GENERAL AUTHORISATIONS (RADIOCOMMUNICATIONS APPARATUS) REGULATIONS

ARRANGEMENT OF REGULATIONS

SUBSIDIARY LEGISLATION 399.40

GENERAL AUTHORISATIONS (RADIOCOMMUNICATIONS APPARATUS) REGULATIONS

1st January, 2008

LEGAL NOTICE 7 of 2008, as amended by Legal Notice 292 of 2008; Act XV of 2009; and Legal Notices 98 of 2010, 224 and 447 of 2011, 193 of 2012, 285 of 2015 420 of 2018 and 153 of 2019 and 150 of 2020.

Part I

Preliminary

Citation.

1. The title of these regulations is the General Authorisations (Radiocommunications Apparatus) Regulations.

Interpretation.
Amended by:
L.N. 292 of 2008;
XV. 2009.49;
L.N. 98 of 2010;
L.N. 224 of 2011;
L.N. 285 of 2015;
L.N. 420 of 2018;
L.N. 153 of 2019.
Cap. 399.
Cap. 234.

2. (1) Unless the context otherwise requires any reference in these regulations to "the Act" is a reference to the Electronic Communications (Regulation) Act, and subject to the provisions of subregulation (2), the provisions of article 28 of the said Act and the provisions of article 2 of the Merchant Shipping Act shall apply to these regulations.

(2) In these regulations, unless the context otherwise requires:

"the Authority" means the Malta Communications Authority;

"authorized officer" means any officer of the Authority, or any other officer of any other public authority duly authorized in accordance with the provisions of the Act to enforce compliance with the Act and, or these regulations:

Provided that for the purposes of any maritime radio-communications apparata however so described "authorized officer" includes any maritime radiocommunications inspector and, or any officer duly authorized by the Authority for Transport in Malta;

"the Community" means the European Communities;

"detachable antenna" means an antenna fixed to the radiocommunications apparatus by means of an antenna connector and detachable by the user of that apparatus;

"Directive 70/156/EEC" means the Council Directive of 6 February 1970 on the approximation of the laws of the Member States relating to the type approval of motor vehicles and their trailers;

"Directive 98/34/EC" means the European Parliament and the Council Directive of 22 June 1998 which lays down a procedure for the provision of information in the field of technical standards and regulations;

"Directive 2014/53/EU" means Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive

2014/53/EU;

"distress and safety communications" means distress, urgency and safety calls and messages;

"duty cycle" means the ratio, expressed as a percentage, of the maximum transmitter 'on' time on one carrier frequency, relative to a one hour period;

"Dynamic Frequency Selection" or "DFS" means an interference mitigation technique to avoid co-channel operation with other electronic communications networks and, or services, and to ensure a spread of the loading across the available spectrum of the wireless access system under the field of view of a satellite to reduce the aggregate emission levels at the satellites of the fixed satellite service (feeder links) and earth exploration-satellite service (active) from wireless access systems;

"Earth station" or "satellite terminal" means a station or terminal located either on the Earth's surface or within the major portion of the Earth's atmosphere and intended for communication:

(*a*) with one or more space stations; or

(*b*) with one or more stations of the same kind by any means of one or more reflecting satellites or other objects in space;

"EAS" means electronic article surveillance;

"EASA" means the European Aviation Safety Agency;

"electronic communications network" has the same meaning as defined in article 2 of the Act which network is used for the provision of publicly available electronic communications services including sound and television broadcasting;

"ETSI" means the European Telecommunications Standards Institute;

"effective radiated power" or "e.r.p." means the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction;

"equivalent isotropically radiated power" or "e.i.r.p." means 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);

"fixed-satellite service" or "FSS" shall have the same definition as in the National Radio Frequency Plan;

"frequency range of operation" means the portion of the radio spectrum within which radiocommunications apparatus must intentionally emit radio signals in order to fulfil its designated function and performance;

"hand portable station" or "handheld station" means radiocommunications apparatus either fitted with an antenna connector or an integral antenna, or both, normally used on a stand-alone basis, to be carried on a person or held in the hand;

"harmful interference" means interference which endangers the

functions of a radio-navigation service or of other safety services or which otherwise seriously degrades, obstructs or repeatedly interrupts a radiocommunications service operated in accordance with the applicable European Community law or Maltese Law;

"harmonised standard" means a technical specification adopted by a recognised standards body under a mandate from the European Commission in conformity with the procedures laid down in Directive 98/34/EC for the purpose of establishing a European requirement, compliance with which is not compulsory;

"ICNIRP" means International Commission on Non-Ionising Radiation Protection;

"indoor use" means the use inside a building, including places assimilated thereto such as an aircraft, in which the shielding will typically provide the necessary attenuation to facilitate sharing with other services;

"integral antenna" means an antenna that is permanently fixed to the radiocommunications apparatus and not detachable by the user of that apparatus;

"Intelligent Transport Systems" or "ITS" means a range of systems and services, based on Information and Communication technologies, including processing, control and positioning, communication and electronics, that are applied to a road transportation system;

"ITU" means the International Telecommunication Union;

"maximum e.i.r.p. density" means the highest signal strength measured in any direction at any frequency within the defined range;

"mean e.i.r.p." means the e.i.r.p. during the transmission burst which corresponds to the highest power, if power control is implemented;

"mean e.i.r.p. density" means the mean power measured with a 1 MHz resolution bandwidth, a root-mean-square (RMS) detector and an averaging time of 1ms or less;

"the Minister" means the Minister responsible for communications;

"MMSI" means maritime mobile service identity and is a unique 9-digit identifier assigned by the Transport Malta or by any other competent authority;

"mobile earth station" shall have the same meaning as in the Radio Regulations;

"mobile satellite service" shall have the same meaning as in the Radio Regulations;

"network access point" is a fixed terrestrial short range device in a data network that acts as a connection point for the other short range devices in the data network to service platforms located outside that data network. The term data network refers to several short range devices, including the network access point, as network components and to the wireless connections between them;

"on non-interference and non-protection basis" means that no harmful interference may be caused to any other radiocommunication service and that no claim may be made for protection of radiocommunications apparatus to which a general authorisation under these regulations applies against interference origination from radiocommunication services;;

"peak e.i.r.p. density" means the peak level of transmission contained within a 50 MHz bandwidth centred on 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;

"person" includes any body corporate and any body of persons whether or not it has a legal personality distinct from that of its members, which is in possession or control of any radiocommunications apparatus in relation to which these regulations may apply;

S.L. 427.41 "Radio Equipment Regulations" means the Radio Equipment Regulations;

"Radio Frequency Identification Devices" or "RFID" means apparatus for, *inter alia*, tracking and identification of items by the use of a radio system, consisting on the one hand of passive devices (tags) mounted on items and, on the other, of transmitter or receiver units (readers) which activate the tags and receive data back;;

"the Radio Regulations" means the Radio Regulations annexed to, or regarded as being annexed to the most recent International Telecommunication Convention which is in force at that time;

"radiodetermination" shall have the same meaning as in the Radio Regulations;

"RF worker" means any person acting for or on behalf of an undertaking who may be or is exposed to radio frequency (RF) radiation as a direct and necessary requirement of his work;

Cap. 234. "ship" shall have the same meaning as in the Merchant Shipping Act;

"short-range device" or "SRD" means radiocommunications apparatus which provides either unidirectional or bidirectional communication and which receives and, or transmits over a short distance at low power;"

S.L. 234.19. "SOLAS Convention" shall have the same meaning as in the Tonnage Regulations;

Cap. 226. "territorial waters" or "territorial seas" shall have the same meaning as defined in article 3 of the Territorial Waters and Contiguous Zone Act;

"transmit power control" or "TPC" refers to a technique in which the transmitter output power is controlled resulting in reduced interference to other networks;

"Transport Malta" means the Authority for Transport in Malta;

"ultra high frequency" or "UHF" means a frequency that exceeds 300 megahertz but does not exceed 3 gigahertz;

"undertaking" means a person authorised to provide electronic communications networks and, or services or associated facilities in accordance with the Electronic Communications (Regulation) Act; Cap. 399.

"urgency" in relation to a transmission, means the safety of a ship, aircraft or person which or who requires urgent attention;

"vehicle" means any vehicle as defined in Directive 70/156/EEC;

"very high frequency" or "VHF" means a frequency that exceeds 30 megahertz but does not exceed 300 megahertz.

Part II

General provisions

Establishment of general authorizations for listed radio-communications apparata. *Amended by: L.N. 224 of 2011.*

3. The Schedules to these regulations establish those general authorizations for radiocommunications apparata whereby a person is authorised to install or use any or all of the radiocommunications apparata to which a general authorisation under these regulations applies:

Provided that a person shall in all instances comply with any requirements stated in the Act and, or in these regulations as may apply to the radiocommunications apparata covered by a general authorization under these regulations.

Harmful interference.

4. (1) Any person enjoying a general authorisation for any radiocommunications apparatus to which these regulations apply, shall comply at all times with any decisions, however so described, taken by the Minister in relation to harmful interference and shall ensure that any such radiocommunications apparatus at all times complies with the applicable standards and is operated in accordance with the applicable conditions in order to ensure that such an operation does not cause harmful interference to other radiocommunications apparatus.

(2) The use of the radiocommunications apparatus for which these regulations apply, is on a non-interference and non-protected basis.

(3) Any person enjoying a general authorisation for any radiocommunications apparatus to which these regulations apply, shall not hold the minister responsible, and where applicable the Authority and, or any other competent public authority for any alleged harmful interference received from other radiocommunications apparatus.

Exposure to electromagnetic fields. *Added by: L.N. 224 of 2011. Amended by: L.N. 285 of 2015.*

5. (1) Any person enjoying a general authorisation for any radiocommunications apparatus to which these regulations apply shall comply with any radiation emission standards adopted and published by ICNIRP, any mandatory standards set by the competent authority responsible for the adoption of any such standards and any other relevant standards as may be specified by law.

(2) Any person enjoying a general authorisation for any radiocommunications apparatus to which these regulations apply shall comply with any decision however so described issued by the

Authority in relation to electromagnetic radiation and shall ensure that all its radiocommunications apparatus at all times comply with the technical and performance standards generally accepted by the industry or as may be prescribed by the Authority in line with national and European Union law, or accepted by the Authority as being adequate to ensure the limitation of exposure of the general public to electromagnetic fields.

(3) Any person enjoying a general authorisation for any radiocommunications apparatus to which these regulations apply shall ensure that its radiocommunications apparatus is not installed or operated at a location and in a manner such as to be the cause of the aggregate non-ionising radiation emissions exceeding the limits published by the ICNIRP, any mandatory standards set by the competent authority responsible for the adoption of any such standards and any other relevant standards as may be specified by law.

Transmission or circulation of false or deceptive distress signals, etc.
Re-numbered by: L.N. 224 of 2011.
Amended by: L.N. 420 of 2018.

6. (1) No person shall transmit or circulate false or deceptive distress, urgency, safety or identification signals.

(2) Any person acting in breach of sub-regulation (1) shall, on conviction, be liable to a fine (*multa*) not exceeding twenty-five thousand euro (€25,000).

Requirement to abide with any requirements under any other laws, etc.
Amended by: L.N. 292 of 2008.
Re-numbered by: L.N. 224 of 2011.

7. (1) Nothing under these regulations shall absolve any person from any requirement to obtain any other permits, authorisations or licences, however so described, as may be necessary under any other law affecting the installation and, or operation of a radiocommunications apparatus to which these regulations apply.

(2) Nothing in these regulations shall be construed as exempting or absolving any person to comply with any other laws or any decisions, however so described, as may be applicable.

Compliance with apparatus specifications and standards.
Re-numbered by: L.N. 224 of 2011.

8. *Deleted by Legal Notice 420 of 2018.*

Provision of information.
Re-numbered by: L.N. 224 of 2011.

9. The Minister may require any person to provide him with any information regarding any radiocommunications apparatus in the possession of or used by that person in relation to which apparatus a general authorization under these regulations applies.

Inspections.
Re-numbered by: L.N. 224 of 2011.

10. An authorized officer may inspect radiocommunications apparatus covered by a general authorization under these regulations to ensure compliance with these regulations.

Reporting and notification requirements applicable to undertakings.
Added by: L.N. 224 of 2011.

11. (1) An undertaking which intends to install radiocommunications apparatus comprised in a wireless electronic communications network shall, before doing so, submit to the Authority a detailed report demonstrating the calculated or measured background levels of electromagnetic fields and the predicted increase in the levels of electromagnetic fields in any

areas accessible to the general public and to RF workers respectively:

Provided that the said detailed report shall also include such technical information as the Authority may require.

(2) An undertaking shall, by not later than fourteen days following the installation and bringing into operation of radiocommunications apparatus comprised in a wireless electronic communications network, notify such installation and operation to the Authority:

Provided that a modification to any of the characteristics of such installation shall also be subject to the same notification requirement.

(3) The notification under sub-regulation (2) shall be in such form as the Authority may from time to time determine and shall as a minimum include the following:

(*a*) information on the installation location, including site address, geographical location, height of site above sea level and antenna height above ground level;

(*b*) contact information of the owner of the site where the installation is located;

(*c*) information on the type of radiocommunications apparatus and antennas;

(*d*) technical information of the transmission emanating from the radiocommunications apparatus comprised in a wireless electronic communications network, including operating frequency, maximum conducted transmitting power, antenna gain, maximum effective radiated power, antenna radiation pattern and modulation scheme;

(*e*) information on the antenna setup such as antenna tilting (electrical and mechanical) and orientation; and

(*f*) a report showing compliance with regulation 5 of Part II.

Signage requirements for undertakings. *Added by: L.N. 224 of 2011.*

12. (1) The installation of radiocommunications apparatus comprised in a wireless electronic communications network at sites not owned by the undertaking, shall contain adequate signage to identify the undertaking and the relevant contact information.

(2) Undertakings shall place warning signs in clearly visible locations to provide information to the general public and, or to RF workers about the nature and degree of the radio frequency hazard and the appropriate safety actions to be followed.

(3) The operation of any radiocommunications apparatus comprised in a wireless electronic communications network in a manner which causes the field strength levels at any area to potentially approach or exceed the general public exposure limits referred to in regulation 5 of Part II, shall require undertakings to identify and clearly demarcate the said area.

Amended by: XV. 2009.49; L.N. 98 of 2010; L.N. 224 of 2011; L.N. 193 of 2012; L.N. 285 of 2015. Substituted by: L.N. 420 of 2018.

FIRST SCHEDULE
(Regulation 3)

General Authorisation for VHF Maritime Apparatus

Applicability of First Schedule.

1. This General Authorisation applies to any person installing or using VHF Maritime Apparatus or any apparatus intended to be used as a component part of that apparatus on board a ship registered under the Merchant Shipping Act and, or the Fisheries Conservation and Management Act with the exception of apparatus installed permanently on ships which fall within the scope of the SOLAS Convention.

Cap. 234.
Cap. 425.

Interpretation.

2. In this Schedule unless the context otherwise requires:

"AIS" means automatic identification system;

"competent authority" means the Authority or Transport Malta or any other public entity as the Authority may consider appropriate;

"Department of Fisheries" means the competent authority responsible for fisheries in Malta;

"digital selective calling" or "DSC" means a technique using digital codes which enables a radio station to establish contact with, and transfer information to, another station or group of stations, and complying with the relevant recommendations of the International Telecommunication Union (ITU) radiocommunication sector;

"private frequency" means a frequency which has been assigned on an exclusive or shared basis to an individual or company and which frequency is not in accordance with the VHF frequencies;

"ITU-R M.1084" means the most recent version of Recommendation M.1084 of the ITU providing interim solutions for improved efficiency in the use of the band 156-174 MHz by stations in the maritime mobile service;

"ITU-R M.1842" means the most recent version of Recommendation M.1842 of the ITU describing the characteristics of VHF radio systems and equipment used for the exchange of data and electronic mail in the maritime mobile service RR Appendix 18 channels;

"ITU-R M.2092" means the most recent version of Recommendation M.2092 of the ITU providing the technical characteristics for a VHF data exchange system in the VHF maritime mobile band;

"safety" means the transmission of an important navigational or meteorological warning by means of the VHF maritime apparatus;

"SRC" means a short range certificate issued to candidates passing an examination described in CEPT/ERC/Recommendation 31-04;

"unique identification number" means a unique 9-digit identifier for a DSC enabled VHF maritime handheld apparatus;

"VHF frequencies" means the radio frequencies described in the Annex to the First Schedule;

"VHF maritime handheld apparatus" means VHF maritime apparatus either fitted with an antenna connector or an integral antenna, or both, to be carried on a person or held in the hand;

"VHF maritime apparatus" means radiocommunications apparatus that is intended to be installed and/or used from on board a ship, which apparatus is capable to transmit and receive communications on the VHF frequencies.

Location of use.

3. (1) Without prejudice to regulation 7 hereof, VHF maritime apparatus having a detachable antenna shall only be installed and, or used from on board a ship.

(2) VHF maritime apparatus having an integral antenna shall only be used from on board a ship.

(3) VHF maritime handheld apparatus shall only be used from on board a ship.

Qualifications to operate VHF maritime apparatus.

4. (1) Except in the case of search and rescue communications and communications relating to the safety of navigation, a person shall not operate VHF maritime apparatus unless that person:

(a) is qualified to operate such apparatus, or

(b) is operating such apparatus under the supervision of a person who is qualified to operate that apparatus.

(2) A person is qualified to operate VHF maritime apparatus if he holds, as a minimum, an SRC, or holds a qualification recognised by Transport Malta as being equivalent to an SRC:

Provided that any such certificate or qualification shall be available for inspection on the demand of any authorized officer at all times when the VHF maritime apparatus is installed or used on board a ship.

Responsibility for VHF maritime apparatus.

5. Any person under whose name a ship is registered with Transport Malta or with the Department of Fisheries, shall be responsible for any VHF maritime apparatus found to be installed

or used on board that ship.

Call signs.

6. (1)Any person enjoying a general authorisation in accordance with this Schedule shall ensure that any ship from where VHF maritime apparatus is installed or used, is assigned a call sign by the competent authority, which call sign shall only be used on the ship on which it is registered.

(2) The call sign shall remain with the ship for the duration of its life regardless of changes of ownership or of ship name.

(3) Any assigned call sign is not transferable between ships.

(4) A person operating VHF maritime apparatus shall use the call sign assigned to the ship from which the VHF maritime apparatus is being operated at the start of each transmission, or series of transmissions.

MMSI.

7. (1)Any person enjoying a general authorisation in accordance with this Schedule shall ensure that the ship from where DSC enabled VHF maritime apparatus is installed or used, is assigned an MMSI by the competent authority:

Provided that such a person shall also ensure that the VHF maritime apparatus is duly programmed with the assigned MMSI:

Provided further that the DSC enabled VHF maritime apparatus programmed with the assigned MMSI shall only be used from on board the ship associated with the same MMSI:

Provided further that a person transferring or relocating, however so described, a DSC enabled VHF maritime apparatus from one ship to another, shall seek the approval of the competent authority prior to installing and, or using the DSC enabled VHF maritime apparatus on that other ship.

(2) The provisions of paragraph (1) shall not apply if the DSC enabled VHF maritime apparatus is a VHF maritime handheld apparatus.

(3) An assigned MMSI is not transferable between ships.

(4) The MMSI assigned by the competent authority shall not be programmed into DSC enabled VHF maritime handheld apparatus.

Additional conditions for VHF maritime handheld apparatus.

8. (1) A DSC enabled VHF maritime handheld apparatus shall have an internal global navigation satellite system.

(2) Any person enjoying a general authorisation under this Schedule shall ensure that a DSC enabled VHF maritime handheld apparatus is assigned with a unique identification number by the

competent authority:

Provided that such a person shall also ensure that the assigned unique identification number is programmed into the DSC enabled VHF maritime handheld apparatus.

(3) A person transferring the ownership of a DSC enabled VHF maritime handheld apparatus shall inform the competent authority about any such transfer prior to effecting such transfer for the purpose of updating the details relating to the unique identification number.

Mode of operation and technical conditions.

9. (1) Without prejudice to any other requirements at law a person shall, whether within or outside territorial waters, only operate the VHF maritime apparatus in accordance with the provisions of the Radio Regulations.

(2) VHF maritime apparatus operating in territorial waters shall operate only on the VHF frequencies and shall not use any other frequency and, or channel, however so described:

Provided that a person who has been assigned a private frequency may also operate a VHF maritime apparatus covered by this General Authorisation on that frequency:

Provided further that a person who has been assigned a private frequency shall pay any applicable fees under the Fees Ordinance or any other applicable law in force.

Cap. 35.

(3) VHF maritime apparatus operating outside territorial waters shall only use those radio frequencies or channels, however so described, which are allowed to be used in those waters and shall observe any terms, conditions or limitations which could be applicable in the same waters.

