



Commission for
Communications Regulation

Draft Interface Requirements for Aeronautical and Maritime Radio Services in Ireland. Notification Number 2012/609/IRL

General Document

Reference: ComReg 12/119

Date: 30/10/2012

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Additional Information

This document is for information purposes only and has been notified to the European Commission (EC) under Directive 98/34/EC (Notification number: 2006/476/IRL). There is an initial 3 month standstill period from the time that the notification was made to the EC during which time comments may be made on the draft document. Interested parties can provide comments on the draft interface requirements to either the European Commission or to their relevant national authority responsible for administering Directive 98/34/EC in the field of technical regulations (In Ireland, the National Standards Authority of Ireland).

Although ComReg intends to adopt the interface requirements as per this document, any comments made by other Member States or the European Commission during the standstill period will need to be taken into account and subsequent amendments to the document may therefore be necessary. For this reason ComReg stresses that the information contained in the current document should be treated with caution and to avoid any doubt about the applicability of individual requirements please contact ComReg. Final interface requirements will be published after the standstill period has lapsed. Should detailed opinions be received, the standstill period may be extended.

Content

Section	Page
1 General Information	5
2 Draft Interface Requirements	8
2.1 Aeronautical and Maritime Services	8
3 General References and Relevant Documentation	24
3.1 National Legislation	24
3.2 EC Directives and Decisions	25
3.3 International Telecommunication Union (ITU) Radio Regulations in General ..	25
3.4 ComReg Documentation	25
3.5 Department of Transport Documentation	25
3.6 Other Documentation	26

1 General Information

1. The Radio and Telecommunications Terminal Equipment Directive¹ (R&TTE Directive) was transposed into Irish law by Statutory Instrument (S.I.) 240 of 2001 entitled “European Communities (Radio Equipment and Telecommunications Terminal Equipment) Regulations, 2001”. Regulation 5(6)(a) of S.I. 240 of 2001 transposes Article 4.1 of the R&TTE Directive and requires the Commission for Communications Regulation (ComReg) to notify the European Commission of the regulated interfaces in Ireland.
2. This document sets out the interface requirements for the aeronautical and maritime radio services in Ireland which have been stipulated for the purpose of the efficient and effective use of the radio spectrum.
3. The manner in which the radio spectrum is allocated in Ireland is laid down in the Radio Frequency Plan for Ireland (ComReg document 08/90R, as revised)².
4. This document augments the draft notification made to the European Commission in 2006/476/IRL. This document is in addition to ComReg 06/47R which details the Interface requirements for Radio Services in Ireland
5. All radio and telecommunications terminal equipment must comply with the essential requirements and other relevant provisions of the R&TTE Directive³ before being placed on the market or put into service in Ireland.
6. Under Irish legislation (The Wireless Telegraphy Act, 1926 as amended), all apparatus for Wireless Telegraphy requires a licence unless that apparatus has been specifically exempted from licensing under Irish legislation by means of an Exemption Order.
7. Detailed information on the licensing policies and procedures for specific radio services in Ireland are available on the ComReg website, <http://www.comreg.ie>, generally in the form of Guidelines to applicants.

¹ Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity available at http://www.comreg.ie/radio_spectrum/randtte.543.420.html

² http://www.comreg.ie/_fileupload/publications/Comreg0890R2.pdf

³ Where applicable, EC Decisions under the R&TTE Directive must also be complied with. These Decisions are listed at <http://europa.eu.int/comm/enterprise/rtte/decision/present.htm> and also in Annex B of this document “General References”.

