IEEE P802.11
Wireless LANs

|  |
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| Proposed Draft Text: Updated on Parameters for EHT-MCSs |
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|  |  |  |  |  |

Abstract

This submission shows

* The proposed text is in accordance with the following Motions:
	+ Motion 137, #SP250

 

* + Motion 137, #SP279

 

Revisions:

* Rev 0: Initial version of the document.

36.3.7 EHT modulation and coding schemes (EHT-MCSs)

The EHT-MCS is a compact representation of the modulation and coding used in the Data field of the PPDU. For an EHT MU PPDU, it is carried per user in the User Specific field of the EHT-SIG field. For an EHT TB PPDU, it is carried in the User Info field of the Trigger frame soliciting the EHT TB PPDU.

Rate dependent parameters for the full set of EHT-MCSs are shown in 36.5 (Parameters for EHT-MCSs).

EHT-MCS ~~TBD~~14 and EHT-MCS 15 enable~~s~~ DCM on top of EHT-MCS 0. EHT-MCS ~~TBD~~14 and EHT-MCS 15 are ~~is~~ supported only with 1SS.

**36.3.8 EHT-SIG modulation and coding schemes (EHT-SIG-MCSs)**

The EHT-SIG-MCS is a compact representation of the modulation and coding used in the EHT-SIG field of the EHT MU PPDU. The EHT-SIG modulation and coding scheme is carried in the EHT-SIG~~-~~MCS ~~sub~~field of the U-SIG field in the EHT MU PPDU and supports EHT-MCS 0, EHT-MCS 1, EHT-MCS 3 and EHT-MCS 15 ~~indicates an EHT-SIG-MCS in the range of TBD~~.

36.5 Parameters for EHT-MCSs
 …

**36.5.1 EHT-MCSs for 26-tone RU**

The rate-dependent parameters for the 26-tone RU are provided in Table 36-50 (EHT-MCSs for 26-tone RU, NSS = 1).

|  |
| --- |
|  |

Table 36-50—EHT-MCSs for 26-tone RU, *NSS,u* = 1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 24 | 24 | 12 | 0.9 | 0.8 | 0.8 |
| 1 | QPSK | 1/2 | 2 | 48 | 24 | 1.8 | 1.7 | 1.5 |
| 2 | 3/4 | 36 | 2.6 | 2.5 | 2.3 |
| 3 | 16-QAM | 1/2 | 4 | 96 | 48 | 3.5 | 3.3 | 3.0 |
| 4 | 3/4 | 72 | 5.3 | 5.0 | 4.5 |
| 5 | 64-QAM | 2/3 | 6 | 144 | 96 | 7.1 | 6.7 | 6.0 |
| 6 | 3/4 | 108 | 7.9 | 7.5 | 6.8 |
| 7 | 5/6 | 120 | 8.8 | 8.3 | 7.5 |
| 8 | 256-QAM | 3/4 | 8 | 192 | 144 | 10.6 | 10.0 | 9.0 |
| 9 | 5/6 | 160 | 11.8 | 11.1 | 10.0 |
| 10 | 1024-QAM | 3/4 | 10 | 240 | 180 | 13.2 | 12.5 | 11.3 |
| 11 | 5/6 | 200 | 14.7 | 13.9 | 12.5 |
| 12 | 4096-QAM | 3/4 | 12 | 288 | 216 | 15.9 | 15.0 | 13.5 |
| 13 | 5/6 | 240 | 17.6 | 16.7 | 15.0 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 12 | 12 | 6 | 0.4 | 0.4 | 0.4 |

**36.5.2 EHT-MCSs for 52-tone RU**

The rate-dependent parameters for the 52-tone RU are provided in Table 36-51 (EHT-MCSs for 52-tone RU, NSS = 1).

