

# Wireless Telegraphy Act Licensing

Terms, Provisions and Limitations

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#### Section 1

# Introduction

This publication details the terms, provisions and limitations which apply to each class of licence listed below, and includes sample licences and, where applicable, the terms and conditions booklets which relate to those licences.

Each Wireless Telegraphy licence issued by the Ofcom under section 8 of the Wireless Telegraphy Act 2006 ("the WT Act") authorises the licensee to establish and use stations or install or use apparatus for wireless telegraphy, subject to the terms, provisions and limitations of that licence.

The terms contained in the General Licence Conditions Booklet (the "Booklet")<sup>1</sup> are incorporated into and form part of the terms, provisions and limitations of each wireless telegraphy licence to which the Booklet applies. (Each such wireless telegraphy licence is referred to as "the Licence"). A copy of these are included in Annex 1 of this document.

Aeronautical				
Aircraft	No separate terms and conditions booklet			
Aircraft (Transportable)	No separate terms and conditions			
Aeronautical Ground Station (Air Traffic/Ground Movement Control)				
Aeronautical Ground Station (Air/Ground Communication Services)				
Aeronautical Ground Station (Airfield Flight Information Service)				
Aeronautical Ground Station (Operations Control)				
Aeronautical Ground Station (General Aviation)				
Aeronautical Ground Station (Fire)				
Aeronautical Ground Station (High Frequency)				
Aeronautical Ground Station (Offshore Oil Platform)				
Aeronautical Ground Station (High Frequency)				
Aeronautical Navigation Aid Stations; Aeronautical Radar				
Aeronautical Station (Recreational Aviation)				
Aeronautical Station (A/G, AFIS and Tower)				
Aeronautical Station (Approach)				
Aeronautical Station (Area Control)				
Aeronautical Station (Aeronautical Broadcast)				

<sup>&</sup>lt;sup>1</sup> <u>http://licensing.ofcom.org.uk/binaries/spectrum/regulations-technical-reference/General\_Licence\_Conditions.pdf</u>.

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A						
Aeronautical Station (ACARS)						
Aeronautical Station (VDL)						
Aeronautical Station (Aerodrome Surface						
and Operational Control)						
Aeronautical Station (Offshore)						
Aeronautical Station- (Fire and						
Emergency)						
Amateur Radio						
American Dedic Foundation	No consulta tours and conditions					
Amateur Radio – Foundation	No separate terms and conditions					
Amateur Radio – Intermediate	booklet					
Amateur Radio – Full						
Broado	casting					
Restricted Radio Services Transmission	No separate terms and conditions					
(Class A-Freely radiating)	booklet					
Restricted Radio Services Transmission	Dookiet					
(Class B-Radiating Cable) Restricted Radio Services Transmission						
(Class C-Freely radiating very low power)						
Community Radio						
Community Radio						
Business Radio						
Business Radio (Area Defined)	Wireless Telegraphy General Licence					
Business Radio (Technically Assigned)	Conditions Booklet					
Business Radio (Simple Site)	- Containerio Bookiet					
Business Radio (Simple UK)						
Business Radio (Suppliers light)						
	Links					
Point to Point Fixed Links Licence	Wireless Telegraphy General Licence					
Point to Point Security CCTV	Conditions Booklet					
Self Co-ordinated Links						
Scanning Telemetry						
5.8 GHz Fixed Wireless Access						
Mari	time					
Coastal Station Radio ( UK)	Wireless Telegraphy General Licence					
Coastal Station Radio (UK) Area Defined	Conditions Booklet					
Coastal Station Radio (International)						
Coastal Station Radio (International)						
Area Defined						
Coastal Station Radio (Marina)						
Coastal Station Radio (Training School)						
Maritime Navigational Aids and Radar						
Maritime Radio (Suppliers and						
Demonstration)						
Differential Global Positioning System						
Ship Portable Radio						
Ship Radio						
Automatic Identification System						
Automatic identification bystem						

Programme Making and Special Events					
Programme Making and Special Events Fixed Site	PMSE Wireless Telegraphy General Licence Conditions Booklet				
Programme Making and Special Events Link					
Programme Making and Special Events Low Power					
UK Wireless Microphone (Annual)	1				
UK Wireless Microphone (Biennial)	]				
Audio Distribution System					
Satellite Services					
Satellite (Earth Station Network)	Wireless Telegraphy General Licence				
Satellite (Permanent Earth Station)	Conditions Booklet				
Satellite (Transportable Earth Station)	-				
Satellite (Non-Fixed Satellite Earth	1				
Station)					
Satellite (Non-Geostationary Earth Station)					
Global Navigation Satellite System	1				
(GNSS) Repeaters					
	1				
Science and Technology					
Non-Operational Temporary Use	Wireless Telegraphy General Licence				
Non-Operational Development	Conditions Booklet				
Ground Probing Radar					
Radar Level Gauges					
High Duty Cycle Network Relay Points	No separate terms and conditions booklet				

#### Section 2

# **Aeronautical**

## **Aircraft**

# Wireless Telegraphy Act 2006 Aircraft Radio Licence

# 1) Licensee Details and Validity

This licence is issued by the Office of Communications ("Ofcom") on <<date>> and replaces any previous authority granted in respect of the service subject to this licence. This licence authorises ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) ("the Radio Equipment") subject to the terms set out below.

# 2) Licence Terms and Conditions

#### Radio Equipment

The following is a generic description of the CAA recorded radio equipment fitted to the referenced aircraft and as such the type and method of installation are CAA approved and authorised for use in the frequency bands listed under this licence.

For registered aircraft it should be ensured that any change to the radio installation is CAA approved with prior notification of any such change being made to the CAA to provide continued validity or re-issue of this licence where appropriate.

The licence also authorises the use of Aeronautical VHF H and portable radio equipment operating in the frequency band 118 to 137 MHz and UHF radio equipment operating in the frequency bands 455.475 to 455.850 MHz and 460.775 to 461.225 MHz for use on the above named aircraft. Emergency equipment operating in frequency bands 121.5 MHZ and 406 MHZ are also authorised.

