IEEE P802.11  
Wireless LANs

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| LB 200 comment resolution for CID 1409, 2574 and 2964 | | | | |
| Date: 2014-04-02 | | | | |
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Abstract

This submission proposes comment resolutions for the subclauses 6, 8, 9 and 10 from TGah Draft 1.0 for CID 1409, 2574 and 2964.

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** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 1409 | 1 | 3 | The term "short" identifies type of frames and is extensively used throughout the draft, e.g., Probe Response, Beacon, Data etc. Hence, have the term unified across the draft as "Short" with capital letter. Also sometimes it is used to identify NDP types. | Replace all occurrences of "short" with "Short" in the following subclauses:  - 6.3.3.3.2, 8.2.4.1.2, 8.4.2.170b, 8.4.2.170h  - from Table 8-191h to Table 8-191m  - 8.7, 9.3.2.1,  - 9.3.2.8 (except last paragraph),  - 9.11, 9.20.5.1, 9.42.2.1,  - 9.46.1, 9.48, 9.51, and clause 10.   Replace all occurrences of "short" with "NDP" in subclause 8.3.5.1.1. | **Accepted–**  ***TGah Editor: make changes according to the proposed change in CID 1409.*** |
| 2574 | 90 | 8.4.2.170b | The 4.4.3.1.2 of SFD (11-11/1137r15) specifies that a channel indication field shall be defined in the RPS (RAW Parameter Set) IE according to 11-13/0071r0. The 11-13/0071r0 slide 8 and 10 specifies a Channel filed as an indication of the 'primary' channel during this RAW, where CSMA is done. Though, the 2nd last paragraph of 9.20.5.1 (Page 172, Line 18) specifies that the primary channel in a RAW is a channel identified by a value of 1 in one of the bitmap bits in the Channel Indication field of RPS. If there are multiple bits having value of 1 in the Channel Indication field, the primary channel is ambiguous. | [Resolution #1] 1) Change the 5th last paragraph of 8.4.2.170b as follows: -- The Channel Indication field indicates the channel number of the temporary primary channel during this RAW, as defined in 9.20.5.1.  2) Change the 2nd last paragraph of 9.20.5.1 as follows: --- AP may further indicate on which channel(s) the STA(s) that are granted access to the RAW use as primary channel, through the Channel Indication field (see 8.4.2.170b). Access to the channel during a RAW shall be performed according to the procedure described in 9.46 (Subchannel Selective Transmission (SST)) assuming the primary channel is a channel identified by the Channel Indication field.  [Resolution #2] 1) Update the SFD to change the channel indication field to specify SST information for the STAs indicated in the RAW. 2) Replace the Channel Indication field by the Subchannel Indication field which is proposed in another comment to 9.46. | Revised-  Tgah editor to make changes shown in 11-14-0485r0 under the heading for CID 2574. |
| 2964 | 194 | 9.46 | As SST sounding can be over multiple beacon intervals, SST operation may be extended beyond one beacon interval. | Increase time span of SST operation. | Revised-  Tgah editor to make changes shown in 11-14-0485r0 under the heading for CID 2964. |

***Discussions:***

***CID 2574:* Agree in principle with resolution #2. The Channel Indication subfield is expanded by 1 byte to incorporate SST operation information.**

***CID 2964:***

**SST can be extended to support periodic operation indicated by RPS element. The Channel Indication subfield in the RPS element is expanded by 1 byte to incorporate SST operation information, as suggested by CID 2574 above. Periodic SST is supported when both the Periodic Operation Parameters subfield and Channel Indication subfield are present in the RPS element.**

***CID 2574:***

**8.4.2.170b RPS element**

***TGah editor: Modify Figure 8-401cl as follows:***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| RAW  Control | RAW Slot Definition | RAW Start Time | RAW Group | Channel Indication | Periodic Operation Parameters |

Octets: 1 2 1 3 ~~1~~ 2 3

***TGah editor: Modify the paragraph starting from Line 1 Page 90 as follows:***

The format of the Channel Indication subfield is shown in Figure 8-401co1 (Channel Indication subfield).

~~The Channel Indication field contains a bitmap allowing the identification of~~ The Channel Activity Bitmap shows the allowed operating channels for the STAs indicated in the RAW, as defined in 9.20.5.1 (General). Each bit in the bitmap corresponds to one minimum width channel within the current BSS operating channels, with the least significant bit corresponding to the lowest numbered operating channel of the BSS. The Maximum Transmission Width, UL Acitivity, and DL Acitivity subfields are defined similarly as in 8.4.2.170l (Subchannel Selective Transmission element)

B0 B7 B8 B9 B10 B11 B12 B15

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Channel Activity Bitmap | Maximum Transmission Width | UL Acitivity | DL Activity | Reserved |

Bits: 8 2 1 1 4

**Figure 8-401co1—Channel Indication subfield**

***CID 2964***

**9.46 Subchannel Selective Transmission (SST)**

***TGah editor: Insert the following section after 9.46.1 Overview on Page 111:***

**9.46.2 Periodic SST Operation**

SST may be operated over a single beacon interval or periodically over multiple beacon intervals. Operation of SST over a single beacon interval shall follow the procedure in 9.46.1 (overview). When the SST operation has identical channel activity schedules in a periodic manner, AP may indicate periodic SST operation parameters in the RPS element in 8.4.2.170b (RPS element). Operation of periodic SST within a beacon interval where SST is scheduled shall follow the procedure in 9.46.1 (overview).

When periodic SST is indicated in the RPS element, both Channel Indication Presence bit and Periodic RAW Indication bit of RPS element are set to 1. The periodicity, validity, and start offset of periodic SST operation are indicated by the Periodic Operation Parameters subfield of the RAW Assignment field of RPS element. When RPS element is used to indicate periodic SST sounding schedule, the RAW Type subfield of the RPS element is set to 2 (Sounding RAW) and the RAW Type Options subfield of the RPS element is set to SST Sounding RAW.