**Table 36-51—EHT-MCSs for 52-tone RU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 48 | 48 | 24 | 1.8 | 1.7 | 1.5 |
| 1 | QPSK | 1/2 | 2 | 96 | 48 | 3.5 | 3.3 | 3.0 |
| 2 | 3/4 | 72 | 5.3 | 5.0 | 4.5 |
| 3 | 16-QAM | 1/2 | 4 | 192 | 96 | 7.1 | 6.7 | 6.0 |
| 4 | 3/4 | 144 | 10.6 | 10.0 | 9.0 |
| 5 | 64-QAM | 2/3 | 6 | 288 | 192 | 14.1 | 13.3 | 12.0 |
| 6 | 3/4 | 216 | 15.9 | 15.0 | 13.5 |
| 7 | 5/6 | 240 | 17.6 | 16.7 | 15.0 |
| 8 | 256-QAM | 3/4 | 8 | 384 | 288 | 21.2 | 20.0 | 18.0 |
| 9 | 5/6 | 320 | 23.5 | 22.2 | 20.0 |
| 10 | 1024-QAM | 3/4 | 10 | 480 | 360 | 26.5 | 25.0 | 22.5 |
| 11 | 5/6 | 400 | 29.4 | 27.8 | 25.0 |
| 12 | 4096-QAM | 3/4 | 12 | 576 | 432 | 31.8 | 30.0 | 27.0 |
| 13 | 5/6 | 480 | 35.3 | 33.3 | 30.0 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 24 | 24 | 12 | 0.9 | 0.8 | 0.8 |

**36.5.3 EHT-MCSs for 52+26-tone MRU**

The rate-dependent parameters for the 52+26-tone MRU are provided in Table 36-52 (EHT-MCSs for 52+26-tone MRU, NSS = 1).

**Table 36-52— EHT-MCSs for 52+26 ~~78~~-tone MRU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 72 | 72 | 36 | 2.6 | 2.5 | 2.3 |
| 1 | QPSK | 1/2 | 2 | 144 | 72 | 5.3 | 5.0 | 4.5 |
| 2 | 3/4 | 108 | 7.9 | 7.5 | 6.8 |
| 3 | 16-QAM | 1/2 | 4 | 288 | 144 | 10.6 | 10.0 | 9.0 |
| 4 | 3/4 | 216 | 15.9 | 15.0 | 13.5 |
| 5 | 64-QAM | 2/3 | 6 | 432 | 288 | 21.2 | 20.0 | 18.0 |
| 6 | 3/4 | 324 | 23.8 | 22.5 | 20.3 |
| 7 | 5/6 | 360 | 26.5 | 25.0 | 22.5 |
| 8 | 256-QAM | 3/4 | 8 | 576 | 432 | 31.8 | 30.0 | 27.0 |
| 9 | 5/6 | 480 | 35.3 | 33.3 | 30.0 |
| 10 | 1024-QAM | 3/4 | 10 | 720 | 540 | 39.7 | 37.5 | 33.8 |
| 11 | 5/6 | 600 | 44.1 | 41.7 | 37.5 |
| 12 | 4096-QAM | 3/4 | 12 | 864 | 648 | 47.6 | 45.0 | 40.5 |
| 13 | 5/6 | 720 | 52.9 | 50.0 | 45.0 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 36 | 36 | 18 | 1.3 | 1.3 | 1.1 |

**36.5.4 EHT-MCSs for 106-tone RU**

The rate-dependent parameters for the 106-tone RU are provided in Table 36-53 (EHT-MCSs for 106-tone RU, NSS = 1).

**Table 36-53—EHT-MCSs for 106-tone RU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 102 | 102 | 51 | 3.8 | 3.5 | 3.2 |
| 1 | QPSK | 1/2 | 2 | 204 | 102 | 7.5 | 7.1 | 6.4 |
| 2 | 3/4 | 153 | 11.3 | 10.6 | 9.6 |
| 3 | 16-QAM | 1/2 | 4 | 408 | 204 | 15.0 | 14.2 | 12.8 |
| 4 | 3/4 | 306 | 22.5 | 21.3 | 19.1 |
| 5 | 64-QAM | 2/3 | 6 | 612 | 408 | 30.0 | 28.3 | 25.5 |
| 6 | 3/4 | 459 | 33.8 | 31.9 | 28.7 |
| 7 | 5/6 | 510 | 37.5 | 35.4 | 31.9 |
| 8 | 256-QAM | 3/4 | 8 | 816 | 612 | 45.0 | 42.5 | 38.3 |
| 9 | 5/6 | 680 | 50.0 | 47.2 | 42.5 |
| 10 | 1024-QAM | 3/4 | 10 | 1,020 | 765 | 56.3 | 53.1 | 47.8 |
| 11 | 5/6 | 850 | 62.5 | 59.0 | 53.1 |
| 12 | 4096-QAM | 3/4 | 12 | 1,224 | 918 | 67.5 | 63.8 | 57.4 |
| 13 | 5/6 | 1,020 | 75.0 | 70.8 | 63.8 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 51 | 51 | 25 | 1.8 | 1.7 | 1.6 |

