Communications Regulatory Authority
State of Qatar

هيئة تنظيم الاتصالات
دولة قطر

Class License for Short Range Devices (SRD)

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Dated October 13, 2024

For the Communications Regulatory Authority (CRA)
Signed by

Eng. Ahmad Abdulla AlMuslemani
President of the Communications Regulatory Authority

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1. Introduction

1.1 The Communications Regulatory Authority "**CRA**" is the responsible authority for regulating and managing all the affairs relating to use of the radio spectrum as well as establishing an effective approval regime for telecommunications equipment in accordance with the Emiri Decision No. (42) of 2014 of establishing the CRA, the Decree Law No. (34) of 2006 on the promulgation of the Telecommunications Law "**Telecommunications Law**" as amended by Law No. (17) of 2017, the Executive By-Law No. (1) of 2009 for the Telecommunications Law "**Executive By-Law**" and other related laws.

1.2 As such, CRA has the powers and authorities of:

1.2.1 granting, modifying, renewing, suspending, and revoking Class Licenses, Radio Spectrum Licenses and Authorizations and determining the conditions and procedures for their issuance.

1.2.2 developing the necessary procedures for the approval of the telecommunications equipment or their types for attachment to telecommunications networks in the State of Qatar including approval of the equipment previously approved by other organizations or other countries.

2. Relevant Legal Provisions

2.1 Article (4) of the Telecommunications Law states that CRA shall develop and manage the plan for radio spectrum and for other scarce resources to ensure the optimal use of such resources and maximize revenues generated from them within the limits specified by international rules.

2.2 Article (10) of the Telecommunications Law states that CRA shall define the conditions under which Individual and Class licenses shall be issued.

2.3 Article (15) of the Telecommunications Law states that no person shall operate any radio-communications equipment or make any use of radio frequencies, without a Radio Spectrum License or a Radio Frequency Authorization from the CRA.

2.4 Article (9), (10), (11), (12) and (14) of the Executive By-Law, establishes the framework to be followed by CRA when defining the terms and conditions of a Class License.

2.5 In accordance with Article (31) of the Executive By-Law, CRA shall establish the terms and conditions of all Licenses and shall monitor compliance by Licensees with the terms and conditions of their Licenses. CRA may take any measures and procedures in this regard. CRA may establish the criteria through Radio Spectrum Regulations in order to determine what radio

spectrum should be available for common use, and this may be awarded by means of a Class License.

3. Grant of License

3.1 CRA hereby grants this Class License pursuant to the above-mentioned articles of the Telecommunications Law and Executive By-Law. This Class License enables any person to possess, operate, install and use Short Range Device(s) (hereinafter referred to as "SRD") without that person having to apply for this Class License. Such a person is hereinafter referred to as the "**Licensee**".

3.2 The Licensee is hereby authorized to import and operate SRDs within the State of Qatar and use the frequency(ies) or the frequency band(s) assigned in Annexure (2) of this Class License on a non-exclusive basis provided that the Licensee operates in the authorized frequency bands and transmits the corresponding output power levels as stated in Annexure (2) of this Class License and provided that type approval is obtained from CRA in accordance with section (6) of this Class License.

3.3 The Licensee must, in addition to complying with the terms and conditions of this Class License and its annexures, comply with the provisions of the Telecommunications Law, Executive By-Law relevant legislation and any regulations, decisions, orders, rules, instructions and notices issued by CRA (hereinafter, collectively referred to as the "**Applicable Regulatory Framework (ARF)**".

3.4 This Class License provides the minimum technical and regulatory requirements and operating specifications of SRD across different types of applications. Annexure (2) contains the list of various types of applications for SRDs, the applicable frequencies, Field Strength / RF Output Power, test reference and other related information which the Licensee must comply with in order to import and/or use SRDs.

4. Definitions

The words and expressions in this License shall have the meanings ascribed to them in the Telecommunications Law, the Applicable Regulatory Framework and this Class License, including the definitions set out in Annexure (1).

5. Operation of the Short Range Devices

5.1 The Licensee is hereby authorized to use and operate SRDs provided that the Licensee operates such devices within the authorized frequency band(s) or frequency(ies) within the corresponding output power levels stipulated in

Annexure (2) of this Class License.

5.2 The use of any SRDs above the maximum power is not allowed. However, if the Licensee wishes to use any of the SRDs above the permitted maximum limit, the Licensee must follow a separate license application procedure and must obtain the required spectrum license from CRA pursuant to CRA's regulations as published on its official website.

5.3 Use of SRD as stipulated in Annexure (2) is intended to operate in unprotected and shared frequency bands. The Licensee must ensure that its operation shall not cause harmful interference to other authorized radio-communications services and must tolerate any interference caused by other radio-communication services, electrical or electronic equipment.

5.4 The SRD must not be integrated with any external or readily accessible control that permits the adjustment of its operation in a manner inconsistent with this Class License, in particular, Annexure (2) of it.

5.5 CRA may amend or update Annexure (2) of this Class License in order to respond to any new developments in the market or technological advancements. The Licensee must comply with any new amendments introduced to Annexure (2) as published on CRA's official website from time to time.

6. Radio Spectrum

6.1 The Licensee is hereby authorized to use the specified radio frequencies set out in Annexure (2) subject to the terms and conditions of this Class License, its annexures and the Applicable Regulatory Framework. This Class License does not grant the Licensee any ownership interest or property rights in the radio frequencies.

6.2 CRA may modify or cancel spectrum allocations in accordance with the Applicable Regulatory Framework or the National Frequency Allocation Plan of Qatar (NFAP).

6.3 In accordance with Article (17) of the Telecommunications Law, the Licensee must not misuse the licensed radio spectrum nor use it for an unauthorized purpose.

7. Type Approval

7.1 The SRD(s) prior to being imported for marketing or sold in the State of Qatar shall be Type Approved by CRA in accordance with the "Type Approval Policy for Radio Equipment and Telecommunications Terminal Equipment" and the "Type Approval Guidelines for Radio Equipment and Telecommunications

Terminal Equipment" published on CRA's official website.

7.2 The Licensee must not manufacture or import for the purposes of marketing, sell or distribute SRDs that are not type approved by CRA.

7.3 In accordance with the preceding paragraphs (6.1) and (6.2), the Licensee must ensure that the SRDs are type approved in accordance with the list of approved telecoms equipment by CRA published on CRA's official website.