### Licence Term

This licence shall continue in force until revoked by Ofcom or surrendered by the Licensee.

## User of the Station

The Licensee shall not permit or suffer any person to use the station unless that person:

- (a) possesses a valid Flight Radio Telephony Operators licences issued by or rendered valid by the Civil Aviation Authority; or
- (b) is under the supervision of a person possessing the above.

Article 26 paragraph 2a of the Air Navigation Order exempts glider pilots operating on the nominated glider frequencies and persons being trained as flight crew in UK registered aircraft from the requirement to hold an operators qualification. However, glider pilots must contact air traffic control if they wish to enter controlled airspace for which they must hold the

Flight Radiotelephony Operators Licence.

The Licensee shall ensure that all persons using the station are made aware of and comply with the terms of this licence.

# Other Requirements

The Licensee and all persons using the station shall comply with:

- (a) the relevant provisions of the International Telecommunication Union Constitution and Convention and the Radio Regulations thereunder, in particular (without prejudice to the generality of the foregoing) article 33 of the Constitution, and articles 36, 37, 39, 42 and No 44.1 of the Radio Regulations; and
- (b)
- (c) the relevant statutes and statutory instruments including (without prejudice to the generality of the foregoing), the Wireless Telegraphy Act 2006, the Civil Aviation Act 1982 and the Air Navigation Order 2005, as amended.

#### Licence Variation and Revocation

Ofcom may exercise their power to vary or revoke this licence by a written notice served on the Licensee or by a general notice applicable to holders of this class of Licence.

# Changes

This Licence may not be transferred.

The Licensee must give to the Directorate of Airspace Policy, acting on behalf of Ofcom prior or immediate notice in writing of any change in the details of the name and/or address recorded above.

## **Fees**

The Licensee shall pay to Ofcom the relevant fee as provided in section 12 of the Wireless Telegraphy Act and the Regulations made thereunder:

- (a) on or before the date of issue of this Licence, and/or
- (b) on or before the fee payment date shown above each year, or on or before such dates as shall be notified in writing to the Licensee,

failing which Ofcom may revoke this Licence.

#### **Radio Equipment Use**

The Licensee must ensure that the Radio Equipment is constructed and used only in accordance with the provisions specified in this licence. Any proposal to amend any detail specified in the schedule(s) must be agreed with the Civil Aviation Authority (CAA) or Ofcom in advance and implemented only after this licence has been varied and/or reissued accordingly.

The Licensee must ensure that the Radio Equipment is used only by persons who have been authorised by the Licensee to do so and that such persons are made aware of, and of the requirements to comply with, the terms of this Licence.

# Access and Inspection

The Licensee shall permit representatives of Ofcom or the CAA authorised by Ofcom:

- (a) to have access to the Radio Equipment; and
- (b) to inspect this Licence at any and all reasonable times (or when, in the opinion of Ofcom, an urgent situation exists, at any time) for the purpose of verifying compliance with the terms of this licence.

## Modification, Restriction and Closedown

A person authorised by Ofcom may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:

- (a) a breach of this Licence has occurred; and/or
- (b) the use of the Radio Equipment is causing or contributing to undue interference to the use of other authorised radio equipment.

Ofcom may require the Radio Equipment to be modified or restricted in use, or temporarily or permanently closed down either immediately or on the expiry of such period as may be specified:

- (a) in the interests of long term spectrum planning; or
- (b) in the event of a national or local state of emergency being declared.

Ofcom shall exercise their power by a written notice served on the Licensee and/or by a general notice applicable to this class of Licence published on Ofcom's website (<a href="www.ofcom.org.uk">www.ofcom.org.uk</a>).

#### Interpretation

In this licence:

- (a) the Wireless Telegraphy Act shall mean the Wireless Telegraphy Act 2006;
- (b) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Wireless Telegraphy Act;
- (c) "undue interference" shall have the same meaning as it has under the Wireless Telegraphy Act;
- (d) "inspect" includes examine and test;
- (e) the schedule(s) form(s) part of this Licence with any subsequent schedule(s) which Ofcom may issue as a variation to this Licence at a later date; and
- (f) the Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.

# Aircraft (Transportable)

# Wireless Telegraphy Act 2006 Aeronautical Transportable Radio Licence

This licence is issued by the Office of Communications ("Ofcom") on <<date>> and replaces any previous authority granted in respect of the service subject to this licence.

This licence authorises ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) ("the Radio Equipment") subject to the terms set out below.

#### 1. Licence Terms and Conditions

#### **Radio Equipment**

The Licensee is authorised to use one VHF hand portable aeronautical radio, which operates in the frequency range 118 – 136.975 MHz.

#### **Licence Term**

This licence shall continue in force until revoked by Ofcom or surrendered by the Licensee.

#### User of the Station

The Licensee shall not permit or suffer any person to use the station unless that person:

- (a) possesses a valid Flight Radio Telephony Operators licences issued by or rendered valid by the Civil Aviation Authority; or is under the supervision of a person possessing the above.
- (b) Article 26 paragraph 2a of the Air Navigation Order exempts glider pilots operating on the nominated glider frequencies and persons being trained as flight crew in UK registered aircraft from the requirement to hold an operators qualification. However, glider pilots must contact air traffic control if they wish to enter controlled airspace for which they must hold the Flight Radiotelephony Operators Licence.
- (c) The Licensee shall ensure that all persons using the station are made aware of and comply with the terms of this licence.

#### Other Requirements

The Licensee and all persons using the station shall comply with:

- (a) the relevant provisions of the International Telecommunications Convention and the Radio Regulations thereunder, in particular (without prejudice to the generality of the foregoing) article 31 of the Convention, and articles 43,44,46,49 and No 3651 of the Radio Regulations; and
- (b) the relevant statutes and statutory instruments including (without prejudice to the generality of the foregoing), the Wireless Telegraphy Act 2006, the Civil Aviation Act 1982 and the Air Navigation Order 2005 and its subsequent amendments

#### **Licence Variation and Revocation**

Ofcom may exercise their power to vary or revoke this licence by a written notice served on the Licensee or by a general notice applicable to holders of this class of Licence.

