IEEE P802.11  
 Wireless LANs

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| **Proposed TGbd draft specification**  **For Parameters for NGV-MCSs** |
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Abstract

This submission contains proposed spec text for 32.3.14 (Parameters for NGV-MCSs). The text reflects the related and motions passed in 11/19/1863. The proposed changes are based on 11bd D0.2.

Revisions:

* Rev 0: Initial version of the document.

***To TGbd Editor:*** *At P61L12, replace the current text with the proposed changes below.*

***------------- Begin Text Changes ---------------***

**32.3.14 Parameters for NGV-MCSs**

The rate-dependent parameters for 10 MHz and 20 MHz are given in Table 32-15 (NGV-MCSs for 10 MHz, NSS = 1) to Table 32-18 (NGV-MCSs for 20 MHz, NSS = 2).

Table 32-15—NGV-MCSs for 10 MHz, NSS = 1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **NGV-MCS Index** | **Modula- tion** | **R** | ***NBPSCS*** | ***NSD*** | ***NCBPS*** | ***NDBPS*** | **Data rate (Mb/s)**  **1.6 μs GI**  **NGV-LTF-2x** |
| ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ |
| 0 | BPSK | 1/2 | 1 | 52 | 52 | 26 | 3.3 |
| 1 | QPSK | 1/2 | 2 | 52 | 104 | 52 | 6.5 |
| 2 | QPSK | 3/4 | 2 | 52 | 104 | 78 | 9.8 |
| 3 | 16QAM | 1/2 | 4 | 52 | 208 | 104 | 13.0 |
| 4 | 16QAM | 3/4 | 4 | 52 | 208 | 156 | 19.5 |
| 5 | 64QAM | 2/3 | 6 | 52 | 312 | 208 | 26.0 |
| 6 | 64QAM | 3/4 | 6 | 52 | 312 | 234 | 29.3 |
| 7 | 64QAM | 5/6 | 6 | 52 | 312 | 260 | 32.5 |
| 8 | 256QAM | 3/4 | 8 | 52 | 416 | 312 | 39.0 |
| 9 | Not valid | | | | | | |
| 10 | BPSK with DCM | 1/2 | 1 | 26 | 26 | 13 | 1.6 |

Table 32-16—NGV-MCSs for 10 MHz, NSS = 2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **NGV-MCS Index** | **Modula- tion** | **R** | ***NBPSCS*** | ***NSD*** | ***NCBPS*** | ***NDBPS*** | **Data rate (Mb/s)**  **1.6 μs GI**  **NGV-LTF-2x** |
| ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ |
| 0 | BPSK | 1/2 | 1 | 52 | 104 | 52 | 6.5 |
| 1 | QPSK | 1/2 | 2 | 52 | 208 | 104 | 13.0 |
| 2 | QPSK | 3/4 | 2 | 52 | 208 | 156 | 19.5 |
| 3 | 16QAM | 1/2 | 4 | 52 | 416 | 208 | 26.0 |
| 4 | 16QAM | 3/4 | 4 | 52 | 416 | 312 | 39.0 |
| 5 | 64QAM | 2/3 | 6 | 52 | 624 | 416 | 52.0 |
| 6 | 64QAM | 3/4 | 6 | 52 | 624 | 468 | 58.5 |
| 7 | 64QAM | 5/6 | 6 | 52 | 624 | 520 | 65.0 |
| 8 | 256QAM | 3/4 | 8 | 52 | 832 | 624 | 78.0 |
| 9 | Not valid | | | | | | |
| 10 | BPSK with DCM | 1/2 | 1 | 26 | 52 | 26 | 3.3 |

Table 32-17—NGV-MCSs for 20 MHz, NSS = 1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **NGV-MCS Index** | **Modula- tion** | **R** | ***NBPSCS*** | ***NSD*** | ***NCBPS*** | ***NDBPS*** | **Data rate (Mb/s)**  **1.6 μs GI**  **NGV-LTF-2x** |
| ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ |
| 0 | BPSK | 1/2 | 1 | 108 | 108 | 54 | 6.8 |
| 1 | QPSK | 1/2 | 2 | 108 | 216 | 108 | 13.5 |
| 2 | QPSK | 3/4 | 2 | 108 | 216 | 162 | 20.3 |
| 3 | 16QAM | 1/2 | 4 | 108 | 432 | 216 | 27.0 |
| 4 | 16QAM | 3/4 | 4 | 108 | 432 | 324 | 40.5 |
| 5 | 64QAM | 2/3 | 6 | 108 | 648 | 432 | 54.0 |
| 6 | 64QAM | 3/4 | 6 | 108 | 648 | 486 | 60.8 |
| 7 | 64QAM | 5/6 | 6 | 108 | 648 | 540 | 67.5 |
| 8 | 256QAM | 3/4 | 8 | 108 | 864 | 648 | 81.0 |
| 9 | 256QAM | 5/6 | 8 | 108 | 864 | 720 | 90.0 |
| 10 | BPSK with DCM | 1/2 | 1 | 54 | 54 | 27 | 3.4 |

Table 32-18—NGV-MCSs for 20 MHz, NSS = 2

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **NGV-MCS Index** | **Modula- tion** | **R** | ***NBPSCS*** | ***NSD*** | ***NCBPS*** | ***NDBPS*** | **Data rate (Mb/s)**  **1.6 μs GI**  **NGV-LTF-2x** |
| ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ | ~~TBD~~ |
| 0 | BPSK | 1/2 | 1 | 108 | 216 | 108 | 13.5 |
| 1 | QPSK | 1/2 | 2 | 108 | 432 | 216 | 27.0 |
| 2 | QPSK | 3/4 | 2 | 108 | 432 | 324 | 40.5 |
| 3 | 16QAM | 1/2 | 4 | 108 | 864 | 432 | 54.0 |
| 4 | 16QAM | 3/4 | 4 | 108 | 864 | 648 | 81.0 |
| 5 | 64QAM | 2/3 | 6 | 108 | 1296 | 864 | 108.0 |
| 6 | 64QAM | 3/4 | 6 | 108 | 1296 | 972 | 121.5 |
| 7 | 64QAM | 5/6 | 6 | 108 | 1296 | 1080 | 135.0 |
| 8 | 256QAM | 3/4 | 8 | 108 | 1728 | 1296 | 162.0 |
| 9 | 256QAM | 5/6 | 8 | 108 | 1728 | 1440 | 180.0 |
| 10 | BPSK with DCM | 1/2 | 1 | 54 | 108 | 54 | 6.8 |

***------------- End Text Changes ------------------***