

# UK Interface Requirement 2033

**Universal shipborne Automatic Identification System (AIS)  
using time division multiple access in the VHF band of the  
maritime mobile service for use at coast station and  
unmanned maritime buoys**

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# Contents

Section	Page
1 References	3
2 Foreword	4
3 Minimum equipment requirements for operation within the UK	5
4 Additional performance parameters	7
5 Contact details	8
6 Document history	9



## Section 1

# References

- 1.1 Recommendation ITU-R M 1371 - Technical characteristics for a universal shipborne automatic identification system using time division multiplex access in the VHF maritime mobile band.

## Section 2

# Foreword

- 2.1 The Radio Equipment Directive (Directive 2014/53/EU) was implemented in the United Kingdom (UK) by the Radio Equipment Regulations 2017. In accordance with Articles 8 and 7 of Directive 2014/53/EU, this UK Interface Requirement contains the requirements for the licensing and use of universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys in the specified frequency bands.
- 2.2 Nothing in this UK Radio Interface Requirement shall preclude the need for equipment to comply with Directive 2014/53/EU.
- 2.3 It is required by the Wireless Telegraphy Act 2006 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 Ofcom. 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 Interface Requirement for the stated equipment types and for the stated frequency bands.
- 2.4 The requirements given in the main body of this UK Radio Interface Requirement will apply to the licensing of universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys.
- 2.5 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 universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys.
- 2.6 All UK Radio Interface Requirements notified under Directive 2015/1535/EU will be published and will be made available free of charge from the Ofcom web-site at <http://www.ofcom.org.uk>
- 2.7 Further information on this UK Radio Interface Requirement can be obtained from the technical enquiry contact given at the back of this document.

## Section 3

# Minimum equipment requirements for operation within the UK

- 3.1 The minimum requirements in this document are made for reasons related to the effective and appropriate use of the radio spectrum, in particular, maximising spectrum utilisation.
- 3.2 This UK Radio Interface Requirement gives a high-level description of how the spectrum in the UK is used for universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys. It does not prescribe technical interpretation of the 'essential requirements' of Directive 2014/53/EU.
- 3.3 This UK Radio Interface Requirement therefore stipulates the necessary equipment parameters for the licensing of universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys in the UK. Table 3.1 contains the relevant equipment parameters. These together with the 'essential requirements' detailed in Article 3.2 and 3.3g of Directive 2014/53/EU constitute the minimum equipment requirements for universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys within the UK.
- 3.4 The technical parameters specified in the UK radio Interface Requirement are applied to achieve the desired level of compatibility within the universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys and with other radiocommunications services, whilst promoting enterprise, innovation and competition.
- 3.5 This UK Radio Interface requirement provides the necessary technical information which facilitates access to the universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys spectrum by making clear the assumptions that are made in planning the use of the universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys 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 2014/53/EU on products. Any specified parameters within this document are for the purpose of identifying product options and not as a national de facto product requirement.

**Table 3.1: Minimum equipment requirements for universal shipborne automatic identification system using time division multiple access in the VHF band of the maritime mobile service for use at coast stations and unmanned maritime buoys**

1	Frequency band (or bands)	156.525 MHz 161.975 MHz 162.025 MHz
2	Radio service	Maritime mobile
3	Application	Maritime Navigational Aids, Automatic Identification Systems (AIS) and Radar Licence
4	Channelling modulation	GMSK/FM; G2B (DSC) on 156.525 MHz, 25 kHz
5	Maximum transmit power limit	12.5W
6	Channel occupation rules	N/A
7	Duplex type/separation	N/A
8	Licensing Regime	Maritime Navigational Aids, Automatic Identification Systems (AIS) and Radar Licence
9	Additional essential requirements	The channels, parameters, class of emission and operation, shall 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.
10	Frequency planning assumptions	It is assumed that the relevant equipment parameters are in accordance with Recommendation ITU-R-M.1371
11	Reference	Recommendation ITU-R-M.1371
12	Remarks	N/A
13	Notification Number	2000/256/UK



## Section 4

# Additional performance parameters

**(informative)**

IEC 61993 Maritime navigation and radiocommunication equipment and systems - Automatic identification systems (AIS) - Part 2: Class A shipborne equipment of the universal automatic identification system (AIS) - Operational and performance requirements, methods of test and required test results

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

## Section 5

# Contact details

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## Section 6

# Document history

Version	Date	Changes
1.0	15 Dec 2000	Published
2.0		Rebranded to Ofcom format
3.0	January 2018	Replaced R&TTE Directive 1999/5/EC and Directive 98/34/EC with Radio Equipment Directive and Directive (EU) 2015/1535 respectively. Minor editorials