



IR 2030 - UK Interface Requirements
2030
Licence Exempt Short Range Devices

Publication date: December 2011
98/34/EC Notification number: 2011/0401/UK

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Section 1

References

- 1.1 EN 300 220-1 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Technical characteristics and test methods for radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW; Part 1: Parameters intended for regulatory purposes.
- 1.2 EN 300 220-2 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Technical characteristics and test methods for radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW; Part 2: Supplementary parameters not intended for regulatory purposes.
- 1.3 EN 300 220-3 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW; Part 3: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive.
- 1.4 EN 300 328-1 Electromagnetic compatibility and Radio spectrum Matters (ERM);Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Part 1: Technical characteristics and test conditions
- 1.5 EN 300 328-2 Electromagnetic compatibility and Radio spectrum Matters (ERM);Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive.
- 1.6 EN 300 330-1 Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment in the frequency range 9 kHz to 25 MHz and inductive loop systems in the frequency range 9 kHz to 30 MHz; Part 1: Technical characteristics and test methods
- 1.7 EN 300 330-2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment in the frequency range 9 kHz to 25 MHz and inductive loop systems in the frequency range 9 kHz to 30 MHz; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive.

- 1.8 EN 300 422-1 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; Part 1: Technical characteristics and test methods.
- 1.9 EN 300 422-2 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless microphones in the 25 MHz to 3 GHz frequency range; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive.
- 1.10 EN 300 440-1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Part 1: Technical characteristics and test methods.
- 1.11 EN 300 440-2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive.
- 1.12 EN 300 674 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Road Transport and Traffic Telematics (RTTT); Technical characteristics and test methods for Dedicated Short Range Communication (DSRC) transmission equipment (500 kbit/s / 250 kbit/s) operating in the 5,8 GHz Industrial, Scientific and Medical (ISM) band.
- 1.13 EN 300 718-1 Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Avalanche Beacons; Transmitter-receiver systems; Part 1: Technical characteristics and test methods.
- 1.14 EN 300 718-2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Avalanche Beacons; Transmitter-receiver systems; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive.
- 1.15 EN 300 718-3 Electromagnetic compatibility and Radio spectrum matters (ERM); Avalanche Beacons; Transmitter-receiver systems; Part 3: Harmonized EN covering essential requirements of article 3.3e of the R&TTE Directive.
- 1.16 EN 300 761 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Automatic Vehicle Identification (AVI) for railways.
- 1.17 EN 301 091-1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Road Transport and Traffic Telematics (RTTT); Radar equipment operating in the 76 GHz to 77 GHz and 24 GHz range; Part 1: Technical Requirements and methods of measurement.

- 1.18 EN 301 091-2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Road Transport and Traffic Telematics (RTTT); Radar equipment operating in the 76 GHz to 77 GHz and 24 GHz range; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive.
- 1.19 EN 301 357-1 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Cordless audio devices in the range 25 MHz to 2 000 MHz; Consumer radio microphones and in-ear monitoring systems operating in the CEPT harmonized band 863 MHz to 865 MHz; Part 1: Technical characteristics and test methods.
- 1.20 EN 301 357-2 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Cordless audio devices in the range 25 MHz to 2 000 MHz; Consumer radio microphones and in-ear monitoring systems operating in the CEPT harmonized band 863 MHz to 865 MHz; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive.
- 1.21 EN 301 839 - 1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Ultra Low Power Active Medical Implants (ULP-AMI) and Peripherals (ULP-AMI-P) operating in the frequency range 402 MHz to 405 MHz; Part 1: Technical characteristics and test methods
- 1.22 EN 301 839 - 2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio equipment in the frequency range 402 MHz to 405 MHz for Ultra Low Power Active Medical Implants and Accessories; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive
- 1.23 EN 301 893 Broadband Radio Access Networks (BRAN); 5 GHz high performance RLAN; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
- 1.24 EN 302 195 - 1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio equipment in the frequency range 9 kHz to 315 kHz for Ultra Low Power Active Medical Implants (ULP-AMI) and accessories; Part 1: Technical characteristics and test methods
- 1.25 EN 302 195 - 2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio equipment in the frequency range 9 kHz to 315 kHz for Ultra Low Power Active Medical Implants (ULP-AMI) and accessories; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive
- 1.26 EN 302 208-1 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio Frequency Identification Equipment operating in the band 865 Hz to 868 MHz with

power levels up to 2 W; Part 1: Technical requirements and methods of measurement.

- 1.27 EN 302 208-2 European Norm - Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio Frequency Identification Equipment operating in the band 865 Hz to 868 MHz with power levels up to 2 W; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive.
- 1.28 EN 302 288-1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Road Transport and Traffic Telematics (RTTT); Short range radar equipment operating in the 24 GHz range.
- 1.29 EN 302 288-2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Road Transport and Traffic Telematics (RTTT); Short range radar equipment operating in the 24 GHz range.
- 1.30 EN 302 291-1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Close Range Inductive Data Communication equipment operating at 13,56 MHz; Part 1: Technical characteristics and test methods
- 1.31 EN 302 291-2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Close Range Inductive Data Communication equipment operating at 13,56 MHz; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive
- 1.32 EN 302 372-1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Equipment for Detection and Movement; Tank Level Probing Radar (TLPR) operating in the frequency bands 5,8 GHz, 10 GHz, 25 GHz, 61 GHz and 77 GHz; Part 1: Technical characteristics and test methods.
- 1.33 EN 302 372-2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Equipment for Detection and Movement; Tank Level Probing Radar (TLPR) operating in the frequency bands 5,8 GHz, 10 GHz, 25 GHz, 61 GHz and 77 GHz; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive.
- 1.34 EN 302 510-1 Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio equipment in the frequency range 30 MHz to 37,5 MHz for Ultra Low Power Active Medical Membrane Implants and Accessories; Part 1: Technical characteristics and test methods
- 1.35 EN 302 510-2 Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio equipment in the frequency range 30 MHz to 37,5 MHz for Ultra Low Power Active Medical Membrane

- Implants and Accessories; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive
- 1.36 EN 302 536 -1 Electromagnetic compatibility and Radio spectrum Matters (ERM);Short Range Devices (SRD);Radio equipment in the frequency range 315 kHz to 600 kHz; Part 1: Technical characteristics and test methods
- 1.37 EN 302 536-2 Electromagnetic compatibility and Radio spectrum Matters (ERM);Short Range Devices (SRD);Radio equipment in the frequency range 315 kHz to 600 kHz; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive
- 1.38 EN 302 537-1 Electromagnetic compatibility and Radio spectrum Matters (ERM);Short Range Devices (SRD);Ultra Low Power Medical Data Service Systems operating in the frequency range 401 MHz to 402 MHz and 405 MHz to 406 MHz; Part 1: Technical characteristics and test methods
- 1.39 EN 302 537-2 Electromagnetic compatibility and Radio spectrum Matters (ERM);Short Range Devices (SRD);Ultra Low Power Medical Data Service Systems operating in the frequency range 401 MHz to 402 MHz and 405 MHz to 406 MHz; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive
- 1.40 EN 302 567 Broadband Radio Access Networks (BRAN);60 GHz Multiple-Gigabit WAS/RLAN Systems; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
- 1.41 EN 302 608-1 Electromagnetic compatibility and Radio spectrum Matters (ERM);Short Range Devices (SRD);Radio equipment for Eurobalise railway systems; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
- 1.42 EN 302 609-1 Electromagnetic compatibility and Radio spectrum Matters (ERM);Short Range Devices (SRD);Radio equipment for Euroloop railway systems; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
- 1.43 EN 302 686 Intelligent Transport Systems (ITS);Radiocommunications equipment operating in the 63 GHz to 64 GHz frequency band;Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
- 1.44 EN 302 858-1 Electromagnetic compatibility and Radio spectrum Matters (ERM);Road Transport and Traffic Telematics (RTTT);Short range radar equipment operating in the 24,05 GHz to 24,25 GHz frequency range for automotive application;Part 1:

Technical characteristics and test methods

- 1.45 EN 302 858-2 Electromagnetic compatibility and Radio spectrum Matters (ERM);Road Transport and Traffic Telematics (RTTT);Short range radar equipment operating in the 24,05 GHz to 24,25 GHz frequency range for automotive application;Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
- 1.46 EN 305 550-1 Electromagnetic compatibility and Radio spectrum Matters (ERM);Short Range Devices (SRD);Radio equipment to be used in the 40 GHz to 246 GHz frequency range;Part 1: Technical characteristics and test methods
- 1.47 EN 305 550-2 Electromagnetic compatibility and Radio spectrum Matters (ERM);Short Range Devices (SRD);Radio equipment to be used in the 40 GHz to 246 GHz frequency range;Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

Section 2

Foreword

- 2.1 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. This document contains minimum requirements for the **establishment, installation and use** of licence exempt short range devices in the UK in the specified frequency bands.
- 2.2 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 (the “RTTE Regulations”).
- 2.3 Nothing in these UK Radio Interface Requirements shall preclude the need for equipment to comply with Directive 1999/5/EC or the RTTE Regulations. This document does not prescribe technical interpretation of the ‘essential requirements’ of Directive 1999/5/EC. Nothing in these UK Interface Requirements shall preclude equipment from being **placed on the market** in the UK if it complies with the ‘essential requirements’ specified in Directive 1999/5/EC.
- 2.4 The requirements in these UK Radio Interface Requirements are made for reasons related to the effective and appropriate use of the radio spectrum in the UK, in particular maximising spectrum utilisation. These UK Radio Interface Requirements will be revised as necessary, for example to take account of:
 - 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 for the use of licence exempt Short Range Devices.
- 2.5 All UK Radio Interface Requirements notified under Directive 1998/34/EC will be published and will be made available free of charge from the Ofcom web-site at <http://stakeholders.ofcom.org.uk/spectrum/spectrum-management/research-guidelines-tech-info/interface-requirements/>.
- 2.6 Further information on these UK Radio Interface Requirements can be obtained from the technical enquiry contact given at the back of this document.

Section 3

Minimum requirements for operation within the UK

- 3.1 The following Table gives the UK Radio Interface Requirements for licence exempt short range devices. Each row of the Table is to be interpreted in accordance with Sections 2 and 3 of this document.
- 3.2 The “Normative Part” of each row of the Table, including comments, sets out minimum requirements relating to that Interface Requirement. Unless otherwise stated, terrestrial use only is permitted.
- 3.3 The “Informative Part” of each row of the Table and in Annex A is not a part of the Interface Requirement. It gives a reference for relevant technical standards as at the date of publication of these Interface Requirements. The standards are updated from time to time and this may not be reflected in these Interface Requirements.
- 3.4 References to documents in the form “EN 111 111” are references to standards published by ETSI.
- 3.5 Adjacent frequency bands within the Table may be considered as a single frequency band provided the specific conditions of each of these adjacent frequency bands are met.
- 3.6 In this document, the following words shall have the following meanings:
- i) “Applications” as set out in the first column of the normative part of each Radio Interface Requirement, refer to the purpose of equipment;
 - ii) “dBm” means decibels of power referenced to one milliWatt;
 - iii) “dB μ A/m” means decibels of inductive field strength referenced to one microAmp per metre;
 - iv) “duty cycle limit” means the proportion of time during which equipment is actively transmitting within any one hour period;
 - v) “e.i.r.p.” means equivalent isotropic radiated power;
 - vi) “e.r.p.” means effective radiated power;
 - vii) “ETSI” means the European Telecommunications Standards Institute;
 - viii) “equipment” means wireless telegraphy apparatus or a wireless telegraphy station;
 - ix) “FCMW” means Frequency Modulated Continuous-Wave;
 - x) “Fo” means the arithmetic mean frequency between the lower frequency boundary and upper frequency boundary of a radio spectrum channel;
 - xi) “GHz” means gigahertz;
 - xii) “kHz” means kilohertz;
 - xiii) “MHz” means megahertz;
 - xiv) “mS” means milliSecond;
 - xv) “mW” means milliWatt;
 - xvi) “ μ W” means microWatt;
 - xvii) “nW” means nanoWatt; and
 - xviii) “W” means Watts.
- 3.7 The following definitions apply in relation to the specified Radio Interface Requirements:

Number	Defined term	Definition
IR2030/17	Alarm	means equipment designed or adapted to generate or indicate an alarm condition; or to arm or disarm an alarm system
IR2030/25	Assistive Listening Devices	means equipment designed or adapted for telephony, for the purpose of hearing aids for the disabled
IR2030/3	Databuoy Telemetry	means equipment designed or adapted for telemetry in a maritime environment
IR2030/15	Inductive Applications	includes devices for car immobilisation, animal identification, alarm systems, cable detection, waste management, personal identification, wireless voice links, access control, proximity sensors, anti-theft systems, data transfers to hand-held devices, automatic article identification, wireless control systems and automatic road tolling
IR2030/23	Model Control	means equipment used to control the movement of models
IR2030/29	Radar Level Gauges	equipment designed or adapted for level measurements
IR2030/12	Radio Determination Applications	equipment means equipment designed or adapted for use for determining the position, velocity or other characteristics of an object
IR2030/24	Radio Microphones	equipment designed or adapted for telephony, for the purpose of projecting the user's voice or music
IR2030/10	Railway Applications	equipment designed or adapted for the purpose of railway vehicle identification or for the provision of short range data links between the track and railway vehicles
IR2030/18	Social Alarms	equipment for assisting elderly or disabled people when they are in distress
IR2030/30	Tank Level Probing Radar	equipment means equipment designed or adapted for measuring the level of the contents of a tank
IR2030/7	Wideband Data Transmission Systems	equipment for wireless networking between two or more devices
IR2030/8	Wireless Access Systems	equipment, including Radio Local Area Networks, designed for high speed data communication
IR2030/26	Wireless Audio Applications	includes cordless loudspeakers and cordless headphones

