

UK Interface Requirement (IR) 2038

Programme Making and Special Events
(PMSE)

Published: 11 March 2025



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1. References

- EN 300 422 - Wireless microphones in the 25 MHz to 3 GHz frequency range;
- EN 300 086 - Land Mobile Service; Radio equipment with an internal or external RF connector intended primarily for analogue speech;
- EN 300 113 - Land mobile service; Radio equipment intended for the transmission of data (and/or speech) using constant or non-constant envelope modulation and having an antenna connector;
- EN 300 454 - Electromagnetic compatibility and Radio Spectrum Matters (ERM); Wide band audio links;
- EN 302 064 - Wireless Video Links (WVL) operating in the 1.3 GHz to 50 GHz frequency band.

2. Foreword

- 2.1 This UK Interface Requirement contains the requirements for the licensing and use of terrestrial systems capable of providing electronic communications services in the specified frequency bands.
- 2.2 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, in order to be installed or used in the UK, the equipment must meet the minimum requirements specified in this UK Interface Requirement for the stated equipment types and for the stated frequency bands.
- 2.3 Nothing in this UK Interface Requirement shall preclude equipment from being placed on the market in the UK that complies with the 'essential requirements' specified in Radio Equipment Regulations 2017 (SI 2017/1206).
- 2.4 The requirements given in the main body of this UK Radio Interface Requirement will apply to the licensing of Programme Making and Special Event (PMSE) equipment.
- 2.5 This UK Radio Interface Requirement will be revised as necessary, for example to follow:
 - a) current technology developments for reasons related to the effective and appropriate use of the spectrum in particular maximising spectrum utilisation; and
 - b) changes to the available spectrum allocated for Programme Making and Special Event (PMSE) equipment.
- 2.6 All UK Radio Interface Requirements will be published and will be made available free of charge from the Ofcom website 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.

3. Minimum 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 technologies covered by Programme Making and Special Event (PMSE). It does not prescribe technical interpretation of the 'essential requirements' of Radio Equipment Regulations 2017 (SI 2017/1206).
- 3.3 This UK Radio Interface Requirement therefore stipulates the necessary equipment parameters for the authorisation of Programme Making and Special Event (PMSE) equipment in the UK. Tables 3.1 to 3.5 contain the relevant equipment parameters. These taken together with the 'essential requirements' detailed in the Radio Equipment Regulations 2017 (SI 2017/1206) constitute the minimum requirements Programme Making and Special Event (PMSE) equipment within the UK.
- 3.4 Nothing in this UK Interface Requirement shall preclude equipment from being placed on the market in the UK that complies with the 'essential requirements' specified in Radio Equipment Regulations 2017 (SI 2017/1206).
- 3.5 The technical parameters specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility within the spectrum for Programme Making and Special Event (PMSE) equipment and with other radiocommunications services, whilst promoting enterprise, innovation and competition.
- 3.6 This UK Radio Interface requirement provides the necessary technical information which facilitates access to PMSE spectrum by making clear the assumptions that are made in planning the use of the spectrum for Programme Making and Special Event (PMSE) in the UK. It is not the intention of this UK Radio Interface Requirement to duplicate or impose any additional 'essential requirements' of the Radio Equipment Regulations 2017 (SI 2017/1206). 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 requirements for the use of Programme Making and Special Event (PMSE) Radio microphones

Wireless telegraphy apparatus designed or adapted for telephony, for the purpose of aids to project personal voice or music.

Interface number / Date	Application	Frequency band	Maximum Radiated Level ¹	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/1/1	Radio microphones	175.15-175.35 MHz	10 mW ERP	200 kHz		EN 300 422
IR2038/1/2	Radio microphones	175.425-175.625 MHz	10 mW ERP	200 kHz		EN 300 422
IR2038/1/3	Radio microphones	176.3-177.1 MHz	10 mW ERP	200 kHz		EN 300 422
IR2038/1/4	Radio microphones	184.5-185.1 MHz	10 mW ERP	200 kHz		EN 300 422
IR2038/1/5	Radio microphones	191.6-193.1 MHz	10 mW ERP	200 kHz		EN 300 422
IR2038/1/6	Radio microphones	199.6-201.1 MHz	10 mW ERP	200 kHz		EN 300 422
IR2038/1/7	Radio microphones	207.6-210.1 MHz	10 mW ERP	200 kHz		EN 300 422
IR2038/1/8	Radio microphones	470-703 MHz	10 mW ERP	200 kHz		EN 300 422
IR2038/1/10	Radio microphones	823-826 MHz	100 mW e.i.r.p. for bodyworn devices CEPT 20 mW e.i.r.p. for other devices	200 kHz		EN 300 422
IR2038/1/11	Radio microphones	826-832 MHz	100 mW e.i.r.p.	200 kHz		

