IEEE P802.11
Wireless LANs

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| LB188 Clause 8 Comment Resolutions |
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| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Nihar Jindal | Broadcom Corp. |  |  | njindal@broadcom.com |
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Abstract

This document proposes resolutions for the following MU CIDs: 6378, 6453, 6528.

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| **CID** | **Commenter** | **Clause Number** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 6378 | Wei Shi | 8.4.1.48 | 51.58 | Why do we allow a BF frame without VHT compressed BF report field/MU BF report field? And when exactly should this type of frame being used? | Please describe/give examples as to when a "null" BF report should be sent. | Revised. See text changes in 931r3 under CID 6378. |
| 6453 | Mark Rison | 8.4.1.48 | 50.44 | When would a VHT Compressed Beamforming frame not contain any part of a BF report? | Add a "NOTE---This might be the case if the PPDU containing the VHT Compressed Beamforming report would otherwise violate a constraint such as aPPDUMaxTime." | Revised. See text changes in 931r3 under CID 6378.. |

**Discussion:**

There is a case described in 9.31.5 in which the Bfee is allowed to send VHT Compressed Beamforming feedback without containing either the VHT CompressedBeamforming Report field or the MU Exclusive Beamforming Report field. Clarifications in 9.31.5 and 8.4.1.47 are needed.

After considerable discussion, a consensus was reached to mandate a complete BF response (i.e., inclusion of the the VHT CompressedBeamforming Report field) for any VHT Beamformee responding SIFS after the VHT NDP. A VHT Beamformee is still mandated to send VHT Compressed Beamforming feedback without containing either the VHT CompressedBeamforming Report field or the MU Exclusive Beamforming Report field if the PPDU containing the VHT Compressed Beamforming frame(s) would exceed the maximum PPDU duration. Furthermore, a pointer to 9.31.5 was added to 8.4.1.47 so that readers can understand when VHT Compressed Beamforming feedback can be sent without containing either the VHT CompressedBeamforming Report field or the MU Exclusive Beamforming Report field.

**Proposed resolution**: Revised.

In 9.31.5, after p. 152.53 (D3.1) insert the following sentence:

If the VHT Beamformee is transmitting VHT Compressed Beamforming frame(s) a SIFS after the VHT NDP, then the VHT Compressed Beamforming frame(s) shall include the VHT Compressed Beamforming Report information and, for the case of MU feedback, the MU Exclusive Beamforming Report information.

In 8.4.1.47 on p. 53.48 (D3.1) modify as follows:

In a VHT Compressed Beamforming frame not carrying all or part of a VHT Compressed Beamforming report(#

6454) (see 9.31.5 (VHT Sounding Protocol) for a description of such case) , the Nc Index, Nr Index, Channel Width, Grouping, Codebook Information, Feedback Type andSounding Dialog Token Number(#6236) fields(Ed) are reserved, the First Feedback(#6422) Segment field is

set to 0 and the Remaining Feedback Segments field is set to 7.

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| **CID** | **Commenter** | **Clause Number** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 6528 | Sigurd Schelstraete | 8.4.1.48 | 50.64 | The last sentence should probably be normative. Also, need distinction between VHT Compressed Beamforming report field and VHT Compressed Beamforming frame. | Change last sentence to:"The VHT Compressed Beamforming Report field shall always be included in the VHT Compressed Beamforming frame (see 8.5.23.2)" | Revised. See terminology change in 1155r1 under CID 6680. |

Discussion: This CID appears related to confusion surrounding the old terminology used to describe VHT Beamforming. The term “VHT Compressed Beamforming report” has been replaced with “VHT Compressed Beamforming feedback”, and it was felt that that change was sufficient to resolve the first request in this CID. The request for normative text cannot be accommodated because clause 8 cannot contain normative text.

Proposed Resolution: Revised.