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/1/1 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	6765 - 6795 kHz		42 dB μ A/m at 10 m				EN 300 330
IR2030/1/2 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	13.553 - 13.567 MHz		42 dB μ A/m at 10 m				EN 300 330
IR2030/1/3 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	26.957 - 27.283 MHz		10 mW e.r.p. 42 dB μ A/m at 10 m				EN 300 220
IR2030/1/4 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	40.66 - 40.70 MHz		10 mW e.r.p.				EN 300 220
IR2030/1/5 2010/0168/UK Oct 2010	Non-specific short-range devices		49.82 - 49.98 MHz		10 mW e.r.p.				EN 300 220
IR2030/1/6 2010/0168/UK Oct 2010	Non-specific short-range devices	Music is only permitted when using a digitised signal	173.20-173.35 MHz		1 mW e.r.p.		Channel Spacing 12.5 kHz Channel numbers 1 and 3 to 11 inclusive; are available with a channel centre frequency of 173.2 MHz plus (Channel Spacing times channel number).		EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/1/7 2010/0168/UK Oct 2010	Non-specific short-range devices	Music is only permitted when using a digitised signal	173.20-173.35 MHz		1 mW e.r.p.		Channel Spacing 25 kHz Channel numbers 2 to 5 inclusive are available with a channel centre frequency of 173.2 MHz plus (Channel Spacing times channel number).		EN 300 220
IR2030/1/8 2010/0168/UK Oct 2010	Non-specific short-range devices	Telemetry and telecommand may only be used in conjunction with telephony with a non-locking push to talk key or voice operated carrier.	173.5875, 173.6 MHz		10 mW e.r.p.		Channel Spacing 12.5 kHz		EN 300 220
IR2030/1/9 2010/0168/UK Oct 2010	Non-specific short-range devices	New equipment cannot be taken into service. However existing equipment brought into service prior to 31 December 2007 may continue to operate within the band. Music is only permitted when using a digitised signal	417.9 - 418.1 MHz		250 µW e.r.p.				EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/1/10 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	433.05-434.79 MHz		10 mW e.r.p.			Duty cycle limit 10%	EN 300 220
IR2030/1/11 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne. Analogue audio applications other than voice / speech are excluded.	433.05-434.79 MHz		1 mW e.r.p.				EN 300 220
IR2030/1/12 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne Analogue audio applications other than voice / speech are excluded.	434.04-434.79 MHz		10 mW e.r.p.		Channel Spacing ≤ 25 kHz		EN 300 220
IR2030/1/13 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne Analogue audio applications other than voice are excluded. Analogue video applications are excluded	863.0 – 865 MHz		25 mW e.r.p.			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. Alternatively a duty cycle limit of 0.1% may be used	EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/1/14 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne Analogue audio applications other than voice are excluded. Analogue video applications are excluded	865 – 868 MHz		25 mW e.r.p.			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. Alternatively a duty cycle limit of 1% may be used	EN 300 220
IR2030/1/15 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne Analogue audio applications other than voice are excluded. Analogue video applications are excluded	868 – 869.7 MHz		25 mW e.r.p.			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. Alternatively a duty cycle limit of 0.1% may be used	EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/1/16 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	868.0-868.6 MHz		25 mW e.r.p.			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. Alternatively a duty cycle limit of 1 % may be used.	EN 300 220
IR2030/1/17 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	868.7-869.2 MHz		25 mW e.r.p.			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. Alternatively a duty cycle limit of 0.1 % may be used.	EN 300 220
IR2030/1/18 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	869.30-869.40 MHz		10 mW e.r.p.		Channel bandwidth ≤ 25 kHz	Duty cycle limit 10 %	EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/1/19 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	869.40-869.65 MHz		500 mW e.r.p.		Channel spacing 25 kHz Consecutive channels may be combined where a larger bandwidth is required, due to the modulation of the signal, up to the maximum sub-band frequency allocation.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. This can include for example Listen Before Talk. Alternatively a duty cycle limit of 10 % may be used.	EN 300 220
IR2030/1/20 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne Analogue audio applications other than voice are excluded. Analogue video applications are excluded	869.7 – 870 MHz		25 mW e.r.p.			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. Alternatively a duty cycle limit of 1% may be used	EN 300 220
IR2030/1/21 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne Analogue audio applications other than voice/speech are excluded.	869.70-870.00 MHz		5 mW e.r.p.				EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/1/22 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	2400-2483.5 MHz		10 mW e.i.r.p.				EN 300 440
IR2030/1/23 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	5725- 5875 MHz		25 mW e.i.r.p.				EN 300 440
IR2030/1/24 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	24.150-24.250 GHz		100 mW e.i.r.p.				EN 300 440
IR2030/1/25 2010/0168/UK Oct 2010	Non-specific short-range devices	Equipment may be used airborne	61.0 - 61.5 GHz		100 mW e.i.r.p.				EN 305 550
IR2030/1/26 2011/0401/UK Dec 2011	Non-specific short-range devices		138.20 – 138.45 MHz		10 mW e.r.p.			Duty Cycle limit < 1.0 %	EN 300 220
IR2030/1/27 2011/0401/UK Dec 2011	Non-specific short-range devices	Equipment may be used airborne	122 – 123 GHz		100 mW e.i.r.p.				EN 305 550
IR2030/1/28 2011/0401/UK Dec 2011	Non-specific short-range devices	Equipment may be used airborne	244 - 246 GHz		100 mW e.i.r.p.				EN 305 550

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/2/1 2010/0168/UK Oct 2010	Industrial/ Commercial Telemetry and Tele- command	Use is limited to remote meter reading. Equipment may be used airborne	169.4 – 169.475 MHz		500mW e.r.p.		Channel Bandwidth ≤ 50kHz	Duty cycle limit 10%	EN 300 220
IR2030/2/2 2010/0168/UK Oct 2010	Industrial/ Commercial Telemetry and Tele- command	Use is limited to asset tracking and tracing Equipment may be used airborne	169.4 – 169.475 MHz		500mW e.r.p.		Channel Bandwidth ≤ 50kHz	Duty cycle limit 1%	EN 300 220
IR2030/2/3 2010/0168/UK Oct 2010	Industrial/ Commercial Telemetry and Tele- command	Music and speech are only permitted when using a digitised signal	173.2 - 173.35 MHz		10 mW e.r.p.		Channel Spacing 12.5 kHz Channel numbers 1 and 3 to 11 inclusive; are available with a channel centre frequency of 173.2 MHz plus (Channel Spacing times channel number).		EN 300 220
IR2030/2/4 2010/0168/UK Oct 2010	Industrial/ Commercial Telemetry and Tele- command	Music and speech are only permitted when using a digitised signal	173.2 - 173.35 MHz		10 mW e.r.p.		Channel Spacing 25 kHz Channel numbers 1 to 5 inclusive are available with a channel centre frequency of 173.2 MHz plus (Channel Spacing times channel number)		EN 300 220

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/2/5 2010/0168/UK Oct 2010	Industrial/Commercial Telemetry and Tele-command	Music and speech are only permitted when using a digitised signal	173.2 - 173.35 MHz		10 mW e.r.p.				EN 300 220
IR2030/2/6 2010/0168/UK Oct 2010	Industrial/Commercial Telemetry and Tele-command	Music and speech are only permitted when using a digitised signal	458.5 - 458.95 MHz		500 mW e.r.p.		Channel Spacing 12.5 kHz Channel numbers 1 to 25 inclusive and 28 to 31 inclusive and 33 to 35 inclusive are available with a channel centre frequency of 458.5 MHz plus (Channel Spacing times channel number).		EN 300 220
IR2030/2/7 2010/0168/UK Oct 2010	Industrial/Commercial Telemetry and Tele-command	Music and speech are only permitted when using a digitised signal	458.5 - 458.95 MHz		500 mW e.r.p.		Channel Spacing 25 kHz Channel numbers 1 to 12 inclusive and 14 to 15 inclusive and 17 are available with a channel centre frequency of 458.5 MHz plus (Channel Spacing times channel number).		EN 300 220
IR2030/2/8 2010/0168/UK Oct 2010	Industrial/Commercial Telemetry and Tele-command	Music and speech are only permitted when using a digitised signal	2445 - 2455 MHz		100 mW e.i.r.p.				EN 300 440