# Changes

This Licence may not be transferred.

The Licensee must give prior or immediate notice to Ofcom in writing of any change in the details of the name and/or address recorded above.

#### **Fees**

The Licensee shall pay to Ofcom the relevant fee as provided in section 12 of the Wireless Telegraphy Act and the Regulations made thereunder:

- (a) on or before the date of issue of this Licence, and/or
- (b) on or before the fee payment date shown above each year, or on or before such dates as shall be notified in writing to the Licensee,

failing which Ofcom may revoke this Licence.

# **Radio Equipment Use**

The Licensee must ensure that the Radio Equipment is constructed and used only in accordance with the provisions specified in this licence. Any proposal to amend any detail specified in the schedule(s) must be agreed with the Civil Aviation Authority (CAA) or Ofcom in advance and implemented only after this licence has been varied and/or reissued accordingly.

The Licensee must ensure that the Radio Equipment is used only by persons who have been authorised by the Licensee to do so and that such persons are made aware of, and of the requirements to comply with, the terms of this Licence.

#### Access and Inspection

The Licensee shall permit representatives of Ofcom or the CAA authorised by Ofcom:

- (a) to have access to the Radio Equipment; and
- (b) to inspect this Licence and CAA Certificate at any and all reasonable times (or when, in the opinion of Ofcom, an urgent situation exists, at any time) for the purpose of verifying compliance with the terms of this licence.

# Modification, Restriction and Closedown

A person authorised by Ofcom may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:

- (a) a breach of this Licence has occurred; and/or
- (b) the use of the Radio Equipment is causing or contributing to undue interference to the use of other authorised radio equipment.

Ofcom may require the Radio Equipment to be modified or restricted in use, or temporarily or permanently closed down either immediately or on the expiry of such period as may be specified:

- (a) in the interests of long term spectrum planning; or
- (b) in the event of a national or local state of emergency being declared.

Ofcom shall exercise their power by a written notice served on the Licensee and/or by a general notice applicable to this class of Licence published on Ofcom's website (<a href="www.ofcom.org.uk">www.ofcom.org.uk</a>).

## Interpretation

In this licence:

- (a) the Wireless Telegraphy Act means the Wireless Telegraphy Act 2006;
- (b) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Wireless Telegraphy Act;
- (c) "undue interference" shall have the same meaning as it has under the Wireless Telegraphy Act;
- (d) "inspect" includes examine and test;
- (e) the schedule(s) form(s) part of this Licence with any subsequent schedule(s) which Ofcom may issue as a variation to this Licence at a later date; and
- (f) the Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.

#### **Aeronautical Ground Station and Aeronautical Station licences**

# WIRELESS TELEGRAPHY ACT 2006 Aeronautical Station Radio Licence

This licence is issued by the Office of Communications ("Ofcom") on and replaces any previous authority granted by Ofcom or the Secretary of State in respect of the service subject to this licence.

This licences authorises ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus ("the Radio Equipment") as described in this Licence subject to the terms set out below. Where the station is providing a service approved under the Air Navigation Order ("ANO"), the use of the station shall be in accordance with a valid ANO Approval granted in respect of the station. The use of the station for test and commissioning transmissions is permitted with the prior agreement of the CAA Safety Regulation Group.

#### 1) Terms

# **Licence Term**

This licence shall continue in force until revoked by Ofcom or surrendered by the Licensee.

#### **Licence Variation and Revocation**

Ofcom may exercise their power to vary or revoke this licence by a written notice served on the Licensee or by a general notice applicable to holders of this class of Licence.

#### Changes

This Licence may not be transferred. The Licensee must give to the Directorate of Airspace Policy, acting on behalf of Ofcom, prior or immediate notice in writing of any change in the details of the name and/or address recorded above.

#### Fees

The Licensee shall pay to Ofcom the relevant fee as provided in section 12 of the Wireless Telegraphy Act and the Regulations made thereunder:

- (a) on or before the date of issue of this Licence, and/or
- (b) on or before the fee payment date shown above each year, or on or before such dates as shall be notified in writing to the Licensee,

failing which Ofcom may revoke this Licence.

# **Radio Equipment Use**

Frequency: (Channel Spacing): (Frequency taken from frequency field) or (As assigned by the Civil Aviation Authority for use in the UK Areas under concession and detailed in the United Kingdom Aeronautical Information Publication (CAP 32))

Class of Emission: (taken from emission code/class field) (Maximum Power): (taken from maximum power field)

#### **Notes**

The Licensee must ensure that the Radio Equipment is constructed and used only in accordance with the parameters set out below. Any proposal to amend any detail specified in this licence must be agreed with the Civil Aviation Authority (CAA) or Ofcom in advance and implemented only after this licence has been varied and/or reissued accordingly.

The Licensee must ensure that the Radio Equipment is used only by persons who have been authorised by the Licensee to do so and that such persons are made aware of, and of the requirements to comply with, the terms of this Licence.

#### Power is expressed in:

- (i) Peak Envelope Power (PX or pX) of a radio transmitter: the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions.
- (ii) Mean Power (PY or pY) of a radio transmitter: the average power supplied to the transmission line by a transmitter during an interval of time sufficiently long compared with the lowest frequency encountered in the modulation taken under normal operating conditions.
- (iii) Carrier Power (PZ or pZ) of a radio transmitter: the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle taken under the condition of no modulation.
- (iv) Effective Radiated Power (in a given direction) by the addition of the letter "e": The product of the power supplied to the antenna and its gain relative to a half wave dipole antenna in a given direction.

For use in formulae, the symbol p denotes power expressed in Watts and symbol P denotes power expressed in decibels relative to a reference level. The symbol e denotes effective

radiated power (erp)(in a given direction). The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

The symbols used to designate the classes of emission have the meanings assigned to them by the Radio Regulations. The Radio Regulations means the 1982 edition of the Radio Regulations and its subsequent amendments.