Interface number / Date	Application	Frequency band	Maximum Radiated Level ¹	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/1/12	Radio microphones	961-976.5 MHz	10 mW ERP	200 kHz	Maximum channel bandwidth is 200 kHz	EN 300 422
IR2038/1/16	Radio microphones	976.5-979.5 MHz	10 mW ERP	200 kHz	Maximum channel bandwidth is 200 kHz Available for indoor use only	EN 300 422
IR2038/1/17	Radio microphones	979.5-1016 MHz	10 mW ERP	200 kHz	Maximum channel bandwidth is 200 kHz	EN 300 422
IR2038/1/13	Radio microphones	1044-1076 MHz	10 mW ERP	200 kHz	Maximum channel bandwidth is 200 kHz	EN 300 422
IR2038/1/14	Radio microphones	1104-1154 MHz	10 mW ERP	200 kHz	Maximum channel bandwidth is 200 kHz	EN 300 422
IR2038/1/15	Radio microphones	1785-1805 MHz	50 mW e.i.r.p. for bodyworn devices or devices implementing Spectrum Scanning Procedure (SSP) 20 mW e.i.r.p. for other devices	200 kHz		EN 300 422

¹ Radiated level may be increased to 50 mW ERP for transmitting equipment designed to be worn in close contact with the body.

Table 3.2: Minimum requirements for the use of Programme Making and Special Event (PMSE) Talkback

Wireless telegraphy apparatus designed or adapted for telephony, for the purpose of communicating the instructions of the director instantly to all those concerned in making the programme; these include presenters, interviewers, cameramen, sound operators, lighting operators and engineers.

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/2/1	Talkback	47.55-48.80 MHz 52.00-52.95 MHz	25 W ERP	12.5 kHz	For on-site use at temporary locations. Duplex Base Tx – 52 MHz band. Duplex Portable Tx – 48 MHz band.	EN 300 086
IR2038/2/2	Talkback	67.7500-67.8375 MHz	25 W ERP	12.5 kHz	For on-site use at temporary locations. Base Tx. Duplex with 75 MHz band.	EN 300 086
IR2038/2/3	Talkback	69.15625-69.18125 MHz	25 W ERP	12.5 kHz	For on-site use at temporary locations. Base Tx. Duplex with 82 MHz band.	EN 300 086
IR2038/2/4	Talkback	74.68125-74.71875 MHz	25 W ERP	12.5 kHz	Simplex.	EN 300 086
IR2038/2/5	Talkback	75.2625-75.3000 MHz	5 W ERP	12.5 kHz	For on-site use at temporary locations. Portable Tx. Duplex with 67 MHz band.	EN 300 086
IR2038/2/6	Talkback	76.80625-76.84375 MHz	25 W ERP	12.5 kHz	For wide-area use. Mobile Tx. Duplex with 86 MHz band.	EN 300 086

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/2/7	Talkback	78.18375-78.25875 MHz	25 W ERP	12.5 kHz	For wide-area or on-site use at temporary locations. Simplex.	EN 300 086
IR2038/2/8	Talkback	82.65625-86.68125 MHz	25 W ERP	12.5 kHz	For on-site use at temporary locations. Portable Tx. Duplex with 69 MHz band.	EN 300 086
IR2038/2/9	Talkback	86.675 MHz	25 W ERP	12.5 kHz		EN 300 086
IR2038/2/10	Talkback	86.80625-86.84375 MHz	25 W ERP	12.5 kHz	For wide-area use. Base Tx. Duplex with 76 MHz band.	EN 300 086
IR2038/2/11	Talkback	139.550 MHz 139.575 MHz	10 W ERP	12.5 kHz		EN 300 086
IR2038/2/12	Talkback	139.64375-139.66875 MHz	10 W ERP	12.5 kHz		EN 300 086
IR2038/2/13	Talkback	140.9875-141.4875 MHz	25 W ERP	12.5 kHz	For wide-area use. Simplex and Duplex Base Tx. Duplex with 212 MHz band.	EN 300 086
IR2038/2/14	Talkback	148.575 MHz 148.725 MHz	10 W ERP	25.0 kHz		EN 300 086
IR2038/2/15	Talkback	181.69375-181.80625 MHz	25 W ERP	12.5 kHz		EN 300 086