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/3/1 2010/0168/UK Oct 2010	Databuoy Telemetry		34.5 to 34.995 MHz		250 mW e.r.p.		Channel Spacing 25 kHz		EN 300 220
IR2030/3/2 2010/0168/UK Oct 2010	Databuoy Telemetry		35.225 to 35.5 MHz		250 mW e.r.p.		Channel Spacing 25 kHz		EN 300 220
IR2030/4/1 2010/0168/UK Oct 2010	Active Medical Implants	Equipment may be used airborne	9 – 315 kHz		30 dBµA/m at 10m			Duty cycle limit 10 %	EN 302 195
IR2030/4/2 2010/0168/UK Oct 2010	Active Medical Implants		300 kHz--30 MHz		9 dBµA/m at 10 m				EN 300 330
IR2030/4/3 2010/0168/UK Oct 2010	Active Medical Implants	Equipment may be used airborne	30 to 37.5 MHz		1 mW e.r.p.			Duty cycle limit 10%	EN 302 510

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/4/4 2010/0168/UK Oct 2010	Active Medical Implants and associated peripherals	Equipment may be used airborne	401 – 402 MHz		25 µW e.r.p.		Channel spacing 25 kHz Individual transmitters may combine adjacent channels for increased bandwidth up to 100 kHz.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. Alternatively a duty cycle limit of 0.1% may be used.	EN 302 537
IR2030/4/5 2010/0168/UK Oct 2010	Active Medical Implants	This category covers the radio part of active implantable medical devices Equipment may be used airborne	402 – 405 MHz		25 µW e.r.p.		Channel spacing 25 kHz Individual transmitters may combine adjacent channels for increased bandwidth.	Other techniques to access spectrum or mitigate interference can be used provided they result at least in an equivalent performance to the techniques described in harmonised standards adopted under directive 1999/5/EC	EN 301 839
IR2030/4/6 2010/0168/UK Oct 2010	Active Medical Implants and associated peripherals	Equipment may be used airborne	405 – 406 MHz		25 µW e.r.p.		Channel spacing 25 kHz Individual transmitters may combine adjacent channels for increased bandwidth up to 100 kHz.	Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. Alternatively a duty cycle limit of 0.1% may be used.	EN 302 537

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/5/1 2010/0168/UK Oct 2010	Animal Implantable Devices	Equipment may be used airborne	315 - 600 kHz		-5 dBµA/m at 10m			Duty cycle limit: 10%	EN 302 536
IR2030/5/2 2010/0168/UK Oct 2010	Animal Implantable Devices	Equipment may be used airborne	12,5 - 20,0 MHz		-7 dBµA/m at 10m in a bandwidth of 10 kHz			Duty cycle limit: 10%	EN 300 330
IR2030/6/1 2010/0168/UK Oct 2010	Medical and Biological Applications	These bands may also be used for the tracking of birds. Equipment affixed to a bird may be used airborne	173.7 – 174 MHz		10 mW e.r.p.		Channel Spacing 12.5 kHz Channel numbers 1 to 24 inclusive are available with channel centre frequency of 173.7 MHz plus (Channel Spacing times channel number)		EN 300 220
IR2030/6/2 2010/0168/UK Oct 2010	Medical and Biological Applications	These bands may also be used for the tracking of birds. Equipment affixed to a bird may be used airborne	173.7 – 174 MHz		10 mW e.r.p.		Channel Spacing 25 kHz Channel numbers 1 to 11 inclusive are available with channel centre frequency of 173.7 MHz plus (Channel Spacing times channel number).		EN 300 220
IR2030/6/3 2010/0168/UK Oct 2010	Medical and Biological Applications		173.7 – 174 MHz		10 mW e.r.p.				EN 300 220

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/6/4 2010/0168/UK Oct 2010	Medical and Biological Applications	These bands may also be used for the tracking of birds. Equipment affixed to a bird may be used airborne	458.9625 – 459.1000 MHz		10 mW e.r.p.		Channel Spacing 12.5 kHz Channel numbers 37 to 47 inclusive are available with channel centre frequency of 458.5 MHz plus (Channel Spacing times channel number)		EN 300 220
IR2030/6/5 2010/0168/UK Oct 2010	Medical and Biological Applications		458.9625 – 459.1000 MHz		500 mW e.r.p.		Channel Spacing 12.5 kHz Channel numbers 37 to 47 inclusive are available with channel centre frequency of 458.5 MHz plus (Channel Spacing times channel number)		EN 300 220
IR2030/6/6 2010/0168/UK Oct 2010	Medical and Biological Applications	These bands may also be used for the tracking of birds. Equipment affixed to a bird may be used airborne	458.9625 – 459.1000 MHz		10 mW e.r.p.		Channel Spacing 25 kHz Channel numbers 19 to 23 inclusive are available with channel centre frequency of 458.5 MHz plus (Channel Spacing times channel number)		EN 300 220

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/6/7 2010/0168/UK Oct 2010	Medical and Biological Applications		458.9625 - 459.1000 MHz		500 mW e.r.p.		Channel Spacing 25 kHz Channel numbers 19 to 23 inclusive are available with channel centre frequency of 458.5 MHz plus (Channel Spacing times channel number)		EN 300 220
IR2030/7/1 2010/0168/UK Oct 2010	Wideband Data Transmission Systems	Equipment may be used airborne	2400 MHz to 2483.5 MHz		100 mW e.i.r.p. In addition, equipment must only emit emissions of 100 mW/100 kHz e.i.r.p. density when frequency hopping modulation is used, or 10 mW/MHz e.i.r.p. density when other types of modulation are used			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used.	EN 300 328
IR2030/7/2 2010/0168/UK Oct 2010	Wideband Data Transmission Systems	Equipment must not form part of a fixed outdoors installation. Equipment may be used airborne	57 – 66 GHz		40 dBm e.i.r.p. and 13 dBm/MHz e.i.r.p. density			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used.	EN 302 567

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/8/1 2010/0168/UK Oct 2010	Wireless Access Systems (WAS)	<p>Aeronautical mobile use is not permitted.</p> <p>The apparatus may only be used within a building or aircraft or any other enclosed space with attenuation characteristics at least as strong as those of either a building or an aircraft, and only to establish a connection with a station or apparatus within the same building or aircraft or other enclosed space.</p>	5150-5350 MHz		<p>Maximum mean e.i.r.p. of 200 mW and</p> <p>Maximum mean e.i.r.p. density of 10mW/MHz in any 1 MHz band</p>			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used.	<p>Dynamic Frequency Selection and Transmit Power Control are assumed to be implemented as specified in EN 301 893</p> <p>Nominal Centre Frequency (MHz) 5180, 5200, 5220, 5240, 5260, 5280, 5300, 5320.</p>

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/8/2 2010/0168/UK Oct 2010	Wireless Access Systems (WAS)	Aeronautical mobile use is not permitted. The apparatus may also be used airborne within an aircraft, only to establish a connection with a station or apparatus within the same aircraft.	5470-5725 MHz		Maximum mean e.i.r.p. of 1W and Maximum mean e.i.r.p. density of 50mW/MHz in any 1 MHz band			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used.	Dynamic Frequency Selection and Transmit Power Control are assumed to be implemented as specified in EN 301 893 Nominal Centre Frequency (MHz) 5500, 5520, 5540, 5560, 5580, 5600, 5620, 5640, 5660, 5680, 5700.
IR2030/9/1 2010/0168/UK Oct 2010	Short Range Indoor Data Links	Music and speech are only permitted when using a digitised signal.	2445 – 2455 MHz		100 mW e.i.r.p.				EN 300 440
IR2030/9/2 2010/0168/UK Oct 2010	Short Range Indoor Data Links	Music and speech are only permitted when using a digitised signal.	5725 – 5875 MHz		25 mW e.i.r.p.				EN 300 440