7.4 If the SRD in question is not stated in the list of approved equipment by CRA, then that person must apply, request and obtain type approval certificate from CRA.

7.5 Companies or persons wishing to sell or import SRDs for marketing purposes or commercially deal with the SRDs must register with CRA to obtain "Import Authorization for Radio and Telecom Terminals RTTE" and must renew their registration annually in accordance with the procedures published on CRA's official website. After obtaining the type approval along with the Import Authorization from CRA, the Licensee may import and/or sell the devices in the State of Qatar.

7.6 The SRD(s) may be imported or used by any person without seeking type approval if is to be used for private use only and provided that it is in accordance with the criteria and standards adopted by CRA.

8. Safety Measures and Standards

The Licensee must implement any measures prescribed by the Applicable Regulatory Framework and other safety measures regarding the installation, operation and usage of all SRDs as stipulated in the "Type Approval Policy for Radio Equipment and Telecommunications Terminal Equipment" and the "Type Approval Guidelines for Radio Equipment and Telecommunications Terminal Equipment".

9. License Term

This License must remain in force provided that the Licensee complies with the terms and conditions of this Class License and the Applicable Regulatory Framework.

10. License Fees

10.1 There are no License fees associated with this Class License.

10.2 The Licensee must remain responsible for all costs, expenses or any other financial commitments arising out of this Class License and/or use of the SRDs in accordance with the Applicable Regulatory Framework.

11. Other Compliance Obligations of the Licensee

11.1 The Licensee must, at all times, comply with the terms and conditions stated herein and the Applicable Regulatory Framework, including any amendments thereto that may be adopted by CRA from time to time.

11.2 The Licensee must comply with any requirements stipulated under the laws of the State of Qatar, including the regulations and decisions issued by the relevant authorities in accordance with the applicable laws.

11.3 The Licensee must obtain any other necessary approvals as may be required by other competent authorities in the State of Qatar in accordance with the applicable laws of the State of Qatar.

12. Breach of License

12.1 The Licensee shall be subject to penalties as provided for in the Applicable Regulatory Framework if the Licensee fails to comply with the terms and conditions set out herein. Any Failure will result in CRA taking enforcement action against the Licensee in accordance with the Applicable Regulatory Framework including initiating criminal proceedings in accordance with Articles (66), (67), (68) and (70) of the Telecommunications Law.

12.2 Without prejudice to any other enforcement powers of CRA or specific penalties set out in the Applicable Regulatory Framework, the Licensee can lose its right to own, import and operate SRDs if the Licensee commits repeated violations of this Class license terms.

13. Security Requirements

The Licensee must comply with the requirements of the authorized agencies of the State of Qatar relating to national security and with the directions of governmental bodies in cases of public emergencies, and it shall implement the orders and instructions issued by CRA pertaining to same.

14. Access to Premises

The employees of CRA who are vested with powers of judicial seizure in accordance with Article (63) of the Telecommunications Law shall seize and prove crimes committed in violation of the rules of the Telecommunications Law.

In this respect, in accordance with the Law, the Licensee shall allow them to enter and

inspect, the related premises, have access to records and documents and inspect equipment and SRD(s) or any other related things and request data or clarifications as they deem necessary.

15. Request of Information

In accordance with Chapter (13) of the Executive Telecommunications By-Law, CRA may require the Licensee to provide to it information necessary for exercising its powers, and the Licensee must provide the information to CRA on request and in the form, manner and time specified by CRA.

16. Modification and Amendment

CRA, based upon its discretion, may modify, by deletion or addition, any terms and conditions in this Class License. The amendments shall be published on the official website of CRA. The Licensee is under the obligation to comply with any such amendments.

17. Governing Law and Language of License

This Class License is rendered in the Arabic and English languages. The Arabic language for this License is the official binding language. The License shall be governed by and interpreted in accordance with the laws of the State of Qatar.

ANNEXURE (1) – Definitions

The following terms and expressions shall have the meanings assigned to each of them:

Active Medical Implant Applications: Are part of a medical implant communication system (MICS) for use with implanted medical devices, like pacemakers, implantable defibrillators, nerve stimulators, and other types of implanted devices. MICS uses transceiver modules for radiofrequency communication between an external device referred to as a programmer/ controller and a medical implant placed within a human or animal body.

Adaptive Frequency Agility (AFA): Is the capability of an equipment to dynamically change the temporary operational channel within its available frequencies for proper operation.

Alarms: The use of radiocommunication for indicating an alarm condition at a distant location.

Applicable Regulatory Framework: The Telecommunications Law and its By-Law and any other rules and regulations, decisions, orders, policies, guidelines, rules, instructions, or notices issued by CRA as well as this license terms and conditions and the relevant laws of the State of Qatar.

Class License: The License granted in accordance with the provisions of the Telecommunications Law for a certain class of persons and/or activities without that person having to apply for the License.

Clear Channel Assessment (CCA): Is a procedure of sensing the operating channel to determine whether it is occupied by a transmission or not.

Detect-And-Avoid (DAA): Is an interference mitigation technique designed for UWB devices to protect active radio communication services operating on the same bands.

Duty Cycle: Is defined as the ratio, expressed as a percentage, of the maximum transmitter "on" time monitored over one hour, relative to a one-hour period.

Effective Isotropic Radiated Power (e.i.r.p.): The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (absolute or isotropic gain).

Effective Radiated Power (e.r.p.): The product of the power supplied to the antenna and its gain relative to a half-dipole in a given direction.

Frequency Band: A portion of the radio spectrum, which starts at a particular frequency and ends at another particular frequency.

Harmful Interference: Means interference which impairs the functioning of a radio communications or which materially degrades or obstructs or repeatedly interrupts radio communication service operating in accordance with the most recent version of ITU Radio Regulations/ ITU Recommendations.

Inductive Applications: Inductive loop systems are communication systems based on magnetic fields, generally at low RF frequencies. Inductive applications include, for example, car immobilizers, car access systems or car detectors, animal identification, alarm systems, item management and logistic systems, cable detection, waste management, personal identification, wireless voice links, access control, proximity sensors, anti-theft systems including RF anti-theft induction systems, data transfer to handheld devices, automatic article identification, wireless control systems and automatic road tolling.

Industrial, Scientific and Medical (ISM): Applications (of radio frequency energy) Operation of equipment or appliances designed to generate and use local radio frequency energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of telecommunications.