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/2/16	Talkback	189.69375-189.80625 MHz	25 W ERP	12.5 kHz		EN 300 086
IR2038/2/17	Talkback	425.3125-425.5625 MHz	25 W ERP	50.0 kHz		EN 300 086
IR2038/2/18	Talkback	427.7625-428.0125 MHz 442.2625-442.5125 MHz	25 W ERP	12.5 kHz	For wide-area or on-site use at temporary locations. Simplex and Duplex.	EN 300 086
IR2038/2/19	Talkback	446.4250-447.5125 MHz	5 W ERP	12.5 kHz	For on-site use at temporary locations. Base Tx. Duplex with 467 MHz band.	EN 300 086
IR2038/2/20	Talkback	454.9875-455.4750 MHz	5 W ERP	12.5 kHz	For on-site use at temporary locations. Base Tx. Duplex with 468 MHz band.	EN 300 086
IR2038/2/21	Talkback	457.250-457.475 MHz	5 W ERP	12.5 kHz	For on-site use at temporary locations. Base Tx. Duplex with 467 MHz band.	EN 300 086
IR2038/2/22	Talkback	461.23125-461.25625 MHz	5 W ERP	12.5 kHz	For on-site use at temporary locations. Base Tx. Duplex with 468 MHz band.	EN 300 086
IR2038/2/23	Talkback	462.75-463.00 MHz	1 W ERP	12.5 kHz	For indoor use at permanent locations. Base Tx. Duplex with 469 MHz band.	EN 300 086

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/2/24	Talkback	467.2625-469.8750 MHz	1 W ERP	12.5 kHz	For on-site use at temporary locations. Portable Tx. Duplex with 455, 457 and 462 MHz bands. For indoor use at permanent locations. Portable Tx. Duplex with 462 MHz band.	EN 300 086
IR2038/2/25	Talkback	470-606 MHz 614-694 MHz	1 W ERP	25 kHz	For indoor use at permanent locations.	EN 300 086

Table 3.3: Minimum requirements for the use of Programme Making and Special Event (PMSE) Audio Links and Audio Distribution Systems (ADS)

Wireless telegraphy apparatus designed or adapted for telephony, for the purpose of carrying broadcast-quality monophonic or stereophonic music and speech signals or for carrying multiple communications-quality talkback signals.

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/3/1	Audio Links	48.425 MHz 48.475 MHz 48.525 MHz 52.875 MHz 52.925 MHz	10 W ERP	50 kHz	For temporary and permanent point-to-point links.	EN 300 454
IR2038/3/4	Audio Links	48.3 MHz 52.75 MHz	10 W ERP	200 kHz	For temporary and permanent point-to-point links.	EN 300 454
IR2038/3/5	Audio Links	53.75-55.75 MHz 60.75-62.75 MHz	5 W ERP	75 kHz	For portable links at temporary locations.	EN 300 454
IR2038/3/6	Audio Distribution Systems (ADS)	60.75-62.75 MHz	1 W ERP	200 kHz	For Audio Distribution Systems.	EN 300 454

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/3/7	Audio Links	191.7 MHz 199.7 MHz 199.9 MHz 200.1 MHz	1 W ERP	200 kHz	For portable links at temporary locations. Vertical polarisation only.	EN 300 454
IR2038/3/8	Audio Links	425.3375 MHz 425.3875 MHz 425.4375 MHz 425.4875 MHz 425.5375 MHz	25 W ERP	50 kHz	For temporary point-to-point links.	EN 300 454
IR2038/3/9	Audio Links	446.5125-447.5125 MHz 454.9875-455.4750 MHz	25 W ERP	50 kHz	For temporary point-to-point links.	EN 300 454
IR2038/3/10	Audio Links	467.2625-469.875 MHz	25 W ERP	50 kHz	For portable and temporary point-to-point links.	EN 300 454
IR2038/3/11	Audio Links	470-606 MHz	5 W ERP	200 kHz	For temporary point-to-point links.	EN 300 454
IR2038/3/12	Audio Links	606.7 MHz 607.0 MHz	10 W ERP	200 kHz	For temporary point-to-point links.	EN 300 454
IR2038/3/13	Audio Links	614-694 MHz	5 W ERP	200 kHz	For temporary point-to-point links.	EN 300 454

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/3/15	Audio Links	1517-1525 MHz	20 dBW ERP	500 kHz	For temporary and permanent point-to-point links.	EN 300 454 EN 300 630 EN 300 631

Table 3.4: Minimum requirements for the use of Programme Making and Special Event (PMSE) Wireless Cameras and Video Links

Wireless telegraphy apparatus designed or adapted for carrying broadcast-quality video together with music and/or speech signals.

