



**UK Radio Interface Requirement 2023
for transmitters and receivers in the MF/HF bands
for use at coast stations in the maritime mobile
service**

(Version 1.0)

98/34/EC Notification Number: 2000/248/UK

Published 15 December 2000

References

- ETS 300 373 ETSI Telecommunication Standard – Radio Equipment and Systems (RES); Technical characteristics and methods of measurement for maritime mobile transmitters and receivers for use in the MF and HF bands.
- ETS 300 338 ETSI Telecommunications Standard – Radio Equipment and Systems (RES); Technical characteristics and methods of measurement for equipment for generation, transmission and reception of Digital Selective Calling (DSC) in the maritime MF, MF/HF and/or VHF mobile service
- ETS 300 067 Radio Equipment and Systems; Radiotelex equipment operating in the maritime MF/HF service; Technical characteristics and methods of measurement

1. Foreword

- 1.1 The Radio Equipment and Telecommunications Terminal Equipment Directive 99/5/EC (R&TTE Directive) was implemented in the United Kingdom (UK) on the 8 April 2000 by The Radio Equipment and Telecommunications Terminal Equipment Regulations 2000, Statutory Instrument 2000 No. 730. In accordance with Articles 4.1 and 7.2 of Directive 1999/5/EC, this UK Radio Interface Requirement contains the requirements for the licensing of transmitters and receivers in the MF/HF bands for use at Coast stations in the maritime mobile service.
- 1.2 Nothing in this UK Radio Interface Requirement shall preclude the need for equipment to comply with Directive 1999/5/EC.
- 1.3 It is required by the Wireless Telegraphy Act 1949 that no radio equipment is installed or used in the UK except under the authority of a licence granted by or otherwise exempted by regulations made by the Secretary of State. It is a condition of such a licence or exemption regulations as appropriate that the equipment must meet the minimum requirements specified in this UK Radio Interface Requirement for the stated equipment types and for the stated frequency bands.
- 1.4 The requirements given in the main body of this UK Radio Interface Requirement will apply to the licensing of transmitters and receivers in the MF/HF bands for use at Coast stations in the maritime mobile service.
- 1.5 This UK Radio Interface Requirement will be revised as necessary, for example to follow:
 - i) current technology developments for reasons related to the effective and appropriate use of the spectrum, in particular maximising spectrum utilisation; and
 - ii) changes to the available spectrum allocated for licensing of transmitters and receivers in the MF/HF bands for use at Coast stations in the maritime mobile service.
- 1.6 All UK Radio Interface Requirements notified under Directive 98/34/EC will be published and will be made available free of charge from the RA Information and Library Service and/or the RA web-site. The addresses for both the Library and the web-site are given on the back cover of this document.
- 1.7 Further information on this UK Radio Interface Requirement can be obtained from the technical enquiry contact given on the back of this document

2. Minimum Equipment Requirements for Operation within the UK

- 2.1 The minimum radio requirements in this document are made for reasons related to the effective and appropriate use of the radio spectrum, in particular maximising spectrum utilisation.
- 2.2 This UK Radio Interface Requirement gives a high level description of how the spectrum in the UK is used for the licensing of transmitters and receivers in the MF/HF bands for use at Coast stations in the maritime mobile service. It does not prescribe a technical interpretation of the 'essential requirements' of Directive 1999/5/EC.
- 2.3 This UK Radio Interface Requirement therefore stipulates the necessary equipment parameters for the licensing of transmitters and receivers in the MF/HF bands for use at Coast stations in the maritime mobile service. Table 2.1 contains the relevant equipment parameters. These together with the 'essential requirement' detailed in Article 3.2 of the Directive 1999/5/EC constitute the minimum equipment requirements for MF/HF transmitters and receivers in the MF/HF bands for use at coast stations in the maritime mobile service within the UK.
- 2.4 Licensing is subject to availability of frequencies, and additionally successful frequency co-ordination. Maximum powers will be allocated on a site by site basis but shall not exceed the maximum shown in table 2.1
- 2.5 The technical parameters specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility within the MF/HF transmitters and receivers in the MF/HF bands for use at coast stations in the maritime mobile Service and with other radiocommunications services whilst promoting enterprise, innovation and competition.
- 2.6 This UK Radio Interface Requirement provides the necessary technical information which facilitates access to the MF/HF transmitters and receivers in the MF/HF bands for use at coast stations in the maritime mobile Service spectrum by making clear the assumptions that are made in planning the use of the MF/HF transmitters and receivers in the MF/HF bands for use at coast stations in the maritime mobile Service spectrum in the UK. It is not the intention of this UK Radio Interface Requirement to duplicate or impose any additional 'essential requirements' of the Directive 1999/5/EC on products. Any specified parameters within this document are for the purpose of identifying product options and not as a national product requirement.