8. All radio equipment should operate so as to optimise the effective use of the radio spectrum and so that it does not cause harmful interference to other authorised radio services.
9. Licence conditions attached to Wireless Telegraphy licences require that licensees comply with the International Commission on Non-Ionising Radiation Protection (ICNIRP)⁴ Guidelines on non-ionising radiation emissions.
10. Throughout this document, the reference standards refer to the harmonised standards under the R&TTE Directive, where available. Although the use of harmonised standards is not compulsory, compliance with a given harmonised standard gives a presumption of conformity to the relevant essential requirements of the R&TTE Directive under the scope of that standard. A list of harmonised standards under the R&TTE Directive is published in the Official Journal of the European Communities, and is published electronically on the European Commission website⁵.
11. Commission Decision 2000/299/EC⁶ established classifications for radio and telecommunications terminal equipment. Radio and telecommunications terminal equipment which can be placed on the market and put into service without restrictions has been designated as Class 1. A list of Class 1 radio and telecommunications terminal equipment is maintained at <http://www.ero.dk/rtte> and <http://europa.eu.int/comm/enterprise/rtte/equip.htm#list> respectively. Class 1 equipment does not need notification under the R&TTE Article 6.4 process. On the other hand, radio equipment which has restrictions placed on it in terms of either placing on the market or putting into service is designated as Class 2 equipment, and should accordingly be marked with the alert symbol. Class 2 equipment requires notification to ComReg under the Article 6.4 process.
12. Wherever possible, CEPT ERC/ECC Decisions and Recommendations apply. A list of these documents and the current status of Ireland's implementation of the CEPT Decisions is available on the ERO website: <http://www.ero.dk>.
13. ComReg may from time to time introduce additional requirements where necessary for the purposes of ensuring the effective and efficient use of the radio spectrum. Such additional requirements may be necessitated by, inter alia, changes to spectrum allocations and/or technological developments. ComReg reserves the right to amend interface requirements where necessary and this document is therefore subject to revision.

⁴ www.icnirp.de

⁵ <http://europa.eu.int/comm/enterprise/newapproach/standardization/harmstds/reflist/radiotte.html>

⁶ <http://europa.eu.int/comm/enterprise/rtte/decision/class-en.pdf>

14. Contact details for queries are provided at the end of this document.

15. Web addresses are referenced throughout this document for convenience only.
Please note that ComReg is not responsible for the content of external websites.

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2 Draft Interface Requirements

2.1 Aeronautical and Maritime Services

16. This section outlines the draft interface requirements for the Aeronautical and Maritime services in Ireland.

17. The legislation and documentation relevant to these services is listed at the end of this document.

Table 1: Draft Interface Requirements for Aeronautical Services – Communications

Parameters	Description		
Mandatory Requirements			
Band	kHz	MHz	MHz
Frequency	2850 – 3025	118 – 137	225-400
	3400 – 3500		
	4650 – 4700		
	5480 – 5680		
	6525 – 6685		
	8815 – 8965		
	8965 – 9040		
	10005 – 10100		
	11175 – 11400		
	13200 – 13360		
17900 – 17970			
21924 - 22000			
National Usage	Fixed HF Stations	Air-ground communications Ground-air	UHF Commuincation

		communications	
Licensing Regime	Wireless Telegraphy Licence is required and operators must be qualified Aircraft Radio Licence - Application Form & Guidelines 09/44R2 Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg11/07 Air Traffic Services Licence Application 11/07(b)		
Standards	Operating standards, and limitations are per ICAO Annex 10		
Channel Spacing			
Maximum Transmit Power / Max ERP			

* Equipment used or intended to be used in connection with the provision of air traffic services is subject to approval by the IAA in accordance with the IAA (Air Traffic Service Systems) Order, S.I. 855 of 2004

Table 2: Draft Interface Requirements for Aeronautical Services – Navigation

Parameters	Description					
Mandatory Requirements						
Band	kHz	kHz	MHz	MHz	MHz	MHz
Frequency	315-415	74800-75200	108-112	112-118	328.6 – 335.4	960 - 1215
National Usage	Non – Directional Beacons	Navigation (Fan Markers)	Instrument Landing Systems	VHF Omni Directional Range Finder	ILS Glide Path	Distance Measuring Equipment

Licensing Regime	Wireless Telegraphy Licence is required and operators must be qualified Aircraft Radio Licence - Application Form & Guidelines 09/44R2 Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg 11/07 Radiodetermination (Radionavigation) Licence 11/07(d)
Standards	Operating standards, and limitations are per ICAO Annex 10
Channel Spacing	
Maximum Transmit Power / Max ERP	

* Equipment used or intended to be used in connection with the provision of air traffic services is subject to approval by the IAA in accordance with the IAA (Air Traffic Service Systems) Order, S.I. 855 of 2004

