

WiMAX Forum Spectrum and Regulatory Database

Technical Information

Last Update: 05 August 2009

Is WiMAX allowed in this country?: Yes
3.5 GHz band is allowed for WiMAX use.

Other bands of WiMAX interest are allocated as follows:

- 2300-2400 MHz: SAP/SAB
- 2500-2690 MHz: IMT-2000/UMTS, SAP/SAB (2520-2670 MHz). The use of the band is under public consultation, it is proposed to be allocated for the development of electronic communications in accordance with the Decision of the Commission 2008/477/EC.
- 3300-3400 MHz: RADIOLOCATION.
- 3600-3800 MHz: Point-to-point radio links.
- 5725-5830 MHz: Non specific SRDs, Road Transport Telematics Services (RTTT), ISM.
- 5830-5850 MHz: Non specific SRDs, ISM.

2.5-2.69 GHz

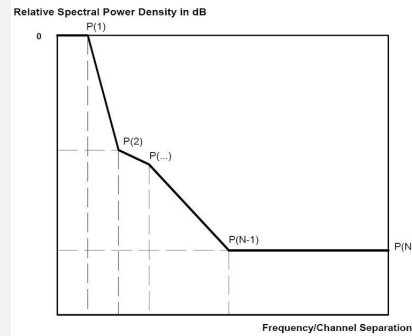
Frequencies	2500-2690 MHz
Usage restrictions	The use of the band is under public consultation, the band is proposed to be allocated for the development of electronic communications in accordance with the Decision of the Commission 2008/477/EC. This band is considered part of WAPECS and it will be allowed for fixed and mobile services in the principle of technological neutrality. The SAP/SAB use will be removed.

3.4-3.6 GHz

Frequencies	3400-3600 MHz
Guard bands	3.5 MHz guard bands between blocks.
Channelization	This band is divided in 8 paired blocks: 1.- 3410.0 MHz - 3438.0 MHz and 3510.0 MHz - 3538.0 MHz 2.- 3476.5 MHz - 3497.5 MHz and 3576.5 MHz - 3597.5 MHz 3.- 3441.5 MHz - 3455.5 MHz and 3541.5 MHz - 3555.5 MHz 4.- 3459.0 MHz - 3473.0 MHz and 3559.0 MHz - 3573.0 MHz
Maximum output power	No restrictions.
Mobile/Nomadic/Fixed and primary/secondary uses	Fixed primary. Mobile not allowed. Nomadic use is considered as mobile. The mobile use of the band is under public consultation to be in accordance with the Decision of the Commission 2008/411/EC.
Duplex modes	No restrictions.
Usage restrictions	Licensed band. This technology can only be marketed by licensed companies.

Spectrum mask

Adjacent Channel Power Spectrum Mask



Power Spectrum Reference Points

F/CHS = EqC-EMO δ	EqC-PET = 0						
	0	0,5	0,5	0,71	1,06	2	2,5
2	0 dB	0 dB	-8 dB	-25 dB	-27 dB	-50 dB	-50 dB
4	0 dB	0 dB	-8 dB	-27 dB	-32 dB	-50 dB	-50 dB
6	0 dB	0 dB	-8 dB	-32 dB	-38 dB	-50 dB	-50 dB

The spectrum masks are defined by a number of turning points in the mask, between which the mask is linearly interpolated. The number of points varies according to the EqC-PET and EqC-EMO.

The frequency of each turning point is expressed as F/CHS, where F is the frequency offset from the carrier centre frequency (f) and CHS is the supplier stated Channel Separation (EqC-CHS).

The 0 dB level shown on the spectrum masks is the maximum of the modulated spectrum density excluding any residual carrier resulting from imperfection in the modulation process.

The equipment shall conform with the mask with the total output power set to the nominal output power declared by the manufacturer.

Note:
Primary Equipment Type (EqC-PET);
Equivalent Modulation Order (EqC-EMO);

More information in ETSI EN 302 328-2