IEEE P802.11
Wireless LANs

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| Comment Resolutions for Section 32.3.5 (Timing related parameters) |
| Date: 2020-06-08 |
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Abstract

This submission proposes resolutions to the comments received on Section 32.3.5 (Timing related parameters) in TGbd D0.3. The following is the list of CIDs:

* 139, 268, 269, 270, 271

***CIDs for Clause 32.3.5***

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| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 139 | 32.3.5 | 38.22 | Table 32-7, STBC is not supported in NGV, N\_STS entry can be removed. | Remove "N\_STS" row. | Accepted |
| 268 | 32.3.5 | 37.12 | complex data numbers should be data subcarriers | as in comment | Accepted |
| 269 | 32.3.5 | 37.14 | pilot values should be pilot subcarriers | as in comment | Accepted |
| 270 | 32.3.5 | 37.49 | NGV-LTF-2X symbol in description should be NGV-LTF-2x symbol to be consistent in the table. | as in comment | Accepted |
| 271 | 32.3.5 | 38.29 | Coding rate should be coding rate with all small letters | as in comment | Accepted |

*TGbd Editor: Please make the following changes in Section 32.3.5 of D0.3.*

32.3.5 Timing related parameters

Table 32-6 (Timing-related constants) defines the timing-related parameters.

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| Table 32-6 Timing-related constants  |
| Parameter | CBW10 | CBW20 | Description |
| *NSD* | 52 | 108 | Number of complex data subcarriers per frequency segment |
| *NSP* | 4 | 6 | Number of pilot subcarriers per frequency segment |
| *NST* | 56 | 114 | Total number of subcarriers per frequency segment. See NOTE. |
| *NSR* | 28 | 58 | Highest data subcarrier index per frequency segment |
| *∆F* | 156.25 kHz | Subcarrier frequency spacing |
| *TDFT* | 6.4 µs | IDFT/DFT period |
| *TGI* | 1.6 µs = *TDFT* /4 | Guard interval duration |
| *TGI2* | 3.2 µs | Double guard interval |
| *TSYM* | 8 µs = *TDFT* + *TGI =* 1.25 *TDFT*  | Symbol interval |
| *TL-STF* | 16 µs = 10 x *TDFT* /4 | Non-HT Short Training field duration |
| *TL-LTF* | 16 µs = 2 x *TDFT* + *TGI2* | Non-HT Long Training field duration |
| *TL-SIG* | 8 µs | Non-HT SIGNAL field duration |
| *TRL-SIG* | 8 µs | Repeated Non-HT SIGNAL field duration |
| *TNGV-SIG* | 8 µs | NGV Signal field duration |
| *TRNGV-SIG* | 8 µs | Repeated NGV Signal field duration |
| *TNGV-STF* | 8 µs | NGV Short Training field duration |
| *TNGV-LTF-2X* | 8 µs | Duration of each NGV-LTF-2x symbol |
| *TNGV-LTF-1X* | 4.8 µs | Duration of each NGV-LTF-1x symbol |
| *TNGV-LTF-2X* | 14.4 µs | Duration of each repeated NGV-LTF-2x symbol |
| *TNGV-LTF* | *T*NGV-LTF-2X or *T*NGV-LTF-1X or *T*NGV-LTF-2X-Repeat or *T*NGV-LTF-1X-Repeat depending upon the LTF duration used | Duration of each OFDM symbol in NGV LTF field |
| *Nservice* | 16 | Number of bits in the SERVICE field |
| *Ntail* | 6 | Number of tail bits per BCC encoder |
| NOTE—*NST* = *NSD* + *NSP* |

Table 33-7 (Frequently used parameters) defines parameters used frequently in Clause 32 (Next Generation V2X (V2X) PHY specification).

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| Table 33-7 Frequently used parameters  |
| Symbol | Explanation |
| *NCBPS* | Number of coded bits per symbol. |
| *NCBPSS* | Number of coded bits per symbol per spatial stream. |
| *NDBPS* | Number of data bits per symbol. |
| *NBPSCS* | Number of coded bits per subcarrier per spatial stream. |
| *NRX* | Number of receive chains |
|  |  |
| *NSS* | Number of spatial streams. |
| *NTX* | Number of transmit chains. |
| *NNGV-LTF* | Number of NGV-LTF symbols. |
| *R* | *R*is the coding rate. |