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/4/1	Wireless Cameras and Video Links	2010-2110 MHz	20 dBW ERP	10 MHz		EN 302 064
IR2038/4/2	Wireless Cameras and Video Links	2200-2290 MHz	20 dBW ERP	10 MHz	Typically for low-power wireless cameras.	EN 302 064
IR2038/4/3	Wireless Cameras and Video Links	2290-2300 MHz	0 dBW ERP	10 MHz	For low-power wireless cameras only.	EN 302 064
IR2038/4/4	Wireless Cameras and Video Links	2390-2500 MHz	20 dBW ERP	20 MHz		EN 302 064
IR2038/4/5	Wireless Cameras and Video Links	3400-3410 MHz	13 dBW ERP	10 MHz		EN 302 064

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/4/6	Wireless Cameras and Video Links	5472-5588 MHz 56825-57025 MHz 57050-57250 MHz 57325-57525 MHz 5770-5790 MHz 5795-5815 MHz 5850-5925 MHz	40 dBW ERP	20 MHz		EN 302 064
IR2038/4/7	Wireless Cameras and Video Links	7110-7250 MHz	40 dBW ERP	10 MHz		EN 302 064
IR2038/4/8	Wireless Cameras and Video Links	7300-7410 MHz	40 dBW ERP	10 MHz		EN 302 064
IR2038/4/9	Wireless Cameras and Video Links	7410-7425 MHz	40 dBW ERP	10 MHz		EN 302 064
IR2038/4/10	Wireless Cameras and Video Links	8460-8500 MHz	40 dBW ERP	20 MHz		EN 302 064
IR2038/4/11	Wireless Cameras and Video Links	10.3-10.36 GHz	40 dBW ERP	20 MHz		EN 302 064
IR2038/4/12	Wireless Cameras and Video Links	12.200-12.475 GHz 24.25-24.50 GHz	40 dBW ERP	25 MHz		EN 302 064

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/4/13	Wireless Cameras and Video Links	48.0-48.4 GHz	30 dBW ERP	100 MHz		EN 302 064

Table 3.5: Minimum requirements for the use of Programme Making and Special Event (PMSE) Telemetry and Telecommand Links

Wireless telegraphy apparatus designed or adapted for carrying broadcast-quality video together with music and/or speech signals.

Interface number / Date	Application	Frequency band	Maximum Radiated Level	Typical Channel Bandwidth	Comments	Informative Reference
IR2038/5/1	Telemetry and Telecommand Links	181.74375 MHz 181.76875 MHz 181.79375 MHz 189.70625 MHz 189.78125 MHz 189.79375 MHz	10 W ERP	12.5 kHz		EN 300 113
IR2038/5/2	Telemetry and Telecommand Links	462.76875 MHz 462.85625 MHz 462.93125 MHz 462.98125 MHz	1 W ERP	12.5 kHz		EN 300 113
IR2038/5/3	Telemetry and Telecommand Links	470-478 MHz	1 W ERP	25 kHz		EN 300 113

4. Additional performance parameters

Informative

4.1 None specified.

5. Contact details

Address

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Phone

Tel: 020 7981 3803

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Email

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6. Document history

Version	Date	Changes
1.0	Jan 2001	Initial publication
2.0	Oct 2004	Editorial changes
2.1	Feb 2006	Published in Ofcom format
2.2	Jan 2018	Replaced R&TTE Directive 1999/5/EC with Radio Equipment Directive 2014/53/EU; addition of new sub-bands (961-1015 MHz; 1045-1075 MHz; 1105-1154 MHz) for low power audio; addition of 700 MHz guard band (694-703 MHz); frequencies and frequency band edges updated; geo-restrictions removed.
2.3	Mar 2025	Removed references to Radio Equipment Directive 2014/53/EU and replaced with UK Radio Equipment Regulations. Updated references to ETSI Standards. Amended allocations in 960-1154 MHz. Removed 978 MHz \pm 1.5 MHz for external PMSE use (now for PMSE use indoors only). Removed band 703-790 MHz following clearance of the 700 MHz band.