**36.5.5 EHT-MCSs for 106+26-tone MRU**

The rate-dependent parameters for the 106+26-tone MRU are provided in Table 36-54 (EHT-MCSs for 106+26-tone MRU, NSS = 1).

**Table 36-54—EHT-MCSs for 106+26~~132~~-tone MRU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 126 | 126 | 63 | 4.6 | 4.4 | 3.9 |
| 1 | QPSK | 1/2 | 2 | 252 | 126 | 9.3 | 8.8 | 7.9 |
| 2 | 3/4 | 189 | 13.9 | 13.1 | 11.8 |
| 3 | 16-QAM | 1/2 | 4 | 504 | 252 | 18.5 | 17.5 | 15.8 |
| 4 | 3/4 | 378 | 27.8 | 26.3 | 23.6 |
| 5 | 64-QAM | 2/3 | 6 | 756 | 504 | 37.1 | 35.0 | 31.5 |
| 6 | 3/4 | 567 | 41.7 | 39.4 | 35.4 |
| 7 | 5/6 | 630 | 46.3 | 43.8 | 39.4 |
| 8 | 256-QAM | 3/4 | 8 | 1,008 | 756 | 55.6 | 52.5 | 47.3 |
| 9 | 5/6 | 840 | 61.8 | 58.3 | 52.5 |
| 10 | 1024-QAM | 3/4 | 10 | 1,260 | 945 | 69.5 | 65.6 | 59.1 |
| 11 | 5/6 | 1,050 | 77.2 | 72.9 | 65.6 |
| 12 | 4096-QAM | 3/4 | 12 | 1,512 | 1,134 | 83.4 | 78.8 | 70.9 |
| 13 | 5/6 | 1,260 | 92.6 | 87.5 | 78.8 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 63 | 63 | 31 | 2.3 | 2.2 | 1.9 |

**36.5.6 EHT-MCSs for 242-tone RU**

The rate-dependent parameters for the 242-tone RU are provided in Table 36-55 (EHT-MCSs for 242-tone RU, NSS = 1).

**Table 36-55—EHT-MCSs for 242-tone RU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 234 | 234 | 117 | 8.6 | 8.1 | 7.3 |
| 1 | QPSK | 1/2 | 2 | 468 | 234 | 17.2 | 16.3 | 14.6 |
| 2 | 3/4 | 351 | 25.8 | 24.4 | 21.9 |
| 3 | 16-QAM | 1/2 | 4 | 936 | 468 | 34.4 | 32.5 | 29.3 |
| 4 | 3/4 | 702 | 51.6 | 48.8 | 43.9 |
| 5 | 64-QAM | 2/3 | 6 | 1,404 | 936 | 68.8 | 65.0 | 58.5 |
| 6 | 3/4 | 1,053 | 77.4 | 73.1 | 65.8 |
| 7 | 5/6 | 1,170 | 86.0 | 81.3 | 73.1 |
| 8 | 256-QAM | 3/4 | 8 | 1,872 | 1,404 | 103.2 | 97.5 | 87.8 |
| 9 | 5/6 | 1,560 | 114.7 | 108.3 | 97.5 |
| 10 | 1024-QAM | 3/4 | 10 | 2,340 | 1,755 | 129.0 | 121.9 | 109.7 |
| 11 | 5/6 | 1,950 | 143.4 | 135.4 | 121.9 |
| 12 | 4096-QAM | 3/4 | 12 | 2,808 | 2,106 | 154.9 | 146.3 | 131.6 |
| 13 | 5/6 | 2,340 | 172.1 | 162.5 | 146.3 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 117 | 117 | 58 | 4.3 | 4.0 | 3.6 |

**36.5.7 EHT-MCSs for 484-tone RU**

The rate-dependent parameters for the 484-tone RU are provided in Table 36-56 (EHT-MCSs for 484-tone RU, NSS = 1).

