Regulatory Domain Rule Changes in Cisco Wireless Release 8.10.130.0 and Cisco IOS XE Release Amsterdam 17.3.1

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Overview

This document lists the regulatory domain rule changes for Cisco Wave 2 and 802.11ax (Wi-Fi 6) access points in Cisco Wireless Release 8.10.130.0 and Cisco IOS XE Amsterdam Release 17.3.1.

The following sections describe the regulatory domain changes made for specific countries.

Russia (-R)

For Outdoor APs

The UNII-1 band is added with channels 36, 40, 44, and 48. These channels have the same limitations as for the UNII-2 and UNII-3 bands. The current -R domain at 5 GHz starts from the UNII-2 band.

For Indoor APs

- Channel 165 is added at 5 GHz with the same limitations as for the UNII-3 band.
- Output power is updated in 5 GHz. Up to 23 dBm of Equivalent Isotropic Radiated Power (EIRP) and 20 dBm of conducted total power that are currently allowed at, are available for -R 5-GHz channels for indoor Wi-Fi short-range devices (SRDs). Transmit Power Control (TPC) enablement and up to 10 mW per MHz for spectral power density EIRP.

  Note: This is applicable for all Cisco AP models. This update has already been applied to Cisco Aironet 1560 Series APs.
- 5-GHz carrier set for (-R) Russian Federation (RU):
  - Outdoor supported channels: 36, 40, 44, 48, 52, 56, 60, 64, 132, 136, 140, 144, 149, 153, 157, 161, 165, 169, and 173
  - Indoor supported channels: 36, 40, 44, 48, 52, 56, 60, 64, 132, 136, 140, 144, 149, 153, 157, 161, and 165

India (-D)

For Outdoor APs

Frequency bands 5150 to 5350 MHz, 5470 to 5725 MHz and 5725 to 5875 MHz are allowed in outdoor APs. Previously, only 5825 to 5875 MHz was allowed in the 5-GHz band.

For Indoor APs

- Frequency band 5470 to 5725 MHz is allowed in India.
- There is also a change in power spectral density and output power limits.
- 5-GHz carrier set for (-D):
  - Outdoor supported channels: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165, 169, and 173
  - Indoor supported channels: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165, 169, and 173

Indonesia (-F)

The new regulations in Indonesia are listed in the following table:

Radio Frequency Band	Maximum Effective Isotropic Radiated Power (Maximum EIRP)	Maximum Bandwidth
2400-2483.5 MHz	Indoor: 500 mW	40 MHz
	Outdoor: 4 Watts	20 MHz
5150-5250 MHz	Indoor: 200 mW	80 MHz
5250-5350 MHz	Indoor: 200 mW	80 MHz
5725-5825 MHz	Indoor: 200 mW	80 MHz
	Outdoor: 4 Watts	20 MHz

5-GHz Carrier Set for (-F) Indonesia (ID)

- Outdoor supported channels: 149, 153, 157, and 161
- Indoor supported channels: 36, 40, 44, 48, 52, 56, 60, 64, 149, 153, 157, and 161 (Internal antenna APs)
- Indoor supported channels: 149, 153, 157, and 161 (External antenna APs)

Taiwan (-T)

- The -T power table definition is updated to match new regulatory rules for Taiwan.
- UNII-1 band is added
- 5-GHz carrier set for Taiwan (-T) :
  - Outdoor supported channels: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, and 165
  - Indoor supported channels: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, and 165

Japan (-Q)

- More testing done for Channel 144.
- Channel 144 is added to -Q power table.
- 5-GHz carrier set for Japan (-Q):
  - Outdoor supported channels: 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, and 144
  - Indoor supported channels: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, and 144

Bahrain (-H)

For Indoor APs

- Cisco Catalyst 9100 APs and Wave 2 APs are mapped to the –H domain.
- Support for -E is retained to ensure backward compatibility only for Cisco Wave 2 APs.
- New regulatory mapping for Bahrain (BH):
  - 2.4 GHz: -E
  - 5 GHz: -H (-E, backward compatible)
- 5-GHz carrier set for (-H) Bahrain (BH):
  - Supported channels: 36, 40, 44, 48, 52, 56, 60, 64, 149, 153, 157, 161, and 165
- 2.4-GHz carrier set for (-E) Bahrain (BH):
  - Supported channels: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13

Egypt (-I)

For Outdoor APs

- Added support for –I domain.
- New regulatory mapping for Egypt (EG):
  - 2.4 GHz: -E
  - 5 GHz: -I
- 5-GHz carrier set for (-I) Egypt (EG):
  - Supported channels: 36, 40, 44, 48, 52, 56, 60, and 64
- 2.4-GHz carrier set for (-E) Egypt (EG):
  - Supported channels: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13

Egypt (-I)

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Egypt (-I)

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