IEEE P802.11  
Wireless LANs

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| --- | --- | --- | --- | --- |
| Comment resolution to SB comments with CIDs 5174 and 5184 | | | | |
| Date: 2015-06-19 | | | | |
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Abstract

This contribution addresses CIDs 5174 and 5184 and uses Draft 4.0 as a baseline.

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| --- | --- | --- | --- | --- | --- |
| **CID** | **Page** | **Line** | **Clause** | **Comment** | **Proposed Change** |
| 5174 | 856 | 30 | 8.4.2.36 | To reduce the number of probe requests sent and not have to send the lengthy VHT Operations or HT Operations elements, we should allow for the transmission of the short (5 bytes) Wide Bandwidth Channel Switch Element in Neigbhor Report. | Include a row in Table 8-148 that contains this. |
| 5184 | 1045 | 12 | 8.4.2.159 | Since we would like to reduce the number of probe requests and use the Wide Bandwidth Channel Switch element in Neighbor Report without having to resort to transmission of either HT or VHT Operations element, we should remove the 20 or 40 MHz ambiguity for the Channel Width=0 value. | Resolve this ambiguity in the Neighbor Report frame Wide Bandwidth Channel Switch subelement. |

***NOTE TO EDITOR* : *Please make the changes shown in red.***

***Discussion:***

To avoid sending VHT Operation (7 bytes) and HT Operation (24 bytes) elements in Neighbor Report, we should rely on a new subelement similar to the Wide Bandwidth Channel Switch element (5 bytes) (See 8.4.2.160).

***NOTE TO EDITOR :* *Add an entry to Table 8-148***

*Please add a row for Wide Bandwidth Channel.*

*Please make the following changes (shown in red) to Section 8.4.2.36 that does not address the CID but was found necessary, since the Co-Located BSSID is part of LCI, not Location Civic:*

A Measurement Report subelement with Measurement Type equal to LCI (see Table 8-104 (Measurement Type definitions for measurement reports)) is optionally present. If present, the subelement has the same format as the Measurement Report element with Measurement Type equal to LCI.The subelement indicates the LCI of the neighbor STA and further includes the Z subelement, or the subelement indicates an unknown LCI (see 10.24.6.7 (LCI and Location Civic retrieval using fine timing measurement procedure)). The Late, Incapable and Refused bits in the Measurement Report Mode field are set to 0. The Co-Located BSSID List subelement is present in the Measurement Report subelement of the Neighbor Report element, when there is at least one other BSS which is co-located with the reporting BSS.

A Measurement Report subelement with Measurement Type equal to Location Civic (see Table 8-104 (Measurement Type definitions for measurement reports)) is optionally present. If present, the subelement has the same format as the Measurement Report element with Measurement Type equal to Location Civic, and the subelement indicates the civic address of the transmitting STA or an unknown civic address (see 10.24.6.7 (LCI and Location Civic retrieval using fine timing measurement procedure)). The Late, Incapable and Refused bits in the Measurement Report Mode field are set to 0. ~~The Co-Located BSSID List subelement is present in the Measurement Report subelement of the Neighbor Report element, when there is at least one other BSS which is co-located with the reporting BSS.~~

…

The VHT Operation subelement is the same as the VHT Operation element as defined in 8.4.2.158 (VHT Operation element).

The Wide Bandwidth Channel subelement is shown in Figure xx-yyy (Wide Bandwidth Channel subelement format)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Subelement ID | Length | Channel Width | Channel Center Frequency Segment 0 | Channel Center Frequency Segment 1 |

Octets : 1 1 1 1 1

Figure xx-yyy (Wide Bandwidth Channel subelement format)

The Subelement ID field is equal to the value for Wide Bandwidth Channel Element in Table 8-148 (Optional subelement IDs for neighbor report).

The Length field is defined in 8.4.3 (Subelements).

The subfields Channel Width, Channel Center Frequency Segment 0, and Channel Center

Frequency Segment 1 have the definition as described in Table xx-zzz (HT/VHT Operation Information subfields).

Table xx-zzz (HT/VHT Operation Information subfields)

|  |  |  |
| --- | --- | --- |
| Field | Definition | Encoding |
| Channel Width | This field defines the BSS operating channel width (see 10.40.1 (Basic VHT BSS functionality)). | Set to 0 for 20 MHz operating channel width.  Set to 1 for 40 MHz operating channel width.  Set to 2 for 80 MHz operating channel width.  Set to 3 for 160 MHz operating channel width.  Set to 4 for non-contiguous 80+80 MHz operating  channel width.  Values in the range 5 to 255 are reserved. |
| Channel Center  Frequency Segment  0 | Defines the channel center frequency for an HT or VHT BSS or the frequency segment 0 channel center frequency for an 80+80 MHz VHT BSS. See 22.3.14 (Channelization). | For 20, 40, 80, or 160 MHz operating channel width, indicates the channel center frequency index for the channel on which the HT or VHT BSS operates.  For 80+80 MHz operating channel width, indicates  the channel center frequency index for the 80 MHz  channel of frequency segment 0 on which the VHT  BSS operates. |
| Channel Center  Frequency Segment  1 | Defines the frequency segment 1 channel center frequency for an 80+80 MHz VHT BSS. See 22.3.14 (Channelization). | For an 80+80 MHz operating channel width,  indicates the channel center frequency index of the  80 MHz channel of frequency segment 1 on which  the VHT BSS operates. Reserved otherwise. |

***NOTE TO EDITOR : Please make the following additions in red at the end of Section* 10.11.10.3 Receiving a neighbor report.**

The Wide Bandwidth Channel subelement shall not be included when either the HT Operation subelement or the VHT Operation subelement is included.

When an AP in a VHT BSS has dot11FineTimingMsmtRespActivated equal to true and includes an HT Operation subelement, then the VHT Operation subelement shall also be included.

When an AP in a non-DMG BSS has dot11FineTimingMsmtRespActivated equal to true and neither the HT Operation subelement nor the VHT Operation subelement is included, then the Wide Bandwidth Channel subelement shall be included.