**Table 36-56—EHT-MCSs for 484-tone RU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 468 | 468 | 234 | 17.2 | 16.3 | 14.6 |
| 1 | QPSK | 1/2 | 2 | 936 | 468 | 34.4 | 32.5 | 29.3 |
| 2 | 3/4 | 702 | 51.6 | 48.8 | 43.9 |
| 3 | 16-QAM | 1/2 | 4 | 1,872 | 936 | 68.8 | 65.0 | 58.5 |
| 4 | 3/4 | 1,404 | 103.2 | 97.5 | 87.8 |
| 5 | 64-QAM | 2/3 | 6 | 2,808 | 1,872 | 137.6 | 130.0 | 117.0 |
| 6 | 3/4 | 2,106 | 154.9 | 146.3 | 131.6 |
| 7 | 5/6 | 2,340 | 172.1 | 162.5 | 146.3 |
| 8 | 256-QAM | 3/4 | 8 | 3,744 | 2,808 | 206.5 | 195.0 | 175.5 |
| 9 | 5/6 | 3,120 | 229.4 | 216.7 | 195.0 |
| 10 | 1024-QAM | 3/4 | 10 | 4,680 | 3,510 | 258.1 | 243.8 | 219.4 |
| 11 | 5/6 | 3,900 | 286.8 | 270.8 | 243.8 |
| 12 | 4096-QAM | 3/4 | 12 | 5,616 | 4,212 | 309.7 | 292.5 | 263.3 |
| 13 | 5/6 | 4,680 | 344.1 | 325.0 | 292.5 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 234 | 234 | 117 | 8.6 | 8.1 | 7.3 |

**36.5.8 EHT-MCSs for 484+242-tone MRU**

The rate-dependent parameters for the 484+242-tone MRU are provided in Table 36-57 (EHT-MCSs for 484+242-tone MRU, NSS = 1).

**Table 36-57—EHT-MCSs for ~~(~~484+242~~)~~-tone MRU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 702 | 702 | 351 | 25.8 | 24.4 | 21.9 |
| 1 | QPSK | 1/2 | 2 | 1,404 | 702 | 51.6 | 48.8 | 43.9 |
| 2 | 3/4 | 1,053 | 77.4 | 73.1 | 65.8 |
| 3 | 16-QAM | 1/2 | 4 | 2,808 | 1,404 | 103.2 | 97.5 | 87.8 |
| 4 | 3/4 | 2,106 | 154.9 | 146.3 | 131.6 |
| 5 | 64-QAM | 2/3 | 6 | 4,212 | 2,808 | 206.5 | 195.0 | 175.5 |
| 6 | 3/4 | 3,159 | 232.3 | 219.4 | 197.4 |
| 7 | 5/6 | 3,510 | 258.1 | 243.8 | 219.4 |
| 8 | 256-QAM | 3/4 | 8 | 5,616 | 4,212 | 309.7 | 292.5 | 263.3 |
| 9 | 5/6 | 4,680 | 344.1 | 325.0 | 292.5 |
| 10 | 1024-QAM | 3/4 | 10 | 7,020 | 5,265 | 387.1 | 365.6 | 329.1 |
| 11 | 5/6 | 5,850 | 430.1 | 406.3 | 365.6 |
| 12 | 4096-QAM | 3/4 | 12 | 8,424 | 6,318 | 464.6 | 438.8 | 394.9 |
| 13 | 5/6 | 7,020 | 516.2 | 487.5 | 438.8 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 351 | 351 | 175 | 12.9 | 12.2 | 10.9 |

**36.5.9 EHT-MCSs for 996-tone RU**

The rate-dependent parameters for the 996-tone RU are provided in Table 36-58 (EHT-MCSs for 996-tone RU, NSS = 1).

