Jersey

WIRELESS TELEGRAPHY (MOBILE COMMUNICATION SERVICES ON SHIPS) (EXEMPTION) REGULATIONS 2017

Unofficial extended UK law

06.748.50

Showing the law as at 1 January 2019

APPENDIX

WIRELESS TELEGRAPHY (MOBILE COMMUNICATION SERVICES ON SHIPS) (EXEMPTION) REGULATIONS 2017

Contents

Regulation

Jersey

R&O.89/2017

WIRELESS TELEGRAPHY (MOBILE COMMUNICATION SERVICES ON SHIPS) (EXEMPTION) REGULATIONS 2017

Registered by the Royal Court *18th August 2017*

Coming into force *2nd August 2017*

THE OFFICE OF COMMUNICATIONS ("OFCOM"), in exercise of the powers conferred by section 8(3) and section 122(7) of the Wireless Telegraphy Act 2006 and in exercise of those sections of the Act as extended to the Bailiwick of Guernsey, to the Bailiwick of Jersey and to the Isle of Man, make the following Regulations.

Before making these Regulations, OFCOM have given notice of their proposal to do so in accordance with section 122(4)(a) of the Act, published notice of their proposal in accordance with section 122(4)(b) of the Act, and have considered the representations made to them before the time specified in the notice in accordance with section 122(4)(c) of the Act.

1 Citation and commencement

These Regulations may be cited as the Wireless Telegraphy (Mobile Communication Services on Ships) (Exemption) Regulations 2017 and come into force on 2nd August 2017.

2 Revocation

The Wireless Telegraphy (Mobile Communication Services on Board Ships) (Exemption) Regulations 2011[1] are hereby revoked.

3 Interpretation

In these Regulations –

"apparatus" means wireless telegraphy apparatus;

"baseline" means the baseline for measuring the breadth of the territorial waters under the United Nations Convention on the Law of the Sea;

"dBi" means decibels of power referenced to the gain of an isotrope antenna;

"dBm" means decibels of power referenced to one milliWatt;

"ETSI" means the European Telecommunications Standards Institute;

"GSM system" means an electronic communications network that complies with the GSM standards EN 301 502 and EN 301 511 published by ETSI;

"kHz" means kilohertz;

"LTE system" means an electronic communications network that complies with the LTE standards EN 301 908–1, EN 301 908–13 and EN 301 908–14 published by ETSI;

"MHz" means megahertz;

"mobile communication services on board ships" means electronic communications services provided by an undertaking to enable persons on board a ship to communicate via public electronic communications networks using a GSM system, LTE system or UMTS system without establishing direct connections with electronic communications networks based on land;

"public electronic communications network" has the meaning given to it by section 151(1) of the Communications Act 2003;

"quality criteria" means the values broadcast by a ship base transceiver station specifying the minimum required received signal level in the cell (as expressed in dBm) required for access by the apparatus to that cell;

"selection timer" means the values set by a ship base transceiver station relating to the frequency of which the apparatus seeks to establish direct connections with a public electronic communications network based on land (also known as the Public Land Mobile Network selection timer);

"ship base transceiver station" means a mobile picocell located on a ship supporting mobile communication services on board ships;

"signal" has the meaning given to it by section 32(10) of the Communications Act 2003;

"the 900 MHz band" means the 880–915 MHz frequency band (for the uplink from the apparatus to the ship base transceiver station) and the 925–960 MHz frequency band (for the downlink from the ship base transceiver station to the apparatus);

"the 1800 MHz band" means the 1710–1785 MHz frequency band (for the uplink from the apparatus to the ship base transceiver station) and the 1805–1880 MHz frequency band (for the downlink from the ship base transceiver station to the apparatus);

"the 1900/2100 MHz band" means the 1920–1980 MHz frequency band (for the uplink from the apparatus to the ship base transceiver station) and the 2110–2170 MHz frequency band (for the downlink from the ship base transceiver station to the apparatus);

"the 2600 MHz band" means the 2500–2570 MHz frequency band (for the uplink from the apparatus to the ship base transceiver station) and the 2620–

2690 MHz frequency band (for the downlink from the ship base transceiver station to the apparatus);

"timing advance parameter" means the values set by a ship base transceiver station relating to the parameter needed to calculate the delay in the conveyance of signals transmitted from the ship base transceiver station to the apparatus;

"UMTS system" means an electronic communications network that complies with the UMTS standards EN 301 908–1, EN 301 908–2 and EN 301 908–3 published by ETSI; and

"user inactivity release timer" means the values set by a ship base transceiver station relating to the duration in which it will determine the apparatus as being inactive when no signals are transmitted between the ship base transceiver station and the apparatus (also known as the Radio Resource Control user inactivity release timer).