(4) VHF maritime apparatus shall, as a minimum, be able to send and receive radiotelephony communications on:

(a) the distress, safety and calling frequency 156.800 MHz (channel 16);

(b) the primary intership frequency 156.300 MHz (channel 06);

(c) the intership navigation safety frequency 156.650 MHz (channel 13); and

(d) all the frequencies necessary for their service.

(5) In addition to the radio frequencies or channels, however so described, listed in paragraph (4) hereof, DSC enabled VHF maritime apparatus must also be able to send and receive emissions on the frequency 156.525 MHz (channel 70).

(6) Without prejudice to the transmit power restrictions

which are established in the Annex to this Schedule, the transmit carrier power level of VHF maritime apparatus shall not exceed 25 Watts:

Provided that whenever possible, the VHF maritime apparatus shall be set to operate on the low transmit power mode of operation:

Provided further that the VHF maritime apparatus shall not be connected in any manner with amplifiers intended to increase the transmit carrier power level.

(7) In using VHF maritime apparatus a person shall abide with any instructions, however so described, related to communications which could be given by the local authorities responsible for the safety of navigation and search and rescue.

Distress and safety-related communications

10. (1) A person shall ensure that the VHF maritime apparatus is used minimally to reduce frequency occupancy:

Provided that in using the said apparatus the person shall ensure that priority is at all times given to distress and safety related communications.

(2) In order to facilitate the reception of distress calls and traffic, all transmissions on 156.800 MHz (channel 16) shall be kept to a minimum and shall not exceed one minute.

(3) Before transmitting on the frequency 156.800 MHz (channel 16) a person shall listen on this frequency for a reasonable time to make sure that no distress traffic is being sent.

(4) All persons shall accept, with absolute priority and in all instances, distress calls and messages regardless of their origin, and shall reply in the same manner to such messages immediately taking such action in regard thereto as may be required.

ANNEX TO THE FIRST SCHEDULE
(Paragraph 9 of the First Schedule)

Table of the VHF Frequencies

Channel designator	**Notes**	**Transmitting frequencies (MHz)**		**Inter-ship**	**Port operations and ship movement**		**Public corres-pondence**
		From ship stations	**From coast stations**		**Single frequency**	**Two frequency**	
60	*m)*	156.025	160.625		x	x	x
01	*m)*	156.050	160.650		x	x	x
61	*m)*	156.075	160.675		x	x	x
02	*m)*	156.100	160.700		x	x	x
62	*m)*	156.125	160.725		x	x	x

Channel designator	Notes	Transmitting frequencies (MHz)		Inter-ship	Port operations and ship movement		Public corres-pondence
		From ship stations	From coast stations		Single frequency	Two frequency	
03	*m)*	156.150	160.750		x	x	x
63	*m)*	156.175	160.775		x	x	x
04	*m)*	156.200	160.800		x	x	x
64	*m)*	156.225	160.825		x	x	x
05	*m)*	156.250	160.850		x	x	x
65	*m)*	156.275	160.875		x	x	x
06	*f)*	156.300		x			
2006	*r)*	160.900	160.900				
66	*m)*	156.325	160.925		x	x	x
07	*m)*	156.350	160.950		x	x	x
67	*h)*	156.375	156.375	x	x		
08		156.400		x			
68		156.425	156.425		x		
09		156.450	156.450	x	x		
69		156.475	156.475	x	x		
10	*h), q)*	156.500	156.500	x	x		
70	*f), j)*	156.525	156.525	Digital selective calling for distress, safety and calling			
11	*q)*	156.550	156.550		x		
71		156.575	156.575		x		
12		156.600	156.600		x		
72		156.625		x			
13	*k)*	156.650	156.650	x	x		
73	*h)*	156.675	156.675	x	x		
14		156.700	156.700		x		
74		156.725	156.725		x		
15	*g)*	156.750	156.750	x	x		
75	*n), s)*	156.775	156.775		x		
16	*f)*	156.800	156.800	DISTRESS, SAFETY AND CALLING			
76	*n), s)*	156.825	156.825		x		
17	*g)*	156.850	156.850	x	x		
77		156.875		x			
18	*m)*	156.900	161.500		x	x	x
78	*m)*	156.925	161.525		x	x	x
1078		156.925	156.925		x		
2078	*mm)*		161.525		x		
19	*m)*	156.950	161.550		x	x	x
1019		156.950	156.950		x		
2019	*mm)*		161.550		x		
79	*m)*	156.975	161.575		x	x	x
1079		156.975	156.975		x		
2079	*mm)*		161.575		x		
20	*m)*	157.000	161.600		x	x	x
1020		157.000	157.000		x		
2020	*mm)*		161.600		x		
80	*y)*	157.025	161.625		x	x	x
21	*y)*	157.050	161.650		x	x	x
81	*y)*	157.075	161.675		x	x	x
22	*y)*	157.100	161.700		x	x	x
82	*y)*	157.125	161.725		x	x	x
23	*y)*	157.150	161.750		x	x	x
83	*y)*	157.175	161.775		x	x	x
24	*w), xx)*	157.200	161.800		x	x	x

Channel designator	Notes	Transmitting frequencies (MHz)		Inter-ship	Port operations and ship movement		Public corres-pondence
		From ship stations	From coast stations		Single frequency	Two frequency	
1024	*w), xx)*	157.200					
2024	*w), xx)*	161.800	161.800	x (digital only)			
84	*w), xx)*	157.225	161.825		x	x	x
1084	*w), xx)*	157.225					
2084	*w), xx)*	161.825	161.825	x (digital only)			
25	*w), xx)*	157.250	161.850		x	x	x
1025	*w), xx)*	157.250					
2025	*w), xx)*	161.850	161.850	x (digital only)			
85	*w), xx)*	157.275	161.875		x	x	x
1085	*w), xx)*	157.275					
2085	*w), xx)*	161.875	161.875	x (digital only)			
26	*w)*	157.300	161.900		x	x	x
1026	*w)*	157.300					
2026	*w)*		161.900				
86	*w)*	157.325	161.925		x	x	x
1086	*w)*	157.325					
2086	*w)*		161.925				
27	*z)*	157.350	161.950			x	x
1027	*z), zz)*	157.350	157.350		x		
2027*	*z)*	161.950	161.950				
87	*z), zz)*	157.375	157.375		x		
28	*z)*	157.400	162.000			x	x
1028	*z), zz)*	157.400	157.400		x		
2028*	*z)*	162.000	162.000				
88	*z), zz)*	157.425	157.425		x		
AIS 1	*f), l), p)*	161.975	161.975				
AIS 2	*f), l), p)*	162.025	162.025				

*) From 1 January 2019, channel 2027 will be designated as ASM 1 and channel 2028 will be designated as ASM 2.

Specific provisions:

f) The frequencies 156.300 MHz (channel 06), 156.525 MHz (channel 70), 156.800 MHz (channel 16), 161.975 MHz (AIS 1) and 162.025 MHz (AIS 2) may also be used by aircraft stations for the purpose of search and rescue operations and other safety-related communication.

g) In territorial waters, channels 15 and 17 may also be used for on board communications provided the effective radiated power does not exceed 1 W.

h) If so required, channels 10, 67 and 73 may also be used for communication between ship stations, aircraft stations and participating land stations engaged in coordinated search and rescue and anti-pollution operations in local areas.

j) Channel 70 is to be used exclusively for digital selective calling for distress, safety and calling.

k) Channel 13 is designated for use on a worldwide basis as a navigation safety communication channel, primarily for intership navigation safety communications.

l) Channels AIS 1 and AIS 2 are used for an automatic identification system (AIS) capable of providing worldwide operation.

m) These channels may be operated as single frequency channels subject to compliance with the following conditions:

- The lower frequency portion of these channels may be operated as single frequency channels by ship and coast stations.

- Transmission using the upper frequency portion of these channels is limited to coast stations.

- The upper frequency portion of these channels may be used by ship stations for transmission. All precautions should be taken to avoid harmful interference to channels AIS 1, AIS 2, 2027 and 2028.

mm) Transmission on these channels is limited to coast stations. These channels may also be used by ship stations for transmission. All precautions should be taken to avoid harmful interference to channels AIS 1, AIS 2, 2027, 2028.

n) With the exception of AIS, the use of channels 75 and 76 should be restricted to navigation-related communications only and all precautions should be taken to avoid harmful interference to channel 16, by limiting the output power to 1 W.

p) Channels AIS 1 and AIS 2 may be used by the mobile-satellite service (Earth-to-space) for the reception of AIS transmissions from ships.

q) When using channels 10 and 11, all precautions should be taken to avoid harmful interference to Channel 70.

r) This frequency is reserved for experimental use for future applications or systems.

s) Channels 75 and 76 are also allocated to the mobile-satellite service (Earth-to-space) for the reception of long-range AIS

broadcast messages from ships (Message 27).

w) The frequency bands 157.200-157.325 MHz and 161.800-161.925 MHz (corresponding to channels: 24, 84, 25, 85, 26 and 86) are earmarked for the utilization of the VHF Data Exchange System (VDES) described in ITU-R M.2092 as from a date to be established by the Authority, which date and any relevant attendant information shall be published by the Authority on its website. These frequency bands may also be used for analogue modulation described in ITU-R M.1084 subject to not causing harmful interference to nor claiming protection from other stations in the maritime mobile service using digitally modulated emissions.

xx) As from a date to be established by the Authority which date shall be published on its website, the channels 24, 84, 25 and 85 may be merged in order to form a unique duplex channel with a bandwidth of 100 kHz in order to operate the VHF Data Exchange System (VDES) terrestrial component described in ITU-R M.2092.

y) These channels may be operated as single or duplex frequency channels.

z) From 1 January 2019, these channels are each split into two simplex channels. The channels 2027 and 2028 designated as ASM 1 and ASM 2 are used for application specific messages (ASM) as described in ITU-R M.2092.

zz) From 1 January 2019, channels 1027, 1028, 87 and 88 are to be used as single frequency analogue channels for port operation and ship movement.

Additional Specific Provisions:

aa) Channel 09 - Pilotage and mooring (MMP) and pilot launch.

ab) Channels 10, 68 and 74 - Towage (tug working channels).

ac) Channel 11 - Navigational warnings/weather broadcasts.

ad) Channel 12 - Valletta port control.

ae) Channel 13 - Terminals/Marinas.

af) Channel 14 - Marsaxlokk port control.

ag) Channel 20 - Navigational assistance/special instructions to a specific ship.

ah) Channel 22 - Emergency operations/oil pollution, etc.

ai) Channel 69 - Malta Vessel Traffic System.

SECOND SCHEDULE

(Regulation 3)

General Authorisation for Wideband Data Transmission Systems

Amended by: L.N. 98 of 2010; L.N. 224 of 2011; L.N. 285 of 2015. Substituted by: L.N. 420 of 2018. Amended by: L.N. 153 of 2019.

Applicability of Second Schedule.

1. This General Authorisation applies to any person installing or using a wideband data transmission system or any apparatus intended to be used as a component part of that system.

Interpretation.

2. In this Schedule unless the context otherwise requires:

"EN 301 893" means the harmonised European standard for 5 GHz wireless access systems including radio local area network equipment covering the essential requirements of Article 3.2 of Directive 2014/53/EU;

"wideband data transmission system" means radiocommunications apparatus that use wideband modulation techniques to access the spectrum, including wireless access systems such as radio local area networks and wideband short-range devices in data networks;

Minimum technical parameters.

3. (1) The minimum technical parameters of wideband data transmission systems shall be those specified in the Annex to this Schedule.

(2) Any person enjoying this general authorisation may have in his possession or under his control a wideband data transmission system, but with technical parameters different from those specified in the Annex to this Schedule:

Provided that in operating such wideband data transmission systems the person enjoying this general authorisation shall ensure compliance with the technical parameters specified in the Annex to this Schedule.

Amended by:
L.N. 153 of 2019.
Substituted by:
L.N. 150 of 2020.

ANNEX TO THE SECOND SCHEDULE
(Paragraph 3 of the Second Schedule)
Minimum Technical Parameters of Wideband Data Transmission Systems

Frequency band	**Transmit power limit/ power density limit**	**Additional parameters**	**Other usage restrictions**
863-868 MHz	25 mW e.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Bandwidth: > 600 kHz and ≤ 1 MHz Duty cycle: ≤ 10% for network access points Duty cycle: ≤ 2.8% otherwise	This set of usage conditions is only available for wideband short range devices (SRD) in data networks.
917.4-919.4 MHz	25 mW e.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Bandwidth: ≤ 1 MHz Duty cycle: ≤ 10% for network access points Duty cycle: ≤ 2.8% in other cases	This set of usage conditions is only available for wide band short-range devices (SRD) in data networks. All devices within the data network shall be under the control of network access points.
2400-2483.5 MHz	100 mW e.i.r.p. and 100 mW/100 kHz e.i.r.p. density applies when frequency hopping modulation is used. 10 mW/MHz e.i.r.p. density applies when other types of modulation are used	Requirements on techniques to access spectrum and mitigate interference apply[1].	
5150-5250 MHz	200 mW mean e.i.r.p. 10 mW/MHz e.i.r.p. density in any 1 MHz band.		Indoor use only.

5250-5350 MHz	200 mW mean e.i.r.p. 10 mW/MHz e.i.r.p. density in any 1 MHz band.	Transmitter power control (TPC) shall be employed to provide, on average, a mitigation factor of at least 3 dB on the maximum permitted transmit power of the system. If TPC is not in use, the maximum permitted transmit power and maximum permitted power density limits shall be reduced by 3 dB. Systems shall use mitigation techniques that give at least the same protection as the detection, operational and response requirements described in EN 301 893 to ensure compatible operation with radiodetermination systems. Such mitigation techniques shall equalise the probability of selecting a specific channel for all available channels so as to ensure, on average, a near-uniform spread of the spectrum loading.	Indoor use only.
5470-5725 MHz	1 W mean e.i.r.p. 50 mW/MHz e.i.r.p. density in any 1 MHz band.		
57-71 GHz	40 dBm e.i.r.p. and 23 dBm/MHz e.i.r.p. density	Requirements on techniques to access spectrum and mitigate interference apply[1].	Fixed outdoor installations are excluded.

57-71 GHz	40 dBm e.i.r.p., 23 dBm/MHz e.i.r.p. density and maximum transmit power of 27 dBm at the antenna port or ports	Requirements on techniques to access spectrum and mitigate interference apply[1].	
57-71 GHz	55 dBm e.i.r.p., 38 dBm/MHz e.i.r.p. density and a transmit antenna gain ≥ 30 dBi	Requirements on techniques to access spectrum and mitigate interference apply[1].	This set of usage conditions is only available to fixed outdoor installations.

[1] Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, performance at least equivalent to these techniques shall be ensured.

Amended by: L.N. 244 of 2011; L.N. 447 of 2011.

THIRD SCHEDULE

(Regulation 3)

General Authorisation for 24 GHz and 79 GHz Automotive Short-Range Radar Radiocommunications Apparatus

Applicability of Third Schedule. *Amended by: L.N. 244 of 2011.*

1. This General Authorization applies to any person installing or using automotive short-range radar apparatus or any apparatus intended to be used as a component part of that apparatus.

Interpretation. *Amended by: L.N. 447 of 2011.*

2. In this Schedule:

"24 GHz range radio spectrum band" means the 24.15 ± 2.50 gigahertz frequency band;

"79 GHz range radio spectrum band" means the frequency range between 77 and 81 gigahertz;

"automotive short-range radar apparatus" means equipment providing road vehicle-based radar functions for collision mitigation and traffic safety applications;

"automotive short-range radar apparatus put into service in the Community" means automotive short-range radar originally installed or replacing one so installed in a vehicle which will be or which has been registered, placed on the market or put into service in the Community;

"Directive 2007/46/EC" means Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive);

"reference dates" means 30 June 2013 for the frequency between 21.65 and 24.25 GHz and 1 January 2018 for the frequency

between 24.25 and 25.65 GHz.

Minimum technical parameters. *Amended by: L.N. 447 of 2011.*

3. (1) Automotive short-range radar apparatus shall operate in the 24 GHz range and 79 GHz radio spectrum bands.

(2) The 24 GHz range radio spectrum band is available for the ultra-wide band part of automotive short-range radar apparatus with a maximum mean power density of -41.3 dBm/MHz e.i.r.p. and peak power density of 0 dBm/50MHz e.i.r.p., except for frequencies below 22 GHz, where the maximum mean power density shall be limited to -61.3 dBm/MHz e.i.r.p.

(3) The 24.05-24.25 GHz radio spectrum band is designated for the narrow-band emission mode/component, which may consist of an unmodulated carrier, with a maximum peak power of 20 dBm e.i.r.p. and a duty cycle limited to 10% for peak emissions higher than -10 dBm e.i.r.p.

(4) Emissions within the 23.6-24.0 GHz band that appear 30° or greater above the horizontal plane shall be attenuated by at least 25 dB for automotive short-range radar apparatus placed on the market before 2010 and thereafter by at least 30 dB.

(5) The maximum mean power density of automotive shortrange radar apparatus operating in the 79 GHz range radio spectrum band shall be of -3 dBm/MHz e.i.r.p. associated with a peak limit of 55 dBm e.i.r.p.

(6) The maximum mean power density outside a vehicle resulting from the operation of one automotive short-range radar apparatus operating in the 79 GHz range radio spectrum band shall not exceed -9 dBm/5MHz e.i.r.p.

Limitations. *Amended by: L.N. 447 of 2011.*

4. (1) The 24 GHz range radio spectrum band shall remain available for automotive short-range radar radiocommunications apparatus until the reference dates.

(2) After the reference dates, the 24 GHz range radio spectrum band will cease to be available for automotive short range radar radiocommunication apparatus mounted on any vehicle except where that apparatus was originally installed, or is replacing apparatus so installed in a vehicle registered, placed on the market or put into service before those dates in the Community.

(3) The date 1 January 2018 shall be extended by four years for automotive short-range radar apparatus mounted on motor vehicles for which a type-approval application has been submitted pursuant to Article 6(6) of Directive 2007/46/EC and has been granted before 1 January 2018.

(4) Automotive short-range radar equipment mounted in vehicles shall only operate when the vehicle is active.

FOURTH SCHEDULE

Amended by: L.N. 98 of 2010; L.N. 244 of 2011; L.N. 285 of 2015.

(Regulation 3)

General Authorisation for Non-Specific Short-Range Devices

Applicability of Fourth Schedule. *Amended by: L.N. 244 of 2011.*

1. This Schedule shall apply to any person installing or using non-specific short-range radiocommunications apparatus or any apparatus intended to be used as a component part of that apparatus.

Interpretation. *Substituted by: L.N. 285 of 2015.*

2. In this Schedule "non-specific short-range devices" means radiocommunications devices regardless of the application or the purpose, which fulfil the technical conditions as specified for a given frequency band in the Annex to this Schedule.

Minimum technical parameters. *Amended by: L.N. 98 of 2010. Substituted by: L.N. 244 of 2011.*

3. The minimum technical parameters of non-specific short range radiocommunications apparatus shall be those specified in the Annex to this Schedule.

Substituted by: L.N. 98 of 2010; L.N. 224 of 2011; L.N. 285 of 2015; Amended by: L.N. 420 of 2018; L.N.153 of 2019; Substituted by: L.N. 150 of 2020.