Listen-before-Talk (LBT): Is a mechanism by which an equipment applies Clear Channel Assessment (CCA) before transmission.

Low Duty Cycle (LDC): Is an interference mitigation technique designed for UWB devices to protect active radio communication services operating on the same bands.

Maximum Mean e.i.r.p Spectral Density: The maximum average value of the product of the transmitted power spectral density and the gain of the omnidirectional or sectoral antenna in the direction of the system.

Maximum Transmit Power: The maximum power at the transmitter output for a single traffic channel.

Mean Power: The average power supplied to the antenna transmission line by a transmitter during an interval of time sufficiently long compared with the lowest frequency encountered in the modulation taken under normal operating conditions.

Medical Body Area Network (MBANS): Are short-range low-power wireless networks, consisting of a plurality of body-worn sensor devices and/or actuator devices and a hub device placed on/around the human body.

Model Control: Model control covers the application of radio model control equipment, which is solely for the purpose of controlling the movement of the model (toy), in the air, on land or over or under the water surface.

National Spectrum Plan: The plan established for the allocation and use of radio spectrum by the concerned entities.

Non-Specific Short Range Devices: Covers all kinds of radio devices, regardless of the application or the purpose, which fulfil the technical conditions as specified for a given frequency band. Typical uses include telemetry, telecommand, alarms, data transmissions in general and other similar applications.

Person: A natural or juridical person of any type or form.

Radio Determination Applications: Are equipment that determines the position, velocity and/or other characteristics of an object, or that obtain information relating to these parameters, by means of the propagation properties of radio waves.

Radio Frequency Identification (RFID) Applications: Are equipment that carries data in suitable transponders, generally known as tags, and retrieve data, by hand- or machine-readable means, at a suitable time and place to satisfy specific application needs.

Radio Microphones: Radio microphones (also referred to as wireless microphones or cordless microphones) are small, low-power (50 mW or less) unidirectional transmitters designed to be worn on the body, or hand-held, for the transmission of sound over short distances for personal use. The receivers are more tailored to specific uses and may range in size from small hand units to rack-mounted modules as part of a multichannel system.

Radio Spectrum: Radio frequencies capable of being used in radio communications in accordance with the publications of the International Telecommunications Union.

Short Range Devices (SRD): The term SRD is intended to cover the radio transmitters which provide either uni-directional or bi-directional communications, which have low capability of causing interference to other radio equipment. SRDs are used with either integral, dedicated or external antennas, and all modes of modulation are permitted subject to relevant standards. Applications include, but are not exhaustively, tele-command, alarms data communication, meter reading, asset tracking, aids for hearing, movement detection and alert, remote controls and inductive systems.

Telecommand: The use of radiocommunication for the transmission of signals to initiate, modify or terminate functions of equipment at a distance.

Telecommunications Executive By-Law: The Executive Telecommunications By-Law No. (1) of 2009.

Telecommunications Law: Telecommunications Law of the State of Qatar No. (34) of 2006, as amended by Law 17 of 2017.

Telemetry: The use of radiocommunication for indicating or recording data at a distance.

Transmit Power Control (TPC): Technique in which the transmitter output power is controlled, resulting in reduced interference to other systems.

Transport and Traffic Telematics: Are defined as systems providing data communication between two or more road vehicles and between road vehicles and the road infrastructure for various information-based travel and transport applications, including automatic toll-collection, route and parking guidance, collision avoidance, communication from and to users as well as radar system installations.

Type Approval: Approval is the procedure by which CRA authorizes RTTE to be imported into or to be used in Qatar and involves verification of the equipment's compliance with the applicable standards and requirements.

Wireless Audio Applications: Applications for wireless audio systems include cordless loudspeakers, cordless headphones, cordless headphones for portable use, i.e., portable compact disc players, cassette decks or radio receivers carried on a person, cordless headphones for use in a vehicle, for example for use with a radio or mobile telephone, etc., in-ear monitoring, for use in concerts or other stage productions.

ANNEXURE (2) – Technical Requirements for Short Range Devices (SRD)

1. Short Range Devices (SRDs)

SRD					
Applicable Sub section of Framework	Typical Application Type	Authorized Frequency Bands/ Frequencies (Channel Spacing)	Maximum Strength/ RF Output Power	Harmonized Standard Reference	Remarks (Emission Type, Duty Cycle, other restrictions
Non-specific Short Range Devices	ISM	13553 - 13567 kHz	e.r.p 10 mW	EN 300 330	
		26957 - 27283 kHz	e.r.p 10mW	EN 300 220 EN 300 330	
		26990 - 27000 kHz	e.r.p100 mW	EN 300 220	≤ 0.1 % duty cycle
		27040 - 27050 kHz	e.r.p100 mW		≤ 0.1 % duty cycle
		27090 - 27100 kHz	e.r.p100 mW		≤ 0.1 % duty cycle
		27140 - 27150 kHz	e.r.p100 mW		≤ 0.1 % duty cycle
		27190 - 27200 kHz	e.r.p 100 mW		≤ 0.1 % duty cycle
		40.66 - 40.7 MHz	e.r.p 10mW		
	Non-specific Short Range Devices	863 - 865 MHz	e.r.p 25 mW	EN 300 220	Duty cycle ≤ 0.1% or LBT+AFA
		865 - 868 MHz	e.r.p 25 mW		Duty cycle ≤ 1% or LBT+AFA
		868 - 868.6 MHz	e.r.p 25mW		Duty cycle ≤ 1% or LBT+AFA