**Table 36-58—EHT-MCSs for 996-tone RU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 980 | 980 | 490 | 36.0 | 34.0 | 30.6 |
| 1 | QPSK | 1/2 | 2 | 1,960 | 980 | 72.1 | 68.1 | 61.3 |
| 2 | 3/4 | 1,470 | 108.1 | 102.1 | 91.9 |
| 3 | 16-QAM | 1/2 | 4 | 3,920 | 1,960 | 144.1 | 136.1 | 122.5 |
| 4 | 3/4 | 2,940 | 216.2 | 204.2 | 183.8 |
| 5 | 64-QAM | 2/3 | 6 | 5,880 | 3,920 | 288.2 | 272.2 | 245.0 |
| 6 | 3/4 | 4,410 | 324.3 | 306.3 | 275.6 |
| 7 | 5/6 | 4,900 | 360.3 | 340.3 | 306.3 |
| 8 | 256-QAM | 3/4 | 8 | 7,840 | 5,880 | 432.4 | 408.3 | 367.5 |
| 9 | 5/6 | 6,533 | 480.4 | 453.7 | 408.3 |
| 10 | 1024-QAM | 3/4 | 10 | 9,800 | 7,350 | 540.4 | 510.4 | 459.4 |
| 11 | 5/6 | 8,166 | 600.4 | 567.1 | 510.4 |
| 12 | 4096-QAM | 3/4 | 12 | 11,760 | 8,820 | 648.5 | 612.5 | 551.3 |
| 13 | 5/6 | 9,800 | 720.6 | 680.6 | 612.5 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 490 | 490 | 245 | 18.0 | 17.0 | 15.3 |

**36.5.10 EHT-MCSs for 996+484-tone MRU**

The rate-dependent parameters for the 996+484-tone MRU are provided in Table 36-59 (EHT-MCSs for 996+484-tone MRU, NSS = 1).

**Table 36-59—EHT-MCSs for ~~(~~996+484~~)~~-tone MRU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 1448 | 1,448 | 724 | 53.2 | 50.3 | 45.3 |
| 1 | QPSK | 1/2 | 2 | 2,896 | 1,448 | 106.5 | 100.6 | 90.5 |
| 2 | 3/4 | 2,172 | 159.7 | 150.8 | 135.8 |
| 3 | 16-QAM | 1/2 | 4 | 5,792 | 2,896 | 212.9 | 201.1 | 181.0 |
| 4 | 3/4 | 4,344 | 319.4 | 301.7 | 271.5 |
| 5 | 64-QAM | 2/3 | 6 | 8,688 | 5,792 | 425.9 | 402.2 | 362.0 |
| 6 | 3/4 | 6,516 | 479.1 | 452.5 | 407.3 |
| 7 | 5/6 | 7,240 | 532.4 | 502.8 | 452.5 |
| 8 | 256-QAM | 3/4 | 8 | 11,584 | 8,688 | 638.8 | 603.3 | 543.0 |
| 9 | 5/6 | 9,653 | 709.8 | 670.3 | 603.3 |
| 10 | 1024-QAM | 3/4 | 10 | 14,480 | 10,860 | 798.5 | 754.2 | 678.8 |
| 11 | 5/6 | 12,066 | 887.2 | 837.9 | 754.1 |
| 12 | 4096-QAM | 3/4 | 12 | 17,376 | 13,032 | 958.2 | 905.0 | 814.5 |
| 13 | 5/6 | 14,480 | 1064.7 | 1005.6 | 905.0 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 724 | 724 | 362 | 26.6 | 25.1 | 22.6 |

**36.5.11 EHT-MCSs for 996+484+242-tone MRU**

The rate-dependent parameters for the 996+484+242-tone MRU are provided in Table 36-60 (EHT-MCSs for 996+484+242-tone MRU, NSS = 1).