ANNEX

(Paragraph 3 of the Fourth Schedule)

Minimum Technical Parameters of Non-Specific Short -Range Devices

Frequency band	**Transmit power limit/field strength limit/ power density limit**	**Additional parameters**	**Other usage parameters**	**Frequency band reference (informative)**
442.2-450.0 kHz	7 dBµA/m at 10m	Channel spacing: ≥ 150 Hz	This set of usage conditions is only available for person detection and collision avoidance devices.	85
456.9-457.1 kHz	7 dBµA/m at 10m		This set of usage conditions is only available for emergency detections of buried victims and valuable items devices.	18
13553-13567 kHz	10 mW e.r.p.			27c
26957-27283 kHz	10 mW e.r.p.			28

26990-27000 kHz	100 mW e.r.p.	Duty cycle limit: 0.1%	Model control devices may operate without duty cycle restrictions.	29
27040-27050 kHz	100 mW e.r.p.	Duty cycle limit: 0.1%	Model control devices may operate without duty cycle restrictions.	30
27090-27100 kHz	100 mW e.r.p.	Duty cycle limit: 0.1%	Model control devices may operate without duty cycle restrictions.	31
27140-27150 kHz	100 mW e.r.p.	Duty cycle limit: 0.1%	Model control devices may operate without duty cycle restrictions.	32
27190-27200 kHz	100 mW e.r.p.	Duty cycle limit: 0.1%	Model control devices may operate without duty cycle restrictions.	33
40.66-40.7 MHz	10 mW e.r.p.			35
138.2-138.45 MHz	10 mW e.r.p.	Duty cycle limit: ≤ 1%		e
169.4-169.475 MHz	500 mW e.r.p.	Channel spacing (maximum): 50 kHz Duty cycle limit: 1.0%		37c
169.4-169.4875 MHz	10 mW e.r.p.	Duty cycle limit: 0.1%		38
169.4875-169.5875 MHz	10 mW e.r.p.	Duty cycle limit: 0.001%	Between 00:00h and 06:00h local time a duty cycle limit of 0.1% may be used.	39b
169.5875-169.8125 MHz	10 mW e.r.p.	Duty cycle limit: 0.1%		40

433.05-434.79 MHz	1 mW e.r.p. and -13 dBm/10 kHz power density for bandwidth modulation larger than 250 kHz		Voice applications are allowed with advanced mitigation techniques. Other audio and video applications are excluded.	44a
433.05-434.79 MHz	10 mW e.r.p.	Duty cycle limit: 10%		44b
434.04-434.79 MHz	10 mW e.r.p.	Duty cycle limit: 100% subject to channel spacing up to 25 kHz	Voice applications are allowed with advanced mitigation techniques. Other audio and video applications are excluded.	45c
862-863 MHz	25 mW e.r.p.	Duty cycle limit: 0.1% Bandwidth: ≤ 350 kHz		87
863-865 MHz	25 mW e.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Alternatively a duty cycle limit of 0.1% may also be used.		46a
865-868 MHz	25 mW e.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Alternatively a duty cycle limit of 1% may also be used.		47

865-868 MHz	500 mW e.r.p. Adaptive Power Control (APC) required. Alternatively other mitigation techniques with at least an equivalent level of spectrum compatibility.	Transmissions only permitted within the frequency ranges 865.6-865.8 MHz, 866.2-866.4 MHz, 866.8-867.0 MHz and 867.4-867.6 MHz. Requirements on techniques to access spectrum and mitigate interference apply[1]. Bandwidth: ≤ 200 kHz Duty cycle: ≤ 10% for network access points Duty cycle: ≤ 2.5% otherwise	This set of usage conditions is only available for data networks.	47b
868-868.6 MHz	25 mW e.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Alternatively a duty cycle limit of 1% may also be used.		48
868.7-869.2 MHz	25 mW e.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Alternatively a duty cycle limit of 0.1% may also be used.		50

869.4-869.65 MHz	500 mW e.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Alternatively a duty cycle limit of 10% may also be used.		54
869.7-870 MHz	5 mW e.r.p.		Voice applications are allowed with advanced mitigation techniques. Other audio and video applications are excluded.	56a
869.7-870 MHz	25 mW e.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Alternatively a duty cycle limit of 1% may also be used.		56b
874-874.4 MHz	500 mW e.r.p. Adaptive Power Control (APC) required, alternatively other mitigation techniques which achieve at least an equivalent level of spectrum compatibility.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Bandwidth: ≤ 200 kHz Duty cycle: ≤ 10% for network access points Duty cycle: 2.5% in other cases	This set of usage conditions is only available for data networks. All devices within the data network shall be under the control of network access points.	1

917.3-918.9 MHz	500 mW e.r.p. Transmissions only permitted within the frequency ranges 917.3-917.7 MHz, 918.5-918.9 MHz Adaptive Power Control (APC) required, alternatively other mitigation techniques which achieve at least an equivalent level of spectrum compatibility.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Bandwidth: ≤ 200 kHz Duty cycle: ≤ 10% for network access points Duty cycle: ≤ 2.5% in other cases	This set of usage conditions is only available for data networks. All devices within the data network shall be under the control of network access points.	4
917.4-919.4 MHz	25 mW e.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1]. Bandwidth: ≤ 600 kHz Duty cycle: ≤ 1%	This set of usage conditions is only available for short-range devices in data networks. All devices within the data network shall be under the control of network access points.	5
2400-2483.5 MHz	10 mW equivalent isotropic radiated power (e.i.r.p.)			57a
5725-5875 MHz	25 mW e.i.r.p.			61
24.15-24.25 GHz	100 mW e.i.r.p.			70a
57-64 GHz	100 mW e.i.r.p. and a maximum transmit power of 10 dBm			74a
61-61.5 GHz	100 mW e.i.r.p.			76
122-122.25 GHz	10 dBm e.i.r.p/ 250 MHz and -48 dBm/MHz at 30° elevation			80a
122.25-123 GHz	100 mW e.i.r.p.			80b

244-246 GHz	100 mW e.i.r.p.			81

[1] Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, performance at least equivalent to these techniques shall be ensured.".

Amended by: L.N. 98 of 2010; L.N. 224 of 2011; L.N. 193 of 2012.

FIFTH SCHEDULE

(Regulation 3)

General Authorisation for Radiocommunications Apparatus intended to be used for Inductive Applications

Applicability of Fifth Schedule. *Amended by: L.N. 224 of 2011.*

1. This Schedule shall apply to any person installing or using short-range radiocommunications apparatus intended to be used for inductive applications or any apparatus intended to be used as a component part of that apparatus.

Interpretation. *Added by: L.N. 285 of 2015.*

2. In this Schedule "Short-range radiocommunications apparatus intended to be used for inductive applications" means apparatus that uses magnetic fields with inductive loop systems for near field communications.

Minimum technical parameters. *Amended by: L.N. 98 of 2010. Substituted by: L.N. 193 of 2012. Re-numbered by: L.N. 285 of 2015.*

3. The minimum technical parameters of short-range radiocommunications apparatus intended to be used for inductive applications, shall be those specified in the Annex to this Schedule.

ANNEX TO THE FIFTH SCHEDULE

(Paragraph 2 of the Fifth Schedule)

Substituted by: L.N. 98 of 2010; L.N. 193 of 2012; L.N. 150 of 2020.

Minimum Technical Parameters of Short-Range Radiocommunications Apparatus intended to be used for Inductive Applications

Mandatory Parameters			
Frequency band	Field strength limit	Additional parameters	Other usage parameters
9-59.75 kHz	72 dBµA/m at 10 metres		
59.75-60.25 kHz	42 dBµA/m at 10 metres		
60.25-74.75 kHz	72 dBµA/m at 10 metres		
74.75-75.25 kHz	42 dBµA/m at 10 metres		
75.25-77.25 kHz	72 dBµA/m at 10 metres		
77.25-77.75 kHz	42 dBµA/m at 10 metres		
77.75-90 kHz	72 dBµA/m at 10 metres		
90-119 kHz	42 dBµA/m at 10 metres		

Mandatory Parameters			
Frequency band	Field strength limit	Additional parameters	Other usage parameters
119-128.6 kHz	66 dBµA/m at 10 metres		
128.6-129.6 kHz	42 dBµA/m at 10 metres		
129.6-135 kHz	66 dBµA/m at 10 metres		
135-140 kHz	42 dBµA/m at 10 metres		
140-148.5 kHz	37.7 dBµA/m at 10 metres		
148.5-5000 kHz In the specific bands mentioned below, higher field strengths and additional usage restrictions apply:	-15 dBµA/m at 10 metres in any bandwidth of 10 kHz Furthermore the total field strength is -5 dBµA/m at 10 metres for systems operating at bandwidths larger than 10 kHz		
3155-3400 kHz	13.5 dBµA/m at 10 metres		
5000 kHz-30 MHz In the specific bands mentioned below, higher field strengths and additional usage restrictions apply.	-20 dBµA/m at 10 metres in any bandwidth of 10 kHz Furthermore the total field strength is -5 dBµA/m at 10 m for systems operating at bandwidths larger than 10 kHz		
6765-6795 kHz	42 dBµA/m at 10 metres		
7400-8800 kHz	9 dBµA/m at 10 metres		
10200-11000 kHz	9 dBµA/m at 10 metres		
13553-13567 kHz	42 dBµA/m at 10 meters	Transmission mask and antenna requirements for all combined frequency segments apply[1], [2].	

[1] Antenna requirements that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant restrictions are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, performance at least equivalent to these restrictions shall be ensured.

[2] Transmission mask that provides an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant restrictions are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, performance at least equivalent to these restrictions shall be ensured.

Amended by: L.N. 224 of 2011; L.N. 420 of 2018.

SIXTH SCHEDULE

(Regulation 3)

General Authorisation for Model Control Radiocommunications Apparatus

Applicability of Sixth Schedule.

1. This Schedule shall apply to any person installing or using model control radiocommunications apparatus or any apparatus intended to be used as a component part of that apparatus.

Interpretation. *Added by: L.N. 224 of 2011.*

2. In this Schedule:

"model control radiocommunications apparatus" means radiocommunications apparatus designed or adapted for the purpose of controlling (otherwise than by means of telephony) the movement of a model vehicle, vessel or aircraft or a model of any other type by means of the emission of electro-magnetic energy from that apparatus and the reception of such energy by receiving apparatus in the model.

Minimum technical parameters. *Added by: L.N. 224 of 2011. Renumbered: L.N. 420 of 2018.*

3. The minimum technical parameters of model control radiocommunications apparatus shall be those specified in the Annex to this Schedule.

Compliance with these regulations. *Added by: L.N. 224 of 2011. Renumbered: L.N. 420 of 2018.*

4. (1) In operating model control radiocommunications apparatus any person shall at all times comply with these regulations.

(2) The operation of model control radiocommunications apparatus shall be limited to those sites or locations however so described, established appropriately for this purpose by the competent authorities. The use of model control radiocommunications apparatus at any other site or location is prohibited.

Substituted by: L.N. 224 of 2011. Amended by: L.N. 420 of 2018.

ANNEX TO THE SIXTH SCHEDULE

(Paragraph 3 of the Sixth Schedule)

Minimum Technical Parameters of Model Control Radiocommunications Apparatus

Mandatory Parameters			Informative Parameters
Operating frequency	Maximum power limit	Additional technical and/ or usage restrictions	Recommended (harmonized) standard
26.975, 26.995 27.025, 27.045, 27.075, 27.095, 27.125, 27.145, 27.175, 27.195 27.225, 27.245 MHz	100 mW e.r.p.	Channel spacing:10 kHz	EN 300 220

Mandatory Parameters			Informative Parameters
Operating frequency	Maximum power limit	Additional technical and/ or usage restrictions	Recommended (harmonized) standard
34.400, 34.700, 34.990, 35.000, 35.010, 35.020, 35.030, 35.040, 35.050, 35.060, 35.070, 35.080, 35.090, 35.100, 35.110, 35.120, 35.130, 35.140, 35.150, 35.160, 37.170, 35.180, 35.190, 35.200, 35.210, 35.220, 35.230, 35.300, 35.600 MHz	100 mW e.r.p.	Channel spacing:10 kHz Usage limited to flying models only	EN 300 220
40.665, 40.675, 40.685, 40.695, 40.715, 40.725, 40.735, 40.765, 40.775 MHz	100 mW e.r.p.	Channel spacing:10 kHz	EN 300 220
41.000, 41.010, 41.020, 41.030, 41.040, 41.050, 41.060, 41.070, 41.100, 41.110, 41.120, 41.130, 41.140, 41.150, 41.160, 41.170, 41.180, 41.190, 41.200 MHz	100 mW e.r.p.	Channel spacing:10 kHz Usage limited to flying models only	EN 300 220

SEVENTH SCHEDULE

Amended by:
L.N. 224 of 2011;
L.N. 285 of 2015.
Substituted by:
L.N. 420 of 2018.

(Regulation 3)

General Authorisation for Low duty cycle /high reliability devices

1. This General Authorisation applies to any person installing or using Low duty cycle /high reliability devices or any apparatus intended to be used as a component part of these devices.

2. In this Schedule:

"low duty cycle/high reliability devices" means radiocommunications apparatus that rely on low overall spectrum utilisation and low duty cycle spectrum access rules to ensure highly reliable spectrum access and transmissions in shared bands, which include alarm systems that use radiocommunication for indicating an alert condition at a distant location and social alarms systems that allow reliable communication for a person in distress;

"alarms" means radiocommunications apparatus for indicating an alert to a system or a person, as a main functionality, at a distant

location;

"social alarms" means radiocommunications apparatus that allow reliable communication for a person in distress.

3. The minimum technical parameters of low duty cycle /high reliability devices shall be those specified in the Annex to this Schedule.

ANNEX TO THE SEVENTH SCHEDULE
(Paragraph 3 of the Seventh Schedule)

Minimum Technical Parameters for Low duty cycle /high reliability devices

Frequency band	Transmit power limit/ field strength limit/power density limit	Additional parameters	Other usage parameters
868.6-868.7 MHz	10 mW e.r.p.	Channel spacing: 25 kHz. The whole frequency band may also be used as a single channel for high-speed data transmission. Duty cycle limit: 1.0%	This set of usage conditions is only available to alarms.
869.2-869.25 MHz	10 mW e.r.p.	Channel spacing: 25 kHz. Duty cycle limit: 0.1%	This set of usage conditions is only available to social alarms.
869.25-869.3 MHz	10 mW e.r.p.	Channel spacing: 25 kHz. Duty cycle limit: 0.1%	This set of usage conditions is only available to alarms.
869.3-869.4 MHz	10 mW e.r.p.	Channel spacing: 25 kHz. Duty cycle limit: 1%	This set of usage conditions is only available to alarms.
869.65-869.7 MHz	25 mW e.r.p.	Channel spacing: 25 kHz. Duty cycle limit: 10%	This set of usage conditions is only available to alarms.

EIGHTH SCHEDULE

Amended by:
L.N. 224 of 2011.
Substituted by:
L.N. 420 of 2018.

(Regulation 3)

General Authorisation for High duty cycle/continuous transmission devices

1. This General Authorisation applies to any person installing or using high duty cycle/continuous transmission devices or any apparatus intended to be used as a component part of these devices.

2. In this Schedule:

"high duty cycle/continuous transmission devices" means radiocommunications apparatus that rely on low latency and high duty cycle transmissions, which includes devices for personal wireless audio and multimedia streaming systems used for combined audio/video transmissions and audio/video sync signals, mobile phones, automotive or home entertainment system, wireless microphones, cordless loudspeakers, cordless headphones, radio devices carried on a person, assistive listening devices, in-ear monitoring, wireless microphones for use at concerts or other stage productions, and low power analogue FM transmitters.

3. The minimum technical parameters of high duty cycle/ continuous transmission devices shall be those specified in the Annex to this Schedule.

ANNEX TO THE EIGHTH SCHEDULE
(Paragraph 3 of the Eighth Schedule)

Minimum Technical Parameters of High duty cycle/continuous transmission devices

Frequency band	Transmit power limit/ field strength limit/power density limit	Additional parameters	Other usage parameters
87.5-108 MHz	50 nW e.r.p.	Channel spacing: up to 200 kHz.	This set of usage conditions is only available to wireless audio and multimedia streaming transmitters with analogue frequency modulation (FM).
863-865 MHz	10 mW e.r.p.		This set of usage conditions is only available to wireless audio and multimedia streaming devices.

Amended by: L.N. 224 of 2011; L.N. 285 of 2015.

NINTH SCHEDULE

(Regulation 3)

General Authorisation for DECT User Terminal Apparatus

Applicability of Ninth Schedule. *Amended by: L.N. 224 of 2011.*

1. (1) This Schedule applies to any person installing or using DECT user terminal apparatus or any apparatus intended to be used as a component part of that apparatus.

(2) In this Schedule "DECT" means digital enhanced cordless telecommunications.

Minimum technical parameters. *Amended by: L.N. 285 of 2015.*

2. The minimum technical parameters of DECT user terminal apparatus operating in the frequency band 1880-1900 MHz shall be those specified in the Annex to this Schedule.

Substituted by: L.N. 285 of 2015.

ANNEX TO THE NINTH SCHEDULE

(Paragraph 2 of the Ninth Schedule)

Minimum Technical Parameters of DECT user terminal apparatus

Frequency band	1880-1900 MHz
Channelling	1728 kHz
Maximum Transmit Power	250 mW peak e.r.p. (peak power over time-slot)
Channel access and occupation rules	Instant Dynamic Channel Selection
Recommended harmonized standard (Informative)	EN 301 406

Amended by: L.N. 224 of 2011. Substituted by: L.N. 193 of 2012. Amended by: L.N. 285 of 2015. Substituted by: L.N. 420 of 2018.

TENTH SCHEDULE

(Regulation 3)

General Authorisation for PMR 446 Radiocommunications Apparatus

Applicability of Tenth Schedule.

1. This Schedule applies to any person installing or using PMR 446 radiocommunications apparatus or any apparatus intended to be used as a component of that apparatus.

Interpretation.

2. In this Schedule unless the context otherwise requires:

"PMR 446 radiocommunications apparatus" means hand portable radiocommunications apparatus that uses integral antennas only in order to maximise sharing and minimise interference.

Minimum technical parameters and limitations.

3. (1) PMR 446 radiocommunications apparatus shall operate in peer-to-peer mode and shall not be used as part of an infrastructure network or as a repeater.

(2) The minimum technical parameters of PMR 446 radiocommunications apparatus shall be those specified in the Annex to this Schedule.

ANNEX TO THE TENTH SCHEDULE
(Paragraph 3 of the Tenth Schedule)

Minimum Technical Parameters of PMR 446 radiocommunications apparatus

Frequency band	Transmit power limit/ field strength limit/ power density limit	Other usage parameters
446-446.2 MHz	500 mW e.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used.

ELEVENTH SCHEDULE

Amended by:
L.N. 98 of 2010;
L.N. 224 of 2011;
L.N. 285 of 2015;
L.N. 420 of 2018;
Substituted by:
L.N.150 of 2020.

(Regulation 3)

General Authorisation for
apparatus using ultra-wideband technology

Applicability of Eleventh Schedule.
Amended by:
L.N. 224 of 2011.

1. This Schedule applies to any person installing or using radiocommunications apparatus using ultra-wideband technology or any apparatus intended to be used as a component part of that apparatus.

Interpretation.

2. In this Schedule unless the context otherwise requires:

"apparatus using ultra-wideband technology" or "UWB" means apparatus incorporating, as an integral part or as an accessory, technology for short-range radiocommunication, involving the intentional generation and transmission of radio-frequency energy that spreads over a frequency range wider than 50 MHz, which may overlap several frequency bands allocated to radiocommunication services;

"contact based UWB material sensing devices" means UWB material sensing apparatus for which the UWB transmitter is only switched on when in direct contact

with the material under investigation;

"Directive 2007/46/EC" means Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles;

"indoors" means inside buildings or places in which the shielding will typically provide the necessary attenuation to protect radiocommunication services against harmful interference;

"LT1" means systems intended for general location tracking of people and objects that can be put into service on an unlicensed basis;

"maximum mean power spectral density" means the average power per unit bandwidth (centred on that frequency) radiated in the direction of the maximum level under the specified conditions of measurement and which is specified as e.i.r.p. of the radio device under test at a particular frequency;

"motor vehicle" has the same meaning as set out in Article 3(11) of Directive 2007/46/EC;"non-contact based UWB material sensing devices" means UWB material sensing apparatus for which the UWB transmitter is only switched on when it is near the investigated material and the UWB transmitter is directed towards the material under investigation (for example manually by using a proximity sensor or by mechanical design);

"on-board aircraft" means the use of radio links for communications purposes inside an aircraft;

"peak power" means the power contained within a 50 MHz bandwidth at the frequency at which the highest mean radiated power occurs, radiated in the direction of the maximum level under the specified conditions of measurement and which is specified as e.i.r.p.;

"railway vehicle" has the same meaning as set out in Article 3(1)(4) of Regulation (EU) 2018/643;

"Regulation (EU) 2018/643" means Regulation (EU) 2018/643 of the European Parliament and of the Council of 18 April 2018 on rail transport statistics; and

"total power spectral density" means the average of the mean power spectral density values measured over a sphere around the measurement scenario with a resolution of at least 15 degrees.

Minimum technical parameters.

3. Apparatus using ultra-wideband technology shall meet the conditions set out in the Annex to this Schedule.

Limitations.

4. (a) Apparatus using ultra-wideband technology meeting the conditions specified in this Schedule shall be used indoors

or, if it is used outdoors, it is not attached to a fixed installation, a fixed infrastructure or a fixed outdoor antenna.

(b) Apparatus using ultra-wideband technology meeting the conditions specified in this Schedule shall also be allowed in motor and railway vehicles..

ANNEX TO THE ELEVENTH SCHEDULE

(Paragraph 3 of the Eleventh Schedule)

Minimum Technical Parameters of Apparatus using Ultra-Wideband Technology

Substituted by: L.N. 98 of 2010; L.N. 285 of 2015. Amended by: L.N. 420 of 2018. Substituted by: L.N. 150 of 2020.