Table 3: Draft Interface Requirements for Aeronautical Services – Radiolocation

Parameters	Description		
Mandatory Requirements			
Band	MHz	MHz	MHz
Frequency	960-1215	2700-2900	15700-16600
National Usage	Secondary Surveillance Radar	Primary Radar	Surface Movement Radar
Licensing Regime	Wireless Telegraphy Licence is required and operators must be qualified Aircraft Radio Licence - Application Form & Guidelines 09/44R2 Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg11/07		

	Radiodetermination Services (Radiolocation) 11/07(c)
Standards	Operating standards, and limitations are per ICAO Annex 10
Channel Spacing	
Maximum Transmit Power / Max ERP	

* Equipment used or intended to be used in connection with the provision of air traffic services is subject to approval by the IAA in accordance with the IAA (Air Traffic Service Systems) Order, S.I. 855 of 2004

Table 4: Draft Interface requirements for VHF portable radiotelephone equipment in the maritime mobile service (non-GMDSS applications).

Parameter	Description
Mandatory Requirements	
Frequency	156 - 163MHz
Radio Service	Maritime Mobile Service
Application	Portable Ships Radio
Licensing requirements	Wireless Telegraphy Licence is required If on board vessels: Ships Radio Licence, see Department of Transport Document SRLAPP20072008 If shore based: Maritime Services Licence Application ComReg11/07(e) Radiodetermination, Air Traffic and Maritime Services Licence Guidelines

Parameter	Description
	ComReg11/07 Operator must hold a ships radio operators certificate (see http://www.transport.gov.ie/Maritime+Safety+Directorate/Maritime+Radio)
Maximum EIRP (peak)	6W
Class of emission and Channel spacing	G3E, 25 kHz
Other	Channel plan and parameters must be in accordance with the relevant sections of the ITU Radio Regulations (Articles 5, 19, 30-33, 50-54, 57-58, Appendices 14, 15.16 and Appendix 18)
Information	
Reference standards	EN 301 178-2

Table 5: Draft Interface requirements for VHF radiotelephone equipment for general communications and associated equipment for class “D” Digital Selective Calling.

Parameter	Description
Mandatory Requirements	
Frequency	156 – 163 MHz
Radio Service	Maritime Mobile Service
Application	VHF radiotelephone equipment for general communications and associated equipment for class “D” Digital Selective Calling

Parameter	Description
Licensing requirements	<p>Wireless Telegraphy Licence is required</p> <p>If on board vessels:</p> <p>Ships Radio Licence, see Department of Transport Document SRLAPP20072008</p> <p>If shore based:</p> <p>Maritime Services Licence Application ComReg11/07(e)</p> <p>Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg11/07</p> <p>Operator must hold a ships radio operators certificate (see http://www.transport.gov.ie/Maritime+Safety+Directorate/Maritime+Radio)</p>
Maximum EIRP (peak)	25W
Channel spacing and class of emission	25kHz, G3E, G2B (DSC)
Other	Channel plan, parameters, classes of emission and operation must be in accordance with the relevant sections of the ITU Radio Regulations (Articles 5, 19, 30-33, 50-54, 57-58, Appendices 13-16 and Appendix 18).
Information	
Reference standards	EN 300 162, EN 301 025-2 and EN 301 025-3

Table 6: Draft Interface requirements for Maritime Emergency Position indicating Radio Beacons (EPIRBs) intended for use on the frequency 121.5 MHz or the frequencies 121.5 MHz and 243 MHz for homing purposes only.

Parameter	Description
Mandatory Requirements	
Frequency	Either 121.5 MHz only or 121.5MHz and 243 MHz combined
Radio Service	Maritime Mobile Service
Application	EPIRBs
Licensing requirements	Wireless Telegraphy Licence is required for EPIRB's on board vessel Ships Radio Licence, Department of Transport Document SRLAPP20072008 The EPIRB will only be licensed for use aspart of a vessel licence
Maximum EIRP (peak)	200mW or 70mW for man overboard devices only.
Class of emission	A3X
Minimum Duty Cycle	33% with a minimum depth of modulation of 0.85 at an Effective Radiated Peak Envelope Power (ERPEP) of not less than 75mW for an uninterrupted period of at least 24 hours or an ERPEP of not less than 25mW for an uninterrupted period of at least 6 hours for man overboard devices only.
Other	Equipment shall be operated in accordance with the relevant sections of the ITU Radio Regulations Article 32, Appendices 13 and 15. Other parameters shall be operated in accordance with ITU-R M.690-1.
Information	
Reference standards	EN 300 152-1, EN 300 152-2, EN 300 152-3

Parameter	Description

Table 7: Draft Interface requirements for Emergency Position indicating Radio Beacons (EPIRBs) Emergency Locator Transmitter (ELT) or Personal Locator Beacons (PLBs) intended for use with the COSPAS-SARSAT Distress Alert System in the 406 – 406.1 MHz frequency band, with an auxiliary 121.5 MHz transmitter for homing purposes only and optional navigational interface (either internal or external).