## **ANO Approval**

Prior to making any transmissions with this radio station, an Air Navigation Order Approval must be held for the purpose for which the station is to be used or a formal authority to undergo commission transmission must have been issued. Any transmissions must only be made under the terms set down in the ANO Approval or authority for commissioning testing.

#### **Access and Inspection**

The Licensee shall permit representatives of Ofcom or the CAA authorised by Ofcom:

- (a) to have access to the Radio Equipment; ,and
- (b) to inspect this Licence and the Radio Equipment,

at any and all times or, when in the opinion of that person an urgent situation exists, at any time to ensure that the Radio Equipment is being used in accordance with the terms of this Licence.

# Modification, Restriction and Closedown

A person authorised by Ofcom may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:

- (a) a breach of this Licence has occurred; and/or
- (b) the use of the Radio Equipment is causing or contributing to undue interference to the use of other authorised radio equipment.

Ofcom may require the Radio Equipment to be modified or restricted in use, or temporarily or permanently closed down either immediately or on the expiry of such period as may be specified:

- (a) in the interests of long term spectrum planning; or
- (b) in the event of a national or local state of emergency being declared.

Ofcom shall exercise their power by a written notice served on the Licensee and/or by a general notice applicable to this class of Licence published on Ofcom's website (<a href="www.ofcom.org.uk">www.ofcom.org.uk</a>).

## Interpretation

In this licence:

- (a) the Wireless Telegraphy Act means the Wireless Telegraphy Act 2006;
- (b) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Wireless Telegraphy Act;

- (c) "undue interference" shall have the same meaning as it has under the Wireless Telegraphy Act;
- (d) "inspect" includes examine and test;
- (e) the schedule(s) form(s) part of this Licence with any subsequent schedule(s) which Ofcom may issue as a variation to this Licence at a later date; and
- (f) the Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.

# **Radio Equipment**

The Radio Equipment subject to the Radio Equipment and Telecommunications Terminal Equipment Directive (1999/5 EC) shall comply with the applicable UK Aeronautical Interface Requirements (published by Ofcom).

# **Aeronautical Navigation Aid Stations; Aeronautical Radar**

# WIRELESS TELEGRAPHY ACT 2006 Aeronautical Navigational Aid Radio Licence

# 1) Licensee Details and Validity:

The Licensee is hereby licensed, subject to the terms, provisions and limitations herein contained, to establish at a sending and receiving station for wireless telegraphy (hereinafter called "the Station") subject to the following conditions:

This licence is issued by the Office of Communications ("Ofcom") on and replaces any previous authority granted in respect of the service subject to this licence.

This licences authorises ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in this Licence (hereinafter called "the Radio Equipment") subject to the terms set out below. The Licensee must hold, or have applied for, an Air Navigation Order approval.

# 2) Terms

#### **Licence Term**

This licence shall continue in force until revoked by Ofcom or surrendered by the Licensee.

#### **Licence Variation and Revocation**

Ofcom may exercise their power to vary or revoke this licence by a written notice served on the Licensee or by a general notice applicable to holders of this class of Licence.

#### Changes

This Licence may not be transferred.

The Licensee must give to the Directorate of Airspace Policy, acting on behalf of Ofcom, prior or immediate notice in writing of any change in the details of the name and/or address recorded above.

#### **Fees**

The Licensee shall pay to Ofcom the relevant fee as provided in section 12 of the Wireless Telegraphy Act and the Regulations made thereunder:

- (a) on or before the date of issue of this Licence, and/or
- (b) on or before the fee payment date shown above each year; or
- (c) on or before such dates as shall be notified in writing to the Licensee,

failing which Ofcom may revoke this Licence.

# **Radio Equipment Use**

Frequency: (Channel Spacing): (Frequency taken from frequency field) or (As assigned by the Civil Aviation Authority for use in the UK Areas under concession and detailed in the United Kingdom Aeronautical Information Publication (CAP 32))

Class of Emission: (taken from emission code/class field)
Maximum Power: (taken from maximum power field)

#### **Notes**

The Licensee must ensure that the Radio Equipment is constructed and used only in accordance with the parameters set out below. Any proposal to amend any detail specified in this licences must be agreed with the Civil Aviation Authority (CAA) or Ofcom in advance and implemented only after this licence has been varied and/or reissued accordingly.

The Licensee must ensure that the Radio Equipment is used only by persons who have been authorised by the Licensee to do so and that such persons are made aware of, and of the requirements to comply with, the terms of this Licence.

# Power is expressed in:

- (i) Peak Envelope Power (px) of a radio transmitter: the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions.
- (ii) Mean Power (py) of a radio transmitter: the average power supplied to the transmission line by a transmitter during an interval of time sufficiently long compared with the lowest frequency encountered in the modulation taken under normal operating conditions.
- (iii) Carrier Power (pz) of a radio transmitter: the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle taken under the condition of no modulation.
- (iv) Effective Radiated Power (in a given direction) by the addition of the letter "e": The product of the power supplied to the antenna and its gain relative to a half wave dipole antenna in a given direction.

The symbols used to designate the classes of emission have the meanings assigned to them by the Radio Regulations. The Radio Regulations means the 1982 edition of the Radio Regulations and its subsequent amendments.

#### Limitations

The Licensee shall use the apparatus only for the purposes of aiding the navigation of any aircraft and only:

a) To receive or transmit any message or signal by non-automatic means; or

b) to receive or transmit a message or signal by automatic means, in order to indicate: to any aircraft its position in relation to any of the apparatus, or to any of the Apparatus the position or absence of any object of any description.

The Licensee shall operate the apparatus on the frequency bands and with the assorted classes of emission, type of frequency, frequency tolerance, bandwidth, pulse characteristics, power, antenna characteristics and other requirements specified in the schedule.

The Licensee must ensure that the Radio Equipment is used only by persons who have been authorised by the Licensee to do so and that such persons are made aware of, and of the requirements to comply with, the terms of this Licence.