4 Exemption

The use of any apparatus on board a ship which is –

(a) registered in the British Islands; and

(b) within the limits of the British Islands and the territorial waters adjacent thereto, or, for the time being, beyond the British Islands and the territorial waters adjacent thereto,

is hereby exempt from the provisions of section 8(1) of the Wireless Telegraphy Act 2006 where the terms, provisions and limitations in regulation 5 are met.

5 Terms, provisions and limitations

(1) The apparatus must only operate –

(a) where it forms part of a GSM system, in the 900 MHz band or the 1800 MHz band;

(b) where it forms part of a LTE system, in the 1800 MHz band or the 2600 MHz band; and

(c) where it forms part of an UMTS system, in the 1900/2100 MHz band.

(2) The apparatus must only be used –

(a) for mobile communication services on board ships;

(b) where it forms part of a GSM system or an UMTS system, when the ship is two nautical miles or more from the baseline; and

(c) where it forms part of a LTE system, when the ship is four nautical miles or more from the baseline.

(3) When controlled by a ship base transceiver station, the apparatus must operate with a maximum radiated output power which is no greater than –

(a) where it forms part of a GSM system –

(i) 5 dBm in the 900 MHz band; and

(ii) 0 dBm in the 1800 MHz band;

(b) where it forms part of a LTE system, 0 dBm in the 1800 MHz band and in the 2600 MHz band; and

(c) where it forms part of an UMTS system, 0 dBm for each 5 MHz in the 1900/2100 MHz band.

(4) The apparatus must connect directly to a ship base transceiver station that complies with the requirements set out in paragraphs (5) to (7).

(5) Where the apparatus forms part of a GSM system, the requirements referred to in paragraph (4) are –

(a) the ship base transceiver station must only use indoor antennas when the ship is between two and twelve nautical miles from the baseline;

(b) the ship base transceiver station must operate such that there is a maximum power density in external areas of the ship of –80 dBm for each 200 kHz with reference to a 0 dBi measurement antenna gain;

(c) the ship base transceiver station must mitigate interference using the following techniques or other techniques which provide at least an equivalent mitigation of interference –

(i) the receiver sensitivity and disconnection threshold (as described in the GSM standards TS 144 018 and TS 148 008 published by ETSI) of the apparatus is –

(aa) when the ship is between two and three nautical miles from the baseline, equal to or higher than –70 dBm for each 200 kHz; and

(bb) when the ship is between three and twelve nautical miles from the baseline, equal to or higher than –75 dBm for each 200 kHz;

(ii) discontinuous transmission (as described in the GSM standard TS 148 008 published by ETSI) is activated in the uplink from the apparatus to the ship base transceiver station; and

(iii) the timing advance (as described in the GSM standard TS 144 018 published by ETSI) is set to the minimum.

(6) Where the apparatus forms part of a LTE system, the requirements referred to in paragraph (4) are –

(a) the ship base transceiver station must only use indoor antennas when the ship is between four and twelve nautical miles from the baseline;

(b) the ship base transceiver station must only use bandwidth which is no greater than 5 MHz (duplex) for each of the 1800 MHz band or the 2600 MHz band;

(c) the ship base transceiver station must operate such that –

(i) its emissions on board the ship's deck must be equal to or less than –98 dBm for each 5 MHz;

(ii) when the ship is between four and twelve nautical miles from the baseline, the quality criteria are equal to or higher than –83 dBm for each 5 MHz;

(iii) the selection timer is set to 10 minutes;

(iv) the timing advance parameter is set according to a cell range for the distributed antenna system that is equal to 400 metres;

(v) the user inactivity release timer is set to 2 seconds; and

(vi) its carrier frequency must not be aligned with electronic communications networks based on land.

(7) Where the apparatus forms part of a UMTS system, the requirements referred to in paragraph (4) are –

(a) the ship base transceiver station must only use indoor antennas when the ship is between two and twelve nautical miles from the baseline;

(b) the ship base transceiver station must only use bandwidth which is no greater than 5 MHz (duplex);

(c) the ship base transceiver station must operate such that –

(i) its emissions on board the ship's deck must be equal to or less than –102 dBm for each 5 MHz;

(ii) when the ship is between two and twelve nautical miles from the baseline, the quality criteria are equal to or higher than –87 dBm for each 5 MHz;

(iii) the selection timer is set to 10 minutes;

(iv) the timing advance parameter is set according to a cell range for the distributed antenna system that is equal to 600 metres;

(v) the user inactivity release timer is set to 2 seconds; and

(vi) its carrier centre frequency must not be aligned with electronic communications networks based on land.

(8) The apparatus must not cause or contribute to undue interference to any wireless telegraphy.

PHILIP MARNICK

Group Director, Spectrum Group

12th July 2017 *For and by the authority of the Office of Communications*

[1] *R&O.25/2011 (chapter 06.748.50)*