		868.7 - 869.2 MHz	e.r.p 25mW		Duty cycle ≤ 0.1% or BT+AFA
		869.4 - 869.65 MHz	e.r.p 500mW		Duty cycle ≤10% or LBT+AFA
		869.7 - 870 MHz	e.r.p 5mW or e.r.p 25mW	EN 300 220	No spectrum access and mitigation requirements for e.r.p of 5mW; Duty cycle ≤ 1% or LBT+AFA for e.r.p of 25mW
	M2M Applications	863 - 870 MHz	e.r.p 25mW	EN 300 220	Duty cycle ≤ 0.1% or LBT+AFA
		433.05 - 434.79 MHz	e.r.p 10mW		Duty cycle ≤ 10%
		870 - 874.4 MHz	e.r.p 500mW	EN 303 204	Adaptive Power Control (APC) required for spectrum sharing and a Duty Cycle of ≤ 10% for the Network Access Point (NAP) and ≤ 2.5% for others. APC is required to reduce the equipment's ERP from its maximum to ≤ 5 mW. All nomadic and mobile devices within the data network shall be controlled by a master network access point (NAP). Channel spacing ≤ 200 kHz.
		915 - 919.4MHz	e.r.p 25 mW	EN 300 220	Duty Cycle ≤ 1%; Channel spacing of 600 kHz. All nomadic and mobile devices within the data network shall

					be controlled by a master network access point (NAP).
	Non-specific Short Range Devices	433.05 - 434.79 MHz	e.r.p. 10mW		Duty cycle ≤ 10%
	Non-specific Short Range Devices	5725 - 5875 MHz	e.i.r.p 25mW	EN 300 440	
Non-specific Short Range Devices	ISM & Bluetooth	2400 - 2483.5 MHz	e.i.r.p 10mW	EN 300 440	Indoor use only.
			e.i.r.p 100mW	EN 300 328	
Non-specific Short Range Devices	Non-specific Short Range Devices	24 - 24.25 GHz	e.i.r.p 100mW	EN 300 440	
		57 - 64 GHz	e.i.r.p 100mW /output power 10 mW	EN 305 550	
		61 - 61.5 GHz	e.i.r.p 100mW		
		122 - 122.25 GHz	10 dBm/250 MHz e.i.r.p. -48 dBm/MHz at >30° elevation		These limits should be measured with rms detector and an averaging time of 1 ms or less.
		122.25 - 123 GHz	e.i.r.p 100mW		
		244 - 246 GHz	e.i.r.p 100mW		
Non-specific Short Range Devices	DECT	1880 - 1900 MHz	Either: Nominals transmit power of up to 250 mW (24 dBm) And/Or: Equivalent isotropic radiated power (e.i.r.p.) of up to:	EN 300 175 EN 301 406	The use of DECT phones is restricted within indoor homes or office premises. Applications covered include Home Monitoring, Door phone, Baby monitor, automatic device detection and configuration, M2M communication such as Home and Industrial automation,

			– 26 dBm for omnidirectional antennas – 30 dBm for directional antennas;		high-end and professional audio systems used in PMSE applications. Integral antennas only.
	Cordless Phones	2.4 - 2.4835 GHz	e.i.r.p 10mW	EN 300 440	Indoor use only.
Non-specific Short Range Devices	Generic Ultra-Wide Band (UWB) (communication, measurement, location, imaging, surveillance, and medical systems)	3100 - 3400 MHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -36 dBm (defined in 50 MHz)	EN 302 065	For devices implementing Low Duty Cycle (LDC) mitigation technique within the band 3.1-4.8 GHz refer to 2.3.1 Ultra-Wide Band Technology Applications (General Case). For devices implementing Detect and Avoid (DAA) mitigation technique within the bands 3.1-4.8 GHz refer to 2.3.1 Ultra-Wide Band Technology Applications (General Case).
		3400 - 3800 MHz	maximum mean e.i.r.p. spectral density of -80 dBm/MHz or maximum peak e.i.r.p. of -40 dBm (defined in 50 MHz)		
		3800 - 4200 MHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -30 dBm (defined in 50 MHz)		
		4200 - 4800 MHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -30 dBm (defined in 50 MHz)		
		6000 - 8500 MHz	maximum mean e.i.r.p. spectral density of -41.3 dBm/MHz or maximum		

			peak e.i.r.p. of 0 dBm (defined in 50 MHz)		
		8500 - 9000 MHz	maximum mean e.i.r.p. spectral density of -65 dBm/MHz or maximum peak e.i.r.p. of -25 dBm (defined in 50 MHz)		For devices implementing Detect and Avoid (DAA) mitigation technique within the bands 8.5-9 GHz refer to 2.3.1 Ultra-Wide Band Technology Applications (General Case).
Radio-determination applications	Movement Detection & Alert Systems	2400 - 2483.5 GHz	e.i.r.p 25mW	EN 300 440	
		9200 - 9500 MHz	e.i.r.p 25mW		
		9500 - 9975 MHz	e.i.r.p 25mW		
		10.5 - 10.6 GHz	e.i.r.p 500mW		
		13.4 - 14.0 GHz	e.i.r.p 25mW		
		17.1 -17.3 GHz	e.i.r.p 26 dBm		For Ground Based Synthetic Aperture Radar (GBSAR).[1] Specific requirements for the radar antenna pattern and for the implementation of Detect and Avoid (DAA) technique apply as described in EN 300 440.
		24.05 - 24.25 GHz	e.i.r.p 100mW		
		4500 - 7000 MHz		EN 302 372	For Tank Level Probing Radar (TLPR)[2]

[1] GBSAR system is used for detection of movement and its scope is limited to radar equipment operated as a short-range device. GBSAR are intended exclusively for detection of movement related to structures potentially effecting the protection of workers and the general public.

[2] Tank level probing radars (TLPR) are used for measuring and determining the distance to the surface of a target material (e.g. liquids and solids) inside shielded tanks and containers and thus indirectly the amount or volume of the available material.

		8500 MHz -10.6 GHz	e.i.r.p -41.3 dBm/MHz outside the enclosed test tank structure		For Tank Level Probing Radar (TLPR). The radiated unwanted emissions within the frequency band 10.6 - 10.7 GHz outside the test tank enclosure shall be less than e.i.r.p -60 dBm/MHz.
		24.05 - 27 GHz			For Tank Level Probing Radar (TLPR).
		57 - 64 GHz			
		75 - 85 GHz			
		6000 - 8500 MHz	Maximum peak e.i.r.p 7 dBm (measured in 50 MHz) or maximum mean e.i.r.p spectral density -33 dBm/MHz or maximum mean e.i.r.p spectral density on half-sphere -55 dBm/MHz[3]	EN 302 729	For Industrial Level Probing Radar (LPR)[4]
		24.05 - 26.5 GHz	Maximum peak e.i.r.p 26 dBm (measured in 50 MHz) or maximum mean e.i.r.p spectral density -14 dBm/MHz or maximum mean e.i.r.p spectral density on half-sphere -41.3 dBm/MHz		

[3] Mean e.i.r.p spectral density within LPR antenna main beam is the average power per unit bandwidth radiated in the direction of the maximum level. Peak e.i.r.p within main beam is the power contained within a 50 MHz bandwidth at the frequency at which the highest mean radiated power occurs. If measured in a bandwidth of x MHz, this level is to be scaled down by a factor of 20log(50/x) dB.