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/9/3 2010/0168/UK Oct 2010	Short Range Indoor Data Links	Music and speech are only permitted when using a digitised signal.	10.675 – 10.699 GHz		1 W e.i.r.p.				EN 300 440
IR2030/10/1 2010/0168/UK Oct 2010	Railway Applications		984 – 7484 kHz	Center Frequency 4234 kHz	9 dB μ A/m				EN 300 330 EN 302 608
IR2030/10/2 2010/0168/UK Oct 2010	Railway Applications		516 – 8516 kHz	Center Frequency 4516 kHz	7 dB μ A/m at 10 m				EN 300 330
IR2030/10/3 2010/0168/UK Oct 2010	Railway Applications		7.3 – 23 MHz	Center Frequency 13.547 MHz	-7 dBuA/m at 10 m				EN 302 609
IR2030/10/4 2010/0168/UK Oct 2010	Railway Applications		27.090 – 27.100 MHz	Center Frequency (Fo) 27.095 MHz	42 dB μ A/m at 10 m	Fo \pm < 5 kHz			EN 300 330 EN 302 608
					5 dB μ A/m at 10 m	Fo \pm (5 to 200) kHz			
					- 1 dB μ A/m at 10 m	Fo \pm > 500 kHz			
IR2030/10/5 2010/0168/UK Oct 2010	Railway Applications		2446 – 2454 MHz		500 mW e.i.r.p.		Channel Bandwidth \leq 1.5 MHz		EN 300 761

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/11/1 2010/0168/UK Oct 2010	Devices for locating victims in distress or at risk	The frequency band is no longer available for new equipment, however, existing Avalanche Victim detection equipment may continue to operate within the band.	2275 Hz		42 dBµA/m at 10 m				
IR2030/11/2 2010/0168/UK Oct 2010	Devices for locating victims in distress or at risk		457 kHz		7 dBµA/m at 10 m				EN 300 718
IR2030/12/1 2010/0168/UK Oct 2010	Radio determination applications	Equipment cannot be taken into service. However existing equipment brought into service prior to 31 December 2003 may continue to operate within the band.	888.0 - 889.0 MHz		500 mW e.r.p.		Channel Spacing 25 kHz		
IR2030/12/2 2010/0168/UK Oct 2010	Radio determination applications	Equipment may be used airborne	2400 – 2483.5 MHz		25 mW e.i.r.p.				EN 300 440
IR2030/12/3 2010/0168/UK Oct 2010	Radio determination applications		2445 - 2455 MHz		100 mW e.i.r.p.				EN 300 440

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IR2030/12/4 2010/0168/UK Oct 2010	Radio determination applications	Equipment may be used airborne	5725 – 5875 MHz		25 mW e.i.r.p.				EN 300 440
IR2030/12/5 2010/0168/UK Oct 2010	Radio determination applications		10.577 - 10.597 GHz		1 W e.i.r.p.				EN 300 440
IR2030/12/6 2010/0168/UK Oct 2010	Radio determination applications	Applications are for indoor use only.	10.675 - 10.699 GHz		1 W e.i.r.p.				EN 300 440
IR2030/12/7 2010/0168/UK Oct 2010	Radio determination applications		13.4 - 14.0 GHz		500 mW e.i.r.p.				EN 300 440
IR2030/12/8 2010/0168/UK Oct 2010	Radio determination applications	Equipment must form part of a ground-based radio determination system.	17,1–17,3 GHz		26 dBm e.i.r.p.			Techniques to access spectrum and mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used.	EN 300 440
IR2030/12/9 2010/0168/UK Oct 2010	Radio determination applications		24.050 – 24.150 GHz		100 mW e.i.r.p.			Minimum sweep rate 2 MHz/mS	EN 300 440

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IR2030/12/10 2010/0168/UK Oct 2010	Radio determination applications		24.150 - 24.250 GHz		2 W e.i.r.p.				EN 300 440
IR2030/12/11 2010/0168/UK Oct 2010	Radio determination applications	Applications are for use in mobile applications only, fixed installations are not permitted.	24.250 - 24.350 GHz		2 W e.i.r.p.				EN 300 440
IR2030/13/1 2010/0168/UK Oct 2010	Radio Frequency Identification	Equipment may be used airborne	13.553 - 13.567 MHz		60 dB μ A/m at 10 m				EN300 330 EN 302 291
IR2030/13/2 ¹ 2010/0168/UK Oct 2010	Radio Frequency Identification	Equipment may be used airborne	865 – 865.6 MHz		100 mW e.r.p.		Channel spacing 200kHz. Channel numbers 1 to 3. Channel centre frequencies are 864.9 MHz plus (0.2 MHz times channel number.		EN302 208

¹ IR2030/13/2 to IR2030/12/4 inclusive (the “IRs” in this footnote) are intended to reproduce requirements imposed by SI 2005/3471, which has been amended by SI 2007/1282 (the “Regulations” in this footnote). The IRs are intended neither to add to nor amend those requirements. If there is any conflict between the IRs and the Regulations, the IRs should be deemed to mean what the Regulations mean.

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/13/3 ¹ 2010/0168/UK Oct 2010	Radio Frequency Identification	Equipment may be used airborne	865.6 – 867.6 MHz		2W e.r.p.		Channel spacing 200kHz. Channel numbers 4 to 13. Channel centre frequencies are 864.9 MHz plus (0.2 MHz times channel number).		EN302 208
IR2030/13/4 ¹ 2010/0168/UK Oct 2010	Radio Frequency Identification	Equipment may be used airborne	867.6 – 868 MHz		500 mW e.r.p.		Channel spacing 200kHz. Channel numbers 14 to 15. Channel centre frequencies are 864.9 MHz plus (0.2 MHz times channel number).		EN302 208
IR2030/13/5 2011/0401/UK Dec 2011	Radio Frequency Identification	Equipment may be used airborne	2446 – 2454 MHz		500 mW e.i.r.p.				EN 300 440
IR2030/13/6 2010/0168/UK Oct 2010	Radio Frequency Identification	Equipment is restricted to indoor use only.	2446 – 2454 MHz		4 W e.i.r.p.	For enforcement purposes, any emission shall not exceed 500 mW when measured 10 metres from either the installed building or boundary of the operator's premises.		For applications with radiated powers greater than 500 mW, a duty cycle limit of < 15% with a maximum transmit power on time of 30 milliseconds is required.	EN 300 440

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IR2030/14/1 2010/0168/UK Oct 2010	Road Transport and Traffic Telematics	For the provision of short range data links which respond to a signal initiated by a network operator.	5795 - 5805 MHz		≤ 2 W e.i.r.p.				EN 300 674 ES 200 674
IR2030/14/2 2010/0168/UK Oct 2010	Road Transport and Traffic Telematics	For the provision of short range data links which respond to a signal initiated by a network operator; or by a private system used and operated by the owner or persons authorised by the owner.	5805 - 5815 MHz		≤ 2 W e.i.r.p.				EN 300 674 ES 200 674
IR2030/14/3 2010/0168/UK Oct 2010	Road Transport and Traffic Telematics	For the provision of short range data links which respond to a signal initiated by a private system used and operated by the owner or persons authorised by the owner.	5805 - 5815 MHz		≤ 2 W e.i.r.p.				EN 300 440