Table 2.1: Minimum Equipment Requirements

Frequency range	Licence Class & Radio Service	Additional requirements
Frequencies in the bands 415 – 526.5 kHz, 1 605 – 4 000 kHz, and 1 605 – 27 500 kHz as allocated to the maritime mobile service	MF/HF Coast station Maritime mobile service	Licensed use of this equipment is dependent on the operator holding the relevant operator’s certificate and Authority to Operate or being under the personal supervision of a holder of the relevant operator’s certificate of competence and Authority to Operate. Channels not licensed shall be disabled. It shall not be possible for the operator to unblock disabled channels

Class of emission (Morse telegraphy)	Frequency band	Maximum power	Additional requirements
A1A, A1B, A2A, A2B, H2A, H2B, F1B, (J2B, J2D on a non-interference basis)	415 – 526.5 kHz}	Minimum power required for service area	The channel plan, parameters, classes of emission and operation must be in accordance with the relevant sections of the ITU Radio Regulations Articles S5, S19, S30-S33, S50-S58, Appx S13-Appx S17 and Appx S25
	1 605 – 4 000 kHz}		
	4 MHz	5 kW Mean	
	6 MHz	5 kW Mean	
	8 MHz	10 kW Mean	
	12 MHz	15 kW Mean	
	16 MHz	15 kW Mean	
	18/19 MHz	15 kW Mean	
	22 MHz	15 kW Mean	
25/26 MHz	15 kW Mean		

Class of emission (Narrow band direct printing)	Frequency band	Maximum power	Additional requirements
F1B, J2B	415 – 526.5 kHz}	Minimum power required for service area	The channel plan, parameters, operation and classes of emission must be in accordance with the relevant sections of the ITU Radio Regulations Articles S5, S19, S30-S33, S50-S58, Appx S13-Appx S17 and Appx S25
	1 605 – 4 000 kHz}		
	4 MHz	5 kW Mean	
	6 MHz	5 kW Mean	
	8 MHz	10 kW Mean	
	12 MHz	15 kW Mean	
	16 MHz	15 kW Mean	
	18/19 MHz	15 kW Mean	
	22 MHz	15 kW Mean	
25/26 MHz	15 kW Mean		

Class of emission (Digital selective calling)	Frequency band	Maximum power	Additional requirements
F1B,J2B	415 – 526.5kHz	Minimum power necessary for service area	The channel plan, parameters, classes of emission and operation must be in accordance with the relevant sections of the ITU Radio Regulations Articles S5, S19, S30-S33, S50-S58, Appx S13- Appx S17 and Appx S25
	1 605 – 4 000 kHz	Minimum power necessary for service area	
	4 MHz	5 kW Mean	
	6 MHz	5 kW Mean	
	8 MHz	10 kW Mean	
	12 MHz	15 kW Mean	
	16 MHz	15 kW Mean	
	18/19 MHz	15 kW Mean	
	22 MHz	15 kW Mean	
25/26 MHz	15 kW Mean		

Class of emission (For wide-band telegraphy, facsimile and special transmission systems – non telephony)	Frequency band	Maximum power	Additional requirements
Any apart from A1A	4 000 – 27 000 kHz	2.5 kW mean per 500 Hz bandwidth	The channel plan, parameters, operation and classes of emission must be in accordance with the relevant sections of the ITU Radio Regulations Articles S5, S19, S30-S33, S50-S58, Appx S13-Appx S17 and Appx S25

Class of emission (Radiotelephony)	Frequency band	Maximum power	Additional requirements
J3E	1 605 – 4 000 kHz	5 kW PEP (but see below)	The channel plan, parameters, classes of emission and operation must be in accordance with the relevant sections of the ITU Radio Regulations Articles S5, S19, S30-S33, S50-S58, Appx S13-Appx S17 and Appx S25
J3E	2 170 - 2 173.5 kHz and 2 190.5 – 2194 kHz	400 W PEP	
H2B (Selcall)	2170.5 kHz	400 W PEP	
H3E, J3E	2182 kHz	5 kW	
J3E, J2D (digital telecommunications)	4,000 – 27 500 kHz	Minimum power for service area, but maximum PEP 10 kW.	
J3E	4 125, 4417, 6215 and 6 516 kHz in simplex mode	1 kW PEP	

Annex A Additional Performance Parameters (Informative)

- A.1 Reference standards ETS300 373, ETS 300 338, ETS 300 067 contain additional performance parameters and limits that the Radiocommunications Agency assume are fulfilled for MF/HF transmitters and receivers for ship stations in communication with coast stations in the maritime mobile service, when planning and managing the radio spectrum in the UK.

Document history

Draft	Date	Changes
	21/11/00	Final Version 1.0

Radiocommunications Agency

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