IEEE P802.11
Wireless LANs

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| LB258: Resolution for CID 6037 |
| Date: 2023-11-11 |
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This submission includes the resolution for CID 6037 on initial SA ballot on P802.11-REVme D4.0. The baseline document is P802.11-REVme D4.1.

##### Revision history:

##### R0 – initial version

**CID: 6037**

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| --- | --- | --- | --- | --- | --- | --- |
| CID | Clause | Page | Line | Comment | Proposed Change | Proposed resolution |
| 6037 | 25.3.3 | 3759 | 20 | [YX] The value of T\_CSTF and T\_STF specified as 14 T\_seq (~8145.5 ns) in Table 25.3-Timing-related parameters is not in agreement with the definition of STF of control mode (which is composed of 50 repetitions of ZCZ sequence of length 32) and the definition of STF of SC and OFDM mode (which is composed of 17 repetitions of ZCZ sequence of length 32). | 1) modifiy the T\_CSTF value in Table 25-3 as 50x32xTc (~3636.8 ns); 2) modifiy the T\_STF value in Table 25-3 as 17x32xTc (~1236.5 ns); | ACCEPTEDTGm editor: Please revise the text in subclauses 25.3.3 in 802.11REVme D4.1as suggested in 11-23/2048r0. |

***Discussion:***

In 25.3.5.2 (CMMG Short Training field), the STF of control mode, and the STF of SC and OFDM mode are defined, in which the STF of control mode is composed of 50 repetitions of a ZCZ sequence length 32, while the STF of SC and OFDM mode is composed 17 repetitions of a ZCZ sequence of length 32. A potential resolution is to revise the values of T\_CSTF and T\_STF in Table 25-3 (Timing-related parameters) which correspond to 50 and 17 repetitions of a ZCZ sequence length 32, respectively. The SC mode chip time of CBW540 MHz (~2.273 ns) is applied to all control, SC and OFDM modes.

During one previous TGm call, a potential issue was concerned about the different STF values for control mode or different SFT values for SC/OFDM mode for given different CBW540 MHz and CBW1080 MHz (equivalently different SC chip time) for a specified STF length.

As defined in 25.3.5 CMMG PHY preamble:

“NOTE 2—For CMMG Control mode and CMMG SC mode preambles, all fields are transmitted with SC mode transmission. For CMMG OFDM mode preamble, the STFs, the CEFs, and the SIG fields are transmitted with SC mode transmission. For 1080 MHz SC transmission, the STFs, the CEFs, and the SIG fields are transmitted in duplicate format as defined in 25.3.10 (CMMG duplication transmission on a 1080 MHz channel).”

The durations of STF for CBW540 MHz and CBW1080 MHz are equivalent.

Note – As shown in Table 20-4 (Timing-related parameters) in P802.11-REVme D4.1, the control mode STF duration and the SC STF duration are also defined as ~3636.8 ns and ~1236.5 ns, respectively.

*TGm Editor: please revise Table 25-3 (Timing-related parameters) in P3885L20 and P3885L23 in P802.11-REVme D4.1 as following.*

**Table 25-3 – Timing-related parameters**

|  |  |  |
| --- | --- | --- |
|  | 256 (~581.8 ns) | ZCZ block duration where is the SC mode chip time of CBW540 MH |
|  |  (~3636.8 ns) | Short training field duration forcontrol mode where is the SC mode chip time of CBW540 MHz |
|  |  (~1236.5 ns) | Short training field duration *n*for SC/OFDM mode where is the SC mode chip time of CBW540 MHz  |