IEEE P802.11
Wireless LANs

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| Comment Resolution on Short SSW in A-BFT |
| Date: 2017-07-10 |
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Abstract

This submission proposes resolutions of comments received from TGay comment collection (TGay Draft).

* 5 CID : #276, 356, 447, 495, 531

Revisions:

* Draft0.35 : Initial version of the document.

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

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| --- | --- | --- | --- | --- | --- |
| CID | Page Number | Line Number | Comment | Proposed Change | Resolution |
| 276 | 62 | 17 | How to align Short SSW with A-BFT? Changes are necessary to accommodate Short SSW in A-BFT. | Provide the necessary changes to accommodate Short SSW in A-BFT | Revised-Agree in principle with the comment.*Add the figure which shows the example of Short SSW frame transmission*TGay editor to make the changes shown in 11-17/1038r0 under all headings that include CID 276. |
| 356 | 14 | 10 | There should be a FSS for short SSW | define a FSS for short SSW in A-BFT or define a conversion procedure | Revised-Agree in principle with the comment.*Actually, the FSS for Short SSW in A-BFT is already added Draft 0.35*TGay editor to make the changes shown in 11-17/1038r0 under all headings that include CID 356. |
| 447 | 62 | 11 | Operation of Short SSW frames during the A-BFT should be defined. | Define the Short SSW operation in A-BFT | Revised-Agree in principle with the comment.TGay editor to make the changes shown in 11-17/1038r0 under all headings that include CID 447. |
| 495 | 62 | 18 | Please resolve editor's note | Please provide the Figures mentioned | Revised-Agree in principle with the comment.*Add the figure which shows the example of Short SSW frame transmission*TGay editor to make the changes shown in 11-17/1038r0 under all headings that include CID 495. |
| 531 | 62 | 18 | There are other changes that need to be made in this subclause to accommodate Short SSW (e.g., figures). | If Short SSW used in the A-BFT, as the editor noted in the draft, "there are other changes that need to be made in this subclause to accommodate Short SSW (e.g., figures).". For example, the length of Short SSW frame is shorter than SSW frame, aSSSlotTime should be redefined or just remain unchanged? If aSSSlotTime remian unchanged, within an aSSSlotTime, more Short SSW frames can be transmitted. The details should be designed. | Revised-Agree in principle with the comment.TGay editor to make the changes shown in 11-17/1038r0 under all headings that include CID 531. |

**TGay editor: Change this section as follows**

**10.38.5 Beamforming in A-BFT**

**10.38.5.2 Operation during the A-BFT**

*Change the fourth paragraph as follows*

In all cases, a DMG STA may use SSW frames to perform an RSS during the A-BFT. If the BSS is an EDMG BSS and if the STA is associated with the BSS, an EDMG STA may use Short SSW packets (30.9.1 Short SSW packet) instead of SSW frames to perform an RSS during the A-BFT. When using Short SSW packets, an EDMG STA can transmit more Short SSW packets within a SSW slot compared to when SSW frames are used.

The A-BFT is slotted and the length of the A-BFT is an integer multiple of the sector sweep slot time. The structure of the A-BFT is shown in Figure 10-67. Figure 10-xx is the structure of A-BFT when STA transmits Short SSW packets The A non-EDMG AP or non-EDMG PCP shall announce the size of the A-BFT in the A-BFT Length subfield of the Beacon Interval Control field (9.3.4.2), while an EDMG AP and EDMG PCP shall also use the A-BFT Multiplier subfield of the Beacon Interval Control field. The first SSW slot begins at the start of the A-BFT, and the following SSW slots are adjacent and nonoverlapping. An SSW slot (Figure 10-68) is a period of time within the A-BFT that can be used by a responder to transmit at least one SSW frameAn SSW slot has a duration of aSSSlotTime. aSSSlotTime is defined to be

aSSSlotTime = aAirPropagationTime + aSSDuration + MBIFS + aSSFBDuration + MBIFS

where

aAirPropagationTime accounts for the propagation delay between the initiator and the responder

aSSDuration ~~(11.39)~~ is defined as follows. If the STA transmits SSW frames in the A-BFT, aSSDuration

provides time for a responder to transmit up to the number of SSW frames announced in the FSS subfield of the Beacon Interval Control field in the DMG Beacon (see 11.39). Otherwise if the STA transmits Short SSW packets in the A-BFT, the maximum number of Short SSW packets the STA may transmit is a function of the value of the FSS subfield of the Beacon Interval Control field in the DMG Beacon as indicated by Table 6.

aSSFBDuration provides time for the initiator to perform an SSW feedback procedure (see 11.39)

**Table 6 —Number of Short SSW packets as a function of the FSS subfield value**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Value of the FSS subfield  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Number of Short SSW packets  | 1 | 3 | 4 | 6 | 8 | 9 | 11 | 12 | 14 | 16 | 17 | 19 | 21 | 22 | 24 | 25 |

*Add the figure after figure. 10-67*



Figure 53. Example of A-BFT structure when STA transmits Short SSW packets