

IR 2090 - UK Interface Requirement 2090

Terrestrial systems capable of providing electronic communications services in the 800 MHz band

Contents

Section	Page	
1	References	3
2	Foreword	4
3	Minimum requirements for operation within the UK	5
4	Additional performance parameters	8
5	Contact details	9
6	Document history	10

Section 1

References

- 1.1 Commission Decision 2010/267/EU of 6 May 2010 on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union.
- 1.2 ECC Decision (09)03 on harmonised conditions for mobile/fixed communications networks (MFCN) operating in the band 790 - 862 MHz
- 1.3 CEPT Report 30: The identification of common and minimal (least restrictive) technical conditions for 790 - 862 MHz for the digital dividend in the European Union
- 1.4 CEPT Report 31: Technical considerations regarding harmonisation options for the digital dividend in the European Union - Frequency (channelling) arrangements for the 790-862 MHz band
- 1.5 ETSI EN 301 908: IMT cellular networks; Harmonized EN covering the essential requirements of article 3.2 of the Radio Equipment Directive (Directive 2014/53/EU)

Section 2

Foreword

- 2.1 The Radio Equipment Directive (Directive 2014/53/EU) was implemented in the United Kingdom (UK) by the Radio Equipment Regulations 2017. In accordance with Articles 8 and 7 of Directive 2014/53/EU, this UK Interface Requirement contains the requirements for the licensing and use of terrestrial systems capable of providing electronic communications services in the specified frequency bands.
- 2.2 Nothing in this UK Radio Interface Requirement shall preclude the need for equipment to comply with Directive 2014/53/EU.
- 2.3 It is required by the Wireless Telegraphy Act 2006 that no radio equipment is installed or used in the UK except under the authority of a licence granted by or otherwise exempted by regulations made by Ofcom. It is a condition of such a licence or exemption regulations as appropriate that, 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. 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 Directive 2014/53/EU.
- 2.4 The requirements given in the main body of this UK Radio Interface Requirement will apply to the licensing of terrestrial systems capable of providing electronic communications services in the 800 MHz band.
- 2.5 This UK Radio Interface Requirement will be revised as necessary, for example to follow:
 - i) current technology developments for reasons related to the effective and appropriate use of the spectrum in particular maximising spectrum utilisation; and
 - ii) changes to the available spectrum allocated for terrestrial systems capable of providing electronic communications services in the 800 MHz band.
- 2.6 All UK Radio Interface Requirements notified under Directive 2015/1535/EU will be published and will be made available free of charge from the Ofcom web-site at <http://www.ofcom.org.uk>.
- 2.7 Further information on this UK Radio Interface Requirement can be obtained from the technical enquiry contact given at the back of this document.

Section 3

Minimum 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 terrestrial systems capable of providing electronic communications services in the 800 MHz band. It does not prescribe technical interpretation of the 'essential requirements' of Directive 2014/53/EU.
- 3.3 This UK Radio Interface Requirement therefore stipulates the necessary equipment parameters for the authorisation of terrestrial systems capable of providing electronic communications services in the 800 MHz band in the UK. Tables 3.1 and 3.2 contain the relevant equipment parameters. These taken together with the 'essential requirements' detailed in Article 3.2 of Directive 2014/53/EU constitute the minimum requirements for terrestrial systems capable of providing electronic communications services in the 800 MHz band within the UK. 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 Directive 2014/53/EU.
- 3.4 The technical parameters specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility within the spectrum for terrestrial systems capable of providing electronic communications services in the 800 MHz band and with other radiocommunications services, whilst promoting enterprise, innovation and competition.
- 3.5 This UK Radio Interface requirement provides the necessary technical information which facilitates access to the 800 MHz spectrum by making clear the assumptions that are made in planning the use of the spectrum for terrestrial systems capable of providing electronic communications services in the 800 MHz band in the UK. It is not the intention of this UK Radio Interface Requirement to duplicate or impose any additional 'essential requirements' of the Directive 2014/53/EU on products. Any specified parameters within this document are for the purpose of identifying product options and not as a national de facto product requirement.

Table 3.1: Minimum requirements for the use of: terrestrial systems capable of providing electronic communications services operating in the 791-821 MHz band

Mandatory (1-10)		
1	Frequency band(s)	791 to 821 MHz
2	Radiocommunication Service	Mobile service or Fixed service
3	Application	TRA-ECS (Terrestrial radio applications capable of providing electronic communications services)
4	Channelling	Not specified
5	Modulation / Occupied bandwidth	Not specified
6	Direction / Separation	Base station transmit Repeater transmit/receive Uplink/downlink separation: 41 MHz
7	Maximum Transmit Power	61dBm/(5 MHz) EIRP
8	Channel access and occupation rules	Not specified
9	Authorisation regime	WT Act licence required for base stations and repeaters
10	Additional essential requirements	None
Informative (11-13)		
11	Frequency planning assumptions	Commission Decision 2010/267/EU CEPT Report 30 CEPT Report 31
12	Planned changes	-
13	Reference	EN 301 908
14	Notification	2012/178/UK
15	Remarks	-

Table 3.2: Minimum requirements for the use of: terrestrial systems capable of providing electronic communications services operating in the 832-862 MHz band

Mandatory (1-10)		
1	Frequency band(s)	832 to 862 MHz
2	Radiocommunication Service	Mobile service or Fixed service
3	Application	TRA-ECS (Terrestrial radio applications capable of providing electronic communications services)
4	Channelling	Not specified
5	Modulation / Occupied bandwidth	Not specified
6	Direction / Separation	Terminal station transmit Repeater transmit/receive Uplink/downlink separation: 41 MHz
7	Maximum Transmit Power	Mobile or nomadic terminal stations or repeaters: 23dBm TRP (total radiated power) Fixed or installed terminal stations or repeaters: 23dBm EIRP
8	Channel access and occupation rules	Not specified
9	Authorisation regime	Network user equipment meeting the minimum requirements outlined in this Interface Requirement is exempt from licensing provided that it meets the requirements of the relevant exemption regulations WT Act licence required for repeaters
10	Additional essential requirements	None
Informative (11-13)		
11	Frequency planning assumptions	Commission Decision 2010/267/EU CEPT Report 30 CEPT Report 31
12	Planned changes	-
13	Reference	EN 301 908
14	Notification	2012/178/UK
15	Remarks	-

Section 4

Additional performance parameters

(informative)

None specified

Section 5

Contact details

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Section 6

Document history

Version	Date	Changes
1.0	March 2013	Published
1.1	January 2018	Replaced R&TTE Directive 1999/5/EC and Directive 98/34/EC with Radio Equipment Directive 2014/53/EU and Directive (EU) 2015/1535 respectively. Minor editorials