[4] Industrial Level Probing Radars (LPR) are used for a wide range of applications such as process control, custody transfer measurement (government legal measurements), water and other liquid monitoring, spilling prevention and other industrial applications.

		57 - 64 GHz	Maximum peak e.i.r.p 35 dBm (measured in 50 MHz) or maximum mean e.i.r.p spectral density -2 dBm/MHz or maximum mean e.i.r.p spectral density on half-sphere -41.3 dBm/MHz		
		75 - 85 GHz	Maximum peak e.i.r.p 34 dBm (measured in 50 MHz) or maximum mean e.i.r.p spectral density -3 dBm/MHz or maximum mean e.i.r.p spectral density on half-sphere -41.3 dBm/MHz		
Transport and Traffic Telematics	Vehicle Radar Systems	76 - 77 GHz	55 dBm peak e.i.r.p 50 dBm average power 23.5 dBm	EN 301 091	Either 50 dBm average power or an average power of 23.5 dBm for pulse radar only. Conditions apply to vehicle and infrastructure radar systems only.
		24.050 - 24.075 GHz	e.i.r.p 100mW	EN 302 858	
		24.075 - 24.150 GHz	e.i.r.p 0.1mW		
		24.150 - 24.250 GHz	e.i.r.p 100mW		
	Automotive Short Range Radars	77 - 81 GHz	Maximum mean power density of -3 dBm/MHz e.i.r.p. associated with a Peak limit of 55 dBm e.i.r.p	EN 302 264	

Inductive Applications	– Car Immobilizer – Anti-theft systems – Navigation devices – Alarm systems – Data transfer to handhelds – Animal identification devices. – Wireless Power Transmission (WPT)	100 Hz - 9 kHz	82 dBµA/m at 10m	EN 303 417 EN 303 660 EN 303 447 EN 303 454	Antenna size of < 1/20 λ
		9 - 90 kHz	72 dBµA/m at 10m	EN 303 417 EN 303 447 EN 303 454 EN 300 330	In the case of external antennas only loop coil antennas may be employed. Magnetic field strength level descending 3 dB/octave above 30 kHz.
		90 - 119 kHz	42 dBµA/m at 10m		In the case of external antennas only loop coil antennas may be employed.
		119 -135 kHz	66 dBµA/m at 10m		In the case of external antennas only loop coil antennas may be employed. Magnetic field strength level descending 3 dB/octave above 119 kHz.
		135 -140 kHz	42 dBµA/m at 10m		In the case of external antennas only loop coil antennas may be employed.
		140 - 148.5 kHz	37.7 dBµA/m at 10m		In the case of external antennas only loop coil antennas may be employed.
		3155 - 3400 kHz	13.5 dBµA/m at 10m	EN 300 330	Security Devices.

					In the case of external antennas only loop coil antennas may be employed.
		148.5 - 5000 kHz	-5 dBµA/m at 10m in total -15 dBµA/m at 10 m per 10 kHz	EN 303 417 EN 300 330 EN 302 536	In the case of external antennas only loop coil antennas may be employed.
		5000 kHz - 30 MHz	-5 dBµA/m at 10m in total -20 dBµA/m at 10 m per 10 kHz	EN 300 330	In the case of external antennas only loop coil antennas may be employed.
		6765 - 6795 kHz	42 dBµA/m at 10m	EN 300 330 EN 303 417	
		7400 - 8800 kHz	9 dBµA/m at 10m	EN 300 330	
		10200 - 11000 kHz	9 dBµA/m at 10m		
		13553 - 13567 kHz	42 dBµA/m at 10m		
		869.4 - 869.65 MHz	e.i.r.p 100mW	EN 300 220	For falcon or bird tracking.
		133 kHz	60 dBµA/m at 10m	EN 300 330	For Vehicular use.
		134 kHz	70 dBµA/m at 10m, e.r.p 10mW (10 dBm)	EN 300 330	For Vehicular use.
		433.05 - 434.79 MHz	e.r.p 10mW	EN 300 220	For Vehicular use. For falcon or bird tracking.
		1559 - 1610 MHz	N/A	EN 303 413	GPS receivers
		1563 - 1591 MHz	N/A		
		1164 - 1215 MHz	N/A		
		1215 - 1300 MHz	N/A		

		315 MHz	e.i.r.p 10mW	EN 300 330	For Vehicular use.
Model Control	Applications of devices for controlling the movement of a model.	26990 - 27000 kHz 27040 - 27050 kHz 27090 - 27100 kHz 27140 - 27150 kHz 27190 - 27200 kHz	e.r.p 100mW	EN 300 220	Channel spacing of 10 kHz
		40.66 - 40.67 MHz 40.67 - 40.68 MHz 40.68 - 40.69 MHz 40.69 - 40.70 MHz			
		34.995 - 35.225 MHz			Only for flying models
Terrestrial Radio Receiver Applications	Automotive, Domestic, and Portable AM/FM/DAB+ receivers	526.5 - 1606.5 kHz	N/A	EN 303 345 EN 303 345-1 EN 303 345-2 EN 303 345-3 EN 303 345-4	Detailed specifications can be found on "The GCC Terrestrial Radio Receiver Specifications for AM/FM/T-DAB+" document GSO 2693:2022
		87.5 - 108.0 MHz	N/A		
		174 - 230 MHz	N/A		
Active Medical Implant and their associated peripherals, and Medical Data Acquisition	Wireless applications in Healthcare and Listening Devices	401 - 406 MHz	e.r.p 25µW	EN 301 839 (402MHz- 405MHz) EN 302 537 (401MHz- 402MHz) & (405MHz– 406MHz)	For Ultra Low Power Active Medical Implant communication systems.
		9 - 315 kHz	30 dBµA/m at 10m	EN 302 195	Duty cycle ≤ 10%, For Ultra Low Power Active Medical Implants using inductive loop techniques for telemetry purposes.