**Table 36-60—EHT-MCSs for ~~(~~996+484+242~~)~~-tone MRU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
|  |  |  |  |  |  |  |  |  |  |
| 0 | BPSK | 1/2 | 1 | 1682 | 1,682 | 841 | 61.8 | 58.4 | 52.6 |
| 1 | QPSK | 1/2 | 2 | 3,364 | 1,682 | 123.7 | 116.8 | 105.1 |
| 2 | 3/4 | 2,523 | 185.5 | 175.2 | 157.7 |
| 3 | 16-QAM | 1/2 | 4 | 6,728 | 3,364 | 247.4 | 233.6 | 210.3 |
| 4 | 3/4 | 5,046 | 371.0 | 350.4 | 315.4 |
| 5 | 64-QAM | 2/3 | 6 | 10,092 | 6,728 | 494.7 | 467.2 | 420.5 |
| 6 | 3/4 | 7,569 | 556.5 | 525.6 | 473.1 |
| 7 | 5/6 | 8,410 | 618.4 | 584.0 | 525.6 |
| 8 | 256-QAM | 3/4 | 8 | 13,456 | 10,092 | 742.1 | 700.8 | 630.8 |
| 9 | 5/6 | 11,213 | 824.5 | 778.7 | 700.8 |
| 10 | 1024-QAM | 3/4 | 10 | 16,820 | 12,615 | 927.6 | 876.0 | 788.4 |
| 11 | 5/6 | 14,016 | 1030.6 | 973.3 | 876.0 |
| 12 | 4096-QAM | 3/4 | 12 | 20,184 | 15,138 | 1113.1 | 1051.3 | 946.1 |
| 13 | 5/6 | 16,820 | 1236.8 | 1168.1 | 1051.3 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 841 | 841 | 420 | 30.9 | 29.2 | 26.3 |

**36.5.12 EHT-MCSs for 2×996-tone RU**

The rate-dependent parameters for the 2×996-tone RU are provided in Table 36-61 (EHT-MCSs for 2×996-tone RU, NSS = 1).

**Table 36-61—EHT-MCSs for 2×996-tone RU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 1960 | 1,960 | 980 | 72.1 | 68.1 | 61.3 |
| 1 | QPSK | 1/2 | 2 | 3,920 | 1,960 | 144.1 | 136.1 | 122.5 |
| 2 | 3/4 | 2,940 | 216.2 | 204.2 | 183.8 |
| 3 | 16-QAM | 1/2 | 4 | 7,840 | 3,920 | 288.2 | 272.2 | 245.0 |
| 4 | 3/4 | 5,880 | 432.4 | 408.3 | 367.5 |
| 5 | 64-QAM | 2/3 | 6 | 11,760 | 7,840 | 576.5 | 544.4 | 490.0 |
| 6 | 3/4 | 8,820 | 648.5 | 612.5 | 551.3 |
| 7 | 5/6 | 9,800 | 720.6 | 680.6 | 612.5 |
| 8 | 256-QAM | 3/4 | 8 | 15,680 | 11,760 | 864.7 | 816.7 | 735.0 |
| 9 | 5/6 | 13,066 | 960.7 | 907.4 | 816.6 |
| 10 | 1024-QAM | 3/4 | 10 | 19,600 | 14,700 | 1080.9 | 1020.8 | 918.8 |
| 11 | 5/6 | 16,333 | 1201.0 | 1134.2 | 1020.8 |
| 12 | 4096-QAM | 3/4 | 12 | 23,520 | 17,640 | 1297.1 | 1225.0 | 1102.5 |
| 13 | 5/6 | 19,600 | 1441.2 | 1361.1 | 1225.0 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 980 | 980 | 490 | 36.0 | 34.0 | 30.6 |

**36.5.13 EHT-MCSs for 2×996+484-tone MRU**

The rate-dependent parameters for the 2×996+484-tone MRU are provided in Table 36-62 (EHT-MCSs for 2×996+484-tone MRU, NSS = 1).

