802.11ba Draft Specification

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| Modification of Spec Text related to sync duration |
| Date: 2018-05-07 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Dongguk Lim | LG Electronics | 19, Yangjae-daero 11gil, Seocho-gu, Seoul 137-130, Korea |  | dongguk.lim@lge.com |
| Eunsung Park | LG Electronics |  |  | esung.park@lge.com  |
| Jinsoo Choi | LE Electronics |  |  | js.choi@lge.com |

Abstract

This submission contains modification of spec text to be incorporated in P802.11ba D0.3 related to the following SFD motions:

1. [Assigned D0.1] The SYNC field duration depends on the data rate of the Data field. When the Data field uses the low data rate, the duration of the SYNC field is 128 µs. When the Data field uses the high data rate, the duration of the SYNC field is 64 µs.

[Motion 1, Nov 2017, See [6] [12]]

1. [Assigned D0.1, D0.2] The SYNC field structure depends on the data rate of the Data field. When the Data field uses the high data rate, the structure of the SYNC field is $\overbar{S}$, where $S$ is a sequence of 32 bits, and $\overbar{S}$ is the complementary sequence of $S$. When the Data field uses the low data rate, the structure of the SYNC field is $[S,S]$. The duration of each bit in the SYNC field is ~~TBD (either~~ 2 ~~or 4)~~ µs. The specific bit sequence of $S$ is TBD. The contiguous OFF period of $[S,S$] or $\overbar{S}$ is no more than 8 us.

[Motion, Nov 2017 and Jan 2018, See [6] [12] [7] [13] [14]]

Revision History:

* Rev 0: Initial version of the document

***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: Modify the subclause*** 32.3.6 (Timing related parameters) ***as the following:***

* Timing related parameters

Table 32-3 (Timing-related constants) defines the timing-related parameters for WUR PPDU formats.

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| * Timing-related constants
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| Parameter | Value | Description |
|  | 312.5 kHz | Subcarrier frequency spacing for WUR PPDU |
| *TDFT,*WUR | 3.2 µs | IDFT/DFT period for the WUR PPDU |
| *TGI,*WUR | 0.8 µs | Guard interval duration for the WUR PPDU |
| *TGI,*L-LTF | 1.6 µs | Guard interval duration for the L-LTF field |
| *TSym-LDR* | 4 µs | Duration of WUR LDR OOK symbol in WUR-Data field |
| *TSym-HDR* | 2 µs | Duration of WUR HDR OOK symbol in WUR-Data field |
| *TSym* | *TSym-LDR* or *TSym-HDR* depending on WUR Data Rate | Duration of OOK symbol in WUR-Data field |
| *TSync* | ~~TBD~~ **2 µs** | Duration of OOK symbol in WUR-Sync field |
| *T*L-STF | 8 µs = 10 × *TDFT,*WUR /4 | Non-HT Short Training field duration |
| *T*L-LTF | 8 µs = 2 × *TDFT,*WUR + *TGI,*L-LTF | Non-HT Long Training field duration |
| *T*L-SIG | 4 µs | Non-HT SIGNAL field duration |
| *T*BPSK-Mark | 4 µs | BPSK-Mark field duration |
| *T*WUR-Sync-LDR | 128 µs | WUR-Sync field duration for WUR LDR |
| *T*WUR-Sync-HDR | 64 µs | WUR-Sync field duration for WUR HDR |
| *T*WUR-Sync | *T*WUR-Sync-LDR or *T*WUR-Sync-HDR depending on WUR Data rate | WUR-Sync field duration for WUR PPDU |

Table 32-4 (Frequently used parameters) defines parameters used frequently in Clause 32.

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| * Frequently used parameters
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| Symbol | Explanation |
| *NSPDB* | Number of OOK symbols per information data bit.For WUR LDR, *NSPDB* =4. For WUR HDR, *NSPDB* =2. |
| *NTX* | Number of transmit chains |
| *NWUR-Sync* | Number of OOK symbols in the WUR-SYNC field~~=TBD~~For WUR LDR, NWUR-Sync =64.For WUR HDR, NWUR-Sync =32. |