1. 1. GENERIC ULTRA-WIDEBAND (UWB) USAGE

Technical requirements		
Frequency range	**Maximum mean power spectral density (e.i.r.p.)**	**Maximum peak power (e.i.r.p.) (defined in 50 MHz)**
f ≤ 1.6 GHz	-90 dBm/MHz	-50 dBm
1.6 < f ≤ 2.7 GHz	-85 dBm/MHz	-45 dBm
2.7 < f ≤ 3.1 GHz	-70 dBm/MHz	-36 dBm
3.1 < f ≤ 3.4 GHz	-70 dBm/MHz or -41.3 dBm/MHz using LDC[1]or DAA[2]	-36 dBm or 0 dBm
3.4 < f ≤ 3.8 GHz	-80 dBm/MHz or -41.3 dBm/MHz using LDC[1] or DAA[2]	-40 dBm or 0 dBm
3.8 < f ≤ 4.8 GHz	-70 dBm/MHz or -41.3 dBm/MHz using LDC[1] or DAA[2]	-30 dBm or 0 dBm
4.8 < f ≤ 6 GHz	-70 dBm/MHz	-30 dBm
6 < f ≤ 8.5 GHz	-41.3 dBm/MHz	0 dBm
8.5 < f ≤ 9 GHz	-65 dBm/MHz or -41.3 dBm/MHz using DAA[2]	-25 dBm or 0 dBm
9 < f ≤ 10.6 GHz	-65 dBm/MHz	-25 dBm
f > 10.6 GHz	-85 dBm/MHz	-45 dBm

(1) Within the 3.1 GHz to 4.8 GHz band. The Low Duty Cycle ('LDC') mitigation technique and its limits are defined in clauses 4.5.3.1, 4.5.3.2 and 4.5.3.3 of ETSI Standard EN 302 065-1 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule.

(2) Within the 3.1 GHz to 4.8 GHz and 8.5 GHz to 9 GHz bands. The Detect and Avoid ('DAA') mitigation technique and its limits are defined in clauses 4.5.1.1, 4.5.1.2 and 4.5.1.3 of ETSI Standard EN 302 065-1 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule.

2. LOCATION TRACKING SYSTEMS Type 1 (LT1)

Technical requirements		
Frequency range	**Maximum mean power spectral density (e.i.r.p.)**	**Maximum peak power (e.i.r.p.) (defined in 50 MHz)**
f ≤ 1.6 GHz	-90 dBm/MHz	-50 dBm
1.6 < f ≤ 2.7 GHz	-85 dBm/MHz	-45 dBm
2.7 < f ≤ 3.4 GHz	-70 dBm/MHz	-36 dBm
3.4 < f ≤ 3.8 GHz	-80 dBm/MHz	-40 dBm
3.8 < f ≤ 6.0 GHz	-70 dBm/MHz	-30 dBm
6 < f ≤ 8.5 GHz	-41.3 dBm/MHz	0 dBm
8.5 < f ≤ 9 GHz	-65 dBm/MHz or -41.3 dBm/MHz using DAA[1]	-25 dBm or 0 dBm
9 < f ≤ 10.6 GHz	-65 dBm/MHz	-25 dBm
f > 10.6 GHz	-85 dBm/MHz	-45 dBm

(1) The DAA mitigation technique and its limits are defined in clauses 4.5.1.1, 4.5.1.2 and 4.5.1.3 of ETSI Standard EN 302 065-2 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule.

3. UWB DEVICES INSTALLED IN MOTOR AND RAILWAY VEHICLES

Technical requirements		
Frequency range	**Maximum mean power spectral density (e.i.r.p.)**	**Maximum peak power (e.i.r.p.) (defined in 50 MHz)**
f ≤ 1.6 GHz	-90 dBm/MHz	-50 dBm
1.6 < f ≤ 2.7 GHz	-85 dBm/MHz	-45 dBm
2.7 < f ≤ 3.1 GHz	-70 dBm/MHz	-36 dBm
3.1 < f ≤ 3.4 GHz	-70 dBm/MHz or -41.3 dBm/MHz using LDC[1] + e.l.[4] or -41.3 dBm/MHz using TPC[3]+ DAA[2] + e.l.[4]	-36 dBm or ≤0 dBm or ≤0 dBm
3.4 < f ≤ 3.8 GHz	-80 dBm/MHz or -41.3 dBm/MHz using LDC[1] + e.l.[4] or -41.3 dBm/MHz using TPC[3]+DAA[2] + e.l.[4]	-40 dBm or ≤0 dBm or ≤0 dBm
3.8 < f ≤ 4.8 GHz	-70 dBm/MHz or -41.3 dBm/MHz using LDC[1] + e.l.[4] or -41.3 dBm/MHz using TPC[3]+DAA[2] + e.l.[4]	-30 dBm or ≤0 dBm or ≤0 dBm
4.8 < f ≤ 6 GHz	-70 dBm/MHz	-30 dBm
6 < f ≤ 8.5 GHz	-53.3 dBm/MHz or -41.3 dBm/MHz using LDC[1] + e.l.[4] or -41.3 dBm/MHz using TPC[3]+e.l.[4]	-13.3 dBm or ≤0 dBm or ≤0 dBm
8.5 < f ≤ 9 GHz	-65 dBm/MHz or -41.3 dBm/MHz using TPC[3]+DAA[2] + e.l.[4]	-25 dBm or ≤0 dBm
9 < f ≤ 10.6 GHz	-65 dBm/MHz	-25 dBm

f > 10.6 GHz	-85 dBm/MHz	-45 dBm

(1) The LDC mitigation technique and its limits are defined in clauses 4.5.3.1, 4.5.3.2 and 4.5.3.3 of ETSI Standard EN 302 065-3 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule.

(2) The DAA mitigation technique and its limits are defined in clauses 4.5.1.1, 4.5.1.2 and 4.5.1.3 of ETSI Standard EN 302 065-3 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule.

(3) The Transmit Power Control ('TPC') mitigation technique and its limits are defined in clauses 4.7.1.1, 4.7.1.2 and 4.7.1.3 of ETSI Standard EN 302 065-3 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule.

(4) The exterior limit (e.l.) ≤ -53.3 dBm/MHz is required. The exterior limit is defined in clauses 4.3.4.1, 4.3.4.2 and 4.3.4.3 of ETSI Standard EN 302 065-3 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule.

Technical requirements to be used within the bands 3.8-4.2 GHz and 6-8.5 GHz for vehicular access systems using trigger-before-transmit are defined in the following table:

Technical requirements		
Frequency range	**Maximum mean power spectral density (e.i.r.p.)**	**Maximum peak power (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 1hour)	0 dBm
6 < f ≤ 8.5 GHz	-41.3 dBm/MHz with trigger-before-transmit operation and LDC ≤ 0.5% (in 1hour) or TPC	0 dBm

'Trigger-before-transmit' mitigation is defined as a UWB transmission that is only initiated when necessary, specifically where the system indicates that UWB devices are nearby. The communication is either triggered by a user or by the vehicle. The subsequent communication can be considered as 'triggered communication'. The existing LDC mitigation applies (or alternatively TPC in the 6 GHz to 8.5 GHz range). An exterior

limit requirement must not be applied when using the trigger-before-transmit mitigation technique for vehicular access systems.

Trigger-before-transmit mitigation techniques that provide an appropriate level of performance in order to comply with the essential requirements of Directive 2014/53/EU shall be used for vehicular access systems. If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, performance at least equivalent to these techniques shall be ensured. These techniques shall respect the conditions specified in this Schedule.

4. UWB ONBOARD AIRCRAFT

The values for maximum mean power spectral density (e.i.r.p.) and maximum peak power (e.i.r..p.) for short-range devices using UWB technology, with or without use of mitigation techniques are listed in the table below:

Technical requirements			
Frequency range	**Maximum mean power spectral density (e.i.r.p.)**	**Maximum peak power (e.i.r.p.) (defined in 50 MHz)**	**Requirements for mitigation techniques**
f ≤ 1.6 GHz	-90 dBm/ MHz	-50 dBm	
1.6 < f ≤ 2.7 GHz	-85 dBm/ MHz	-45 dBm	
2.7 < f ≤ 3.4 GHz	-70 dBm/ MHz	-36 dBm	
3.4 < f ≤ 3.8 GHz	-80 dBm/ MHz	-40 dBm	
3.8 < f ≤ 6.0 GHz	-70 dBm/ MHz	-30 dBm	
6.0 < f ≤ 6.650 GHz	-41.3 dBm/ MHz	0 dBm	
6.650 < f ≤ 6.6752 GHz	-62.3 dBm/ MHz	-21 dBm	notch of 21 dB should be implemented to meet the -62.3 dBm/MHz[1] level
6.6752 < f ≤ 8.5 GHz	-41.3 dBm/ MHz	0 dBm	7.25 to 7.75 GHz (FSS and MetSat (7.45 to 7.55 GHz) protection)[1, 2] 7.75 to 7.9 GHz (MetSat protection)[1,3]

8.5 < f ≤ 10.6 GHz	-65 dBm/ MHz	-25 dBm	
f > 10.6 GHz	-85 dBm/ MHz	-45 dBm	

(1) Alternative mitigation techniques, such as the use of shielded portholes, may be used if they ensure at least an equivalent performance.

(2) 7.25 to 7.75 GHz (Fixed Satellite Service) and 7.45 to 7.55 GHz (Meteorological Satellite) protection:
-51.3 - 20*$\log_{10}$(10[km]/x[km])(dBm/MHz) for heights above ground of over 1000 m, where x is the aircraft height above ground in kilometres, -71.3 dBm/MHz for heights above ground of 1000 m and below.

(3) 7.75 to 7.9 GHz (Meteorological Satellite) protection:
-44.3 - 20*$\log_{10}$(10 [km]/x [km]) (dBm/MHz) for heights above ground of over 1000 m, where x is the aircraft height above ground in kilometres, and -64.3 dBm/MHz for heights above ground of 1000 m and below.

5. MATERIAL SENSING DEVICES USING UWB TECHNOLOGY

Material sensing devices based on UWB technology shall comply either with the generic UWB conditions set out in section 1 of this Schedule or with the specific limits for material sensing devices set out in sections 5.1 and 5.2 hereof.

The generic UWB conditions set out in section 1 of this Schedule excludes fixed outdoor installations. Emissions radiated by a material sensing device must not exceed the limits of the regulation for generic UWB usage specified in section 1. Material sensing devices must fulfil the requirements of mitigation techniques specified for the generic use of UWB in section 1.

The specific limits for material sensing devices including the mitigation techniques are listed in the following tables. Emissions radiating from material sensing devices permitted under this Schedule must be kept to a minimum and in any case not exceed the emission limits within the following tables. Compliance with the specific limits must be ensured by the device placed on a representative structure of the investigated material. The specific limits listed in the following tables are applicable in all environments for material sensing devices, except those to which note 5 of these tables, which excludes fixed outdoor installation in certain applicable frequency ranges, applies.

5.1 Contact based material sensing devices

The specific limits for maximum mean power spectral density (e.i.r.p.) and maximum peak power (e.i.r.p.) for contact based material sensing devices using UWB technology are defined in the

table below.

Technical requirements for contact based UWB material sensing devices		
Frequency range	**Maximum mean power spectral density (e.i.r.p.)**	**Maximum peak power (e.i.r.p.) (defined in 50 MHz)**
f ≤ 1.73 GHz	-85 dBm/MHz (see note 1)	-45 dBm
1.73 < f ≤ 2.2 GHz	-65 dBm/MHz	-25 dBm
2.2 < f ≤ 2.5 GHz	-50 dBm/MHz	-10 dBm
2.5 < f ≤ 2.69 GHz	-65 dBm/MHz (see notes 1 and 2)	-25 dBm
2.69< f ≤ 2.7 GHz (see note 4)	-55 dBm/MHz (see note 3)	-15 dBm
2.7 < f ≤ 2.9 GHz	-70 dBm/MHz (see note 1)	-30 dBm
2.9 < f ≤ 3.4 GHz	-70 dBm/MHz (see note 1, 6 and 7)	-30 dBm
3.4 < f ≤ 3.8 GHz (see note 4)	-50 dBm/MHz (see notes 2,6 and 7)	-10 dBm
3.8 < f ≤ 4.8 GHz	-50 dBm/MHz (see notes 6 and 7)	-10 dBm
4.8 < f ≤ 5.0 GHz (see note 4)	-55 dBm/MHz (see notes 2 and 3)	-15 dBm
5.0 < f ≤ 5.25 GHz	-50 dBm/MHz	-10 dBm
5.25<f ≤ 5.35 GHz	-50 dBm/MHz	-10 dBm
5.35<f ≤ 5.6 GHz	-50 dBm/MHz	-10 dBm
5.6<f ≤ 5.65 GHz	-50 dBm/MHz	-10 dBm
5.65<f≤5.725 GHz	-50 dBm/MHz	-10 dBm
5.725<f≤6.0 GHz	-50 dBm/MHz	-10 dBm
6.0<f≤8.5 GHz	-41.3 dBm/MHz (see note 5)	0 dBm
8.5<f≤9.0 GHz	-65 dBm/MHz (see note 7)	-25 dBm
9.0<f≤10.6 GHz	-65 dBm/MHz	-25 dBm
f > 10.6 GHz	-85 dBm/MHz	-45 dBm

(1) Devices using the Listen Before Talk ('LBT') mechanism are permitted to operate in the 1.215 GHz to 1.73 GHz frequency range with a maximum mean e.i.r.p. spectral density of -70 dBm/MHz and in the 2.5 GHz to 2.69 GHz and 2.7 GHz to 3.4 GHz frequency ranges with a maximum mean e.i.r.p. spectral density of -50 dBm/MHz and a maximum peak e.i.r.p. of -10 dBm/50 MHz. The LBT mechanism is defined in clauses 4.5.2.1, 4.5.2.2 and 4.5.2.3 of ETSI Standard EN 302 065-4 V1.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule.

(2) To protect the radio services, non-fixed installations must fulfil the following requirement for total radiated power:

(a) In the 2.5 GHz to 2.69 GHz and 4.8 GHz to 5 GHz frequency ranges, the total power spectral density must be 10 dB below the maximum e.i.r.p. spectral density.

(b) In the 3.4 GHz to 3.8 GHz frequency range, the total power spectral density must be 5 dB below the maximum e.i.r.p. spectral density.

(3) To protect the Radio Astronomy Service (RAS) in the 2.69 GHz to 2.7 GHz and 4.8 GHz to 5 GHz bands, the total power spectral density must be below -65 dBm/MHz.

(4) Limitation of the Duty Cycle to 10% per second.

(5) No fixed outdoor installation is permitted.

(6) Within the 3.1 GHz - 4.8 GHz band, devices implementing LDC mitigation technique 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. The LDC mitigation technique and its limits are defined in clauses 4.5.3.1, 4.5.3.2 and 4.5.3.3 of ETSI Standard EN 302 065-1 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule. When LDC is implemented, note 5 applies.

(7) Within the 3.1 GHz - 4.8 GHz and 8.5 GHz - 9 GHz bands, devices implementing DAA mitigation technique 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. The DAA mitigation technique and its limits are defined in clauses 4.5.1.1, 4.5.1.2 and 4.5.1.3 of ETSI Standard EN 302 065-1 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule. When DAA is implemented, note 5 applies.

5.2 Non-contact based material sensing devices

The specific limits for maximum mean power spectral density (e.i.r.p.) and maximum peak power (e.i.r.p.) for non-contact based material sensing devices using UWB technology are defined in the table below.

Technical requirements for non-contact based UWB material sensing devices		
Frequency range	**Maximum mean power spectral density (e.i.r.p.)**	**Maximum peak power (e.i.r.p.) (defined in 50 MHz)**

f ≤ 1.73 GHz	-85 dBm/MHz (see note 1)	-60 dBm
1.73 < f ≤ 2.2 GHz	-70 dBm/MHz	-45 dBm
2.2 < f ≤ 2.5 GHz	-50 dBm/MHz	-25 dBm
2.5 < f ≤ 2.69 GHz	-65 dBm/MHz (see notes 1 and 2)	-40 dBm
2.69< f ≤ 2.7 GHz (see note 4)	-70 dBm/MHz (see note 3)	-45 dBm
2.7 < f ≤ 2.9 GHz	-70 dBm/MHz (see note 1)	-45 dBm
2.9 < f ≤ 3.4 GHz	-70 dBm/MHz (see note 1, 6 and 7)	-45 dBm
3.4 < f ≤ 3.8 GHz (see note 4)	-70 dBm/MHz (see notes 2,6 and 7)	-45 dBm
3.8 < f ≤ 4.8 GHz	-50 dBm/MHz (see notes 6 and 7)	-25 dBm
4.8 < f ≤ 5.0 GHz (see note 4)	-55 dBm/MHz (see notes 2 and 3)	-30 dBm
5.0 < f ≤ 5.25 GHz	-55 dBm/MHz	-30 dBm
5.25<f ≤ 5.35 GHz	-50 dBm/MHz	-25 dBm
5.35<f ≤ 5.6 GHz	-50 dBm/MHz	-25 dBm
5.6<f ≤ 5.65 GHz	-50 dBm/MHz	-25 dBm
5.65<f≤5.725 GHz	-65 dBm/MHz	-40 dBm
5.725<f≤6.0 GHz	-60 dBm/MHz	-35 dBm
6.0<f≤8.5 GHz	-41.3 dBm/MHz (see note 5)	0 dBm
8.5<f≤9.0 GHz	-65 dBm/MHz (see note 7)	-25 dBm
9.0<f≤10.6 GHz	-65 dBm/MHz	-25 dBm
f > 10.6 GHz	-85 dBm/MHz	-45 dBm

(1) Devices using the LBT mechanism are permitted to operate in the 1.215 GHz to 1.73 GHz frequency range with a maximum mean e.i.r.p. spectral density of -70 dBm/MHz and in the 2.5 GHz to 2.69 GHz and 2.7 GHz to 3.4 GHz frequency ranges with a maximum mean e.i.r.p. spectral density of -50 dBm/MHz and a maximum peak e.i.r.p of -10 dBm/50 MHz. The LBT mechanism is defined in clauses 4.5.2.1, 4.5.2.2 and 4.5.2.3 of ETSI Standard EN 302 065-4 V1.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule.

(2) To protect the radio services, non-fixed installations must fulfil the following requirement for total radiated power:

(a) In the 2.5 GHz to 2.69 GHz and 4.8 GHz to 5 GHz frequency ranges, the total power spectral density must be 10 dB below the maximum e.i.r.p. spectral density.

(b) In the 3.4 GHz to 3.8 GHz frequency range, the total power spectral density must be 5 dB below the maximum e.i.r.p. spectral density.

(3) To protect the Radio Astronomy Service (RAS) in the 2.69 GHz to 2.7 GHz and 4.8 GHz to 5 GHz bands, the total power spectral density must be below -65 dBm/MHz.

(4) Limitation of the Duty Cycle to 10% per second.

(5) No fixed outdoor installation is permitted.

(6) Within the 3.1 GHz to 4.8 GHz band, devices implementing LDC mitigation technique 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. The LDC mitigation technique and its limits are defined in clauses 4.5.3.1, 4.5.3.2 and 4.5.3.3 of ETSI Standard EN 302 065-1 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule. When LDC is implemented, note 5 applies.

(7) Within the 3.1 GHz to 4.8 GHz and 8.5 GHz to 9 GHz bands, devices implementing DAA mitigation technique 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. The DAA mitigation technique and its limits are defined in clauses 4.5.1.1, 4.5.1.2 and 4.5.1.3 of ETSI Standard EN 302 065-1 V2.1.1. Alternative mitigation techniques may be used if they ensure at least an equivalent performance and level of spectrum protection in order to comply with the corresponding essential requirements of Directive 2014/53/EU and respect the conditions specified in this Schedule. When DAA is implemented, note 5 applies.

Peak power threshold values for the LBT mechanism to ensure the protection of radio services listed below are defined in the following table.

Technical requirements of the LBT mechanism for material sensing devices		
Frequency range	**Radio service to be detected**	**Peak power threshold value**
1.215 <f ≤1.4 GHz	Radiodetermination service	+8 dBm/MHz
1.61<f ≤ 1.66 GHz	Mobile satellite service	-43 dBm/MHz

2.5 < f ≤ 2.69 GHz	Land mobile service	-50 dBm/MHz
2.9 < f ≤ 3.4 GHz	Radiodetermination service	-7dBm/MHz

Additional requirements for radar detection: continuously listening and automatic switch-off within 10 ms for the related frequency range if the threshold value is exceeded (table with LBT mechanism). A silent time of at least 12 s while listening continuously is necessary before the transmitter can be switched on again. This silent time during which only the LBT receiver is active must be ensured even after the device is switched off.

TWELFTH SCHEDULE

Amended by:
L.N. 98 of 2010;
L.N. 224 of 2011;
L.N. 285 of 2015.

