



Z-Wave Alliance Frequency and
Region List

Release 1.9.0

Z-Wave Alliance

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1 Preamble

1.1 Description

List of Z-Wave frequency allocation in different regions

Reviewed and approved by the Z-Wave Alliance Core Stack Working Group (CSWG).

1.2 Disclaimer

THIS SPECIFICATION IS BEING OFFERED WITHOUT ANY WARRANTY WHATSOEVER, AND IN PARTICULAR, ANY WARRANTY OF NON-INFRINGEMENT IS EXPRESSLY DISCLAIMED. ANY USE OF THIS SPECIFICATION SHALL BE MADE ENTIRELY AT THE IMPLEMENTER'S OWN RISK, AND NEITHER THE ALLIANCE, NOR ANY OF ITS MEMBERS OR SUBMITTERS, SHALL HAVE ANY LIABILITY WHATSOEVER TO ANY IMPLEMENTER OR THIRD PARTY FOR ANY DAMAGES OF ANY NATURE WHATSOEVER, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF THIS SPECIFICATION.

1.3 Audience and Requirements

The audience of this document is the Z-Wave Alliance members and Z-Wave developers.

Recipients of this document are requested to submit, with their comments, notification of any relevant patent claims or other intellectual property rights of which they may be aware that might be infringed by any implementation of the Specification set forth in this document, and to provide supporting documentation.

1.4 Revision Record

Table 1.1: Revision History

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	None	CSWG review done. Adding Pakistan region as requested in review comment.
0.5.2	2022/03/16	Silicon Labs	None	Nicaragua and Dominican Republic frequency allocations obsoleted
0.5.3	2023/04/24	Silicon Labs	Section 4	Adding Z-Wave LR for Canada and renaming USLR to US_LR
0.5.4	2023/06/06	Silicon Labs	Table 3, Table 4	Added Z-Wave Long Range for Europe
0.5.5	2024/10/22	CSWG	All	Conversion from Microsoft Word to RST.
0.5.6	2025/01/16	CSWG	Table 4.1	Shift EU_LR frequency to comply with ETSI regulation.
0.7.0	2025/01/23	CSWG	n/a	Ready for the TC review.
0.9.0	2025/01/31	CSWG	n/a	Approved by TC. Ready for the IPR review.
1.0.0	2025/04/16	CSWG	n/a	Approved for Publication.
1.5.0	2025/03/11	MK Logic	Table Table 3.2	Fixed table header.
1.5.1	2025/03/21	CSWG	Table 3.2	Add Kenya in the Z-Wave country list.
1.7.0	2025/03/25	CSWG	n/a	Ready for the TC review.
1.9.0	2025/05/30	TC	n/a	Approved for IPR review.

1.5 Abbreviations

Table 1.2: 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.

3 Z-WAVE COUNTRY, REGIONS AND FREQUENCIES

Table 3.1: Z-Wave Frequency Plans

Frequency Plan	Channel Config*	Center Frequency (MHz)			Data Rate*		
		F1	F2	F3	F1	F2	F3
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 3.2: 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* Cyprus Moldova	EN 300 220	EU
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
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

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Country/Region	Standard	Frequency Plan
Japan	ARIB STD-T108	JP
Jordan	EN 300 220	EU
Kazakhstan	EN 300 220	EU
Kenya	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
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 & Tobago	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

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

4 Z-WAVE LONG RANGE COUNTRIES, REGIONS AND FREQUENCIES

Table 4.1: Z-Wave Long Range Frequency Plans

Frequency Plan	Channel Config*	Center Frequency (MHz)		Data Rate*	
		FLR1	FLR2	FLR1	FLF2
US_LR	1, 2	912.00	920.00	LR1	LR1
EU_LR	1, 2	864.00	866.00	LR1	LR1
* Refer to ZWA_Z-Wave Long Range PHY and MAC Layer Specification_SPE					

Table 4.2: Z-Wave Long Range Country-Region Frequency List

Country/Region	Standard	Frequency Plan
USA	FCC CFR47 Part 15.247	US_LR
Canada	FCC CFR47 Part 15.247	US_LR
Europe*	EN 300 220	EU_LR
* Note that there are special regulatory requirements for LBT, duty cycle and transmit times in this region		

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).
- [2] Z-Wave Alliance. ZWA_Z-Wave Long Range PHY and MAC Layer Specification.