Parameter	Description
Mandatory Requirements	
Frequency	406.0 - 406.1 MHz and 121.5 MHz
Radio Service	Maritime Mobile/Maritime Mobile Satellite
Application	Personal Locator Beacons (PLBs) Emergency Position indicating Radio Beacons (EPIRBs) – Emergency Locator Transmitter (ELT)
Licensing requirements	<p>EPIRB</p> <p>Wireless Telegraphy Licence is required for EPIRB's on board vessel</p> <p>Ships Radio Licence, Department of Transport Document SRLAPP20072008</p> <p>The EPIRB will only be licensed for use as part of a vessel licence</p> <p>ELT</p> <p>Wireless Telegraphy Licence is required for ELT's on board aircraft</p> <p>Aircraft Radio Licence - Application Form & Guidelines 09/44R2</p> <p>The ELT will only be licensed for use as part of an Aircraft licence</p> <p>PLB</p> <p>Licence exempt subject to compliance with technical conditions (ITU M. 633 and operating on 406 MHz) and registered (see link below)</p> <p>http://www.comreg.ie/licensing_and_services/personal_locator_beacons.715.html</p>

Parameter	Description
Maximum EIRP (peak)	Between 406.0 – 406.1 MHz, maximum EIRP is $5W \pm 2dB$ (35-39 dBm). At 121.5MHz maximum EIRP is 100mW
Channelling Modulation	Requirements laid down in COSPAS-SARSAT documents C/S T.001 for 406.0 – 406.1MHz and ITU-R M.690-1 for 121.5 MHz.
Other	The equipment shall meet the relevant sections of C/S G.005 and C/S T.001 and equipment and operation shall be in accordance with the relevant sections of the ITU Radio Regulations (Articles 5, 30, 32, Appendices 13 and 15) and C/S T.007 and ITU M. 633 in relation to PLB's
Additional Essential requirements	Commission Decision 2005/631/EC
Information	
Reference Documents	EN 302 152-1; C/S T.001; C/S G.005; C/S T.007

Table 8: Draft Interface Requirements for non-SOLAS radar systems in the maritime radionavigation service

Parameter	Description
Mandatory Requirements	
Frequency	2700 - 3400 MHz 9300 – 9500 MHz
Radio Service	Maritime radionavigation service
Application	Non-SOLAS radar
Licensing requirements	Wireless Telegraphy Licence is required If on board a vessel; Ships Radio Licence see Department of Transport Document

Parameter	Description
	<p>SRLAPP20072008</p> <p>If on land</p> <p>Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg11/07</p> <p>Radiodetermination (Radiolocation) Licence 11/07(c) or Radiodetermination (Radionavigation) Licence 11/07(d)</p>
Maximum EIRP (peak)	100MW (80dBW)
Class of emission	PON
Frequency tolerance	1250 in 1E6
Other	The bandwidth occupied by the emissions must be completely maintained in the band allocated to the service.
Information	
Reference Documents	IEC 62252: 2004

Table 9: Draft Interface requirements for Radar Beacons (RACONs) in the maritime mobile service in the 3 GHz and 9 GHz bands.

Parameter	Description
Mandatory Requirements	
Frequency	2900 – 3100 MHz or 9300 – 9500 MHz
Radio Service	Maritime radionavigation service
Application	Radar Beacons (RACONs)
Licensing requirements	<p>Wireless Telegraphy Licence is required</p> <p>If on board a vessel;</p> <p>Ships Radio Licence see Department of Transport Document SRLAPP20072008</p> <p>If shore based;</p> <p>Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg11/07</p> <p>Radiodetermination (Radiolocation) Licence 11/07c or Radiodetermination (Radionavigation) Licence 11/07(d)</p>
Maximum EIRP (peak)	50W (17dBW)
Class of emission	Q0N
Other	The bandwidth occupied by the emissions must be maintained entirely in the band allocated to the service.
Information	
Reference	ITU-R M.824