		30 - 37.5 MHz	e.r.p 1mW	EN 302 510	Duty cycle ≤ 10%, For Ultra Low Power Medical Membrane Implants for blood pressure measurements.
		315 - 600 kHz	-5 dBµA/m at 10m	EN 302 536	For animal Implants. Duty Cycle ≤ 10%.
		12500 - 20000 kHz	-7 dBµA/m at 10m per 10 kHz	EN 300 330	For Ultra Low Power active Animal Implant Devices. Duty Cycle ≤ 10%
		430 - 440 MHz	Maximum e.i.r.p density of -50 dBm/100 kHz but not exceeding a total power of -40 dBm/10 MHz	EN 303 520	Both limits are intended for measurement outside of the patient's body. Channel Spacing ≤ 10 MHz. For Ultra Low Power Wireless Medical Capsule Endoscopy.
		2483.5 - 2500 MHz	e.i.r.p 10 dBm	EN 301 559	LBT+AFA and ≤ 10% duty cycle for peripherals. Channel Spacing ≤ 1 MHz. For Low power active medical implants.
		2483.5 - 2500 MHz	e.i.r.p 10 mW	EN 303 203	LBT+AFA and ≤ 2% duty cycle. Channel Spacing ≤ 3 MHz. For MBANS, indoor only within the patient's home.
		2483.5 - 2500 MHz	e.i.r.p 1mW		LBT+AFA and ≤ 10% duty cycle. Channel Spacing ≤ 3 MHz.

					For MBANS, indoor only within healthcare facilities.

2. Additional Applications of Radio communications Equipment

In the context of this document, additional applications of Radio-communications Equipment include the following:

1. Radio Microphone Applications including Assistive Listening Devices (ALD), Personal Wireless Audio Devices.
2. Radio Frequency Identification Applications.
3. Ultra-Wide Band Technology Applications.
4. Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications.

2.1 Radio Microphone Applications including Assistive Listening Devices (ALD), Personal Wireless Audio Devices.

- Radio microphone applications include small, low power transmitters designed to be worn on the body, or handheld, for the transmission of sound.
- The frequency ranges of operation and corresponding output power levels of radio microphone applications are as follows:

Radio Microphones					
Typical Application Type	Applicable Sub-Section of Framework	Authorized Frequency Bands/ Frequencies (Channel Spacing)	Maximum Strength/ RF Output Power	Harmonized Standard Reference	Remarks (Emission Type, Duty Cycle, other restrictions
Hearing Aid Systems	Inductive loop systems	100 Hz - 9 kHz	120 dBμA/m at 10m	EN 303 348 EN 300 422	Inductive loop systems intended to assist the hearing impaired. Antenna size of < 1/20λ

Hearing Aid Systems	Assistive Listening Devices (ALD)	169.4 - 174 MHz	e.r.p 10 mW	EN 300 422	Personal ALD Systems could be handheld, put on a table or around the neck of a hearing-impaired person. The duty cycle shall not be capable of being disabled or altered and shall be implemented as an automatic feature in the equipment.
		169.4 - 169.475 MHz	e.r.p. 500 mW		Public ALD Systems are installed at a fixed location in a large auditorium, e.g. in a Mosque or theatre. Public hearing aid systems are usually used in cases of big events attended by many hearing-impaired people, who otherwise would experience strong interferences caused by personal hearing aid systems if used simultaneously and in a very close proximity one from another. The duty cycle shall not be capable of being disabled or altered and shall be implemented as an automatic feature in the equipment.
		169.4875 - 169.5875 MHz	e.r.p. 500 mW		
Wireless Microphone Systems	Band II low power FM transmitters	87.5 - 108 MHz	e.r.p.50 nW	EN 301 357	Channel spacing ≤ 200 kHz

	Wireless audio applications	863 - 865 MHz	e.r.p 10mW	EN 301 357 EN 300 422	Personal cordless audio devices. Assistive Listening Devices
		1785 - 1805 MHz	e.i.r.p 20mW / 50 mW e.i.r.p	EN 300 422	50mW restricted to body-worn equipment or equipment implementing Spectrum Scanning Procedure (SSP)
		174 - 216 MHz	50 mW e.r.p.	EN 300 422	Use of the bands is on a tuning range basis. Note that the use of these bands may be subject to license. Any e.r.p power higher than 50mW is subject to spectrum license as per the Spectrum Licensing Framework.
		470 - 694 MHz			
		821.5 - 826 MHz	20 mW e.i.r.p.		Channel spacing of 200 kHz The use of these bands may be subject to license.
			100mW e.i.r.p.		Restricted to body worn microphones/ Channel spacing of 200 kHz The use of these bands may be subject to license.
		826 - 832 MHz	100mW e.i.r.p.		Channel spacing of 200 kHz The use of these bands may be subject to license.

2.2 Radio Frequency Identification Applications

- Radio frequency Identification (RFID) Applications include but are not limited to automatic article identification, asset tracking, anti-theft systems, alarm systems and wireless control systems.
- The frequency ranges of operation and corresponding output power levels of RFID applications are as follows:

RFID					
Typical Application Type	Applicable Sub-Section of Framework	Authorized Frequency Bands/ Frequencies (Channel Spacing)	Maximum Strength/ RF Output Power	Harmonized Standard Reference	Remarks (Emission Type, Duty Cycle, other restrictions
Radio Frequency Identification (RFID) Application	Asset Tracking Systems	400 - 600 kHz	-5 dBµA/m at 10m in total -8 dBµA/m at 10m per 10 kHz	EN 300 330	Channel spacing ≥ 30 kHz
		13553 - 13567 kHz	60 dBµA/m at 10m		
		865 - 865.6 MHz	100 mW e.r.p.	EN 302 208	Channel spacing ≤ 200 kHz
		865.6 - 867.6 MHz	2W e.r.p		
		867.6 - 868 MHz	500 mW e.r.p.		
		2446 - 2454 MHz	e.i.r.p 500mW	EN 300 440	

2.3 Ultra-Wide Band Technology Applications

- Ultra-Wide Band (UWB) Technology Applications include but are not limited to equipment used for communications, measurement, location, imaging, surveillance, and medical systems.