(Regulation 3)

General Authorisation for Radio Frequency Identification Devices (RFID)

Applicability of Twelfth Schedule.
Amended by:
L.N. 224 of 2011.

1. This Schedule applies to any person installing or using radio frequency identification apparatus or any apparatus intended to be used as a component part of that apparatus.

Minimum technical parameters.

2. The minimum technical parameters of RFID apparatus shall be those specified in the Annex to this Schedule.

ANNEX TO THE TWELFTH SCHEDULE

Substituted by:
L.N. 285 of 2015;
L.N. 420 of 2018.
Amended by:
L.N.153 of 2019;
L.N. 150 of 2020.

(Paragraph 3 of the Twelfth Schedule)

Minimum Technical Parameters of RFID

Frequency band	Transmit power limit/ field strength limit/power density limit	Additional parameters	Other usage parameters
400-600 kHz	-8 dBµA/m at 10 metres		
13553-13567 kHz	60 dBµA/m at 10 metres	The transmission mask and antenna requirements for all combined frequency segments have to provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU.	

865-868 MHz	2 W e.r.p. Interrogator transmissions at 2 W e.r.p. are only permitted within the four channels centred at 865.7 MHz, 866.3 MHz, 866.9 MHz and 867.5 MHz each with a maximum bandwidth of 200 kHz. RFID interrogator devices placed on the market before 1 January 2018 are "grandfathered", i.e. they are continuously permitted to use in line with the provisions set out in EC Decision 2006/804/EC before 1 January 2018.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used.	

916.1-918.9 MHz	Interrogator transmissions at 4 W e.r.p. only permitted at the centre frequencies 916.3 MHz, 917.5 MHz, 918.7 MHz	Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in harmonised standards or parts thereof adopted under Directive 2014/53/EU, performance at least equivalent to these techniques shall be ensured. Bandwidth: ≤ 400 kHz	
2446.0-2454.0	500 mW e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used.	
2446.0-2454.0	>500 mW to 4 W e.i.r.p.	Duty cycle limit: 15% in any 200 ms period.	Restricted to be used inside the boundaries of a building.".

Amended by: L.N. 98 of 2010; L.N. 224 of 2011; L.N. 285 of 2015.

THIRTEENTH SCHEDULE

(Regulation 3)

General Authorisation for Radiocommunications Apparatus for tracking, tracing and data acquisition

Applicability of Thirteenth Schedule. *Amended by: L.N. 224 of 2011.*

1. This Schedule applies to any person installing or using radiocommunications apparatus for tracking, tracing and data acquisition or any apparatus intended to be used as a component part of that apparatus.

Interpretation *Added by: L.N. 285 of 2015.*

2. In this Schedule:

"Medical Body Area Network Systems" or "MBANS" means low power area network systems used for the transmission of non-voice data to and from medical devices for the purposes of monitoring, diagnosing and treating patients as prescribed by duly authorised healthcare professionals and are defined in the context of medical applications only;", and

"metering devices" means apparatus forming part of bidirectional radiocommunications systems which allow remote monitoring, measuring and transmission of data in smart grid infrastructures, such as electricity, gas and water.

Minimum technical parameters. *Re-numbered by: L.N. 285 of 2015.*

3. The minimum technical parameters of radiocommunications apparatus for tracking, tracing and data acquisition shall be those specified in the Annex to this Schedule.

Amended by: L.N. 98 of 2010. Substituted by: L.N. 285 of 2015; L.N. 420 of 2018. Amended by: L.N. 150 of 2020.

ANNEX TO THE THIRTEENTH SCHEDULE

(Paragraph 3 of the Thirteenth Schedule)

Minimum Technical Parameters of Radiocommunications apparatus for tracking, tracing and data acquisition

Frequency band	Transmit power limit/	Additional parameters	Other usage parameters
169.4-169.475 MHz	500 mW e.i.r.p.	Channel spacing: ≤50 kHz. Duty cycle limit: 10%.	This set of usage conditions is only available to metering devices.
430-440 MHz	-50 dBm/100kHz e.r.p. power density but not exceeding a total power of -40 dBm/ 10MHz (both limits are intended for measurement outside of the patient's body)		The set of usage conditions is only available for Ultra-Low Power Wireless Medical Capsule Endoscopy (ULP-WMCE) applications.

2483.5-2500 MHz	1 mW e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used. Modulation bandwidth: ≤ 3 MHz. Duty cycle limit: ≤ 10 %.	The set of usage conditions is only available for medical body area network systems for indoor use within healthcare facilities.
2483.5-2500 MHz	10 mW e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used. Modulation bandwidth: ≤ 3 MHz. Duty cycle limit: ≤ 2 %.	The set of usage conditions is only available for medical body area network systems for indoor use within a person's home.

FOURTEENTH SCHEDULE

Re-numbered by: L.N. 224 of 2011. Amended by: L.N. 285 of 2015; L.N. 420 of 2018.

(Regulation 3)

General Authorisation for Apparatus for Mobile Communication Services on Aircraft

Applicability of Fourteenth Schedule.

1. This General Authorisation applies to apparatus for mobile communication services on aircraft which is described in Table 1 of the Annex to this Schedule.

Interpretation.
Amended by: L.N. 285 of 2015.

2. In this Schedule unless the context otherwise requires:

"Aircraft base station transceiver" or "aircraft BTS" means one or more mobile communication stations located in the aircraft supporting the frequency bands and systems specified in Table 1 of the Annex to this Schedule;

"Apparatus for Mobile Communication Services on Aircraft" means apparatus for radiocommunications, providing mobile communication services on aircraft;

"EN 302 480" means a harmonised standard being a Harmonised EN for the GSM onboard aircraft system covering the essential requirements of Article 3.2 of Directive 2014/53/EU;

"EN 301 502" means a harmonised standard being a Harmonised EN for the Global System for mobile communications (GSM); Base Station and Repeater equipment covering the essential requirements under Article 3.2 of Directive 2014/53/EU;

"EN 301 511" means a harmonised standard being a Harmonised EN for mobile stations in the GSM 900 and GSM 1800 bands covering the essential requirements of Article 3.2 of the Directive 2014/53/EU;

"EN 301 908-1" means a harmonised standard being a Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 1: Introduction and common requirements;

"EN 301 908-2" means a harmonised standard being a Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 2: CDMA Direct Spread (UTRA FDD) User Equipment (UE);

"EN 301 908-3" means a harmonised standard being a Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 3: CDMA Direct Spread (UTRA FDD) Base Stations (BS);

"EN 301 908-13" means a harmonised standard being a Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 13: Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE);

"EN 301 908-14" means a harmonised standard being a Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 14: Evolved Universal Terrestrial Radio Access (E-UTRA) Base Stations (BS);

"EN 301 908-15" means a harmonised standard being a Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 15: Evolved Universal Terrestrial Radio Access (E-UTRA FDD) (Repeaters);

"MCA Services Decision" means the decision of the European Commission on harmonised conditions of spectrum use for the operation of mobile communication services on aircraft (MCA services) in the Community, 2008/294/EC;

"Mobile Communication Services on Aircraft" or "MCA Services" means an electronic communication service as defined in Article 2 of the Electronic Communications (Regulation) Act provided by an undertaking to enable airline passengers to use public communication networks during the flight without establishing direct connections with terrestrial mobile networks; Cap. 399.

"Network Control Unit" or "NCU" means equipment located in the aircraft which prevents direct connection of the onboard mobile terminals with the terrestrially based mobile networks listed in Table 2 of the Annex to this Schedule.

Jurisdiction.

3. This Schedule only applies within the jurisdiction of Malta and its airspace and is subject to any approval of EASA as may from time to time be applicable in relation to apparatus, in flight operation and the use of mobile terminals.

Minimum Technical Parameters. *Amended by: L.N. 285 of 2015.*

4. (1) Apparatus for Mobile Communication Services on Aircraft shall operate on the frequency bands and it shall be compliant with the standards or equivalent specifications, listed in Table 1 of the Annex to this Schedule.

(2) The minimum technical parameters of Apparatus for Mobile Communication Services on Aircraft shall be those specified in the Annex to this Schedule.

Conformity with requirements.

5. (1) Transmissions from Apparatus for Mobile Communication Services on Aircraft are only allowed when the aircraft is at the height specified in the Annex to this Schedule.

(2) MCA Services may be provided only if they fulfil air safety requirements in accordance with the appropriate airworthiness certification and other relevant aeronautical requirements.

(3) Apparatus for Mobile Communications on Aircraft shall be in conformity with any other condition contained in the MCA Services Decision.

Operation of apparatus.

6. (1) The operation of apparatus for Mobile Communications on Aircraft shall be immediately terminated should any malfunction occur.

(2) Malfunctioning apparatus for Mobile Communications on Aircraft shall be disabled for the remainder of the flight and may not be used again until it is fully certified by the competent authorities as being in conformity with these Regulations and the MCA Services Decision, and is operating correctly.

Inspections.

7. Without prejudice to the other provisions contained in these Regulations, if an authorised officer has reasonable grounds to suspect that there is non-conformity with these Regulations, he may at any time inspect any apparatus for Mobile Communication Services on Aircraft at the expense of the person or undertaking in possession or in control of the apparatus in question.

Provision of MCA Services.

8. Prior to operating any apparatus intended to provide an MCA service, an operator shall obtain all approvals, authorisations or licences, however so described, as may be necessary at law.

Substituted by: L.N. 420 of 2018.

ANNEX TO THE FOURTEENTH SCHEDULE
(Paragraph 4 of the Fourteenth Schedule)

1. Frequency bands and systems allowed for MCA Services

Table 1

Type	Frequency	System
GSM 1 800	1710-1785 MHz (uplink) 1805-1880 MHz (downlink)	GSM complying with the GSM Standards as published by ETSI, in particular EN 301 502, EN 301 511 and EN 302 480, or equivalent specifications.
UMTS 2 100 (FDD)	1920-1980 MHz (uplink) 2110-2170 MHz (downlink)	UMTS complying with the UMTS Standards as published by ETSI, in particular EN 301 908-1, EN 301 908-2, EN 301 908-3 and EN 301 908-11, or equivalent specifications.
LTE 1 800 (FDD)	1710-1785 MHz (uplink) 1805-1880 MHz (downlink)	LTE complying with LTE Standards, as published by ETSI, in particular EN 301 908-1, EN 301 908-13, EN 301 908-14, and EN 301 908-15, or equivalent specifications.

2. Prevention of connection of mobile terminals to ground networks

Mobile terminals receiving within the frequency bands listed in Table 2 must be prevented from attempting to register with UMTS mobile networks on the ground:

- by the inclusion, in the Apparatus for Mobile Communication Services on Aircraft, of an NCU, which raises the noise floor inside the cabin in mobile receive bands, and/or;

- by aircraft fuselage shielding to further attenuate the signal entering and leaving the fuselage.

Table 2

Frequency bands (MHz)	Systems on the ground
925-960 MHz	UMTS (and GSM, LTE)
2110-2170 MHz	UMTS (and LTE)

A person enjoying a general authorisation in accordance with this Schedule may also decide to implement an NCU in the other frequency bands listed in Table 3.

Table 3

Frequency bands (MHz)	**Systems on the ground**
460-470 MHz	LTE
791-821 MHz	LTE
1805-1880 MHz	LTE and GSM
2620-2690 MHz	LTE
2570-2620 MHz	LTE

3. Technical parameters

(a) Equivalent isotropic radiated power (e.i.r.p.), outside the aircraft, from the NCU/aircraft BTS/aircraft Node B

Table 4

The total e.i.r.p., outside the aircraft, from the NCU/aircraft BTS/aircraft Node B must not exceed:

Height above ground (m)	**Maximum e.i.r.p. of the System outside the aircraft in dBm/channel**		
	NCU	**Aircraft BTS/ Aircraft Node B**	**Aircraft BTS/Aircraft Node B and NCU**
	Band: 900 MHz	**Band: 1800 MHz**	**Band: 2100 MHz**
	Channel Bandwidth= 3.84 MHz	**Channel Bandwidth= 200 kHz**	**Channel Bandwidth= 3.84 MHz**
3000	-6.2	-13.0	1.0
4000	-3.7	-10.5	3.5
5000	-1.7	-8.5	5.4
6000	-0.1	-6.9	7.0
7000	1.2	-5.6	8.3
8000	2.3	-4.4	9.5

(b) Equivalent isotropic radiated power (e.i.r.p.), outside the aircraft, from the on board terminal

Table 5

The e.i.r.p., outside the aircraft, from the mobile terminal must not exceed:

Height above ground (m)	**Maximum e.i.r.p., outside the aircraft, from the GSM mobile terminal in dBm/ 200 kHz**	**Maximum e.i.r.p., outside the aircraft, from the LTE mobile terminal in dBm/5 MHz**	**Maximum e.i.r.p., outside the aircraft, from the UMTS mobile terminal in dBm/ 3.84 MHz**
	GSM 1800 MHz	**LTE 1800 MHz**	**UMTS 2100 MHz**

3000	-3.3	1.7	3.1
4000	-1.1	3.9	5.6
5000	0.5	5	7
6000	1.8	5	7
7000	2.9	5	7
8000	3.8	5	7

When a person enjoying a general authorisation in accordance with this Schedule decides to implement an NCU in the frequency bands listed in Table 3, the maximum values indicated in Table 6 apply for the total e.i.r.p. outside the aircraft, from the NCU/aircraft BTS/aircraft Node B, in conjunction with the values mentioned in Table 4.

Table 6

Height above ground (m)	**Maximum e.i.r.p. outside the aircraft, from the NCU/aircraft BTS /aircraft Node B**			
	460-470 MHz	**791-821 MHz**	**1805-1880 MHz**	**2570-2690 MHz**
	dBm/1.25 MHz	**dBm/10 MHz**	**dBm/200 kHz**	**dBm/4.75 MHz**
3000	-17.0	-0.87	-13.0	1.9
4000	-14.5	1.63	-10.5	4.4
5000	-12.6	3.57	-8.5	6.3
6000	-11.0	5.15	-6.9	7.9
7000	-9.6	6.49	-5.6	9.3
8000	-8.5	7.65	-4.4	10.4

(c) Operational requirements

I. The minimum height above ground for any transmission from Apparatus for Mobile Communications Services on Aircraft in operation must be 3000 metres.

II. The aircraft BTS, while in operation, must limit the transmit power of all *GSM* mobile terminals transmitting in the 1800 MHz band to a nominal value of 0 dBm/200 kHz at all stages of communication, including initial access.

III. The aircraft Node B, while in operation, must limit the transmit power of all *LTE* mobile terminals transmitting in the 1800 MHz band to a nominal value of 5 dBm/5 MHz at all stages of communication.

IV. The aircraft Node B, while in operation, must limit the transmit power of all *UMTS* mobile terminals transmitting in the 2100 MHz band to a nominal value of -6 dBm/3.84 MHz at all stages

of communication and the maximum number of users should not exceed 20.

FIFTEENTH SCHEDULE

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011; L.N. 285 of 2015.

(Regulation 3)

General Authorisations for Assistive Listening Apparatus

Applicability of Fifteenth Schedule. *Amended by: L.N. 224 of 2011.*

1. This Schedule applies to any person installing or using assistive listening apparatus or any apparatus intended to be used as a component part of that apparatus.

Interpretation.

2. In this Schedule:

"hearing impaired apparatus" means apparatus which usually includes one or more transmitter and one or more radio receivers allowing persons suffering from hearing disability to increase their listening capability.

Minimum technical parameters. *Substituted by: L.N. 285 of 2015.*

3. The minimum technical parameters of assistive listening apparatus shall be those operating in the Annex to this Schedule.

ANNEX TO THE FIFTEENTH SCHEDULE

Amended by: L.N. 420 of 2018.

(Paragraph 3 of the Fifteenth Schedule)

Minimum Technical Parameters of Assistive Listening Devices

Frequency Band	Transmit power limit	Additional parameters	Other usage parameters
169.4-169.475 MHz	500 mW e.r.p.	Channel spacing (maximum): 50 kHz.	
169.4875-169.5875 MHz	500 mW e.r.p.	Channel spacing (maximum): 50 kHz.	

173.965-216 MHz	10 mW e.r.p.	Channel spacing: 50 kHz maximum. A threshold of 35 dBµV/m is required to ensure the protection of a digital audio broadcasting (DAB) receiver located at 1.5 m from the assistive listening apparatus, subject to DAB signal strength measurements taken around the assistive listening apparatus operating site. The assistive listening apparatus should operate under all circumstances at least 300 kHz away from the channel edge of an occupied DAB channel. Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used.	

SIXTEENTH SCHEDULE

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011

(Regulation 3)

General Authorisation for Apparatus used for the safety related applications of Intelligent Transport Systems

Applicability of Sixteenth Schedule. *Amended by: L.N. 224 of 2011.*

1. This Schedule applies to any person installing or using apparatus used for the safety related applications of Intelligent Transport systems or any apparatus intended to be used as a component part of that apparatus.

Minimum technical parameters.

2. The minimum technical parameters of apparatus used for the safety related applications of Intelligent Transport Systems operating in the frequency band 5875-5905 MHz shall be those specified in the Annex to this Schedule.

ANNEX TO THE SIXTEENTH SCHEDULE

Amended by: L.N. 420 of 2018.

(Paragraph 2 of the Sixteenth Schedule)

Minimum Technical Parameters of apparatus used for the safety related applications of Intelligent Transport Systems

Parameter	Value
Operating frequency range	5875 - 5905 MHz
Maximum Spectral power density (mean e.i.r.p.)	23 dBm/MHz
Maximum total transmit power (mean e.i.r.p.)	33 dBm
Channel access and occupational rules	Techniques to mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used. These require a transmitter power control (TPC) range of at least 30 dB.

SEVENTEENTH SCHEDULE

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011. Substituted by: L.N. 285 of 2015 Amended by: L.N. 420 of 2018.

(Regulation 3)

General Authorisation for Earth Stations on Mobile Platforms operating with Geostationary Satellite Networks

Applicability of the Seventeenth Schedule.

1. This Schedule applies to any person installing or using apparatus for Earth Stations on Mobile Platforms operating with geostationary satellite networks or any apparatus intended to be used as a component part of that apparatus.

Interpretation.

2. In this Schedule:

"earth stations on mobile platforms" or "ESOMPs" means terminals with small directional antennas for the provision of

wireless broadband communication services, operating in geostationary satellite networks;

"mobile platform" means any non-stationary platform such as a train, a vessel, an aircraft or other vehicles; and

"network control facility" or "NCF" means set of functional entities that, at system level, monitor and control the correct operation of the ESOMP and, if appropriate, all of the ESOMPs in a network.

Limitations.

3. (1) ESOMPs which are not installed or used in Malta shall observe any terms, conditions or limitations which could be applicable in the area or country, however so described, in which they are instlled or used.

(2) The use of ESOMPs from aircraft within the coordination zones specified in the Annex to this Schedule is permitted:

Provided that the relevant agreement is obtained from the competent authorities prior to making use of such stations:

Provided further that any conditions which could be imposed by such an agreement should be observed.

Minimum technical parameters.

4. (1) Unless otherwise specified in the National Radio Frequency Plan, ESOMPs shall operate in the following frequency bands:

(*a*) 19.7-20.2 GHz (space-to-Earth) and 29.5-30 GHz (Earth-to-space); and

(*b*) 17.3-19.7 GHz (space-to-Earth), 27.5-27.8285 GHz (Earth-to-space), 28.4445-28.8365 GHz (Earth-to-space) and 29.4525-29.5 GHz (Earth-to-space).

(2) ESOMPs shall operate under the control of a network control facility.

(3) The minimum technical parameters of ESOMPs shall be those specified in the Annex to this Schedule.

Substituted by: L.N. 285 of 2015. Amended by: L.N. 420 of 2018.

ANNEX TO THE SEVENTEENTH SCHEDULE
(Regulation 4)

General Authorisation for Earth Stations on Mobile Platforms operating with Geostationary Satellite Networks

Technical and operational requirements for ESOMPs operating within the frequency bands 17.3-20.2 GHz and 27.5-30 GHz

1. The maximum e.i.r.p. level of a single ESOMP shall not exceed 55 dBW.

2. ESOMPs shall at least account for the following factors which could vary the aggregate off-axis e.i.r.p. levels generated by:

(*a*) antenna mis-pointing;

(*b*) variations in the antenna pattern;

(*c*) variations in the transmit e.i.r.p.

3. ESOMPs that use close-loop tracking of the satellite signal shall employ an algorithm that is resistant to capturing and tracking adjacent satellite signals. ESOMPs shall immediately inhibit transmissions when they detect that unintended satellite tracking has happened or is about to happen.

4. ESOMPs shall be self-monitoring and should a fault which can cause harmful interference to fixed satellite services or to terrestrial networks be detected, the ESOMP must automatically cease its transmissions.

5. Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.

