802.11ba Draft Specification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Proposed Spec Text for Time of Departure accuracy and CCA sensitivity | | | | |
| Date: 2018-07-09 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Shahrnaz Azizi | Intel Corp | 220 Mission College Blvd. Santa Clara, CA 95054 |  | shahrnaz.azizi@intel.com |
|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This submission proposes the spec text to be incorporated in IEEE802.11ba D1.0 related to the following clauses 32.2.10.5 Time of Departure accuracy and 32.2.11.5 CCA sensitivity. In addition, it resolves the TBD value for aCCAMidTime.

Revision History:

* Rev 0: Initial version of the document
* Rev 1-3: incorporating comments from the July 2018 meeting discussions.

**Motion**

Move to modify the Spec Text as indicated in this document IEEE 802.11-18/1163r3?

Yes

No

Abstain

**Straw Poll**

Do you support the Spec Text in this document IEEE 802.11-18/1163r1?

Yes

No

***Editing instructions formatted like this are intended to be copied into the TGba Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

**TGba Editor: *Instruction: Remove section 32.2.10.5 Time of Departure accuracy***

Note: It was discussed that Time of Departure measurement will not be useful for location calculation for other 802.11 receivers or PCR because there is no clear acknowledgment to support Time of Arrival measurement. Therefore removing this section.

**TGba Editor: *Instruction: Add the following content under 32.2.11.5 CCA sensitivity***

**32.2.11.5 CCA sensitivity**

The CCA sensitivity shall follow the CCA sensitivity specification for the attached PCR PHY as defined in in 17.3.10.6 for OFDM, 19.3.19.5 for HT, 21.3.18.5 for VHT and 28.3.19.6 for HE depending on the Capabilities Element of PCR.

**TGba Editor: *Instruction: correct Table 32-11 as follows***

For FDMA case, aCCAMidTime definition is required and is defined as shown in the table below.

**Table 32-11—WUR PPDU Time and Length Characteristics**

|  |  |
| --- | --- |
| **Characteristics** | **Value** |
| aCCAMidTime | 25 µs |
| aPPDUMaxTime | 5.484 ms |
| aPSDUMaxLength | 166 octets (see NOTE 1) |
| aRxPHYStartDelay | 88 µs (see NOTE 2) |
| NOTE 1—This is the maximum length in octets for a WUR PPDU with HDR, single stream, and limited by 1332 possible data symbols in aPPDUMaxTime. This is the maximum PSDU length a WUR PHY could support assuming no restrictions in MAC.  NOTE 2—This value arises from the time to the end of the WUR-Sync field with HDR. | |