

Draft

**UK Radio Interface Requirement 2022
Broadcast Transmitters
Operating in frequency bands
Administered
By the Radiocommunications Agency
(Version 1.0)**

98/34/EC Notification Number: [number to be added]

Printed [date/year to be added]



Blank Page

References

- EN 300 339 Electromagnetic compatibility and Radio spectrum matters; General ElectroMagnetic compatibility for radio communications equipment.
- ETS 300 384 Radio broadcasting systems; VHF frequency modulated, sound broadcasting transmitters.
- ETS 300 401 Digital Audio Broadcasting (DAB) to mobile, portable and fixed receivers
- ETS 300 421 Framing structure, channel coding and modulation for 11/12 GHz satellite services (DVB-S)
- EN 300 447 Radio Equipment and Systems; ElectroMagnetic Compatibility standard for VHF FM broadcasting transmitters.
- ETS 300 744 Framing structure, channel coding and modulation for digital Terrestrial television (DVB-T)
- ETS 300 748 Digital Video Broadcasting (DVB); Multipoint Video Distribution Systems (MVDS) at 10 GHz and above
- EN 301489 ElectroMagnetic Compatibility standard for radio equipment and services; Part 11: Specific conditions for Terrestrial broadcasting transmitters.
- RA 244 Frequency Clearance for Sound Broadcast Transmitting Stations Information Sheet (Rev 3, January 2000)
- RA365 United Kingdom Table of Radio Frequency Allocations 9kHz - 105GHz

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 Interface Requirement contains the requirements for the licensing and use of broadcast transmitters in the specified frequency bands.
- 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 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 broadcasting transmitters in the UK.
- 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 broadcast services.
- 1.6 The RA has publicly consulted with manufacturers on all aspects of this UK Radio Interface Requirement. 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 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.

Minimum Equipment Requirements for Operation within the UK

- 2.1 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.
- 2.2 This UK Radio Interface Requirement gives a high level description of how the spectrum in the UK is used for broadcast transmitters. It does not prescribe technical interpretation of the 'essential requirements' of Directive 1999/5/EC.
- 2.3 This UK Radio Interface Specification therefore stipulates the necessary equipment parameters for the licensing of Broadcast Transmitters in the UK. Table 2.1 contains the relevant equipment parameters. These together with the 'essential requirement' detailed in Article 3.2 of Directive 1999/5/EC constitute the minimum equipment requirements for Broadcast Transmitters within the UK.
- 2.4 The technical parameters specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility within the Broadcast Band Service and with other radiocommunications services whilst promoting enterprise, innovation and competition.
- 2.5 This UK Radio Interface Requirement provides the necessary technical information which facilitates access to the Broadcast Band spectrum by making clear the assumptions that are made in planning the use of the Broadcast Band 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 Band	Maximum Radiated Level	Maximum Channel Bandwidth	Notes
148.5 to 255 kHz	See note ¹	9 kHz	LF Audio Broadcast
526.5 to 1606.5 kHz		9 kHz	MF Audio Broadcast
3950 to 4000 kHz		10 kHz	HF Audio Broadcast
5900 to 6200 kHz		10 kHz	HF Audio Broadcast
7100 to 7350 kHz		10 kHz	HF Audio Broadcast
9400 to 9900 kHz		10 kHz	HF Audio Broadcast
11600 to 12100 kHz		10 kHz	HF Audio Broadcast
13570 to 13870 kHz		10 kHz	HF Audio Broadcast
15100 to 15800 kHz		10 kHz	HF Audio Broadcast
17480 to 17900 kHz		10 kHz	HF Audio Broadcast
18900 to 19020 kHz		10 kHz	HF Audio Broadcast
21450 to 21850 kHz		10 kHz	HF Audio Broadcast
25670 to 26100 kHz		10 kHz	HF Audio Broadcast
87.5 to 108 MHz		200 kHz	Terrestrial Audio Broadcast
217.5 to 230 MHz		1.55 MHz	Terrestrial Digital Audio Broadcast
470 to 854 MHz		8 MHz	Terrestrial Television Broadcast

¹ The effective radiated power is dependent on the co-ordination process, which addresses the effect of potential interference with other broadcast assignments in the band and with adjacent band services.

Document history

Draft	Date	Changes

Radiocommunications Agency

General Enquiries to the
Information and Library Service:
Tel.: +44-(0) 20-7211-0502 or 0505
Fax: +44 (0) 20-7211- 0507
Email: library@ra.gsi.gov.uk

Technical Enquiries to the
Broadcasting Programme-making and Multimedia Unit
Tel.: +44-(0)20-7211-0335
Fax: +44-(0)20-7211- 0332
Email: brian.parkin@ra.gsi.gov.uk

Web site: www.radio.gov.uk

This is a UK Radio Interface Requirement

Postal address:

Broadcasting Programme-making and Multimedia Unit
Wyndham House, 189 Marsh Wall, LONDON, E14 9SX

There is no current published version of this UK Radio Interface Requirement.