6. Additional technical and operational requirements for ESOMPs operating within the frequency bands 17.3-19.7 GHz and 27.5-29.5 GHz

7. The off-axis* e.i.r.p. spectral density radiated by any ESOMP into the frequency bands allocated to the fixed service by the National Radio Frequency Plan shall be limited to -35 dBW/ MHz. This limit shall, in any case, be met by ESOMPs installed or used on land, on territorial seas or in internal waters of any country, at a direction of 3 degrees or less above the local horizontal plane at the ESOMP terminal.

8. In the territory of any country, ESOMPs shall not have their transmit occupied band edges closer than 10 MHz from the edges of the bands identified by that country for operation by fixed services.

9. The antenna elevation angle shall be higher than 3 degrees.

10. For ESOMPs installed or used on aircraft, the PFD† values in dB(W/m2) in a reference bandwidth of 14 MHz on the ground are the following:

-124.7	for	$0° < \delta \leq 0.01°$
-120.9 + 1.9 log10(δ)	for	$0.01° < \delta \leq 0.3°$
-116.2 + 11.0 log10(δ)	for	$0.3° < \delta \leq 1.0°$
-116.2 + 18.0 log10(δ)	for	$1.0° < \delta \leq 2.0°$
-117.9 + 23.7 log10(δ)	for	$2.0° < \delta \leq 8.0°$
-96.5	for	$8.0° < \delta \leq 90.0°$

where δ is the angle of arrival at the Earth's surface (in degrees).

10. For ESOMPs operating in the bands 27.8285-28.4445 GHz and 28.9485-29.4526 GHz the PFD values established under paragraph 9 above shall also apply.

11. For ESOMPs installed or used on vessels, the PFD threshold value is -109 dB(W/m2) in a reference bandwidth of 14 MHz at a height of 20 meters above mean sea level at the low-water

* Off-axis refers to angles greater than 7° from the axis of the main beam or to angles greater than the declared minimum elevation angle of the ESOMP, whichever is lower.

† These PFD values are not defined as under "free-space" conditions.

mark.

12. For ensuring compliance with the above PFD provisions ESOMPs shall have self-monitoring functions and automatic mechanisms (locally or under the control of the NCF) to reduce its e.i.r.p. or cease transmissions.

C. Protection of Aircraft from ESOMPs operating on the Earth surface in the vicinity of an airfield

13. The following coordination zones comprises the area within the airfield boundary fence in addition to an area surrounding the boundary fence, the width of which depends on the e.i.r.p. level:

ESOMP e.i.r.p. range	34 dBW to 50 dBW	>50 dBW to 55 dBW
ESOMP latitude	Coordination zones	
>35-70°/N	500 m	1800 m
30-35°/N	600 m	2000 m

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011; L.N. 285 of 2015.

EIGHTEENTH SCHEDULE

(Regulation 3)

General Authorisation for Apparatus used for Radiodetermination Applications

Applicability of Eighteenth Schedule. *Amended by: L.N. 224 of 2011.*

1. This Schedule applies to any person installing or using apparatus used for Radiodetermination Applications or any apparatus intended to be used as a component part of that apparatus.

Interpretation. *Amended by: L.N. 285 of 2015.*

2. In this Schedule:

"Radiodetermination applications" means application used for determining the position, velocity and any other characteristics of an object, or for obtaining information relating to these parameters;

"Tank Level Probing Radars" or "TLPR" means a specific type of radiodetermination application, which is used for tank level measurements and are installed in metallic or reinforced concrete tanks, or similar structures made of material with comparable attenuation characteristics. The purpose of the tank is to contain a substance.

Minimum technical parameters.

3. The minimum technical parameters of apparatus used for Radiodetermination apparatus shall be those specified in the Annex to this Schedule.

Substituted by: L.N. 285 of 2015. Amended by: L.N. 420 of 2018.

ANNEX TO THE EIGHTEENTH SCHEDULE

(Paragraph 3 of the Eighteenth Schedule)

Minimum Technical Parameters of apparatus used for Radiodetermination Applications

Frequency Band	Transmit power limit / power density limit	Additional parameters	Other usage parameters

2400-2483.5 MHz	25 mW e.i.r.p.		
4500-7000 MHz	24 dBm e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to TLPR.
6000-8500 MHz	7 dBm/50 MHz peak e.i.r.p. -33 dBm/MHz mean e.i.r.p.	Automatic power control and antenna requirements as well as equivalent techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to Level Probing Radar.
8500-10600 MHz	30 dBm e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to TLPR.
13.4-14 GHz	25 mW e.i.r.p.		
17.1 - 17.3 GHz	26 dBm e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to ground-based systems.

24.05-26.5 GHz	26 dBm/50 MHz peak e.i.r.p. -14 dBm/MHz mean e.i.r.p.	Automatic power control and antenna requirements as well as equivalent techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to Level Probing Radar.
24.05-27 GHz	43 dBm e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to TLPR.
57-64 GHz	43 dBm e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to TLPR.
57-64 GHz	35 dBm/50 MHz peak e.i.r.p. -2 dBm/MHz mean e.i.r.p.	Automatic power control and antenna requirements as well as equivalent techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to Level Probing Radar.

75-85 GHz	34 dBm/50 MHz peak e.i.r.p. -3 dBm/MHz mean e.i.r.p.	Automatic power control and antenna requirements as well as equivalent techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to Level Probing Radar.
75-85 GHz	43 dBm e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used.	This set of usage conditions is only available to TLPR.

NINETEENTH SCHEDULE

Added by: L.N. 98 of 2010. Amended b y: L.N. 224 of 2011; L.N. 285 of 2015

(Regulation 3)

General Authorisation for Radiocommunications Apparatus used in Healthcare

1. This Schedule applies to any person installing or using radiocommunications apparatus used in healthcare or any apparatus intended to be used as a component part of that apparatus.

Applicability of Nineteenth Schedule. *Amended by: L.N. 224 of 2011.*

2. In this Schedule:

Interpretation. *Substituted by: L.N. 285 of 2015.*

"active implantable medical devices" has the same meaning as defined in Council Directive 90/385/EEC of 20 June 1990 on the approximation of the laws of the Member States relating to active implantable devices and their peripherals; and

"animal implantable devices" means radiocommunications apparatus capable to transmit which are placed inside the body of an animal for the purpose of performing diagnostic functions and/ or delivery of therapeutic treatment.

3. The minimum technical parameters of Radiocommunication apparatus used in healthcare shall be those specified in the Annex to this Schedule.

Minimum technical parameters.

Substituted by:
L.N. 224 of 2011;
L.N. 285 of 2015.
Amended by:
L.N. 420 of 2018;
L.N. 150 of 2020.

ANNEX TO THE NINETEENTH SCHEDULE

(Paragraph 3 of the Nineteenth Schedule)

Minimum Technical Parameters of Radiocommunications Apparatus used in Healthcare

Frequency Band	Transmit power limit / power density limit	Additional parameters	Other usage parameters
9-315 kHz	30 dBµA/m at 10 metres	Duty cycle limit: 10%	This set of usage conditions is only available to active implantable medical devices.
30-37.5 MHz	1 mW e.r.p.	Duty cycle limit: 10%	This set of usage conditions is only available to ultra-low power medical membrane implants for blood pressure measurements within the definition of active implantable medical devices in Directive 90/385/EEC.
401-402 MHz	25 µW e.r.p.	Channel spacing: 25 kHz. Individual transmitters may combine adjacent channels for increased bandwidth up to 100 kHz. Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used. Alternatively a duty cycle limit of 0.1% may also be used.	This set of usage conditions is only available for systems specifically designed for the purpose of providing non-voice digital communications between active implantable medical devices and/or body-worn devices and other devices external to the human body used for transferring non-time critical individual patient-related physiological information.
402-405 MHz	25 µW e.r.p.	Channel spacing: 25 kHz. Individual transmitters may combine adjacent channels for increased bandwidth up to 300 kHz. Other techniques to access spectrum or mitigate interference, including bandwidths greater than 300 kHz, can be used provided they result at least in an equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU to ensure compatible operation with the other users and in particular with meteorological radiosondes.	This set of usage conditions is only available to active implantable medical devices.

405-406 MHz	25 μW e.r.p.	Channel spacing: 25 kHz. Individual transmitters may combine adjacent channels for increased bandwidth up to 100 kHz. Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under the Directive 2014/53/EU must be used. Alternatively a duty cycle limit of 0.1% may also be used.	This set of usage conditions is only available for systems specifically designed for the purpose of providing non-voice digital communications between active implantable medical devices and/or body-worn devices and other devices external to the human body used for transferring non-time critical individual patient-related physiological information.
2483.5-2 500 MHz	10 mW e.i.r.p.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 2014/53/EU must be used. Channel spacing: 1 MHz. The whole frequency band may also be used dynamically as a single channel for high-speed data transmissions. Duty cycle limit: 10 %.	This set of usage conditions is only available to active implantable medical devices.

TWENTIETH SCHEDULE

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011.

(Regulation 3)

General Authorisation for Transmit-only Mobile Earth Stations

Applicability of Twentieth Schedule. *Amended by: L.N. 224 of 2011.*

1. This Schedule applies to any person installing or using transmit-only mobile earth station or any apparatus intended to be used as a component part of that apparatus.

Interpretation.

2. In this Schedule:

"ITU-R Recommendation M.1343-1" means essential technical requirements of mobile earth stations for global non-geostationary mobile-satellite service systems in the band 1-3 GHz.

Minimum technical parameters.

3. The minimum technical parameters of transmit-only mobile earth stations shall be those specified in the Annex to this Schedule.

ANNEX TO THE TWENTIETH SCHEDULE

(Paragraph 3 of the Twentieth Schedule)

Minimum Technical Parameters of transmit-only mobile earth stations

Frequency Band	Maximum transmit power	Other usage restrictions
1613.8 - 1626.5 MHz	30 dBm e.i.r.p.	Maximum duty cycle: 1% Level of unwanted emissions: shall not exceed the limits specified in Table 1 of Annex 1 of ITU-R Recommendation M.1343-1.

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011.

TWENTY-FIRST SCHEDULE

(Regulation 3)

General Authorisation for Very Small Aperture Terminals (VSAT)

Applicability of Twenty-first Schedule. *Amended by: L.N. 224 of 2011.*

1. (1) This Schedule applies to any person installing or using very small aperture terminals (VSAT) operating in the 11/12/14 GHz frequency bands or any apparatus intended to be used as a component part of that apparatus.

(2) This Schedule does not apply to very small aperture terminals (VSAT) operating in the 11/12/14 GHz frequency bands or any apparatus intended to be used as a component part of that apparatus which is installed or used within 500 meters from the boundary fence of an airport.

Interpretation.

2. In this Schedule:

"Very small aperture terminals" or "VSAT" shall have the same meaning as in ETSI EN 301 428;

"ETSI EN 301 428" means Satellite Earth Stations and Systems (SES); Harmonised Standard for Very Small Aperture Terminal (VSAT); Transmit-only, transmit/receive or receive-only satellite earth stations operating in the 11/12/14 GHz frequency bands covering the essential requirements of article 3.2 of Directive 2014/53/EU;

Minimum technical parameters.

3. The minimum technical parameters of very small aperture terminals (VSAT) operating in the 11/12/14 GHz frequency bands shall be those specified in the Annex to this Schedule.

Location of use.

4. VSAT operating in the 11/12/14 GHz frequency bands shall be used beyond 500 metres from the boundary fence of an airport.

Limitations.

5. (1) VSAT operating in the 11/12/14 GHz frequency bands shall operate under the control of a satellite system.

(2) Prior to installing and, or operating a VSAT operating in the 11/12/14 GHz frequency bands a person shall obtain the necessary clearance from the Authority.

ANNEX TO THE TWENTY-FIRST SCHEDULE

(Paragraph 3 of the Twenty-first Schedule)

Minimum Technical Parameters of very small aperture terminals (VSAT) operating in the 11/12/14 GHz frequency bands

Frequency Band	10.7 - 11.7 GHz (space-to-Earth) 14.25 - 14.50 GHz (Earth-to-space)
Maximum transmit power	2 Watts
Maximum effective isotropically radiated power (e.i.r.p.)	50 dBW

TWENTY-SECOND SCHEDULE

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011.

(Regulation 3)

General Authorisation for low e.i.r.p. satellite Terminals (LEST)

1. This Schedule applies to any person installing or using low e.i.r.p. satellite Terminals (LEST) or any apparatus intended to be used as a component part of that apparatus.

Applicability of Twenty-second Schedule. *Amended by: L.N. 224 of 2011.*

2. The minimum technical parameters of low e.i.r.p. satellite terminals (LEST) shall be those specified in the Annex to this Schedule.

Minimum technical parameters.

3. Low e.i.r.p. satellite terminals (LEST) shall operate under the control of a satellite system, providing digital communications.

Limitations.

ANNEX TO THE TWENTY-SECOND SCHEDULE

(Paragraph 2 of the Twenty-second Schedule)

Minimum Technical Parameters of low e.i.r.p. satellite terminals (LEST)

Frequency bands	10.7 - 12.75 GHz (space-to-Earth) 19.7 - 20.2 GHz (space-to-Earth) 14.0 - 14.25 GHz (Earth-to-space) 29.5 - 30.0 GHz (Earth-to-space) 11.7 - 12.5 GHz (space-to-Earth)
Maximum effective isotropically radiated power (e.i.r.p.)	34 dBW(When an antenna is coupled to more than one transmitter or a transmitter provides more than one carrier (multi-carrier operation), the above e.i.r.p. level is the sum of all simultaneous emissions from the antenna on the main lobe)

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011; L.N. 420 of 2018.

TWENTY-THIRD SCHEDULE

(Regulation 3)

General Authorisation for High e.i.r.p. satellite Terminals (HEST)

Applicability of Twenty-third Schedule. *Amended by: L.N. 224 of 2011.*

1. This Schedule applies to any person installing or using high e.i.r.p. satellite terminals (HEST) or any apparatus intended to be used as a component part of that apparatus.

Non-applicability.

2. This Schedule does not apply to high e.i.r.p. satellite terminals (HEST) or any apparatus intended to be used as a component part of that apparatus which is installed or used within 500 meters from the boundary fence of an airport.

Minimum technical parameters.

3. The minimum technical parameters of high e.i.r.p. satellite terminals shall be those specified in the Annex to this Schedule.

Location of use. *Amended by: L.N. 420 of 2018.*

4. High e.i.r.p. satellite terminals shall be used beyond 500 metres from the boundary fence of an airport.

Limitations.

5. (1) High e.i.r.p. satellite terminals shall operate under the control of a satellite system, providing digital communications.

(2) Prior to installing and, or operating high e.i.r.p. satellite terminals, a person shall obtain the necessary clearance from the Authority.

ANNEX TO THE TWENTY-THIRD SCHEDULE

(Paragraph 3 of the Twenty-third Schedule)

Minimum Technical Parameters of high e.i.r.p. satellite terminals (HEST)

Frequency band	10.7 - 12.75 GHz (space-to-Earth) 19.7 - 20.2 GHz (space-to-Earth) 14.00 - 14.25 GHz (Earth-to-space) 29.5 - 30.0 GHz (Earth-to-space) 11.7 - 12.5 GHz (space-to-Earth)
Maximum effective isotropically radiated power (e.i.r.p.)	50 dBW(When an antenna is coupled to more than one transmitter or a transmitter provides more than one carrier (multi-carrier operation), the above e.i.r.p. level is the sum of all simultaneous emissions from the antenna on the main lobe)

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011; L.N. 420 of 2018.

TWENTY-FOURTH SCHEDULE

(Regulation 3)

General Authorisation for Aircraft Earth Station (AES)

Applicability of Twenty-fourth Schedule.
Amended by:
L.N. 224 of 2011.

1. This Schedule applies to any person installing or using an aircraft earth station (AES) or any apparatus intended to be used as a component part of that apparatus.

Interpretation.

2. In this Schedule:

"Aircraft earth station" or "AES" shall have the same meaning as in ETSI EN 302 186 to provide non-safety broadband data services onboard aircraft;

"ETSI EN 302 186" means Satellite Earth Stations and Systems (SES); Harmonised Standard for satellite mobile Aircraft Earth Stations (AESs) operating in the 11/12/14 GHz frequency bands covering the essential requirements of Article 3.2 of the Directive 2014/53/EU;

"ITU-R M.1643" means Recommendation M.1643 of the ITU defining the technical and operational requirements for aircraft earth stations of the aeronautical mobile-satellite service including those using fixed-satellite service network transponders in the band 14.0-14.5 GHz.

Minimum technical parameters.

3. The minimum technical parameters of an aircraft earth stations shall be those specified in the Annex to this Schedule.

Limitations.

4. (1) Aircraft earth stations shall operate under the control of a network control facility.

(2) An Aircraft earth station shall comply with Recommendation ITU-R M.1643.

(3) The operation of an Aircraft earth station on the ground, may be subject to any condition or limitation, however so described, which could be imposed by the Authority or the competent authority responsible for the aviation sector.

ANNEX TO THE TWENTY-FOURTH SCHEDULE

(Paragraph 3 of the Twenty-fourth Schedule)

Minimum Technical Parameters of Aircraft Earth Station (AES)

Frequency bands	14.0 - 14.5 GHz (Earth-to-space) 10.7 - 11.7 GHz (space-to-Earth) 12.5 - 12.75 GHz (space-to-Earth)
Maximum effective isotropically radiated power (e.i.r.p.)	50 dBW

TWENTY-FIFTH SCHEDULE

Added by:
L.N. 98 of 2010.
Amended by:
L.N. 224 of 2011;
L.N. 420 of 2018.

(Regulation 3)

General Authorisation for Earth Station on board Vessels (ESV)

Applicability of Twenty-fifty Schedule.
Amended by:
L.N. 224 of 2011.

1. This Schedule applies to any person installing or using earth station on board Vessels (ESV) or any apparatus intended to be used as a component part of that apparatus.

Interpretation.

2. In this Schedule:

"Point of Service Activation" means an entity designated to activate certain types of earth stations on board vessels and to maintain records and accounts of such earth stations;

"GSO" means geostationary-satellite;

"Resolution 902" means ITU Resolution 902 concerning the provisions relating to earth stations located on board vessels which operate in fixed-satellite service networks in the uplink bands 5925 - 6425 MHz and 14.0 -14.5 GHz (WRC-03).

Minimum technical parameters.

3. The minimum technical parameters of earth stations on board vessels shall be those specified in the Annex to this Schedule.

Limitations.

4. (1) Earth stations on board vessels shall operate under the control of a network control facility.

(2) Earth stations on board vessels shall comply with Resolution 902.

(3) The activation of certain earth stations on board vessels shall be done by Point of Service Activation entities recognised by the Authority.

(4) In cases where the Earth station on board vessels operates in the 5925 - 6425 MHz band and where the same Earth station is installed on a vessel which is located at a distance which is less than 300 km from the low water mark of a country, the person operating the same Earth station shall seek the prior approval of the competent authorities of that country prior operating the Earth station on board vessels from that location:

Provided that the Earth station on board vessels shall cease its transmissions in the event that a country experiences harmful interference caused by the Earth station on board vessel.

(5) In cases where the Earth station on board vessels operates in the 14.0 - 14.5 GHz band and where the same Earth station is installed on a vessel which is located at a distance which is less than 125 km from the low water mark of a country, the person operating the Earth station on board vessels shall seek the prior approval of the competent authorities of that country prior operating the Earth station on board vessels from that location:

Provided that the Earth station on board vessels shall cease its transmissions in the event that a country experiences harmful interference caused by the Earth station on board vessels.

(6) The requirement described in paragraph (5) hereof relating to seeking the prior approval of the countries that are within a distance that is less than 125 km does not apply if the countries which are within this distance are those listed in footnote 5.506B of the National Radio Frequency Plan.

ANNEX TO THE TWENTY-FIFTH SCHEDULE

Amended by:
L.N. 420 of 2018.