Parameter	Description
Documents	IALA Recommendation R-101 on Marine Radar Beacons (RACONs)

Table 10: Draft Interface requirements for the Transmission of differential correction signals of global navigation satellite systems (DGNSS) for maritime use in the frequency bands 162.4375-162.4625 MHz and 163.0125-163.03125 MHz

Parameter	Description
Mandatory Requirements	
Frequency	162.4375-162.4625 MHz and 163.0125-163.03125 MHz
Radio Service	Maritime Radionavigation
Application	Maritime Navigational Aids
Licensing requirements	<p>Wireless Telegraphy Licence is required</p> <p>If on board a vessel;</p> <p>Ships Radio Licence see Department of Transport Document SRLAPP20072008</p> <p>If shore based;</p> <p>Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg11/07</p> <p>Radiodetermination (Radiolocation) Licence 11/07(c) or Radiodetermination (Radionavigation) Licence 11/07(d)</p>
Maximum EIRP (peak)	25W
Channel spacing and class of emission	12.5 kHz, F1D, G1D

Parameter	Description
Information	
Reference standards	N/A

Table 11: Draft Interface requirements for Automatic Identification System (AIS) using time division multiple access in the VHF band for use at a coast station, unmanned maritime buoys, Navigational Aids and Radars for maritime use in the VHF band.

Parameter	Description
Mandatory Requirements	
Frequency	161.975 MHz, 162.025 MHz
Radio Service	Maritime mobile
Application	Maritime navigational aids
Licensing requirements	<p>Wireless Telegraphy Licence is required</p> <p>If On board a vessel</p> <p>Ships Radio Licence see Department of Transport Document SRLAPP20072008</p> <p>If not on board a vessel</p> <p>Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg11/07</p> <p>Radiodetermination (AIS) Licence Application Form 11/07(a)</p> <p>Commissoners of Irish Lights Statutory Sanction is a pre requisite for licensing AIS not on board vessels</p>

Parameter	Description
Maximum EIRP (peak)	12.5W
Modulation	GMSK/FM,
Class of emission and Channel spacing	G2B (DSC) on 156.525 MHz 25 kHz
Other	Channels, parameters, class of emission and operation must be in accordance with the relevant sections of the ITU Radio Regulations (Articles 5, 19, 30-33, 50-54, 57-58, Appendices 13-16 and 18).
Additional Essential requirements	For radio equipment intending to participate in AIS, Commission Decision 2005/53/EC applies
Frequency planning assumptions	Equipment parameters are assumed to meet ITU-R M.1371
Information	
Reference Documents	IEC 62287-1 (2006-03), ITU-R M.1371

Table 12: Draft Interface requirements for radio beacons of the maritime radionavigation service in the frequency band 283.5 – 315 kHz

Parameter	Description
Mandatory Requirements	
Frequency	283.5 – 315.0 kHz
Radio Service	Maritime Radiodetermination Service
Application	Maritime navigational aids, and radars
Licensing	Wireless Telegraphy Licence is required

Parameter	Description
requirements	<p>If on board a vessel</p> <p>Ships Radio Licence see Department of Transport Document SRLAPP20072008</p> <p>If shore based;</p> <p>Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg11/07</p> <p>Radiodetermination (Radiolocation) Licence 11/07(c) or Radiodetermination (Radionavigation) Licence 11/07(d)</p>
Maximum EIRP (peak)	Minimum necessary to achieve the desired field strength at the service range. It shall not exceed 50 μ V/m.
Class of emission and channel spacing	<p>A1A, A2A, G1D.</p> <p>Integer multiple of 500 Hz if transmitting GNSS differential correction signals</p>
Additional Essential requirements	
Other	Assignments shall take account of the Master List of DGNSS Reference and Transmitting Stations in the Maritime Radionavigation (Radiobeacon) Band (283.5 – 315 kHz Region 1, 285 – 325 kHz Regions 2 and 3) published by the International Association of Marine Aids to navigation and Lighthouse Authorities.
Information	
Reference Documents	ITU-R M.823 and ITU-R M.588-1

