolutions proposed by document 16/773r2 as pointed out by: “Editor’s Note: Editing instructions in 16/773r2 do not mention the existing text in this subclause. I’ll leave it here until the group decides what they want to do with it (delete, modify, move)”. The proposed resolution is to remove that paragraph as the description of the sounding protocol starts from subclause 25.6.1 (General).  TGax editor to make the changes shown in 11-16-1357r0 under all headings that include CID 1518. |
| 1560 | Mark RISON | 61.53 | This figure refers to "Beamforming Feedback frame"s. No such frame exists | Change to "VHT Compressed Beamforming frame" or define an HE flavour thereof | Revised –  Agree in principle with the comment. The figure is part of the old draft D0.1 that survived removal during the comment resolutions proposed by document 16/773r2 as pointed out by: “Editor’s Note: Editing instructions in 16/773r2 do not mention the existing text in this subclause. I’ll leave it here until the group decides what they want to do with it (delete, modify, move)”. The proposed resolution is to remove that paragraph as the description of the sounding protocol starts from subclause 25.6.1 (General).  TGax editor to make the changes shown in 11-16-1357r0 under all headings that include CID 1560. |
| 1917 | Sigurd Schelstraete | 61.31 | Reference to undefined field ("the UL MU Capable field of the most recently received HE Capabilities element") | Add field to HE Capabilities element | Revised –  Agree in principle with the comment. The sentence is part of the old draft D0.1 that survived removal during the comment resolutions proposed by document 16/773r2 as pointed out by: “Editor’s Note: Editing instructions in 16/773r2 do not mention the existing text in this subclause. I’ll leave it here until the group decides what they want to do with it (delete, modify, move)”. The proposed resolution is to remove that paragraph as the description of the sounding protocol starts from subclause 25.6.1 (General).  TGax editor to make the changes shown in 11-16-1357r0 under all headings that include CID 1917. |
| 2180 | Tianyu Wu | 61.28 | How to do sounding for UL channels is not clear. We have efficient sounding protocol for DL using MU operation. We may also need to define some efficient sounding protocol for UL. | Define a efficient sounding protocol for UL channels. | Rejected –  The comment fails to identify specific changes. Moreover, the benefits of UL beamforming as a technique are unclear when STAs typically have much less antennas than the AP, so it may not warrant introducing yet another protocol in the spec. If needed, the SU sounding protocol can be used for getting channel feedback. |

**Discussion: *None.***

**TGax Editor: *Change the paragraphs below of this subclause as follows (#CID 969, 1517, 1518, 1560, 1917):***

* HE sounding protocol



*(#969, 1517, 1518, 1560, 1917)*