(Paragraph 3 of the Twenty-fifth Schedule)

Minimum Technical Parameters of Earth Stations on board Vessels (ESV)

(*a*) ESV operating in the 4/6GHz frequency bands

Frequency bands	5925 - 6425 MHz (Earth-to-space) 3700 - 4200 MHz (space-to-Earth)
Minimum antenna diameter	2.4 m
Tracking antenna accuracy	± 0.2° (peak)
Maximum effective isotropically radiated power (e.i.r.p.) towards the horizon	20.8 dBW
Maximum effective isotropically radiated power (e.i.r.p.) spectrum density towards the horizon	17 dBW/MHz
Maximum off-axis effective isotropically radiated power (e.i.r.p.) density	Any angle φ specified, off the main-lobe axis of an earth station antenna, the maximum e.i.r.p. in any direction within 3° of the GSO shall not exceed the following values: Angle off-axis — Maximum e.i.r.p. per 4 kHz band in dB(W/4kHz) 2.5° ≤ φ ≤ 7° — (32 – 25 log φ) 7° < φ ≤ 9.2° — 11 9.2° < φ ≤ 48° — (35 – 25 log φ) 48° < φ ≤ 180° — -7

(*b*) ESV operating in the 11/12/14 GHz frequency bands

Frequency bands	14.0 – 14.5 GHz (Earth-to-space) 10.7 – 11.7 GHz (space-to-Earth) 12.5 – 12.75 GHz (space-to-Earth)
Minimum antenna diameter	0.6 m
Tracking antenna accuracy	± 0.2° (peak)
Maximum effective isotropically radiated power (e.i.r.p.) towards the horizon	16.3 dBW
Maximum effective isotropically radiated power (e.i.r.p.) spectrum density towards the horizon	12.5 dBW/MHz
Maximum off-axis effective isotropically radiated power (e.i.r.p.) density	Any angle φ specified, off the main-lobe axis of an earth station antenna, the maximum e.i.r.p. in any direction within 3° of the GSO shall not exceed the following values: Angle off-axis — Maximum e.i.r.p. per 40 kHz band in dB(W/40kHz) 2° ≤ φ ≤ 7° — (33 – 25 log φ) 7° < φ ≤ 9.2° — 12 9.2° < φ ≤ 48° — (36 – 25 log φ) 48° < φ ≤ 180° — -6

Added by: L.N. 98 of 2010. Amended by: L.N. 224 of 2011; L.N. 193 of 2012; L.N. 285 of 2015; L.N. 150 of 2020.

TWENTY-SIXTH SCHEDULE

(Regulation 3)

General Authorisation for Transport and Traffic Telematics systems

Applicability of Twenty-sixth Schedule. *Amended by: L.N. 224 of 2011.*

1. This Schedule applies to any person installing or using road transport and traffic telematics systems or any apparatus intended to be used as a component part of that apparatus.

Interpretation.

2. In this Schedule:

"Commission Implementing Regulation 2016/799" means Commission Implementing Regulation (EU) 2016/799 of 18 March 2016 implementing Regulation (EU) No 165/2014 of the European Parliament and of the Council laying down the requirements for the construction, testing, installation, operation and repair of tachographs and their components;

"Directive 2015/719" means Directive (EU) 2015/719 of the European Parliament and of the Council of 29 April 2015 amending Council Directive 96/53/EC laying down for certain road vehicles circulating within the Community the maximum authorised dimensions in national and international traffic and the maximum authorised weights in international traffic;

"smart tachograph, weight and dimension applications" are defined as remote enforcement of the tachograph in Appendix 14 of Commission Implementing Regulation 2016/799 and for the weights and dimensions enforcement in Article 10d of Directive 2015/719; and

"transport and traffic telematics systems" means apparatus that are used in the fields of transport (road, rail, water or air, depending on the relevant technical restrictions), traffic management, navigation, mobility management and in intelligent transport systems.

Minimum technical parameters.

3. The minimum technical parameters of road transport and traffic telematics systems shall be those specified in the Annex to this Schedule.

Substituted by: L.N. 224 of 2011; L.N. 193 of 2012; L.N. 285 of 2015. Amended by: L.N. 420 of 2018. Substituted by: L.N. 150 of 2020.

ANNEX TO THE TWENTY-SIXTH SCHEDULE

(Paragraph 3 of the Twenty-sixth Schedule)

Minimum Technical Parameters of road transport and traffic telematics systems

Frequency band	**Transmit power limit/ power density limit**	**Additional parameters**	**Other usage parameters**
5795-5815 MHz	2 W e.i.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1].	This set of usage conditions applies only to road tolling applications and smart tachograph, weight and dimension applications.
5855-5865 MHz	33 dBm e.i.r.p., 23 dBm/MHz e.i.r.p. density and a Transmit Power Control (TPC) range of 30 dB.	Requirements on techniques to access spectrum and mitigate interference apply[1].	This set of usage conditions is only available to vehicle-to-vehicle, vehicle-to-infrastructure and infrastructure-to-vehicle systems.
5865-5875 MHz	33 dBm e.i.r.p., 23 dBm/MHz e.i.r.p. density and a Transmit Power Control (TPC) range of 30 dB.	Requirements on techniques to access spectrum and mitigate interference apply[1].	This set of usage conditions is only available to vehicle-to-vehicle, vehicle-to-infrastructure and infrastructure-to-vehicle systems.
24.05-24.075 GHz	100 mW e.i.r.p.		
24.075-24.15 GHz	100 mW e.i.r.p.	Requirements on techniques to access spectrum and mitigate interference apply[1].	This set of usage conditions is only available to ground-based vehicle radars.
24.075-24.15 GHz	0.1 mW e.i.r.p.		
24.15-24.25 GHz	100 mW e.i.r.p.		
63.72-65.88 GHz	40 dBm e.i.r.p.	Road transport telematics systems placed on the market before 1 January 2020 are ‘grandfathered’, i.e. they are permitted to use the previous frequency range 63-64 GHz, and otherwise the same conditions apply.	This set of usage conditions is only available to vehicle-to-vehicle, vehicle-to-infrastructure and infrastructure-to-vehicle systems.

76-77 GHz	55 dBm peak e.i.r.p. and 50 dBm mean e.i.r.p. and 23.5 dBm mean e.i.r.p. for pulse radars	Requirements on techniques to access spectrum and mitigate interference apply[1]. Fixed transportation infrastructure radars have to be of a scanning nature in order to limit the illumination time and ensure a minimum silent time to achieve coexistence with automotive radar systems.	This set of usage conditions is only available to ground-based vehicle and infrastructure systems.
76-77 GHz	30 dBm peak e.i.r.p. and 3 dBm/MHz average power spectral density	Duty cycle limit: ≤56%/s	This set of usage conditions is only available to obstacle detection systems for rotorcraft use.

[1] Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, performance at least equivalent to these techniques shall be ensured.".

Added by: L.N. 224 of 2011. Substituted by: L.N. 285 of 2015. Amended by: L.N. 420 of 2018.

TWENTY-SEVENTH SCHEDULE

(Regulation 3)

General Authorisation for Citizens' Band Radiocommunications Apparatus

Applicability of Twenty-Seventh Schedule.

1. This Schedule applies to any person installing or using citizens' band radiocommunications apparatus or any apparatus used as a component part of that apparatus.

Interpretation.

2. In this Schedule:

"angle modulation" means F3E/G3E classes of emission as defined in the Radio Regulations, corresponding to modulation with an audio pre-emphasis characteristic for the FM transmitter and an audio de-emphasis characteristic for the receiver;

"citizens' band radiocommunications apparatus" means apparatus intended for analogue speech and/or data transmission, operating on the carrier frequencies specified in the Annex to this Schedule (within the frequency band 26.960 MHz to 27.410 MHz with a channel spacing of 10 kHz), using angle-modulation, Double Side Band (DSB) and/or Single Side Band (SSB) modulation;

"Double Side Band modulation" or "DSB" means A3E class of emission as defined in the Radio Regulations, corresponding to double side band amplitude modulation; and

"Single Side Band modulation" or "SSB" means J3E class of emission as defined in the Radio Regulations, corresponding to single side band suppressed carrier amplitude modulation, using

either the upper or lower side bands.

Minimum technical parameters.

3. The minimum technical parameters of citizens' band radiocommunications apparatus shall be those specified in the Annex to this Schedule.

Location of use. *Renumbered by: L.N. 420 of 2018.*

4. Citizens' band radiocommunications apparatus shall not be used on board aircraft of any kind, or as an aeronautical station.

Limitations. *Renumbered by: L.N. 420 of 2018.*

5. (1) Any person enjoying a general authorisation in accordance with this Schedule may have in his possession citizens' band radiocommunications apparatus which is capable to operate within the frequency range of operation from 26 MHz to 28 MHz:

Provided that any radio frequency transmission from such citizens' band radiocommunications apparatus shall only take place on the carrier frequencies specified in the Annex to this Schedule.

(2) Citizens' band radiocommunications apparatus may employ all types of external antennas with the exception of directional antennas with gain in the horizontal plane.

(3) The operation of repeater stations in conjunction with Citizens' band radiocommunications apparatus is not permitted.

(4) Transmission and reception of communications using Citizens' band radiocommunications apparatus shall take place on the same channel (single frequency, simplex traffic).

(5) Citizens' band radiocommunications apparatus shall not be considered as the primary means for distress and safety communications.

ANNEX TO TWENTY-SEVENTH SCHEDULE

Substituted by: L.N. 285 of 2015.

(Paragraph 3 of the Twenty-Seventh Schedule)

Minimum Technical Parameters for Citizens' Band Radiocommunications Apparatus

Channel No.	Carrier Frequencies (MHz)	Channel No.	Carrier Frequencies (MHz)
1	26.965	21	27.215
2	26.975	22	27.225
3	26.985	23	27.235
4	27.005	24	27.245
5	27.015	25	27.255
6	27.025	26	27.265
7	27.035	27	27.275
8	27.055	28	27.285
9	27.065	29	27.295
10	27.075	30	27.305
11	27.085	31	27.315

12	27.105	32	27.325
13	27.115	33	27.335
14	27.125	34	27.345
15	27.135	35	27.355
16	27.155	36	27.365
17	27.165	37	27.375
18	27.175	38	27.385
19	27.185	39	27.395
20	27.205	40	27.405

Channel Separation: 10 kHz

Radiated Power Limit:

Type of Modulation	Maximum Radiated Power
Angle modulation	4 Watts
Double Side Band modulation	4 Watts (measured as a root mean square)
Single Side Band modulation	12 Watts (measured as a peak envelope power).

Added by: L.N. 224 of 2011.

TWENTY-EIGHTH SCHEDULE

(Regulation 3)

General Authorisation for the Radiocommunications Apparatus comprised in a Wireless Electronic Communication Network

Applicability of Twenty-Eighth Schedule. Cap. 399.

1. This Schedule applies to an undertaking installing radiocommunications apparatus comprised in a wireless electronic communications network to be operating on individual rights of use of radio frequencies granted under the Electronic Communications (Regulation) Act, or any apparatus used as a component part of that apparatus:

Provided that the aforesaid wireless electronic communications network is used for the provision of publicly available electronic communications services including television and radio distribution services.

Interpretation.

2. In this Schedule:

"individual rights of use" means an individual grant to use specific radio frequencies.

Minimum technical parameters.

3. The minimum technical parameters of the radiocommunications apparatus comprised in a wireless electronic communications network shall be those specified in the individual rights of use granted under the Electronic Communications (Regulation) Act.

Cap. 399.

Limitations

4. (1) The radiocommunications apparatus comprised in a wireless electronic communications network shall be operated exclusively by personnel duly authorised by the undertaking and under the responsibility of the undertaking.

(2) The undertaking shall not permit any unauthorised persons to operate the radiocommunications apparatus comprised in a wireless electronic communications network.

(3) The undertaking shall ensure that persons authorised to operate the radiocommunications apparatus comprised in a wireless electronic communications network observe the terms, conditions and limitations of these regulations.

TWENTY-NINTH SCHEDULE
(Regulation 3)

Added by: L.N. 224 of 2011. Amended by: L.N. 420 of 2018.

General Authorisation for Dealing in Radiocommunications Apparatus other than Television and Broadcast Receiving

Applicability of Twenty-Ninth Schedule.

1. This Schedule applies to any person who deals in the sale of radiocommunications apparatus other than television and broadcast receiving.

Interpretation.

2. In this Schedule:

"apparatus" means any radiocommunications apparatus other than television and broadcast receiving;

"dealer" means any person who engages in a commercial activity to sell and, or to program or to configure in any manner however so described, apparata.

Limitations.

3. (1) A dealer shall only program those radio frequencies or channels, however so described, which were assigned by the Authority in writing to a person following receipt of a written request for the assignment of a radio frequency or channel:

Provided that in programming the apparatus with the said radio frequencies or channels, however so described, the dealer shall also observe any technical conditions or limitations, however so described, which the Authority could impose when assigning the same radio frequencies or channels:

Provided further that the programming in apparatus of radio frequencies or channels, however so described, other than those assigned in writing by the Authority shall be considered to be a breach to the Act.

(2) The Authority may require any dealer to provide it with any information relating to the storing, purchase and sale of apparatus.

(3) A dealer shall, by not later than fifteen days following the sale, hire or passing over to any person of apparatus which requires the assignment of a Maritime Mobile Service Identity (MMSI) and, or call sign, notify such deal to the Authority or any other competent authority as applicable:

Provided that this sub-paragraph is not applicable to apparatus intended to be installed and, or operated on a ship or aircraft not registered with the competent authority responsible for transport in Malta.

(4) A dealer is not permitted to dispose of any apparatus which is capable to operate without first rendering the apparatus incapable of transmitting any radio signal.

Servicing and repairing of apparatus.

4. (1) A dealer shall before commencing an activity relating to the servicing and repairing of apparatus, notify in writing such activities to the Authority.

(2) The notification under sub-paragraph (1) shall be in such form as the Authority may from time to time determine.

(3) The apparatus to be serviced or repaired shall be connected to either a suitable radio frequency dummy load or a radio frequency apparatus containing a dummy load.

(4) Any transmission for the purpose of completing servicing and repairing may be carried out using appropriate radiating antennas on those radio frequencies the rights of use of which were granted by the Authority:

Provided that any transmission shall be of the minimum possible duration and with low radiated power level where possible.

(5) This General Authorisation does not authorise any dealer to service and, or repair apparatus which is not compliant with paragraph 3(1).

Added by: L.N. 224 of 2011.

THIRTIETH SCHEDULE

(Regulation 3)

General Authorisation for Communication Receive Only Radiocommunications Apparatus

Applicability of Thirtieth Schedule.

1. This Schedule applies to any person installing or using communication receive only radiocommunications apparatus or any apparatus used as a component part of that apparatus.

Interpretation.

2. In this Schedule:

"communication receive only radiocommunications apparatus" or "communication receiver" means apparatus capable to receive voice only radiocommunications with the exception of sound only broadcast receivers.

Limitations.

3. (1) In operating a communication receiver any person shall not intercept radiocommunications not intended for the general use of the public.

(2) No person shall divulge the contents, simply disclose of the existence, publish or make any use whatsoever without authorisation, of information of any nature whatsoever obtained by the interception referred to in sub-paragraph (1).

THIRTY-FIRST SCHEDULE

Added by: L.N. 224 of 2011. Substituted by: L.N. 285 of 2015. Amended by: L.N. 420 of 2018.

(Regulation 3)

General Authorisation for Wireless Audio PMSE Apparatus

Applicability of Thirty-First Schedule.

1. This Schedule applies to any person installing or using wireless audio PMSE apparatus or any apparatus used as a component part of that apparatus.

Interpretation.

2. In this Schedule unless the context otherwise requires:

"PMSE" means programme making and special events; and

"wireless audio PMSE apparatus" means radiocommunications transmission apparatus used for short range transmission of analogue or digital audio signals among a limited number of emitters and, or receivers, such as radio microphones, in-ear monitor systems or audio links, used in particular for the production of broadcast programs and private or public social and cultural events capturing real-time presentation of audio information.

Minimum technical parameters.

3. The minimum technical parameters of wireless audio PMSE apparatus shall be those specified in the Annex to this Schedule.

Limitations. *Renumbered/ Substituted: L.N. 420 of 2018.*

4. (1) The use of wireless audio PMSE apparatus on the frequency range of operation between 694 MHz and 790 MHz is not permitted after 31 December 2020.

(2) The Authority may, in accordance with the provision of article 27 of the Act, after publishing a notice in its official website, impose additional limitations regarding the use of wireless audio PMSE apparatus in the frequency range of operation between 470 MHz and 782 MHz:

Provided that such notice shall be published at least 60 days prior to imposing such additional limitations:

Provided further that such additional limitations may also relate to the restriction of sub-bands within the same frequency range of operation by wireless audio PMSE apparatus.

(3) Any person who intends to use wireless audio PMSE apparatus on the frequency range of operation between 823 MHz and 832 MHz shall provide to the Authority his contact information. This information may be used by the Authority in cases relating to harmful interference.

ANNEX TO THIRTY-FIRST SCHEDULE

Substituted by: L.N. 285 of 2015. Amended by: L.N. 420 of 2018.

(Paragraph 3 of the Thirty-First Schedule)

A1. Minimum Technical Parameters for Wireless Audio PMSE apparatus

Frequency Band	Transmit power limit	Additional parameters	Other usage parameters
29.7-34.9 MHz	30 mW e.r.p.	Channel spacing (maximum): 50 kHz	
37.5-40.98 MHz	30 mW e.r.p.	Channel spacing (maximum): 50 kHz	
470-526 MHz 534-550 MHz 558-566 MHz 574-582 MHz 590-606 MHz 614-646 MHz 654-662 MHz 670-750 MHz 758-766 MHz 774-782 MHz	50 mW e.r.p.		Refer to sub-paragraphs 4(1), 4(2).
823-832 MHz	Refer to A2 below		Refer to sub-paragraph 4(3).
863-865 MHz	10 mW e.r.p.		
1785-1805 MHz	Refer to A3 below		

A2. Block edge mask range conditions applicable to wireless audio PMSE apparatus in the band 823-832 MHz

Frequencies below 821 MHz	821-823 MHz	823-826 MHz	826-832 MHz	Frequencies above 832 MHz
Out-of-block baseline limits	Guard band (for protection against interference from PMSE into the downlink of mobile fixed communications networks) Guard band (for protection against interference from PMSE into the downlink of mobile fixed communications networks)	In-block limits	Out-of-block baseline limits	
Out-of-block e.i.r.p. is -43 dBm/(5 MHz)		in-block e.i.r.p. of 13 dBm for hand-held wireless audio PMSE apparatus. in-block e.i.r.p. of 20 dBm for body-worn wireless audio PMSE apparatus.	in-block e.i.r.p. of 20 dBm	Out-of-block e.i.r.p. is -25 dBm/(5 MHz).

A3. Block edge mask range conditions applicable to wireless audio PMSE apparatus in the band 1785-1805 MHz

Parameter	Frequency Range	Handheld e.i.r.p.
Out-of-block	< 1785 MHz	-17 dBm/200kHz
Restricted frequency range	1785-1785.2 MHz	4 dBm/200kHz
	1785.2-1803.6 MHz	13 dBm/channel
	1803.6-1804.8 MHz	10 dBm/200kHz, with a limit of 13 dBm/channel.
	1804.8-1805 MHz	-14 dBm/200kHz
Out-of-block	> 1805 MHz	-37 dBm/200kHz

Parameter	Frequency Range	Body worn e.i.r.p.
Out-of-block	< 1785 MHz	-17 dBm/200kHz
	1785-1804.8 MHz	17 dBm/channel
Restricted frequency range	1804.8-1805 MHz	0 dBm/200kHz
Out-of-block	> 1805 MHz	-23 dBm/200kHz

THIRTY-SECOND SCHEDULE

Added by: L.N. 224 of 2011. Amended by: L.N. 420 of 2018.

(Regulation 3)

General Authorisation for Apparatus for Mobile Communication Services on board vessels

1. This Schedule applies to apparatus for mobile communication services on board vessels in the territorial seas of Malta. Applicability of Thirty-Second Schedule.

2. In this Schedule unless the context otherwise requires: Interpretation.

"baseline" has the same meaning as in the Territorial Waters and Contiguous Zone Act; Cap.226.

"Decision 2011/251/EU" means Commission Implementing Decision of 18 April 2011 amending Decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community (2011/251/EU);

"mobile communication services on board vessels" or "MCV services" means electronic communications service as defined in article 2 of the Electronic Communications (Regulation) Act provided by an undertaking to enable persons on board a vessel to communicate via public communication networks using a system subject to paragraph 3 hereto without establishing direct connections with land-based networks; Cap. 399.

"the 900 MHz band" means the 880-915 MHz band for uplink (terminal transmit, base station receive) and 925-960 MHz band for downlink (base station transmit, terminal receive);

"the 1800 MHz band" means the 1710-1785 MHz band for uplink

(terminal transmit, base station receive) and 1805-1880 MHz band for downlink (base station transmit, terminal receive);

"the 1900/2100 MHz bands" means the 1920-1980 MHz for uplink (terminal transmit, base station receive) and 2110-2170 MHz band for downlink (base station transmit, terminal receive);

"the 2600 MHz band" means the 2500-2570 MHz for uplink (terminal transmit, base station receive) and 2620-2690 MHz band for downlink (base station transmit, terminal receive);

"EN 301 502" means a harmonised European standard for the Global system for mobile communications (GSM); Harmonised EN for Base Station Equipment covering the essential requirements of article 3.2 of the Directive 2014/53/EU;

"EN 301 511" means a harmonised European standard for the Global System for mobile communications (GSM); Harmonised EN for mobile stations in the GSM 900 and GSM 1800 bands covering essential requirements under article 3.2 of the Directive 2014/53/EU;

"GSM system" means an electronic communications network that complies with the GSM standards, as published by European Telecommunications Standards Institute, in particular EN 301 502 and EN 301 511;

"LTE system" means an electronic communications network as defined in Decision 2011/251/EU;

"UMTS system" means an electronic communications network as defined in Decision 2011/251/EU;

"vessel base transceiver station" or "vessel-BS" means a mobile pico-cell located on a vessel and supporting GSM, LTE or UMTS services in compliance with the Annex to this Schedule;

Minimum technical parameters.