2.3.1 General Case

- The technical requirements for the operation of generic UWB applications are not applicable to:
  - Devices and infrastructure used at a fixed outdoor location or connected to a fixed outdoor antenna.
  - Devices installed in flying models, aircraft and other aviation.
  - Devices installed in road and rail vehicles.
- The frequency ranges of operation and corresponding output power levels of generic UWB technology applications are as follows:

UWB					
Typical Application Type	Applicable Sub-Section of Framework	Authorized Frequency Bands/ Frequencies (Channel Spacing)	Maximum Strength/ RF Output Power	Harmonized Standard Reference	Remarks (Emission Type, Duty Cycle, other restrictions
Ultra-Wide Band Technology	Wide Band Data Transmission Systems	Below 1.6 GHz	maximum mean e.i.r.p. spectral density of -90 dBm/MHz or maximum peak e.i.r.p. of -50 dBm (defined in 50 MHz)	EN 302 065	
		1.6 - 2.7 GHz	maximum mean e.i.r.p. spectral density of -85 dBm/MHz or maximum peak e.i.r.p. of -45 dBm (defined in 50 MHz),		
		2.7 - 3.1GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -36 dBm (defined in 50 MHz),		Within the band 3.1 - 4.8 GHz, devices implementing Low Duty Cycle (LDC) mitigation technique (as per Annex 2 of ECC/DEC/ (06)04 document) are permitted to operate with a maximum mean e.i.r.p. spectral density
		3.1- 3.4 GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum		

			peak e.i.r.p. of -36 dBm (defined in 50 MHz),		of -41.3 dBm/MHz and a maximum peak e.i.r.p. of 0 dBm defined in 50 MHz Within the band 3.1 - 4.8 GHz range, devices using Detect And Avoid (as per Annex 3 of ECC/DEC/(06)04 document) are allowed to operate with a maximum mean e.i.r.p. spectral density of -41.3 dBm/MHz and a maximum peak e.i.r.p. of 0 dBm defined in 50 MHz
		3.4 - 3.8 GHz	maximum mean e.i.r.p. spectral density of -80 dBm/MHz or maximum peak e.i.r.p. of -40 dBm (defined in 50 MHz)		
		3.8 - 4.2 GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -30 dBm (defined in 50 MHz)		
		4.2 - 4.8 GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -30 dBm (defined in 50 MHz)		
		4.8 - 6 GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -30 dBm (defined in 50 MHz)		
		6 - 8.5 GHz	maximum mean e.i.r.p. spectral density of -41.3 dBm/MHz or maximum peak e.i.r.p. of 0 dBm (defined in 50 MHz)		
		8.5 - 10.6 GHz	maximum mean e.i.r.p. spectral density of -65 dBm/MHz or maximum peak e.i.r.p. of -25 dBm (defined in 50 MHz)		For 8.5 - 9 GHz range, devices using Detect And Avoid mitigation technique (as per Annex 3 of ECC/DEC/(06)04 document) are allowed to operate with a maximum mean e.i.r.p.

					spectral density of -41.3 dBm/MHz and a maximum peak e.i.r.p. of 0 dBm defined in 50 MHz
		Above 10.6 GHz	maximum mean e.i.r.p. spectral density of -85 dBm/MHz or maximum peak e.i.r.p. of -45 dBm (defined in 50 MHz)		

2.3.2 General case for UWB devices installed in road and rail vehicles.

- The technical requirements below are applicable for the operation of UWB devices installed in road and rail vehicles only.
- Alternative technical requirements can be used for specific applications involving UWB devices including those installed in road and rail vehicles are defined in sections below.

UWB in road and rail vehicles					
Typical Application Type	Applicable Sub-Section of Framework	Authorized Frequency Bands/ Frequencies (Channel Spacing)	Maximum Strength/ RF Output Power	Harmonized Standard Reference	Remarks (Emission Type, Duty Cycle, other restrictions
Ultra-Wide Band Technology	Wide Band Data Transmission Systems	Below 1.6 GHz	maximum mean e.i.r.p. spectral density of -90 dBm/MHz or maximum peak e.i.r.p. of -50 dBm (defined in 50 MHz),	EN 302 065	
		1.6 - 2.7 GHz	maximum mean e.i.r.p. spectral density of -85 dBm/MHz or maximum		

			peak e.i.r.p. of -45 dBm (defined in 50 MHz),		
		2.7 - 3.1 GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -36 dBm (defined in 50 MHz),		
		3.1 - 3.4 GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -36 dBm (defined in 50 MHz),		Within the band 3.1 - 4.8 GHz, devices implementing Low Duty Cycle (LDC) mitigation technique (as per Annex 2 of ECC/DEC/ (06)04 document) are permitted to operate with a maximum mean e.i.r.p. spectral density of -41.3 dBm/MHz and a maximum peak e.i.r.p. of 0 dBm defined in 50 MHz. Operation is in addition subject to the implementation of an exterior limit (as per annex 5 of ECC/DEC/(06)04 document) of -53.3 dBm/MHz. Within the band 3.1 - 4.8 GHz range, devices using Detect And Avoid (as per Annex 3 of ECC/DEC/(06)04 document) are allowed to operate with a maximum mean e.i.r.p. spectral density of -41.3 dBm/MHz and a maximum peak e.i.r.p. of 0 dBm defined
		3.4 – 3.8 GHz	maximum mean e.i.r.p. spectral density of -80 dBm/MHz or maximum peak e.i.r.p. of -40 dBm (defined in 50 MHz),		
		3.8 - 4.2 GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -30 dBm (defined in 50 MHz),		
		4.2 - 4.8 GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -30 dBm (defined in 50 MHz),		

					in 50 MHz. Operation is in addition subject to the implementation of Transmit Power Control (TPC) mitigation technique (as per annex 4 of ECC/DEC/(06)04 document) and an exterior limit (as per annex 5 of ECC/DEC/(06)04 document) of -53.3 dBm/MHz.
		4.8 - 6 GHz	maximum mean e.i.r.p. spectral density of -70 dBm/MHz or maximum peak e.i.r.p. of -30 dBm (defined in 50 MHz),		
		6 - 8.5 GHz	maximum mean e.i.r.p. spectral density of -53.3 dBm/MHz or maximum peak e.i.r.p. of -13.3 dBm (defined in 50 MHz),		Within the band 6 – 8.5 GHz, devices implementing Transmit Power Control (TPC) mitigation technique (as per annex 4 of ECC/DEC/ (06)04 document) and an exterior limit (as per annex 5 of ECC/DEC/ (06)04 document) of -53.3 dBm/MHz are permitted to operate with a maximum mean e.i.r.p. spectral density of -41.3 dBm/MHz and a maximum peak e.i.r.p. of 0 dBm defined in 50 MHz. Within the band 6 – 8.5 GHz, devices implementing Low Duty Cycle (LDC) mitigation