Table 13: Draft Interface requirements for UHF on-board communications

Parameter	Description

Parameter	Description
Mandatory Requirements	
Frequency	<p>Single frequency simplex channels: 467.525 MHz, 467.550 MHz, 467.575 MHz, 457.525 MHz, 457.550 MHz, 457.575 MHz</p> <p>Two-frequency simplex channels for use with repeater only: 467.525 MHz (transmit) paired with 457.525 MHz (receive), 467.550 MHz (transmit) paired with 457.550 MHz (receive), 467.575 MHz (transmit) paired with 457.575 MHz (receive)</p>
Radio Service	UHF on-board communications
Application	Ships Radio Licence see Department of Transport Document SRLAPP20072008
Licensing requirements	<p>Wireless Telegraphy Licence is required</p> <p>Ships Radio Licence see Department of Transport Document SRLAPP20072008</p>
Maximum EIRP (peak)	Carrier power shall not exceed 4 W
Class of emission and channel spacing	<p>Phase modulation, G3E</p> <p>25 kHz channel spacing</p>
Information	
Reference standards	EN 300 720-2

3 General References and Relevant Documentation

Under The Wireless Telegraphy Act, 1926 as amended, all apparatus for wireless telegraphy requires a licence unless that apparatus has been exempted from licensing under legislation.

All radio equipment is required to comply with the requirements of the European Communities (Radio Equipment and Telecommunications Terminal Equipment) Regulations, 2001 (S.I. 240 of 2001) and in the case of equipment installed on vessels, the European Communities (Marine Equipment) Regulations 2003 (S.I. 38 of 2003), may be applicable, depending on the vessel.

3.1 National Legislation

Primary Legislation

Wireless Telegraphy Act 1926, as amended.

Secondary Legislation

S.I. 240 of 2001: European Communities (Radio Equipment and Telecommunications Terminal Equipment) Regulations, 2001

S.I. 38 of 2003: European Communities (Marine Equipment) Regulations, 2003

S.I. 855 of 2004: Irish Aviation Authority (Air Traffic Service Systems) Order, 2004

S.I. 414 of 2006: Wireless Telegraphy (Ship Station Radio Licence) Regulations, 2006

S.I. 193 of 2009 Wireless Telegraphy (Aircraft Station Radio Licence) Regulations, 2009

S.I. 369 of 2009: Wireless Telegraphy (Radiodetermination, Air Traffic and Maritime Services) Regulations, 2009

S.I. 290 of 2010: Wireless Telegraphy Act 1926 (section 3) (Exemption of 406 MHz Personal Locator Beacons) Order 2010

3.2 EC Directives and Decisions

Decision 2005/631/EC Commission Decision of 29 August 2005 concerning essential requirements as referred to in Directive 1999/5/EC of the European Parliament and of the Council ensuring access of Cospas-Sarsat locator beacons to emergency services

Commission Decision of 25 January 2005 on the application of Article 3(3)(e) of Directive 1999/5/EC of the European Parliament and of the Council to radio equipment intended to participate in the Automatic Identification System (AIS).

3.3 International Telecommunication Union (ITU) Radio Regulations in General

Radio Regulations Appendix S14: Phonetic alphabet and figure code

Radio Regulations Appendix S15 Frequencies for distress and safety communications for the Global Maritime Distress and Safety System (GMDSS)

Radio Regulations Appendix S16: Documents with which stations on board ships and aircraft shall be provided.

Radio Regulations Appendix S18: Table of transmitting frequencies in the VHF maritime mobile band.

3.4 ComReg Documentation

Aircraft Radio Licence - Application Form & Guidelines 09/44R2:

Radiodetermination, Air Traffic and Maritime Services Licence Guidelines ComReg11/07

Radiodetermination (AIS) Licence Application Form - ComReg 11/07(a)

Air Traffic Services Licence Application Form - ComReg 11/07(b)

Radiodetermination (Radiolocation) Licence - ComReg 11/07(c)

Radiodetermination (Radionavigation) Licence - ComReg 11/07(d)

Maritime Services Licence Application Form - ComReg 11/07(e)

3.5 Department of Transport Documentation

Ships Radio Licence Application Form SRLAPP20072008

http://www.dttas.ie/upload/general/12538-07_SHIP_RADIO_LICENCE_APPLICATION_FORM-0.PDF

3.6 Other Documentation

IEC 62287: Maritime navigation and radiocommunication equipment and systems - Class B shipborne installation of the universal automatic identification system (AIS) using VHF TDMA techniques.

