
Interface Requirement 2086

Safety Related Applications of Intelligent Transport
Systems (ITS)

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1. Foreword

- 1.1 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.
- 1.2 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.
- 1.3 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).
- 1.4 The requirements given in the main body of this UK Radio Interface Requirement will apply to the authorisation of safety related intelligent transport systems (ITS).
- 1.5 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>.
- 1.6 Further information on this UK Radio Interface Requirement can be obtained from the technical enquiry contact given at the back of this document.

2. Minimum requirements for operation within the UK

- 2.1 The minimum requirements in this document are made for reasons related to the effective and appropriate use of the radio spectrum, in particular maximising spectrum utilisation.
- 2.2 This UK Radio Interface Requirement gives a high-level description of how the spectrum in the UK is used for safety related intelligent transport systems (ITS). It does not prescribe technical interpretation of the 'essential requirements' of Radio Equipment Regulations 2017 (SI 2017/1206).
- 2.3 This UK Radio Interface Requirement therefore stipulates the necessary equipment parameters for the authorisation of terrestrial systems capable of providing safety related ITS in the UK. Table 3.1 contains 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 for safety related ITS within the UK.
- 2.4 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).
- 2.5 The technical parameters specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility within the spectrum for safety related ITS and with other radiocommunications services, whilst promoting enterprise, innovation and competition.
- 2.6 This UK Radio Interface requirement provides the necessary technical information which facilitates access to spectrum by making clear the assumptions that are made in planning the use of the spectrum for safety related ITS 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: safety related intelligent transport systems (ITS).

Mandatory (1 – 10)	
1. Radiocommunication Service	Mobile or Fixed service
2. Application	Intelligent Transport Systems
3. Frequency band(s)	5875 to 5925 MHz
4. Channelling	N/A
5. Modulation / Occupied bandwidth	N/A
6. Direction / Separation	N/A
7. Maximum Mean Transmit Power	23 e.i.r.p. dBm/MHz Maximum total transmit power (mean e.i.r.p.) of 33 dBm with a transmit power control (TPC) range of at least 30 dB
8. Channel access and occupation rules	Techniques to mitigate interference that provide at least equivalent performance to the techniques described in ETSI standard EN 302 571
9. Authorisation regime	Licence exempt
10. Additional essential requirements	N/A
Informative (11 – 15)	
11. Frequency planning assumptions	N/A
12. Planned changes	N/A
13. Reference	EN 302 571, EN 302 665
14. Remarks	N/A
15. Notification Number (in respect of Northern Ireland)	2022/7004/XI

3. Additional performance parameters

None specified

4. Contact details

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5. Document history

Version	Date	Changes
1.0	April 2011	Document published
2.0	March 2023	Amended to include 5805-5825 MHz