					technique (as per Annex 2 of ECC/DEC/ (06)04 document) are permitted to operate with a maximum mean e.i.r.p. spectral density of -41.3 dBm/MHz and a maximum peak e.i.r.p. of 0 dBm defined in 50 MHz. Operation is in addition subject to the implementation of an exterior limit (as per annex 5 of ECC/DEC/(06)04 document) of -53.3 dBm/MHz.
		8.5 - 10.6 GHz	maximum mean e.i.r.p. spectral density of -65 dBm/MHz or maximum peak e.i.r.p. of -25 dBm (defined in 50 MHz),		Within the band 8.5 - 9 GHz range, devices using Detect And Avoid mitigation technique (as per Annex 3 of ECC/DEC/(06)04 document) are allowed to operate with a maximum mean e.i.r.p. spectral density of -41.3 dBm/MHz and a maximum peak e.i.r.p. of 0 dBm defined in 50 MHz
		Above 10.6 GHz	maximum mean e.i.r.p. spectral density of -85 dBm/MHz or maximum peak e.i.r.p. of -45 dBm (defined in 50 MHz),		

2.3.3 Specific Vehicular access systems using trigger-before-transmit.

- Technical requirements to be used within 3.8 - 4.2 GHz and 6 - 8.5 GHz for vehicular access systems using trigger-before-transmit are defined in the following table.
- The technical requirements applicable to ultra-wideband emissions below 3.8 GHz, within 4.2 - 6 GHz and above 8.5 GHz are as defined as in the table 2.3.2 above.
- "Trigger-before-transmit" mitigation is defined as an UWB transmission which is initiated only, when necessary, only where the system indicates that UWB devices are in proximity. The communication is either triggered by a user or by the vehicle. The subsequent communication can be viewed as "triggered communication".
- The existing LDC mitigation applies (or alternatively TPC in the range from 6 GHz to 8.5 GHz). No exterior limit requirement shall apply when using the trigger-before-transmit mitigation technique for vehicular access systems.

Frequency range	Maximum mean e.i.r.p. spectral density	Maximum peak e.i.r.p. (defined in 50 MHz)
3.8 < f ≤ 4.2 GHz	-41.3 dBm/MHz with trigger-before-transmit operation and LDC ≤ 0.5% (in 1h)	0 dBm
6 < f ≤ 8.5 GHz	-41.3 dBm/MHz with trigger-before-transmit operatoion and LDC ≤ 0.5% (in 1h) or TPC	0 dBm

2.3.4 Other vehicular applications, including applications involving infrastructure to vehicle and vehicle to vehicle communications in 6-8.5 GHz.

- The technical requirements of the below table are applicable to vehicular applications operating in 6 - 8.5 GHz, including applications involving infrastructure to vehicle and vehicle to vehicle communications.
- The technical requirements applicable to ultra-wideband emissions below 6 GHz and above 8.5 GHz are as defined as in the table 2.3.2 above.

Frequency range	Maximum mean e.i.r.p. spectral density	Maximum peak e.i.r.p. (defined in 50 MHz)
6 < f ≤ 8.5 GHz (Notes 1 and 2)	-41.3 dBm/MHz	0 dBm

Note 1: Within the band 6-8.5 GHz, the following additional requirements apply to fixed outdoor installations supporting communication with UWB devices installed in road and rail vehicles:
- Antennas are directive, down tilted and installed at a maximum height of 10 m.
- The duty cycle is limited to a maximum of 5% per second.

Note 2: Within the band 6-8.5 GHz, the following additional requirements apply to UWB devices installed in road and rail vehicles:
- Antennas are installed at a maximum height of 4 m.
- The duty cycle is limited to maximum 1% per second.

2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications

- The operation of Wireless Access Systems is restricted to indoor premises. Indoor use is intended to mean inside a closed space which will typically provide the necessary attenuation to facilitate sharing with other services.
- Indoor use is classified in the use cases mentioned herein which represent specific scenarios: inside domestic buildings, inside industrial or commercial buildings, inside road vehicles, inside trains and trams.
- "Vehicle" is a machine that transports people or cargo. In this Class License, the term vehicle refers to Land Vehicles which include wagons, cars, trucks and buses.
- The frequency ranges of operation and corresponding output power levels of WAS/RLAN applications are as follows:

WAS/RLAN					
Applicable Sub-section of Framework	Typical Application Type	Authorized Frequency Bands/ Frequencies (Channel Spacing)	Maximum Strength/ RF Output Power	Harmonized Standard Reference	Remarks (Emission Type, Duty Cycle, other restrictions
Wireless Access Systems including Radio Local Area Networks	WAS/RLAN	2400 - 2483.5 MHz	e.i.r.p 100mW	EN 300 328	
		5150 - 5250 MHz	maximum e.i.r.p. 200mW	EN 301 893	Indoor use only
		5250 - 5350 MHz	maximum e.i.r.p. 200mW (use of Dynamic Frequency Selection (DFS) as well	EN 301 893	Indoor use only

			as transmitter power control (TPC) are required)		
		5470 - 5725 MHz	maximum e.i.r.p. 1000mW (use of Dynamic Frequency Selection (DFS) as well as transmitter power control (TPC) are required)	EN 301 893	Fixed broadband data transmitting systems are subject to license.
		5725 - 5875 MHz	e.i.r.p. 100mW	EN 302 502	Fixed broadband data transmitting systems are subject to license.
		5925 - 6425 MHz	e.i.r.p 23 dBm (Low Power)	EN 303 687	Refer to Class License for the use of RLAN devices over 5925-6425 MHz Band (CRA/SM/TA/001/2022)
			e.i.r.p 14 dBm (Very Low Power)		
	WAS/RLAN onboard vehicles, trams and trains only	2400 - 2483.5 MHz	e.i.r.p. 100mW	EN 300 328	Onboard vehicles, trams and trains only (indoor).
		5150 - 5250 MHz	e.i.r.p. 40mW	EN 301 893	
		5725 - 5875 MHz	e.i.r.p. 25mW	EN 300 440	
	Multiple-Gigabit WAS/RLAN	57 - 71 GHz	maximum e.i.r.p 10W (40 dBm) (LBT)	EN 302 567	Indoor use only Fixed outdoor installations are not allowed