IEC 62282: 2004 Maritime navigation and radiocommunication equipment and systems – Radar for craft not in compliance with IMO SOLAS Chapter V – Performance requirements, methods of test and required test results

EN 300 152: Electromagnetic compatibility and Radio spectrum Matters (ERM);Maritime Emergency Position Indicating Radio Beacons (EPIRBs) intended for use on the frequency 121,5 MHz or the frequencies 121,5 MHz and 243 MHz for homing purposes only.

EN 300-162-1: Electromagnetic compatibility and Radio spectrum Matters (ERM); Radiotelephone transmitters and receivers for the maritime mobile service operating in VHF bands; Part 1: Technical characteristics and methods of measurement

EN 300-162-2: Electromagnetic compatibility and Radio spectrum Matters (ERM); Radiotelephone transmitters and receivers for the maritime mobile service operating in VHF bands; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive

EN 300-162-3: Electromagnetic compatibility and Radio spectrum Matters (ERM); Radiotelephone transmitters and receivers for the maritime mobile service operating in VHF bands;Part 3: Harmonized EN covering essential requirements of article 3.3 (e) of the R&TTE Directive

EN 300-720-1: ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Ultra-High Frequency (UHF) on-board communications systems and equipment; Part 1: Technical characteristics and methods of measurement.

EN 300-720-2: Electromagnetic compatibility and Radio Spectrum Matters (ERM) Ultra-High Frequency (UHF) on-board communications systems and equipment; Part 2: Harmonised EN under article 3.2 of the R&TTE Directive.

EN 301-025: Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC).

EN 301-025-2: Electromagnetic compatibility and Radio spectrum Matters (ERM);VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

EN 301-025-3: Electromagnetic compatibility and Radio spectrum Matters (ERM);VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC);Part 3: Harmonized EN covering the essential requirements of article 3.3(e) of the R&TTE Directive

EN 301-178: Electromagnetic compatibility and Radio spectrum Matters (ERM); Portable Very High Frequency (VHF) radiotelephone equipment for the maritime mobile service operating in the VHF bands (for non-GMDSS applications only).

EN 301-178-2: Electromagnetic compatibility and Radio spectrum Matters (ERM); Portable Very High Frequency (VHF) radiotelephone equipment for the maritime mobile service operating in the VHF bands (for non-GMDSS applications only); Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive

EN 302-152-1: Electromagnetic compatibility and Radio spectrum Matters (ERM); Satellite Personal Locator Beacons (PLBs) operating in the 406,0 MHz to 406,1 MHz frequency band; Part 1: Technical characteristics and methods of measurement

Recommendation ITU-R M.588 Characteristics of maritime radio beacons (Region 1)

Recommendation ITU-R M.588-1: Black and white facsimile transmissions over combined metallic and radio circuits in the maritime mobile service and in the maritime mobile-satellite service.

Recommendation ITU-R M.690-1: Technical characteristics of emergency position-indicating radio beacons (EPIRBs) operating on the carrier frequencies of 121.5 MHz and 243 MHz.

Recommendation ITU-R M.823: Technical characteristics of differential transmissions for Global Navigation Satellite Systems (GNSS) from maritime radio beacons in the frequency band 285-315 kHz (Region 1) and 283.5-325 kHz (Region 2 and 3).

Recommendation ITU-R M.824: Technical parameters of radar beacons (RACONS).

Recommendation ITU-R M.1371 Technical characteristics for an automatic identification system using time-division multiple access in the VHF maritime mobile band

C/S G.005: Cospas-Sarsat Guidelines on 406 MHz Beacon Coding, Registration and Type Approval.

C/S T.001: Specification for Cospas-Sarsat 406 MHz Distress Beacons.

C/S T.007: Cospas-Sarsat 406 MHz Distress Beacon Type Approval Standard.

International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Guidelines on the Universal Automatic Identification System.

IALA Recommendation R101 on Maritime Radar Beacons (RACONS).

International Standards and Recommended Practices - Annex 10 to the Convention on International Civil Aviation as published by the International Civil Aviation Organisation (ICAO)

Please note that all documentation is subject to update and revision by the originating authority.

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