



Specification

Z-Wave Alliance Frequency and region list

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| | |
| Version: | 0.5.2 |
| Description: | List of Z-Wave frequency allocation in different regions |
| Written By: | CSWG |
| Date: | 2022/07/05 |
| Reviewed By: | Technical Committee |
| Restrictions: | Public |

Approved by:

Technical Committee

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REVISION RECORD

| Doc. Rev | Date | By | Pages affected | Brief description of changes |
|----------|------------|--------------|----------------------------|--|
| 0.1 | 2021/04/08 | CSWG | All | Initial version |
| 0.5 | 2021/08/23 | CSWG | Front page, header, footer | Cleanup for Alliance review |
| 0.5.1 | 2021/10/26 | Silicon Labs | | CSWG review done. Adding Pakistan region as requested in review comment. |
| 0.5.2 | 2022/03/16 | Silicon Labs | | Nicaragua and Dominican Republic frequency allocations obsoleted |
| 0.5.2 | 2022/07/05 | TC | | Approved for Publication |

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1 ABBREVIATIONS

| Abbreviation | Explanation |
|--------------|-----------------|
| RF | Radio Frequency |

2 INTRODUCTION

2.1 Purpose

This document lists the approved regions and frequencies within the Z-Wave ecosystem.

This document is the basis for the selections available in the Certification Form

2.2 Audience and prerequisites

Z-Wave protocol and application developers

3 Z-WAVE COUNTRY, REGIONS AND FREQUENCIES

Table 1 Z-Wave frequency Plans

| Frequency Plan | Channel Config * | Center Frequency (MHz) | | | Data Rate * | | |
|----------------|------------------|------------------------|----------------|----------------|----------------|----------------|----------------|
| | | F ₁ | F ₂ | F ₃ | F ₁ | F ₂ | F ₃ |
| ANZ | 2 | 919.80 | 921.40 | -- | R3 | R2+R1 | -- |
| CN | 2 | 868.40 | -- | -- | R1+R2+R3 | -- | -- |
| EU | 2 | 869.85 | 868.40 | -- | R3 | R2+R1 | -- |
| HK | 2 | 919.80 | 919.80 | -- | R3 | R2+R1 | -- |
| IL | 2 | 916.00 | -- | -- | R1+R2+R3 | -- | -- |
| IN | 2 | 865.20 | -- | -- | R1+R2+R3 | -- | -- |
| JP | 3 | 922.50 | 923.90 | 926.30 | R3 | R3 | R3 |
| KR | 3 | 920.90 | 921.70 | 923.10 | R3 | R3 | R3 |
| RU | 2 | 869.00 | -- | -- | R1+R2+R3 | -- | -- |
| US | 2 | 916.00 | 908.40 | -- | R3 | R2+R1 | -- |

* Refer to ITU-T G.9959

Table 2 Country/Region frequency list

| Country/Region | Standard | Frequency plan |
|------------------------|---|----------------|
| Algeria | EN 300 220 | HK |
| Argentina | FCC CFR47 Part 15.249 | US |
| Armenia | EN 300 220 | EU |
| Australia | AS/NZS 4268 | ANZ |
| Bahamas | FCC CFR47 Part 15.249 | US |
| Bahrain | EN 300 220 | EU |
| Barbados | FCC CFR47 Part 15.249 | US |
| Bermuda | FCC CFR47 Part 15.249 | US |
| Bolivia | FCC CFR47 Part 15.249 | US |
| Brazil | ANATEL Resolution 506 | ANZ |
| British Virgin Islands | FCC CFR47 Part 15.249 | US |
| Canada | FCC CFR47 Part 15.249 | US |
| Cayman Islands | FCC CFR47 Part 15.249 | US |
| CEPT* | EN 300 220 | EU |
| Cyprus | | |
| Moldova | | |
| Chile | AS/NZS 4268 | ANZ |
| China | CNAS / EN 300 220 / CMIIT 2016DJ7232 | CN |
| Colombia | FCC CFR47 Part 15.249 | US |