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	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/14/4 2011/0401/UK Dec 2011	Road Transport and Traffic Telematics		24.050-24.075 GHz		100 mW e.i.r.p.				EN 302 858
IR2030/14/5 2011/0401/UK Dec 2011	Road Transport and Traffic Telematics		24.075-24.150 GHz		0.1mW e.i.r.p.				EN 302 858
IR2030/14/6 2010/0168/UK Oct 2010	Road Transport and Traffic Telematics	For vehicle radar only.	24.075-24.150 GHz		100 mW e.i.r.p.			<p>≤ 4µs/40kHz dwell time every 3ms</p> <p>The spectrum access and mitigation requirement is given for devices mounted behind a bumper. If mounted without a bumper, the requirement is 3µs/40kHz maximum dwell time every 3ms</p> <p>A requirement for minimum frequency modulation range (applicable to FMCW or step frequency signals) or minimum instantaneous bandwidth (applicable to pulsed signal) of 250 kHz applies in addition to the requirement on maximum dwell time.</p>	EN 302 858-1 V1.2.1

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IR2030/14/7 2010/0168/UK Oct 2010	Road Transport and Traffic Telematics	For vehicle radar only.	24.075-24.150 GHz		100 mW e.i.r.p.			<p>≤ 1ms/40kHz dwell time every 40ms</p> <p>The spectrum access and mitigation requirement is given for devices mounted either behind a bumper or mounted without a bumper</p> <p>A requirement for minimum frequency modulation range (applicable to FMCW or step frequency signals) or minimum instantaneous bandwidth (applicable to pulsed signal) of 250 kHz applies in addition to the requirement on maximum dwell time.</p>	EN 302 858-1 V 1.2.1
IR2030/14/8 2011/0401/UK Dec 2011	Road Transport and Traffic Telematics		24.150-24.250 GHz		100mW e.i.r.p				EN 302 858
IR2030/14/9 2010/0168/UK Oct 2010	Road Transport and Traffic Telematics	This set of usage conditions applies to terrestrial vehicle and infrastructure systems only.	76 - 77 GHz		55 dBm e.i.r.p.				EN 301 091

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IR2030/14/10 2011/0401/UK Dec 2011	Road Transport and Telematics	This set of usage conditions applies to vehicle-to-vehicle, vehicle-to-infrastructure and infrastructure-to-vehicle systems only	63-64 GHz		40 dBm e.i.r.p.				EN 302 686
IR2030/15/1 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	9 – 59.75 kHz		72 dB μ A/m at 10 m				EN 300 330
IR2030/15/2 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	59.75 – 60.25 kHz		48 dB μ A/m at 10 m				EN 300 330
IR2030/15/3 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	60.25 – 90 kHz		72 dB μ A/m at 10 m				EN 300 330
IR2030/15/4 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	90 - 119 kHz		48 dB μ A/m at 10 m				EN 300 330
IR2030/15/5 2011/0401/UK Dec 2011	Inductive Applications	Equipment may be used airborne	119 - 127 kHz		66 dB μ A/m at 10 m				EN 300 330
IR2030/15/6 2011/0401/UK Dec 2011	Inductive Applications	Equipment may be used airborne	127 - 135 kHz		66 dB μ A/m at 10 m				EN 300 330

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IR2030/15/7 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	135 - 148.5 kHz		48 dB μ A/m at 10 m				EN 300 330
IR2030/15/8 2010/0168/UK Oct 2010	Inductive Applications		148.5 - 185 kHz		48 dB μ A/m at 10 m				EN 300 330
IR2030/15/9 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	148.5 - 5000 kHz		-15 dB μ A/m at 10 m in any bandwidth of 10 kHz. Total field strength -5 dB μ A/m at 10 m for systems operating at bandwidths larger than 10 kHz				EN 300 330

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IR2030/15/10 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	148.5 – 1600 kHz		-5 dB μ A/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dB μ A/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of -5 dB μ A/m at 10 m			EN 300 330. The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems
IR2030/15/11 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	240 - 315 kHz		24 dB μ A/m at 10 m				EN 300 330

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IR2030/15/12 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	400 to 600 kHz		-5 dBµA/m at 10 m				EN 300 330
IR2030/15/13 2010/0168/UK Oct 2010	Inductive Applications		1600 kHz - 2 MHz		-15 dBµA/m at 10 m in any bandwidth of 10 kHz. Total field strength -5 dBµA/m at 10 m for systems operating at bandwidths larger than 10 kHz.	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of - 15 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems

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IR2030/15/14 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field	2 - 3.155 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems
IR2030/15/15 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	3.155 - 3.400 MHz		13.5dBµA/m at 10 m				EN 300 330

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/16 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	3.155 - 3.400 MHz		13.5dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 13.5 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/17 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	3.400 – 5.000 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems
IR2030/15/18 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne.	5000 – 30000 kHz		-20 dBµA/m at 10 m in any bandwidth of 10 kHz. Total field strength -5 dBµA/m at 10 m for systems operating at bandwidths larger than 10 kHz				EN 300 330

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/19 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field	5.000 - 6.765 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems
IR2030/15/20 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	6.765 - 6.795 MHz		42 dBµA/m at 10 m				EN 300 330

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/21 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	6.795 – 7.400 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems
IR2030/15/22 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne.	7.400 – 8.800 MHz		9 dBµA/m at 10 m				EN 300 330

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/23 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field	7.400 – 8.800 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/24 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	8.800 – 10.200 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems
IR2030/15/25 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne.	10.200 – 11.000 MHz		9 dBµA/m at 10 m				EN 300 330

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/26 2010/0168/UK Oct 2010	Inductive Applications		10.200 – 11.000 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/27 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	11.000 – 13.533 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/28 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	13.533 - 13.553 MHz		21.5 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems
IR2030/15/29 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	13.553 - 13.567 MHz		42 dBµA/m at 10 m	The transmit power may be increased to 60 dBµA/m at 10 m for Radio Frequency Identification and Electronic Article Surveillance applications.			EN 300 330 EN 302 291

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/30 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	13.567 - 26.957 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems
IR2030/15/31 2010/0168/UK Oct 2010	Inductive Applications	Equipment may be used airborne	26.957 - 27.283 MHz		42 dBµA/m at 10 m				EN 300 330

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/15/32 2010/0168/UK Oct 2010	Inductive Applications	That part of an induction system designed or adapted to produce:- (a) controlled magnetic field; and (b) a predetermined recognisable signal when operating within the magnetic field.	27.283 - 30 MHz		9 dBµA/m at 10 m	Only when the device is submerged in water, the power may be increased to 40 dBµA/m at 10 m (measured underwater), provided that emissions above water are restricted to the transmit power limit of 9 dBµA/m at 10 m			EN 300 330 The MoD operates high-power underwater communication systems. Users and manufacturers of underwater SRD equipment should be aware that this equipment should be constructed so as to operate safely in the presence of high-power systems
IR2030/16/1 2010/0168/UK Oct 2010	Metal Detectors	That part of an induction system designed or adapted to produce:- (a) to produce a controlled magnetic field; and (b) a predetermined recognisable signal when operating within that magnetic field	9 - 148.5 kHz		70 dBµA/m at 6 m				EN 300 330

