IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LB200 Proposed Comment Resolutions for Subclause 4.15 SF Exchange Description | | | | |
| Date: 2013-12-27 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Matthew Fischer | Broadcom | 190 Mathilda Place, Sunnyvale, CA 94086 | +1 408 543 3370 | [mfischer@broadcom.com](mailto:mfischer@broadcom.com) |
|  |  |  |  |  |

Abstract

Addressing all CIDs from LB200 which relate to Subclause 4.15 Speed Fram Exchange, includng resolutions for

* CIDs: 1017, 1018, 2334, 2362, 2096 (5 CIDs)

**REVISION NOTES:**

R0: initial

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.***

**CID LIST:**

| **CID** | **Commenter** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- | --- | --- |
| 1017 | Adrian Stephens | 5 | 4.15 | "Speed Frame Exchange" This is a poor name. Speed can get confused with PHY rates (in which case these exchanges are, by existing 802.11 standards, low speed). Rather than describe the intended outcome, the name should reflect the mechanism in some way. | Rename to something descriptive of the method. Apply globally. | Revise - generally agree with commenter, TGah editor to execute proposed changes from 11-14-0607r1 found under all headings which include CID1017 |
| 1018 | Adrian Stephens | 5 | 4.15 | "This operation mode is" - how exactly is a frame exchange an operation mode? An operation mode implies some persistent state, with rules on how to manage it. | Replace "this mechanism" or some such. | Revise - generally agree with commenter, TGah editor to execute proposed changes from 11-14-0607r1 found under all headings which include CID1018 |
| 2334 | Mark Hamilton | 5 | 4.15 | How is Speed Frame Exchange different from reverse direction protocol? | Add explanation describing how SF differs from RD, and when each would be used | Revise - generally agree with commenter, TGah editor to execute proposed changes from 11-14-0607r1 found under all headings which include CID2334 |
| 2362 | Mark RISON | 5 | 4.15 | How does "Speed Frame Exchange" differ from your common-or-garden TXOP? | Clarify (what are the features which distinguish a SFE from a baseline TXOP?) | Revise - generally agree with commenter, TGah editor to execute proposed changes from 11-14-0607r1 found under all headings which include CID2334 |
| 2096 | Jon Rosdahl |  |  | The first use of Speed Frame Exchange is on page 5 line 12. But the acronym is not initially used until page 34 line 21. the acronym is listed in the list of "Acronyms and Abreviations" on page one. No mention of it in the definitions sections is made | Use the acronym after it has been defined, or remove the acronym and don't use a "SF" in the draft. | Revise - generally agree with commenter, TGah editor to execute proposed changes from 11-14-0607r1 found under all headings which include CID2096 |

**Discussion**

**Proposed changes**

**CID 1017, 1018, 2334, 2362, 2096**

***TGah editor: Replace the entry for Speed Frame (SF) in subcluase 3.3 Abbreviations and acronyms as shown:***

**3.3 Abbreviations and acronyms**

BD T Bi Directional TXOP

***TGah editor: Throughout the TGah draft, replace the term “Speed Frame exchange” with “Bi Directional TXOP”***

***TGah editor: Throughout the TGah draft, replace the phrase “SF exchange” with “BDT”***

***TGah editor: Throughout the TGah draft, replace the abbreviation “SF” where it is not a part of the expression “SF exchange” with “BDT”, including within the names of some types of frames that carry Bi Directional TXOP information, for example, the PS-Poll+SF frame changes to PS-Poll+BDT***

***TGah editor: Modify sublcause 4.15 Speed Frame Exchange of TGah Draft 1.2 as shown:***

**4.15 Bi Directional TXOP**

Bi Directional TXOP (BDT) provides the functionality that enables an AP and non-AP STA to exchange a sequence of uplink and downlink PPDUs within a TXOP. This continuous frame exchange sequence can include the exchange of both uplink and downlink data frames between the pair of STAs. BDT is intended to reduce the number of contention-based channel accesses, improve channel efficiency by minimizing the number of frame exchanges required for uplink and downlink data frames, and enable STAs to extend battery lifetime by keeping Awake times short. As compared to Reverse Direction (RD) protocol, BDT includes requirements for PHY-layer signaling that provides medium reservation information at the lowest PHY rate to minimize the possibility of interference with the exchange.

**References:**