3. (1) Apparatus for MCV services shall operate in the 900 MHz and, or in the 1800 MHz band on a non-interference and non-protection basis.

(2) The minimum technical parameters of Apparatus for MCV services shall be those specified in the Annex to this Schedule.

Limitations.

4. (1) The apparatus providing MCV services shall not be used within 2 nautical miles (3,704 metres) from the baseline.

(2) The use of apparatus providing MCV services between 2 nautical miles (3,704 metres) and 12 nautical miles (22,224 metres) is limited to indoor vessel-BS only.

Substituted by: L.N. 420 of 2018.

ANNEX TO THIRTY-SECOND SCHEDULE

(Paragraph 3 of the Thirty-Second Schedule)

Minimum Technical Parameters for Mobile Communication

Services On Board Vessels

Conditions to be met by a system providing MCV services in the territorial seas of the Member States of the European Union, in order to avoid harmful interference to land-based mobile networks

(1) Conditions to be met by GSM systems operating in the 900 MHz band and 1800 MHz band providing MCV services in the territorial seas of the Member States, in order to avoid harmful interference to land-based mobile networks

The following conditions shall apply:

(a) The system providing MCV services shall not be used closer than 2 nautical miles* from the baseline, as defined in the United Nations Convention on the Law of the Sea;

(b) Only indoor vessel-BS antenna(s) shall be used between 2 and 12 nautical miles from the baseline;

(c) Limits to be set for mobile terminals when used on board vessel and for vessel-BS:

Parameter	Description
Transmit power/power density	For mobile terminals used on board vessels and controlled by the vessel-BS in the 900 MHz band, maximum radiated output power: 5 dBm
	For mobile terminals used on board vessels and controlled by the vessel-BS in the 1800 MHz band, maximum radiated output power: 0 dBm
	For base stations on board vessels, the maximum power density measured in external areas of the vessel, with reference to a 0 dBi measurement antenna gain: -80 dBm/200 kHz

*One nautical mile = 1852 metres

Channel access and occupation rules	Techniques to mitigate interference that provide at least equivalent performance to the following mitigation factors based on GSM standards shall be used: - between 2 and 3 nautical miles from the baseline, the receiver sensitivity and the disconnection threshold (ACCMIN[2] and min RXLEV[3] level) of the mobile terminal used on board vessel shall be equal to or higher than -70 dBm/200 kHz and between 3 and 12 nautical miles from the baseline equal to or higher than -75 dBm/200 kHz; - discontinuous transmission[4] shall be activated in the MCV system uplink direction; - the timing advance[5] value of the vessel-BS shall be set to the minimum.

2 ACCMIN (RX_LEV_ACCESS_MIN); as described in GSM standard ETSI TS 144 018

3 RXLEV (RXLEV-FULL-SERVING-CELL); as described in GSM standard ETSI TS 148 008

4 Discontinuous transmission, or DTX; as described in GSM standard ETSI TS 148 008

5 Timing advance; as described in GSM standard ETSI TS 144 018

(2) Conditions to be met by UMTS systems in the 1900/ 2100 MHz bands providing MCV services in the territorial seas of the Member States, in order to avoid harmful interference to land-based mobile networks

The following conditions shall apply:

(a) the system providing MCV services shall not be used closer than two nautical miles from the baseline, as defined in the United Nations Convention on the Law of the Sea;

(b) only indoor vessel-BS antenna(s) shall be used between two and twelve nautical miles from the baseline;

(c) only bandwidth up to 5 MHz (duplex) can be used;

(d) limits to be set for mobile terminals when used on board vessel and for vessel-BS:

Parameter	Description
Transmit power/power density	For mobile terminals transmitting in the 1900 MHz band used on board vessels and controlled by the vessel-BS transmitting in the 2100 MHz band, maximum radiated output power: 0 dBm/5 MHz
Emissions on deck	The vessel-BS emission on deck shall be equal or below -102 dBm/5 MHz (Common Pilot Channel)
Channel access and occupation rules	Between 2 and 12 nautical miles from the baseline, the quality criteria (minimum required received signal level in the cell) shall be equal to or higher than: -87 dBm/5 MHz
	The Public Land Mobile Network selection timer shall be set to 10 minutes
	The timing advance parameter shall be set according to a cell range for the MCV distributed antenna system equal to 600 m
	The Radio Resource Control user inactivity release timer shall be set to 2 seconds
Non alignment with land networks	MCV carrier centre frequency shall not be aligned with land network carriers

(3) Conditions to be met by LTE systems in the 1800 MHz band and 2600 MHz band providing MCV services in the territorial seas of the Member States, in order to avoid harmful interference to land-based mobile networks.

The following conditions shall apply:

(a) The system providing MCV services shall not be used closer than 4 nautical miles from the baseline, as defined in the United Nations Convention on the Law of the Sea;

(b) Only indoor vessel-BS antenna(s) shall be used between 4 and 12 nautical miles from the baseline;

(c) Only a bandwidth of up to 5 MHz (duplex) can be used per frequency band (1800 MHz and 2600 MHz);

(d) Limits to be set for mobile terminals when used on board vessel and for vessel-BS:

Parameter	Description
Transmit power/power density	For mobile terminals used on board vessels and controlled by the vessel-BS in the 1800 MHz band and 2600 MHz band, maximum radiated output power: 0 dBm
Emissions on deck	The vessel-BS emission on deck shall be equal or below -98 dBm/5 MHz (equivalent to -120 dBm/15 kHz)
Channel access and occupation rules	Between 4 and 12 nautical miles from the baseline, the quality criteria (minimum required received signal level in the cell) shall be equal to or higher than -83 dBm/ 5 MHz (equivalent to -105 dBm/15 kHz)
	Public Land Mobile Network selection timer shall be set to 10 minutes
	The timing advance parameter shall be set according to a cell range for the MCV distributed antenna system equal to 400 m
	Radio Resource Control user inactivity release timer shall be set to 2 seconds
Non alignment with land networks	MCV carrier centre frequency shall not be aligned with land network carriers

Added by: L.N. 420 of 2018.

THIRTY-THIRD SCHEDULE
(Regulation 3)

General Authorisation for Radiobeacons

Applicability of Thirty-Third Schedule.

1. This General Authorisation applies to any person installing or using certain types of Radiobeacons or any apparatus intended to be used as a component part of that apparatus.

Interpretation.

2. In this Schedule unless the context otherwise requires:

"COSPAS-SARSAT" means an international satellite-based search and rescue distress alert detection and information distribution system;

"EPIRB" means Emergency Position-Indicating Radio Beacon;

"homing device" means a beacon primarily intended for homing by aircraft;

"IBRD" means the International Beacon Registration Database

maintained by COSPAS-SARSAT that is available at internet address https://www.406registration.com/ or any other address as could be determined by COSPAS-SARSAT;

"PLB" means Personal Locator Beacon;

"radiobeacons" means radiocommunications apparatus such as an EPIRB or PLB, the emissions of which are intended to facilitate search and rescue operations;

"Rescue Coordination Centre" means the Armed Forces of Malta or any other entity which could be responsible for the coordination of maritime search and rescue operations; and

"Standard Location Protocol" is a means to identify a PLB using a unique serial number allocated by the PLB manufacturer accompanied with the COSPAS-SARSAT PLB type approval certificate number.

Conditions applicable to EPIRB.

3. (1) Without prejudice to paragraph 1 of this Schedule, this general authorisation does not apply to EPIRBs installed permanently on ships which fall within the scope of the SOLAS Convention.

(2) EPIRBs shall be capable to operate on the 406.0 to 406.1 MHz frequency band and shall be provided with a homing device operating on 121.5 MHz.

(3) EPIRBs shall be registered with Transport Malta or with any other competent authority as the Authority may consider appropriate in the circumstances.

(4) Any person enjoying a general authorisation in accordance with this Schedule shall ensure that the ship from where the EPIRB may be activated or used, however so described, is assigned an MMSI by the competent authority:

Provided that such a person shall also ensure that the EPIRB is duly programmed with the assigned MMSI:

(5) Without prejudice to paragraph 5 hereof, a person shall only activate or use, however so described, an EPIRB from on board a ship:

Provided further that the EPIRB programmed with the assigned MMSI shall only be activated or used on board the ship associated with the same MMSI:

Provided further that a person transferring or relocating, however so described, an EPIRB from one ship to another, shall seek the approval of the competent authority prior to installing the EPIRB on that other ship.

(6) An assigned MMSI is not transferable between ships.

Conditions applicable to PLB.

4. (1) PLBs shall be capable to operate on the 406.0 to 406.1 MHz frequency band and shall be provided with a homing device operating on 121.5 MHz.

(2) PLBs shall have an internal global navigation satellite system.

(3) Any person enjoying a general authorisation in accordance with this Schedule shall ensure that any PLB that is in his possession or under his control is duly registered in the IBRD:

Provided that a PLB shall not be carried by a person, or on board a ship or an aircraft unless the PLB is registered in the IBRD:

Provided further that such a person shall ensure that the details registered in the IBRD are accurate at all times and updated immediately if and whenever necessary:

Provided further that the details registered in the IBRD shall also be updated immediately to reflect situations where the PLB is transferred between persons.

(4) Any person enjoying a general authorisation in accordance with this Schedule shall ensure that any PLB that is in his possession or under his control shall be coded with the standard location protocol and programmed with maritime identification digit 256:

Provided that the programming of a PLB with an MMSI is prohibited.

(5) Any person carrying a PLB on a foreign registered ship or foreign registered aircraft whilst such ship or aircraft is in Malta shall observe the technical and operational terms, conditions and limitations, however so described, of these regulations:

Provided that the requirement to register the PLB in the IBRD in accordance with paragraph 4(3) shall not apply if the PLB that is carried on board the foreign-registered ship or aircraft is registered in an alternative PLB registration database.

(6) Any person enjoying a general authorisation in accordance with this Schedule shall ensure that any PLB that is carried on board a locally registered ship or aircraft whilst such ship or aircraft is located outside Malta shall observe the terms, conditions and limitations, however so described, that could apply in the area or location, however so described, where the ship or aircraft is positioned.

Common conditions applicable to radiobeacons.

5. (1) Radiobeacons shall only be activated or used, however so described, for distress alerting:

Provided that radiobeacons shall only be considered as a secondary means of distress alerting and shall only be activated when no other means to send distress alerts are available at that particular time:

Provided further that if for any reason a radiobeacon is activated or used, however so described, inadvertently, the person noticing such activation or use shall immediately notify the Rescue Coordination Centre to cancel the distress alert:

Provided further that in situations where a person who was in a distress situation has activated a radiobeacon and then that person is no longer in distress, then, that same person shall immediately notify the Rescue Coordination Centre to cancel the distress alert.

(2) Any person enjoying a general authorisation in accordance with this Schedule shall ensure that prior to the disposal of a radiobeacon, the battery of the said radiobeacon is removed and the radiobeacon made inoperative.

THIRTY-FOURTH SCHEDULE
(Regulation 3)

General Authorisation for Land and Maritime Earth Stations on Mobile Platforms (ESOMPs) operating with Non-Geostationary Satellite Networks

Applicability of Thirty-Fourth Schedule. *Added by: L.N. 420 of 2018.*

1. This Schedule applies to any person installing or using apparatus for Land and Maritime Earth Stations on Mobile Platforms operating with Non-Geostationary Satellite Networks or any apparatus intended to be used as a component part of that apparatus.

Interpretation.

2. In this Schedule:

"CEPT countries" means the countries or administrations that are members of the European Conference of Postal and Telecommunications Administrations;

"earth stations on mobile platforms" or "ESOMPs" means terminals with small directional antennas tracking the satellites for the provision of wireless broadband communication services, operating in non-geostationary satellite networks, from mobile platforms;

"ECC Report 066" means the report developed by the Electronic Communications Committee of CEPT on the protection of aircraft from satellite earth stations operating on the ground in the vicinity of airfields;

"epfd" means equivalent power flux-density;

"mobile platform" means a ship or land vehicle or may be a

transportable device used in motion or at temporary halts;

"network control facility" or "NCF" means set of functional entities that, at system level, monitor and control the correct operation of the ESOMP and, if appropriate, all of the ESOMPs in a network; and

"pfd" means power flux-density.

Limitations.

3. (1) ESOMPs which are not installed or used in Malta shall observe any terms, conditions or limitations which could be applicable in the area or country, however so described, in which they are installed or used.

(2) ESOMPs shall not be installed on aircraft.

Minimum technical parameters.

4. (1) Unless otherwise specified in the National Frequency Plan, ESOMPs shall operate in the following frequency bands:

(a) 19.7-20.2 GHz (space-to-Earth) and 29.5-30 GHz (Earth-to-space);

(b) 17.3-19.7 GHz (space-to-Earth), 27.5-27.8285 GHz (Earth-to-space) and 28.4445-28.8365 GHz (Earth-to-space); and

(c) 28.8365-28.9485 GHz (space-to-Earth).

(2) ESOMPs shall operate under the control of a network control facility.

(3) The minimum technical parameters of ESOMPs shall be those specified in the Annex to this Schedule.

ANNEX TO THE THIRTY-FOURTH SCHEDULE
(Paragraph 4 of the Thirty-Fourth Schedule)

Minimum Technical Parameters for Land and Maritime Earth Stations on Mobile Platforms operating with Non-Geostationary Satellite Networks

A. Technical and operational requirements for ESOMPs operating within the frequency bands 17.3-20.2 GHz and 27.5-29.1 GHz and 29.5-30.0 GHz

ESOMPs operating within the frequency bands 17.3-20.2 GHz and 27.5-29.1 GHz and 29.5-30.0 GHz shall comply with the following technical and operational requirements:

1. The protection of geostationary FSS networks operating in 27.5-28.6 GHz and 29.5-30.0 GHz from ESOMPs operating in non-geostationary systems shall be achieved by complying with the

epfd limits stipulated in No. 22.5D of the Radio Regulations. The protection of FSS geostationary networks and FSS non-geostationary systems operating in 28.6-29.1 GHz shall be on the basis of relevant coordination agreements reached between administrations and operators in accordance with No. 9.11A of the Radio Regulations.

2. The design, coordination and operation of ESOMPs shall take into account the following factors to the extent that they ensure compliance with the conditions specified in no. 1 above:

(a) antenna mis-pointing;

(b) variations in the antenna pattern;

(c) variations in the transmit e.i.r.p

3. ESOMPs that use closed-loop tracking of the satellite signal shall employ an algorithm that is resistant to capturing and tracking signals from nearby satellite. ESOMPs shall immediately inhibit transmissions when they detect that unintended satellite tracking has happened or is about to happen.

4. ESOMPs shall be self-monitoring and should a fault which can cause harmful interference to FSS or terrestrial networks be detected, the ESOMPs must automatically cease its transmissions.

5. ESOMPs shall be in conformance with the Harmonised European Standard EN 303 979, "Satellite Earth Stations and Systems (SES); Harmonised European standard for Earth Stations on Mobile Platforms (ESOMPs) transmitting towards satellites in non-geostationary orbit in the 27.5-29.1 GHz and 29.5-30.0 GHz frequency bands covering the essential requirements of article 3.2 of Directive 2014/53/EU".

B. Additional technical and operational requirements for ESOMPs operating within the frequency bands 17.3-19.7 GHz and 27.5-29.1 GHz

ESOMPs operating within the frequency bands 17.3-19.7 GHz and 27.5-29.1 GHz must comply (in addition to A above) with the following technical and operational requirements:

1. In the territory of any country, the off-axis* e.i.r.p. spectral density radiated by any ESOMP into the fixed service bands (i.e. 27.8285-28.4445 GHz, 28.8365-28.9485 GHz (where applicable) and 28.9485-29.1 GHz) shall be limited to -35 dBW/ MHz. This limit shall, in any case, be met by ESOMPs on land, on territorial sea or on internal waters, at a direction of 3 degrees or less

* Off-axis refers to angles greater than 7° from the axis of the main beam or to angles greater than the declared minimum elevation angle of the ESOMPs, whichever is lower.

above the local horizontal plane at the ESOMPs terminal.

2. In the territory of any country, ESOMPs shall not have their transmit occupied band edges closer than 10 MHz from the edges of the bands identified by that country for the fixed service operation.

3. The antenna elevation angle shall be higher than 3 degrees.

4. In the band 28.8365-28.9485 GHz, the pfd threshold values in paragraph 6 shall apply to the territory of any country which authorises systems in the fixed service in this band and shall not be exceeded, unless prior agreement has been given by the concerned country(ies) to exceed these values.

5. In the bands 27.8285-28.4445 GHz and 28.9485-29.1 GHz, the pfd threshold values given in paragraph 6 shall apply to the territory of all CEPT countries and shall not be exceeded, unless prior agreement has been given by the concerned country(ies) to exceed these values.

6. For ESOMPs installed on vessels, the pfd threshold value is -109 dB(W/m^2) in a reference bandwidth of 14 MHz at a height of 20 metres above mean sea level at the low-water mark of the territory of the countries defined in paragraphs 4 and 5 above*.

7. For ensuring compliance with the above pfd provisions ESOMPs shall have self-monitoring functions and automatic mechanisms (locally, or under the control of the NCF) to reduce its e.i.r.p. or cease transmissions.

8. National limitations applicable to uncoordinated FSS earth stations to avoid cross-border interference to fixed or mobile services in the same band in an adjacent country shall apply to land based ESOMPs and ESOMPs operating on territorial sea and on inland waterways in the same country as the uncoordinated FSS earth stations.

C. Protection of Aircraft from ESOMPs operating on the Earth's surface in the vicinity of an airfield

1. The coordination zone comprises the area within the airfield boundary fence in addition to an area outside the boundary fence. The coordination area is dependent on the e.i.r.p. and orbital characteristics of the non-geostationary orbit system.

2. Table 1 lists the coordination areas to be used for the

*The pfd value above is not defined as under "free-space" conditions. The percentage of time that should be used in the propagation model when assessing compliance with this PFD threshold should be 0.007%.

protection of aircrafts in the vicinity of airfields from ESOMPs for which the coordination areas have not been determined using the methodology given in ECC Report 066.

ESOMPs e.i.r.p.	>40 dBW	50 dBW	>55 dBW	>60 dBW
Note: These coordination areas are not dependent on the latitude of the ESOMPs	Coordination Area	Coordination Area	Coordination Area	Coordination Area
	500 m to 1500 m	1500 m to 3000 m	3000 m to 6000 m	6000 m and beyond

The coordination areas given in Table 1 have been derived for the following:

(a) a field strength criterion at the aircraft of 20 V/m

(b) maximum elevation angle of the earth station antenna of non-geostationary ESOMPs equal to 90°

(c) earth station antenna height (H) is 0 m

(d) glide path angle (α) is at 3°

3. Table 2 lists the coordination areas to be used for the protection of aircrafts in the vicinity of airfields from ESOMPs of a non-geostationary system called O3b having the following characteristics:

Description of the orbit: equatorial plane at an altitude of 8062 km
maximum e.i.r.p. of 70 dBW (under rain fade conditions)

e.i.r.p. of ESOMPs: Nominal e.i.r.p. 60.6 dBW
e.i.r.p. under clear sky conditions 61.9 dBW

ESOMPs	>40 dBW	>45 dBW	>50 dBW	>55 dBW	>60 dBW	>61 dBW	>62 dBW	>68 dBW
e.i.r.p. range	>45 dBW	>50 dBW	>55 dBW	>60 dBW	>61 dBW	>62 dBW	>68 dBW	>70 dBW
ESOMPs Latitude	Co-ordination Area	Co-ordination Area	Co-ordination Area	Co-ordination Area	Co-ordination Area	Co-ordination Area	Co-ordination Area	Co-ordination Area
>50^{0}N	288 m	511 m	909 m	1614 m	1814 m	2036 m	4062 m	5113 m
45^0-500	378 m	673 m	1197 m	2128 m	2388 m	2679 m	5346 m	6730 m
40^0-50^{0}N	465 m	827 m	1471 m	2616 m	2936 m	3294 m	6572 m	8274 m
35^0-40^{0}N	547 m	973 m	1730 m	3076 m	3451 m	3872 m	7726 m	9726 m
30^0-35^{0}N	646 m	1149 m	2044 m	3635 m	4079 m	4576 m	9131 m	11495 m