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/17/1 2010/0168/UK Oct 2010	Alarms	Equipment may be used airborne	868.60 – 868.70 MHz		10 mW e.r.p.		Channel spacing ≤25 kHz. Consecutive channels may be combined where a larger bandwidth is required, due to the modulation of the signal, up to the maximum sub-band frequency allocation.	Duty cycle limit ≤1%	EN 300 220
IR2030/17/2 2010/0168/UK Oct 2010	Alarms	Equipment may be used airborne	869.25 – 869.30 MHz		10 mW e.r.p.		Channel spacing ≤25 kHz	Duty cycle limit ≤0.1%	EN 300 220
IR2030/17/3 2010/0168/UK Oct 2010	Alarms	Equipment may be used airborne	869.3 – 869.4 MHz		10 mW e.r.p.		Channel spacing ≤25 kHz	Duty cycle limit ≤1%	EN 300 220
IR2030/17/4 2010/0168/UK Oct 2010	Alarms	Equipment may be used airborne	869.65 – 869.70 MHz		25 mW e.r.p.		Channel spacing ≤25 kHz	Duty cycle limit ≤10%	EN 300 220
IR2030/18/1 2010/0168/UK Oct 2010	Social Alarms for the Elderly and Infirm		27.450MHz		500μW e.r.p.		Channel bandwidth 12.5 kHz		EN 300 220
IR2030/18/2 2010/0168/UK Oct 2010	Social Alarms for the Elderly and Infirm		34.925 MHz		500μW e.r.p.		Channel bandwidth 12.5 kHz		EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/18/3 2010/0168/UK Oct 2010	Social Alarms for the Elderly and Infirm		34.950 MHz		500µW e.r.p.		Channel bandwidth 12.5 kHz		EN 300 220
IR2030/18/4 2010/0168/UK Oct 2010	Social Alarms for the Elderly and Infirm		34.975 MHz		500µW e.r.p.		Channel bandwidth 12.5 kHz		EN 300 220
IR2030/18/5 2010/0168/UK Oct 2010	Social Alarms	Equipment may be used airborne	169.4750 – 169.4875 MHz		500 mW e.r.p.		Channel spacing 12.5 kHz		EN 300 220
IR2030/18/6 2010/0168/UK Oct 2010	Social Alarms	Equipment may be used airborne	169.5875 – 169.600 MHz		500 mW e.r.p.		Channel spacing 12.5 kHz		EN 300 220
IR2030/18/7 2010/0168/UK Oct 2010	Social Alarms	Equipment may be used airborne	869.2 - 869.25 MHz		10 mW e.r.p.		Channel spacing 25 kHz	Duty cycle limit 0.1%	EN 300 220
IR2030/19/1 2010/0168/UK Oct 2010	Vehicle Paging Alarms		47.4 MHz		100 mW e.r.p.		Channel spacing 12.5 kHz		EN 300 220
IR2030/19/2 2010/0168/UK Oct 2010	Vehicle Paging Alarms		458.90 MHz		100 mW e.r.p.	Equipment may also be used to arm or disarm the alarm system at a radiated level not exceeding 1 mW	Channel spacing 12.5 kHz		EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/20/1 2010/0168/UK Oct 2010	General Alarms Associated with Marine Applications Including Fixed Shore Installations	Including use on land for the storage or transportation of vessels	161.275 MHz		10 mW e.r.p.		Channel spacing 12.5 kHz		EN 300 220
IR2030/21/1 2010/0168/UK Oct 2010	Mobile, Transportable and Lone Worker Safety Alarms		173.1875 MHz		10 mW e.r.p.		Channel spacing 12.5 kHz		EN 300 220
IR2030/21/2 2010/0168/UK Oct 2010	Mobile, Transportable and Lone Worker Safety Alarms		458.8375 MHz		100 mW e.r.p.		Channel spacing 12.5 kHz		EN 300 220
IR2030/22/1 2010/0168/UK Oct 2010	Fixed Alarms		173.225 MHz		10 mW e.r.p.		Channel spacing 12.5 kHz		EN 300 220
IR2030/22/2 2010/0168/UK Oct 2010	Fixed Alarms		173.225 MHz		10 mW e.r.p.		Channel spacing 25 kHz		EN 300 220
IR2030/22/3 2010/0168/UK Oct 2010	Fixed Alarms		458.825 MHz		100 mW e.r.p.		Channel spacing 12.5 kHz		EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/23/1 2010/0168/UK Oct 2010	Model Control		26.96 - 27.28 MHz	In the frequency bands; 26 990–27 000 kHz, Channel 4, 27 040–27 050 kHz, Channel 9, 27 090–27 100 kHz, Channel 14, 27 140–27 150 kHz, Channel 19 , and 27 190–27 200 kHz, Channel 24, equipment may be used airborne.	100 mW		Channel spacing 10 kHz Channel numbers 1 to 32 inclusive are available with channel centre frequency of 26.955 MHz plus (Channel spacing times channel number).		EN 300 220
IR2030/23/2 2010/0168/UK Oct 2010	Model Control	For telecommand to control the movement of airborne models only	34.945 - 35.305 MHz		100 mW		Channel spacing 10 kHz Channel numbers 1 to 36 inclusive are available with channel centre frequency of 34.94 MHz plus (Channel Spacing times channel number)		EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/23/3 2010/0168/UK Oct 2010	Model Control	For telecommand to control the movement of models on the ground, on water or under the water.	40.66 - 41.00 MHz		100 mW		Channel spacing 10 kHz Channel numbers 1 to 34 inclusive are available with channel centre frequency of 40.655 MHz plus (Channel Spacing times channel number)		EN 300 220
IR2030/23/4 2010/0168/UK Oct 2010	Model Control	For telemetry to provide data from the model only, including airborne models	433.05 - 434.79 MHz		1 mW		Channel spacing 25 kHz		EN 300 220
IR2030/23/5 2010/0168/UK Oct 2010	Model Control	For telemetry to provide data from the model only, including airborne models	434.04 – 434.79 MHz		10 mW		Channel spacing 25 kHz		EN 300 220
IR2030/23/6 2010/0168/UK Oct 2010	Model Control	For telecommand to control the movement of any model.	458.5 - 459.5 MHz		100 mW		Channel spacing 25 kHz Channel numbers 1 to 40 inclusive are available with channel centre frequency of 458.4875 MHz plus (Channel Spacing times channel number)		EN 300 220

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/24/1 2010/0168/UK Oct 2010	Radio Microphones		173.775 to 175.075 MHz		10 mW e.r.p.		Channel spacing 50 kHz Channel numbers 10 to 35 inclusive are available; where the channel centre frequency is equal to 173.3 MHz plus (Channel Spacing times channel number).		EN 300 422
IR2030/24/2 2010/0168/UK Oct 2010	Radio Microphones		173.7 to 175.1 MHz		10 mW e.r.p.	The maximum radiated power may be increased to 50 mW e.r.p. for a radio microphone which is intended to be worn next to or strapped to the user's body.	Channel spacing 200 kHz Channel numbers 1 to 7 inclusive are available; where the channel centre frequency is equal to 173.6 MHz plus (Channel Spacing times channel number).		EN 300 422
IR2030/24/3 2010/0168/UK Oct 2010	Radio Microphones	Equipment may be used airborne	863 - 865 MHz		10 mW e.r.p.				EN 300 422 EN 301 357
IR2030/25/1 2010/0168/UK Oct 2010	Assistive Listening Devices	Equipment may be used airborne	169.4000 - 169.4750 MHz		500 mW e.r.p.		Channel Bandwidth ≤ 50 kHz		EN 300 422
IR2030/25/2 2010/0168/UK Oct 2010	Assistive Listening Devices	Equipment may be used airborne	169.4875 - 169.5875 MHz		500 mW e.r.p.		Channel bandwidth ≤ 50 kHz		EN 300 422