| | | |
|---------------------------|--|------------------|
| Costa Rica | ARIB T96, ARIB STD-T108 | JP |
| Dominican Republic | AS/NZS 4268 | ANZ ^a |
| Ecuador | ARCOTEL Resolution 12-09-ARCOTEL-2107, Note EQA.45 | ANZ |
| Egypt | EN 300 220 | EU |
| El Salvador | AS/NZS 4268 | ANZ |
| French Guiana | EN 300 220 | EU |
| Georgia | EN 300 220 | EU |
| Guatemala | FCC CFR47 Part 15.249 | US |
| Haiti | FCC CFR47 Part 15.249 | US |
| Honduras | FCC CFR47 Part 15.249 | US |
| Hong Kong | HKTA 1035 | HK |
| India | CSR 564 (E) | IN |
| Indonesia | Regulation No. 161 Tahun 2019 | ANZ |
| Iraq | EN 300 220 | EU |
| Israel | | IL |
| Jamaica | FCC CFR47 Part 15.249 | US |
| Japan | ARIB STD-T108 | JP |
| Jordan | EN 300 220 | EU |
| Kazakstan | EN 300 220 | EU |
| Kuwait | EN 300 220 | EU |
| Lebanon | EN 300 220 | EU |
| Libya | EN 300 220 | EU |
| Macau | Clause 2, Article 58-2 of Radio Waves Act | KR |
| Malaysia | MCMC MTSFBTC T007: 2014 | ANZ |
| Maldives | EN 300 220 | EU |
| Mauritius | EN 300 220 | EU |
| Mexico | FCC CFR47 Part 15.249 | US |
| Morocco | CNAS / EN 300 220 / CMIIT 2016DJ7232 | CN |
| New Zealand | AS/NZS 4268 | ANZ |
| Nicaragua | FCC CFR47 Part 15.249 | US ^a |
| Nigeria | EN 300 220 | EU |
| Oman | EN 300 220 | EU |
| Pakistan | SRO 287(I)/2016 | IN |
| Panama | FCC CFR47 Part 15.249 | US |
| Paraguay | AS/NZS 4268 | ANZ |
| Peru | AS/NZS 4268 | ANZ |
| Philippines | EN 300 220 | EU |
| Qatar | EN 300 220 | EU |
| Russia | GKRCh/EN 300 220 | RU |
| Saudi Arabia | EN 300 220 | EU |
| Singapore | IMDA TS SRD | KR |
| South Africa | ICASA/EN 300 220 | EU |

| | | |
|-----------------------------------|---|-----|
| South Korea | Clause 2, Article 58-2 of Radio Waves Act | KR |
| St Kitts & Nevis | FCC CFR47 Part 15.249 | US |
| Suriname | FCC CFR47 Part 15.249 | US |
| Taiwan | Changed from JP May 2017 | KR |
| Thailand | Clause 2, Article 58-2 of Radio Waves Act | KR |
| Trinidad & Tabago | FCC CFR47 Part 15.249 | US |
| Turkmenistan | EN 300 220 | EU |
| Turks & Caicos Islands | FCC CFR47 Part 15.249 | US |
| UAE | EN 300 220 | EU |
| Uruguay | AS/NZS 4268 | ANZ |
| USA | FCC CFR47 Part 15.249 | US |
| Uzbekistan | Uz.SMT.01.334.1961745 | EU |
| Venezuela | | ANZ |
| Vietnam | AS/NZS 4268 | ANZ |
| Yemen | EN 300 220 | EU |

^a Frequency allocation obsoleted because of changes in locate RF regulatory rules. Z-Wave Alliance is working on a solution.

4 Z-WAVE LONG RANGE COUNTRIES, REGIONS AND FREQUENCIES

Table 3 Z-Wave frequency Plans

| Frequency Plan | Channel Config * | Center Frequency (MHz) | | Data Rate * | |
|--|------------------|------------------------|------------------|-------------|------|
| | | FLR ₁ | FLR ₂ | FLR1 | FLR2 |
| USLR | 1, 2 | 912.00 | 920.00 | LR1 | LR1 |
| * Refer to ZWA_Z-Wave Long Range PHY and MAC Layer Specification_SPE | | | | | |

Table 4 Country/Region frequency list

| Country/Region | Standard | Frequency plan |
|----------------|-----------------------|----------------|
| USA | FCC CFR47 Part 15.247 | USLR |

5 HOW TO ADD A REGION OR COUNTRY TO THE LIST

Existing frequency plans must be used whenever possible, but any member of the Z-Wave Alliance may request support for a new country or region within the Z-Wave eco-system.

Member must provide references to the country/region's RF regulatory and email it to the Core Stack Working Group CSWG-chair@sdmembers.z-wavealliance.org for approval.

Once approved the CSWG will update and share this list with the Product Certification & Ecosystem Working Group for certification update.

REFERENCES

- [1] ITU-T, G.9959 (01/2015)
- [3] Z-Wave Alliance, ZWA_Z-Wave Long Range PHY and MAC Layer Specification