# **Access and Inspection**

The Licensee shall permit representatives of Ofcom or the CAA authorised by Ofcom:

- (a) to have access to the Radio Equipment; ,and
- (b) to inspect this Licence and the Radio Equipment,

at any and all times or, when in the opinion of that person an urgent situation exists, at any time to ensure that the Radio Equipment is being used in accordance with the terms of this Licence.

### Modification, Restriction and Closedown

A person authorised by Ofcom may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:

- (a) a breach of this Licence has occurred; and/or
- (b) the use of the Radio Equipment is causing or contributing to undue interference to the use of other authorised radio equipment.

Ofcom may require the Radio Equipment to be modified or restricted in use, or temporarily or permanently closed down either immediately or on the expiry of such period as may be specified:

- (a) in the interests of long term spectrum planning; or
- (b). in the event of a national or local state of emergency being declared.

Ofcom shall exercise their power by a written notice served on the Licensee and/or by a general notice applicable to this class of Licence published on Ofcom's website (www.ofcom.org.uk).

#### Interpretation

In this licence:

- (a) the Wireless Telegraphy Act means the Wireless Telegraphy Act 2006;
- (b) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Wireless Telegraphy Act;

- (c) "undue interference" shall have the same meaning as it has under the Wireless Telegraphy Act;
- (d) "inspect" includes examine and test;
- (e) the schedule(s) form(s) part of this Licence with any subsequent schedule(s) which Ofcom may issue as a variation to this Licence at a later date; and
- (f) the Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.

# **Radio Equipment**

The Radio Equipment subject to the Radio Equipment and Telecommunications Terminal Equipment Directive (1999/5 EC) shall comply with the applicable UK Aeronautical Interface Requirements (published by Ofcom).

#### Section 3

# **Amateur**

This licence is applicable for the following licence classes:

- Amateur Foundation
- Amateur Intermediate
- Amateur Full

#### Section 1

This Licence, issued by the Office of Communications ("Ofcom") on the issue date specified above, authorises the holder named above ("the Licensee") to establish and use stations or install or use radio transmitting and receiving apparatus for wireless telegraphy (the "Radio Equipment") in accordance with the terms, conditions and limitations set out in Section 2 of this Licence.

If this Licence is a Full Licence then the Licensee shall also be authorised to operate in countries which have implemented CEPT Recommendation T/R 61-01 in accordance with Clause 2(1)(b) of Section 2<sup>2</sup>.

This Licence shall be kept at the Main Station Address unless the Licensee is operating in a CEPT country which has implemented CEPT Recommendation T/R 61-01 in which case the Licence may be required for proof of permission to operate (as required by Clause 16(1)(b) of Section 2).

In addition to terms defined elsewhere in this Licence, the definitions and other provisions in Clause 17 of Section 2 apply throughout this Licence, unless the contrary intention appears.

If this Licence is a Full (Reciprocal) Licence or a Full (Temporary Reciprocal) Licence then it has been issued under a reciprocal agreement between Ofcom and the Licensee's home (non-UK) licensing administration rather than on the production of proof of the qualification normally recognised by Ofcom. It is not recommended that a Full (Reciprocal) Licence or a Full (Temporary Reciprocal) Licence is used as a basis for the issue of further licences under reciprocal arrangements by other (non-UK) licensing administrations.

# Section 2 Terms, conditions and limitations

#### 1. Purpose

1(1) The Licensee shall ensure that the Radio Equipment is only used:

<sup>&</sup>lt;sup>2</sup> A list of countries that have implemented T/R 61-01 is available from the European Radiocommunications Office website at <a href="http://www.ero.dk/">http://www.ero.dk/</a>
Une liste des pays ayant mis en oeuvre T/R 61-01 est disponible sur le site de l'European Radiocommunications Office à <a href="http://www.ero.dk/">http://www.ero.dk/</a>
Eine Liste der Länder, welche T/R 61-01 implementiert haben, sind auf Internetseite des Europäischen Radiokommunikationsbüros verfügbar unter <a href="http://www.ero.dk/">http://www.ero.dk/</a>.

- a) for the purpose of self-training in radio communications, including conducting technical investigations; and
- b) as a leisure activity and not for commercial purposes of any kind.
- 1(2) The Licensee may use or permit the use of the Radio Equipment by a member of a User Service during any operation conducted by a User Service or during any exercise relating to such an operation in each case for the purpose of sending Messages on behalf of the User Service.
- 1(3) The Licensee may use the Radio Equipment to assist with communications in times of disaster or national or international emergency.

#### 2. Location

- 2(1) The Licensee may only operate the Radio Equipment in the United Kingdom (including its territorial seas) subject to sub-clauses (a) (c):
  - a) Where this Licence is a Full Licence only, and unless it is a Full (Club) or Temporary Licence, the Licensee may operate the Radio Equipment from a Maritime Mobile location;
  - b) Where this Licence is a Full Licence only, and unless it is a Full (Club) or Temporary Licence, the Licensee may operate the Radio Equipment in countries which have implemented CEPT Recommendation T/R 61-01.
  - c) The Radio Equipment may not be established or used in any Aircraft or Airborne Vehicle.
- 2(2) The Licensee shall use the following appropriate Regional Secondary Locator after the United Kingdom Callsign prefix "G", "M" or "2" as specified in Section 1, when identifying the Radio Equipment in accordance with Clause 13(1):

(a) England - No Regional Secondary Locator;

(b) Guernsey - "U"; (c) Isle of Man - "D"; (d) Jersey - "J"; (e) Northern Ireland - "I"; (f) Scotland - "M"; (g) Wales - "W".

2(3) If the Callsign specified in Section 1 begins with the number "2", the provisions of Clause 2(2) shall apply with the addition that when used in England, the Secondary Locator "E" shall be used.