**Table 36-62—EHT-MCSs for ~~(~~2×996+484~~)~~-tone MRU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 2428 | 2,428 | 1,214 | 89.3 | 84.3 | 75.9 |
| 1 | QPSK | 1/2 | 2 | 4,856 | 2,428 | 178.5 | 168.6 | 151.8 |
| 2 | 3/4 | 3,642 | 267.8 | 252.9 | 227.6 |
| 3 | 16-QAM | 1/2 | 4 | 9,712 | 4,856 | 357.1 | 337.2 | 303.5 |
| 4 | 3/4 | 7,284 | 535.6 | 505.8 | 455.3 |
| 5 | 64-QAM | 2/3 | 6 | 14,568 | 9,712 | 714.1 | 674.4 | 607.0 |
| 6 | 3/4 | 10,926 | 803.4 | 758.8 | 682.9 |
| 7 | 5/6 | 12,140 | 892.6 | 843.1 | 758.8 |
| 8 | 256-QAM | 3/4 | 8 | 19,424 | 14,568 | 1071.2 | 1011.7 | 910.5 |
| 9 | 5/6 | 16,186 | 1190.1 | 1124.0 | 1011.6 |
| 10 | 1024-QAM | 3/4 | 10 | 24,280 | 18,210 | 1339.0 | 1264.6 | 1138.1 |
| 11 | 5/6 | 20,233 | 1487.7 | 1405.1 | 1264.6 |
| 12 | 4096-QAM | 3/4 | 12 | 29,136 | 21,852 | 1606.8 | 1517.5 | 1365.8 |
| 13 | 5/6 | 24,280 | 1785.3 | 1686.1 | 1517.5 |
| ~~TBD~~ | ~~BPSK-DCM (TBD)~~ | ~~1/2~~ | ~~1~~ | ~~1214~~ | ~~1,214~~ | ~~607~~ | ~~44.6~~ | ~~42.2~~ | ~~37.9~~ |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | Not valid |

**36.5.14 EHT-MCSs for 3×996-tone RU**

The rate-dependent parameters for the 3×996-tone RU are provided in Table 36-63 (EHT-MCSs for 3×996-tone RU, NSS = 1).

**Table 36-63—EHT-MCSs for 3×996-tone RU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 2940 | 2,940 | 1,470 | 108.1 | 102.1 | 91.9 |
| 1 | QPSK | 1/2 | 2 | 5,880 | 2,940 | 216.2 | 204.2 | 183.8 |
| 2 | 3/4 | 4,410 | 324.3 | 306.3 | 275.6 |
| 3 | 16-QAM | 1/2 | 4 | 11,760 | 5,880 | 432.4 | 408.3 | 367.5 |
| 4 | 3/4 | 8,820 | 648.5 | 612.5 | 551.3 |
| 5 | 64-QAM | 2/3 | 6 | 17,640 | 11,760 | 864.7 | 816.7 | 735.0 |
| 6 | 3/4 | 13,230 | 972.8 | 918.8 | 826.9 |
| 7 | 5/6 | 14,700 | 1080.9 | 1020.8 | 918.8 |
| 8 | 256-QAM | 3/4 | 8 | 23,520 | 17,640 | 1297.1 | 1225.0 | 1102.5 |
| 9 | 5/6 | 19,600 | 1441.2 | 1361.1 | 1225.0 |
| 10 | 1024-QAM | 3/4 | 10 | 29,400 | 22,050 | 1621.3 | 1531.3 | 1378.1 |
| 11 | 5/6 | 24,500 | 1801.5 | 1701.4 | 1531.3 |
| 12 | 4096-QAM | 3/4 | 12 | 35,280 | 26,460 | 1945.6 | 1837.5 | 1653.8 |
| 13 | 5/6 | 29,400 | 2161.8 | 2041.7 | 1837.5 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 1470 | 1,470 | 735 | 54.0 | 51.0 | 45.9 |

**36.5.15 EHT-MCSs for 3×996+484-tone MRU**

The rate-dependent parameters for the 3×996+484-tone MRU are provided in Table 36-64 (EHT-MCSs for 3×996+484-tone MRU, NSS = 1).