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/25/3 2010/0168/UK Oct 2010	Assistive Listening Devices	Equipment may be used airborne	173.325 to 175.075 MHz		2 mW e.r.p.		Channel spacing 50 kHz Channel numbers 1 to 5 inclusive and 7 to 9 inclusive are the preferred channels, channels 10 to 35 inclusive may be used as an alternative but are shared with other applications including radio microphones. The channel centre frequency is equal to 173.3 MHz plus (Channel Spacing times channel number)		EN 300 422
IR2030/26/1 2010/0168/UK Oct 2010	Wireless Audio Applications		36.61 - 36.79 MHz 37.01 - 37.19 MHz		10 µW e.r.p.				EN 300 220 EN 300 422
IR2030/26/2 2011/0401/UK Dec 2011	Low power FM transmitters	Equipment may be used airborne	87.5 – 108 MHz		50 nW e.r.p.		Channel spacing ≤200 kHz		EN 301 357
IR2030/26/3 2010/0168/UK Oct 2010	Wireless Audio Applications	Equipment may be used airborne	863 - 865 MHz		10 mW e.r.p.				EN 300 422 EN 301 357

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/26/4 2010/0168/UK Oct 2010	Wireless Audio Applications		864.8 - 865.0 MHz	Frequency band may be used for narrow band applications	10 mW e.r.p.		Channel bandwidth ≤ 50 kHz		EN 300 220
IR2030/26/5 2010/0168/UK Oct 2010	Wireless Audio Applications		2400 – 2483.5 MHz		10 mW e.i.r.p.				EN 300 422
IR2030/27/1 2010/0168/UK Oct 2010	Wireless Video Cameras - Non Broadcasting	Apparatus designed or adapted for Television. Where required, associated audio may also be used within the specified frequency band.	1394 MHz		500 mW e.i.r.p.		Channel Bandwidth ≤ 10 MHz		EN 300 440
IR2030/27/2 2010/0168/UK Oct 2010	Wireless Video Cameras - Non Broadcasting	Apparatus designed or adapted for Television. Where required, associated audio may also be used within the specified frequency band. Equipment may be used airborne	2400 – 2483.5 MHz		10 mW e.i.r.p.				EN 300 440

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/27/3 2010/0168/UK Oct 2010	Wireless Video Cameras - Non Broadcasting	Apparatus designed or adapted for Television. Where required, associated audio may also be used within the specified frequency band. Equipment may be used airborne	5725 – 5875 MHz		25 mW e.i.r.p.				EN 300 440
IR2030/28/1 2010/0168/UK Oct 2010	Video Distribution for Private Use	Apparatus designed or adapted for Television Where required, associated audio may also be used within the specified frequency band. Music and speech only permitted when associated with the video application	1394 MHz		10 mW e.i.r.p.		Channel Bandwidth ≤ 10 MHz		EN 300 440
IR2030/29/1 2010/0168/UK Oct 2010	Radar Level Gauges		5150 MHz to 7100 MHz		≤ 25 mW Peak ≤ 0.1 mW Average				EN 302 372

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/29/2 2010/0168/UK Oct 2010	Radar Level Gauges		8500 MHz to 10.600 GHz		≤ 25 mW Peak ≤ 0.1 mW Average				EN 302 372
IR2030/29/3 2010/0168/UK Oct 2010	Radar Level Gauges		10.700 GHz to 10.850 GHz		≤ 25 mW Peak ≤ 0.1 mW Average				EN 302 372
IR2030/29/4 2010/0168/UK Oct 2010	Radar Level Gauges		24.3 to 27.7 GHz		≤ 100 mW Peak ≤ 0.36 mW Average				EN 302 372
IR2030/30/1 2010/0168/UK Oct 2010	Tank Level Probing Radar (TLPR)	Equipment may be used airborne	4,5–7,0 GHz		24 dBm e.i.r.p. Equipment must be within a closed tank, whose purpose is to contain a substance, and which is made of metal or reinforced concrete or any other material with attenuation characteristics that are at least as strong as those of either metal or reinforced concrete	Equipment must only emit emissions which would (if the equipment were used within a closed tank, which has the specifications set out in Annex E of ETSI standard EN 302 372-1), when measured in any direction, have a maximum e.i.r.p. density of -41.3 dBm per MHz			EN 302 372

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/30/2 2010/0168/UK Oct 2010	Tank Level Probing Radar (TLPR)	Equipment may be used airborne	8,5–10,6 GHz		30 dBm e.i.r.p. Equipment must be within a closed tank, whose purpose is to contain a substance, and which is made of metal or reinforced concrete or any other material with attenuation characteristics that are at least as strong as those of either metal or reinforced concrete	Equipment must only emit emissions which would (if the equipment were used within a closed tank, which has the specifications set out in Annex E of ETSI standard EN 302 372-1), when measured in any direction, have a maximum e.i.r.p. density of -41.3 dBm per MHz			EN 302 372
IR2030/30/3 2010/0168/UK Oct 2010	Tank Level Probing Radar (TLPR)	Equipment may be used airborne	24,05–27,0 GHz		43 dBm e.i.r.p. Equipment must be within a closed tank, whose purpose is to contain a substance, and which is made of metal or reinforced concrete or any other material with attenuation characteristics that are at least as strong as those of either metal or reinforced concrete.	Equipment must only emit emissions which would (if the equipment were used within a closed tank, which has the specifications set out in Annex E of ETSI standard EN 302 372-1), when measured in any direction, have a maximum e.i.r.p. density of -41.3 dBm per MHz			EN 302 372

Interface Number/Notification number/Date	Normative Part								Informative Part
	Application	Comments to application	Frequency band	Comments to Frequency band	Transmit power / Power density	Comment to Transmit power / Power density	Channelling	Channel access and occupation rules	Reference
IR2030/30/4 2010/0168/UK Oct 2010	Tank Level Probing Radar (TLPR)	Equipment may be used airborne	57,0–64,0 GHz		43 dBm e.i.r.p. Equipment must be within a closed tank, whose purpose is to contain a substance, and which is made of metal or reinforced concrete or any other material with attenuation characteristics that are at least as strong as those of either metal or reinforced concrete.	Equipment must only emit emissions which would (if the equipment were used within a closed tank, which has the specifications set out in Annex E of ETSI standard EN 302 372-1), when measured in any direction, have a maximum e.i.r.p. density of -41.3 dBm per MHz			EN 302 372
IR2030/30/5 2010/0168/UK Oct 2010	Tank Level Probing Radar (TLPR)	Equipment may be used airborne	75,0–85,0 GHz		43 dBm e.i.r.p. Equipment must be within a closed tank, whose purpose is to contain a substance, and which is made of metal or reinforced concrete or any other material with attenuation characteristics that are at least as strong as those of either metal or reinforced concrete	Equipment must only emit emissions which would (if the equipment were used within a closed tank, which has the specifications set out in Annex E of ETSI standard EN 302 372-1), when measured in any direction, have a maximum e.i.r.p. density of -41.3 dBm per MHz			EN 302 372

Section 4

Annex A. Additional Performance Parameters (Informative)

A.1 For Licence Exempt Short Range Devices operating on radio frequencies between 25 MHz and 1 GHz, with power levels up to 500 mW, the guidance published in EN 300 220-2 should ensure reasonable reliability of the radio link and performance of the receiver.

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Section 5

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Section 6

Document history

Version	Date	Changes
1.0	Jan 2001	First Publication EU No. 2000/0156/UK
1.1	Aug 2001	Amended EU No. 2001/0116/UK
1.2	Oct 2002	Amended EU No. 2002/248/UK
1.3	Nov 2006	Changes for proposed Wireless Telegraphy (Exemption) Regulations 2006 EU No.2006/427/UK
1.4	2008	Changes to ensure alignment to the Draft 2007 amendment to the EC Decision 2006/771/EC – SRD Harmonisation
1.5	Oct 2010	Changes to ensure alignment to the 2010 amendment to the EC Decision 2006/771/EC – SRD Harmonisation
1.6	Dec 2011	Changes to ensure alignment to the 2011 amendment to the EC Decision 2006/771/EC – SRD Harmonisation