# 3. Operators and qualifications

- 3(1) Subject to Clauses 1(2), 3(2) and 3(3), the Licensee shall ensure that the Radio Equipment shall only be operated by the Licensee personally and by no other persons.
- 3(2) The Licensee may permit the operation of the Radio Equipment by a person who holds a current United Kingdom Amateur Radio Licence provided that any such operation of the Radio Equipment is carried out in the presence of and under the direct supervision of the Licensee and that such persons are made aware of, and of the requirement to comply with, the terms, conditions and limitations of this Licence.

- 3(3) Only where this Licence is a Full Licence or a Full (Club) Licence may the Licensee also permit the operation of the Radio Equipment:
  - a) by a person on a Recognised Foundation Training Course; or
  - b) by a non-UK person who holds a current radio amateur licence issued by any other country,
  - c) by any person:
    - I. who does not fall within Clause 3(3)(a) or (b);
    - II. whom the Licensee has reasonable grounds to believe is not a Disqualified Person; and
    - III. who holds a Radio Amateurs' Examination Pass Certificate recognised by Ofcom.

provided that, in each case, any such operation of the Radio Equipment is carried out in the presence of and under the direct supervision of the Licensee and that such persons are made aware of, and of the requirement to comply with, the terms, conditions and limitations of this Licence.

- 3(4) Only where this Licence is a Full Licence may the Licensee permit a non-licensed person to send a Message using the Radio Equipment provided that the Radio Equipment is operated by the Licensee.
- 3(5) Only where this Licence is a Full (Club) Licence issued to the Licensee for use on behalf of a Club, may the Licensee:
  - a) authorise any Club member who holds their own separate Full Licence to use and supervise the operation of the Radio Equipment on the Licensee's behalf under this Licence:
  - b) permit a non-licensed person to send a Message using the Radio Equipment provided the Radio Equipment is operated by the Licensee or by a Club member who holds their own separate Full Licence,

provided that, in each case, such persons are made aware of, and of the requirement to comply with, the terms, conditions and limitations of this Licence.

#### 4. Variation and revocation

- 4(1) Subject to Clause 4(5), this Licence shall continue in force until revoked by Ofcom in accordance with Clause 4(2) or surrendered by the Licensee.
- 4(2) Pursuant to schedule 1, paragraph 8 of the Wireless Telegraphy Act 2006 (the "Act"), Ofcom may not revoke this Licence under schedule 1, paragraph 6 of the Act except:
  - a) at the request of, or with the consent of, the Licensee:
  - b) if there has been a breach of any of the terms, conditions or limitations of the Licence;
  - c) in accordance with schedule 1, paragraph 8(5) of the Act;
  - d) if it appears to Ofcom to be necessary or expedient to revoke the Licence for the purposes of complying with a direction by the Secretary of State given to Ofcom under section 5 of the Act:
  - e) for reasons related to the management of the radio spectrum, provided that in such cases the power to revoke may only be exercised after first giving reasonable notice to Licensees;

- f) where this Licence is a Paper Licence, for failure by the Licensee to pay the Licence Fee on or before the date of issue of this Licence;
- g) where this is a Full (Club) Licence, Ofcom is satisfied that the Licensee no longer represents the club; or
- h) where the Licensee has been convicted of an offence under the Wireless Telegraphy Acts.
- 4(3) Where Ofcom exercises its power to revoke or vary the Licence in accordance with schedule 1, paragraph 6 of the Act, the Licensee shall be notified in writing, or by email, or by a general notice. Any general notices will be posted on the Ofcom website<sup>3</sup>.
- 4(4) Ofcom reserves the right to publish the Callsign of the Licensee if the Licence is revoked.
- 4(5) Ofcom may revoke this Licence five years after the later of:
  - a) the date on which the Licensee last notifies Ofcom that the Licensee wishes to amend any of the details set out in Section 1 of the Licence; or
  - b) the date on which the Licensee last confirms to Ofcom that the details set out in Section 1 of the Licence are still valid.4
- 4(6) In relation to the following bands:
  - a) 2310 to 2350 MHz;
  - b) 2390 to 2400 MHz; and
  - c) 3400 to 3410 MHz.

Ofcom may vary this licence for reasons related to interference management after first giving reasonable notice of three months.

#### 5. Modification, restriction and closedown

- 5(1) A person authorised by Ofcom may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down with immediate effect if, in the reasonable opinion of the person authorised by Ofcom:
  - a) a breach of this Licence has occurred; and/or
  - b) the use of the Radio Equipment is causing or contributing to Undue Interference to the authorised use of other radio equipment.
- 5(2) Ofcom may require the Radio Equipment to be modified or restricted in use, or temporarily closed down either immediately or on the expiry of such period as may be specified in the event of a national or local state of emergency being declared. Ofcom may only exercise this power after a written notice is served on the Licensee or a general notice is published. Any general notices will be posted on the Ofcom website.
- 5(3) When operating the Radio Equipment from a Maritime Mobile location, the Licensee shall cease to operate the Radio Equipment on the demand of the Vessel's master.

# 6. Changes

<sup>&</sup>lt;sup>3</sup> www.ofcom.org.uk

<sup>&</sup>lt;sup>4</sup> For quidance please refer to note (i) to this Licence.

- 6(1) This Licence is personal to the Licensee and may not be transferred.
- 6(2) The Licensee must give immediate notice to Ofcom either in writing or by means of Ofcom's on-line licensing system of any change to the Licensee's name, Main Station Address (or mailing address if different) from that recorded in this Licence.
- 6(3) By no later than five years after the date of issue of this Licence, unless during that five year period the Licensee has given notice to Ofcom of any change to any of the Licensee's details as set out in Section 1 of the Licence in accordance with Clause 6(2), the Licensee must confirm to Ofcom that the details set out in Section 1 of this Licence remain current and accurate. The Licensee must make a further confirmation to Ofcom once every five years from the later of:
  - a) the date on which the Licensee last confirms to Ofcom that the details set out in Section 1 of this Licence remain current and accurate; and
  - b) the date on which the Licensee last gives notice to Ofcom of any change to the Licensee's details in accordance with Clause 6(2),

unless during that five year period the Licensee has already given notice to Ofcom of a change to any of the Licensee's details set out in Section 1 in accordance with Clause 6(2), in which case the subsequent five year period will be calculated from the date on which the Licensee gave that notice. Failure to do so may lead to the revocation of this Licence in accordance with Clause 4(5).