**Table 36-64—EHT-MCSs for ~~(~~****3×996+484~~)~~-tone MRU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 3408 | 3,408 | 1,704 | 125.3 | 118.3 | 106.5 |
| 1 | QPSK | 1/2 | 2 | 6,816 | 3,408 | 250.6 | 236.7 | 213.0 |
| 2 | 3/4 | 5,112 | 375.9 | 355.0 | 319.5 |
| 3 | 16-QAM | 1/2 | 4 | 13,632 | 6,816 | 501.2 | 473.3 | 426.0 |
| 4 | 3/4 | 10,224 | 751.8 | 710.0 | 639.0 |
| 5 | 64-QAM | 2/3 | 6 | 20,448 | 13,632 | 1002.4 | 946.7 | 852.0 |
| 6 | 3/4 | 15,336 | 1127.6 | 1065.0 | 958.5 |
| 7 | 5/6 | 17,040 | 1252.9 | 1183.3 | 1065.0 |
| 8 | 256-QAM | 3/4 | 8 | 27,264 | 20,448 | 1503.5 | 1420.0 | 1278.0 |
| 9 | 5/6 | 22,720 | 1670.6 | 1577.8 | 1420.0 |
| 10 | 1024-QAM | 3/4 | 10 | 34,080 | 25,560 | 1879.4 | 1775.0 | 1597.5 |
| 11 | 5/6 | 28,400 | 2088.2 | 1972.2 | 1775.0 |
| 12 | 4096-QAM | 3/4 | 12 | 40,896 | 30,672 | 2255.3 | 2130.0 | 1917.0 |
| 13 | 5/6 | 34,080 | 2505.9 | 2366.7 | 2130.0 |
| ~~TBD~~ | ~~BPSK-DCM (TBD)~~ | ~~1/2~~ | ~~1~~ | ~~1704~~ | ~~1,704~~ | ~~852~~ | ~~62.6~~ | ~~59.2~~ | ~~53.3~~ |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | Not valid |

**36.5.16 EHT-MCSs for 4×996-tone RU**

The rate-dependent parameters for the 4×996-tone RU are provided in Table 36-65 (EHT-MCSs for 4×996-tone RU, NSS = 1).

**Table 36-65—EHT-MCSs for 4×996-tone RU, *NSS,u* = 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **EHT-MCS Index** | **Modulation** | ***Ru*** | ***NBPSCS,u*** | ***NSD,u*** | ***NCBPS,u*** | ***NDBPS,u*** | **Data rate (Mbps)** |
| **0.8** μ**s GI** | **1.6** μ**s GI** | **3.2** μ**s GI** |
| 0 | BPSK | 1/2 | 1 | 3920 | 3,920 | 1,960 | 144.1 | 136.1 | 122.5 |
| 1 | QPSK | 1/2 | 2 | 7,840 | 3,920 | 288.2 | 272.2 | 245.0 |
| 2 | 3/4 | 5,880 | 432.4 | 408.3 | 367.5 |
| 3 | 16-QAM | 1/2 | 4 | 15,680 | 7,840 | 576.5 | 544.4 | 490.0 |
| 4 | 3/4 | 11,760 | 864.7 | 816.7 | 735.0 |
| 5 | 64-QAM | 2/3 | 6 | 23,520 | 15,680 | 1152.9 | 1088.9 | 980.0 |
| 6 | 3/4 | 17,640 | 1297.1 | 1225.0 | 1102.5 |
| 7 | 5/6 | 19,600 | 1441.2 | 1361.1 | 1225.0 |
| 8 | 256-QAM | 3/4 | 8 | 31,360 | 23,520 | 1729.4 | 1633.3 | 1470.0 |
| 9 | 5/6 | 26,133 | 1921.5 | 1814.8 | 1633.3 |
| 10 | 1024-QAM | 3/4 | 10 | 39,200 | 29,400 | 2161.8 | 2041.7 | 1837.5 |
| 11 | 5/6 | 32,666 | 2401.9 | 2268.5 | 2041.6 |
| 12 | 4096-QAM | 3/4 | 12 | 47,040 | 35,280 | 2594.1 | 2450.0 | 2205.0 |
| 13 | 5/6 | 39,200 | 2882.4 | 2722.2 | 2450.0 |
| ~~TBD~~15 | BPSK-DCM ~~(TBD)~~ | 1/2 | 1 | 1960 | 1,960 | 980 | 72.1 | 68.1 | 61.3 |