IEEE P802.11
Wireless LANs

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| 40 MHz Channels in China 5 GHz |
| Date: 2025-9-11 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Youhan Kim | Qualcomm Technologies, Inc. |  |  | youhank@qti.qualcomm.com |
| Xiaogang Chen | Spreadtrum |  |  | xiaogang.g.chen@gmail.com |
| Bo Sun | Sanechips |  |  | sun.bo1@SANECHIPS.COM.CN |
| Ross Jian Yu | Huawei |  |  | ross.yujian@huawei.com |
| Edward Au | Huawei Technologies |  |  | edward.ks.au@gmail.com |
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Abstract

This submission proposes resolutions for the following comment(s) from LB289 on P802.11REVmf D1.0:

47

NOTE – Set the Track Changes Viewing Option in the MS Word to “All Markup” to clearly see the proposed text edits.

**Revision History:**

R0: Initial version

R1: Added coauthors and incorporated feedback

R2: Update CID number per LB289

# CID 47

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| --- | --- | --- |
| **CID****Clause****Page.Line** | **Comment** | **Proposed Change** |
| 47E.16656.25 | Table E-6 does not have operating classes to allow the primary 20 MHz channel to be at the upper half of the 40 MHz channel bandwidth in China. | Add operating classes with PrimaryChannelUpperBehavior with 40 MHz channel spacing in Table E-6. |

## Discussion

REVmf D1.0 P6656:

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Primary 20 MHz channel could be either in the lower or upper half of a 40 MHz channel. In the Operating classes table, this is denoted by PrimaryChannelLowerBehavior and PrimaryChannelUpperBehavior.

Note that Table E-6 (Operating classes in China) only has PrimaryChannelLowerBehavior for 40 MHz channels in the 5 GHz band (see operating classes 4, 5 and 6). In comparison, 40 MHz channels in the 2.4 GHz band has both PrimaryChannelLowerBehavior (operating class 8) and PrimaryChannelUpperBehavior (operating class 9).

Note also that other operating classes tables have both PrimaryChannelLowerBehavior and PrimaryChannelUpperBehavior for 40 MHz channels in the 5 GHz band. For example, Table E-4 (Global operating classes) has both PrimaryChannelLowerBehavior (operating classes 116, 119, 126) and PrimaryChannelUpperBehavior (operating classes 117, 120, 127).

Speaking with some experts on Chinese regulations, it seems the omission of PrimaryChannelUpperBehavior in Table E-6 was an unintentional oversight.

Update in R1:

During the review, Edward Au suggested to update Table D-1 (Regulatory requirement list) with the latest documents for the Chinese regulations. The proposed text update makes these changes.

## Proposed Resolution: CID 47

**REVISED**

**Instruction to TGmf Editor:**

Implement the proposed text update for CID 47 in <https://mentor.ieee.org/802.11/dcn/25/11-25-1510-02-000m-40-mhz-channels-in-china-5-ghz.docx>

**Note to commenter:**

The proposed text update adds 40 MHz operating classes with PrimaryChannelUpperBehavior in Table E-6. It also updates Table D-1 with the latest regulatory documents for China.

## Proposed Text Update: CID 47

D.1 External regulatory references

*Instruction to TGmf Editor: Update TGmf D1.0 P6629L45 as shown below.*

|  |
| --- |
| * Regulatory requirement list
 |
| Geographic area | Approval standards | Documents | Approval authority |
| … | … | … | … |
| China | Ministry of Industry and Information Technology (MIIT) | Gōngxìnbù wú (2002) 277Gōngxìnbù wú (2002) 353Gōngxìnbù wú (2005) 423Gōngxìnbù wú (2012) 620Gōngxìnbù wú (2021) 129 | MIIT |

**E.1 Country information and operating classes**

*Instruction to TGmf Editor: Update TGmf D1.0 P6656L63 as shown below.*

|  |
| --- |
| * Operating classes in China
 |
| Operating class | Global operating class (see Table E-4) | Channel starting frequency (GHz) | Channel spacing (MHz) | Channel set | Channel number of the center frequency | Behavior limits set |
| 1 | 115 | 5 | 20 | 36, 40, 44, 48 | — | UseEirpForVHTTxPowEnv |
| 2 | 118 | 5 | 20 | 52, 56, 60, 64 | — | DFS\_50\_100\_Behavior,UseEirpForVHTTxPowEnv |
| 3 | 125 | 5 | 20 | 149, 153, 157, 161, 165 | — | UseEirpForVHTTxPowEnv |
| 4 | 116 | 5 | 40 | 36, 44 | — | PrimaryChannelLowerBehaviorUseEirpForVHTTxPowEnv |
| 5 | 119 | 5 | 40 | 52, 60 | — | PrimaryChannelLowerBehaviorDFS\_50\_100\_BehaviorUseEirpForVHTTxPowEnv |
| 6 | 126 | 5 | 40 | 149, 157 | — | PrimaryChannelLowerBehaviorUseEirpForVHTTxPowEnv |
| 7 | 81 | 2.407 | 25 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 | — | LicenseExemptBehavior |
| 8 | 83 | 2.407 | 40 | 1-9 | — | LicenseExemptBehavior, PrimaryChannelLowerBehavior |
| 9 | 84 | 2.407 | 40 | 5-13 | — | LicenseExemptBehavior, PrimaryChannelUpperBehavior |
| 10 | 181 | 56.16 | 2160 | 2, 3 | — | — |
| 11 | 182 | 56.70 | 1080 | 35, 36, 37, 38 | — | — |
| 12 | 183 | 42.66 | 540 | 1, 2, 3, 4, 5, 6, 7, 8 | — | LicenseExemptBehavior |
| 13 | 184 | 47.52 | 540 | 9, 10 | — | LicenseExemptBehavior |
| 14 | 185 | 42.93 | 1080 | 11, 12, 13, 14 | — | LicenseExemptBehavior |
| 15 | 186 | 47.79 | 1080 | 15 | — | LicenseExemptBehavior |
| 16 | 117 | 5 | 40 | 40, 48 | — | PrimaryChannelUpperBehaviorUseEirpForVHTTxPowEnv |
| 17 | 120 | 5 | 40 | 56, 64 | — | PrimaryChannelUpperBehaviorDFS\_50\_100\_BehaviorUseEirpForVHTTxPowEnv |
| 18 | 127 | 5 | 40 | 153, 161 | — | PrimaryChannelUpperBehaviorUseEirpForVHTTxPowEnv |
| 19–127 | Reserved | Reserved | Reserved | Reserved | Reserved | Reserved |
| 128 | 128 | 5 | 80 | — | 42, 58, 155 | UseEirpForVHTTxPowEnv |
| 129 | 129 | 5 | 160 | — | 50 | UseEirpForVHTTxPowEnv |
| 130 | 130 | 5 | 80 | — | 42, 58, 155 | 80+UseEirpForVHTTxPowEnv |
| 131–255 | Reserved | Reserved | Reserved | Reserved | Reserved | Reserved |
| *Instruction to TGmf Editor: Add a “period” at the end of the first sentence in NOTE 1 (between “segment” and “In”).*NOTE 1—The channel spacing for operating classes 4 to 6 specifies the maximum radio bandwidth of one frequency segment. In these operating classes, the AP operates in a 20/40 MHz BSS, and the operating channel width for a non-AP STA is either 20 MHz or 40 MHz.NOTE 2—The channel spacing for operating classes 128, 129, and 130 specifies the maximum radio bandwidth of one frequency segment. |

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