# 7. Equipment

- 7(1) The Licensee shall ensure that:
  - a) the emitted frequency of the apparatus comprised in the Radio Equipment is as stable and as free from Unwanted Emissions as the state of technical development for amateur radio apparatus reasonably permits; and
  - b) whatever class of emission is in use, the bandwidth occupied by the emission is such that not more than 1% of the mean power of the transmission falls outside the nominal modulated carrier bandwidth<sup>5</sup>.
- 7(2) Where this Licence is a Foundation Licence, the Licensee shall only use commercially available Radio Equipment which satisfies IR 2028. Foundation Licence holders may also use Radio Equipment constructed using commercially available kits which satisfy IR 2028.
- 7(3) Notwithstanding any other terms of this Licence, the Licensee shall ensure that the Radio Equipment is designed, constructed, maintained and used so that its use does not cause any Undue Interference to any wireless telegraphy.
- 7(4) If any Undue Interference to wireless telegraphy is caused by the radiation of Unwanted Emissions from the Radio Equipment, then the Licensee shall suppress the Unwanted Emissions to the degree satisfactory to Ofcom.
- 7(5) The Licensee shall conduct tests from time to time to ensure that the requirements set out in this Clause 7 are met.

<sup>&</sup>lt;sup>5</sup> Please refer to note (a) to this Licence.

7(6) In order to reduce the likelihood of causing Undue Interference, the Licensee shall ensure that the Radio Equipment is capable of receiving Messages on the same frequencies and with the same classes of emission in use for the transmission of Messages by the Radio Equipment.

# 8. Access and inspection

- 8(1) The Licensee shall permit any person authorised by Ofcom:
  - a) to inspect the Licence; and
  - b) to have access to the Radio Equipment for the purposes of inspection, examination and testing,

at any and all reasonable times or, when in the reasonable opinion of that person an urgent situation exists, at any time to ensure that the Radio Equipment is being used in accordance with the terms of this Licence.

#### 9. Limitations

- 9(1) Each of the limitations set out in this Clause 9 are without prejudice to the provisions of Clause 1 of this Licence.
- 9(2) When operating the Radio Equipment the Licensee shall:
  - a) only use the frequency bands specified in Schedule 1, subject to the limitations set out in that Schedule;
  - b) only use a power level relating to those frequency bands which does not exceed the maximum power level specified in Schedule 1; and
  - c) take account of any other limitations set out in Schedule 1 which apply to the class of Licence held by the Licensee.
- 9(3) Before operating the Radio Equipment on a Vessel, the Licensee shall install, use or make changes to the Radio Equipment only with the written permission of the Vessel's Master.
- 9(4) Whilst operating the Radio Equipment on a Vessel, the Licensee shall observe radio silence on the advice of the Vessel's Master.
- 9(5) When the Licensee operates the Radio Equipment on a Vessel in international waters, use of the radio spectrum shall continue to be made in accordance with Schedule 1, except that the Licensee shall use only those frequency bands which, in accordance with the Radio Regulations, have an allocation to the amateur service in the International Telecommunication Union (ITU) region being visited.
- 9(6) The Licensee may receive Messages from an overseas amateur or from a UK Amateur duly authorised by Ofcom on a frequency band not specified in Schedule 1 but the Licensee may only transmit on a band specified in Schedule 1 which is authorised under Clause 9(2).
- 9(7) The Licensee shall comply with all relevant statutory enactments including, without limitation, the Wireless Telegraphy Acts.

# 10. Unattended and remote control operation

- 10(1) The Licensee may conduct Unattended Operation of Radio Equipment provided that any such operation is consistent with the terms of this Licence. Additional restrictions which apply to the Unattended Operation of Beacons are specified in Schedule 2 to this Licence.
- 10(2) Subject to Clause 10(3), the Licensee may also conduct Remote Control Operation of Radio Equipment (including, for the avoidance of doubt, Beacons) provided that any such operation is consistent with the terms of this Licence.
- 10(3) This Clause 10 does not permit the Licensee to install Radio Equipment capable of Remote Control Operation for general unsupervised use by other Amateurs.
- 10(4) Any communication links<sup>6</sup> used to control the Radio Equipment or to carry Messages to or from the Radio Equipment in accordance with Clause 10(2) must be adequately secure so as to ensure compliance with Clause 3 of this Licence. Any security measures must be consistent with Clause 11(2) of this Licence.
- 10(5) The use of any such communication links referred to in Clause 10(4) must be failsafe such that any failure will not result in unintended transmissions or any transmissions of a type not permitted by this Licence.
- 10(6) If this Licence is a Foundation Licence or an Intermediate Licence, and the Licensee wishes to establish communication links to operate the Radio Equipment in accordance with Clause 10(4), then the Licensee may only do so using wireless communication links and the Licensee may only use the amateur band allocations detailed in Schedule 1<sup>6</sup> to operate those links. Any such communications links shall be subject to a maximum power level of 500 mW pep e.r.p.
- 10(7) Only where this Licence is a Full Licence, Full (Reciprocal) Licence, Full (Temporary Reciprocal) Licence or a Full (Club) Licence, the Licensee may make use of any communications links (including, for the avoidance of doubt, the amateur band allocations detailed in Schedule 1<sup>7</sup>) to establish the wireless communication links referred to in Clause 10(4).

# 11. Messages

- 11(1) The Licensee shall be permitted to use the Radio Equipment to discuss any topics of mutual interest with other Amateurs, and to seek to receive and impart any information and any ideas<sup>8</sup>.
- 11(2) Unless the Radio Equipment is being used for the purposes of clauses 1(2) or 1(3) in the UK:
  - a) Messages sent from the station shall only be addressed to other Amateurs or to the stations of those Amateurs;
  - b) Messages sent from the station shall not be encrypted for the purposes of rendering the Message unintelligible to other radio spectrum users.

<sup>&</sup>lt;sup>6</sup> Please refer to note (f) to this Licence

<sup>&</sup>lt;sup>7</sup> Please refer to note (g) to this Licence

<sup>&</sup>lt;sup>8</sup> Please refer to note (h) to this Licence.

- 11(3) The Licensee may use codes and abbreviations for communications as long as they do not obscure or confuse the meaning of the Message.
- 11(4) The Licensee shall not send Messages (whether directly or for onwards transmission by another station) for general reception other than:
  - a) initial calls; or
  - b) to groups or networks ("nets") of three or more Amateurs as long as communication is first established separately with at least one Amateur in any such group;
  - c) Messages transmitted via a mailbox or bulletin board for reception by Amateurs.

# **12. Log**

- 12(1) For the purposes of any interference investigation, to determine compliance with the terms, conditions and limitations of this Licence, or for any other matter concerning the enforcement of any relevant legislation, the Licensee shall at the request of a person authorised by Ofcom, keep a permanent record (a "log") of such matters concerning the operation of the Radio Equipment, over such period, and in such form, as the authorised person may require.
- 12(2) When operating the Radio Equipment from a Vessel, the Licensee shall, at the request of the Vessel's master, keep a log of such matters concerning the operation of the Radio Equipment as the master may require.

### 13. Identification

- 13(1) The Licensee, or, if this Licence is a Full Licence, then any other authorised person who uses the Radio Equipment, shall ensure that:
  - a) the station is clearly identifiable at all times;
  - b) the Callsign is transmitted as frequently as is practicable during transmissions, unless the specific requirements of Note (g) to the Notes to Schedule 1 of this Licence apply; and
  - c) the Callsign is given in voice or other appropriate format consistent with the mode of operation.

# 14. Recorded or retransmitted Messages

- 14(1) The Licensee may record and retransmit Messages addressed to the Licensee received from other Amateurs:
  - a) with whom the Licensee is in direct communication; or
  - b) which are intended for retransmission to a specified Amateur.
- 14(2) When recording and retransmitting the Message of another Amateur, if the Licensee also records and retransmits the Callsign of that Amateur, then the Licensee shall transmit the Callsign in such a way that the origin of the Message and the origin of the retransmission are clear.

# **15. Fees**

The Licensee shall pay to Ofcom the relevant sums as provided in section 12 of the Wireless Telegraphy Act 2006 and the regulations made thereunder.

# 16. Operation by the Licensee in CEPT countries

16(1) Where the Licensee is authorised to operate abroad in accordance with Clause 2(1)(b), the Licensee shall:

- a) comply with the requirements applicable to the use of wireless telegraphy apparatus at the location of operation in the host country;
- b) present this Licence upon request to the relevant supervisory authorities in the host country;
- c) unless instructed otherwise by the host country, use the Callsign specified in Section 1 of this Licence after the appropriate host country Callsign prefix.

# 17. Interpretation

17(1) In this Licence, unless the context otherwise requires:

- a) "Act" means the Wireless Telegraphy Act 2006;
- b) "Alternative Address" means a fixed postal address in the United Kingdom other than the Main Station Address;
- c) "Aircraft" and "Airborne Vehicles" includes full size and models and also includes balloons whether tethered or free:
- d) "Amateur" means a holder of a United Kingdom Amateur Radio Licence;
- e) "Beacon" means automatic transmitting only Radio Equipment which is operated by the Licensee in accordance with Clause 10 and Schedule 2 of this Licence;
- f) "Callsign" means the unique group of alphanumeric characters specified in Section 1 of this Licence and used to identify the Radio Equipment in accordance with ITU Radio Regulations;
- g) "CEPT" means the European Conference of Postal and Telecommunications Administrations;
- h) "Club" means an amateur radio club;
- i) "Disqualified Person" means any person:
  - I. whose United Kingdom Amateur Radio Licence is currently revoked or varied as a result of revocation action:
  - II. whose last application for a United Kingdom Amateur Radio Licence was refused as a result of revocation action; or
  - III. who, in the last six months, has been convicted of an offence under the Wireless Telegraphy Acts.
- j) "Foundation Licence" means a Licence issued to an Amateur who is the holder of a Radio Amateurs' Examination Pass Certificate which confirms that the holder has achieved the appropriate level of competence required by Ofcom to be issued with a Foundation Licence;
- k) "Full Licence" means a Licence issued to an Amateur who is the holder of a Radio Amateurs' Examination Pass Certificate which confirms that the holder has achieved the appropriate level of competence required by Ofcom to be issued with a Full Licence:
- I) "Full (Club) Licence" means a Licence issued to an Amateur who is the holder of a separate Full Licence and who represents a Club;

- m) "Full (Reciprocal) Licence" means a Licence issued to an Amateur who holds a Harmonised Amateur Radio Examination Certificate which confirms that the holder has achieved the appropriate level of competence required by Ofcom to be issued with a Full (Reciprocal) Licence;
- n) "Full (Temporary Reciprocal) Licence" means a licence issued to an Amateur who holds an amateur radio Licence issued by a foreign (non-UK) administration recognised by Ofcom and which confirms that the holder has achieved the appropriate level of competence required by Ofcom to be issued with a Full (Temporary Reciprocal) Licence;
- o) "Harmonised Amateur Radio Examination Certificate" means a certificate issued by a non-UK licensing administration as evidence that the holder has achieved a specified level of qualification consistent with the requirements of CEPT Recommendation T/R 61-02:
- p) "Inspect" means examine and test;
- q) "Intermediate Licence" means a licence issued to an Amateur who is the holder of Radio Amateurs' Examination Pass Certificate which confirms that the holder has achieved the appropriate level of competence required by Ofcom to be issued with an Intermediate Licence;
- r) "Licence Fee" means the licence fee payable by the Licensee to Ofcom only where this Licence is a Paper Licence;
- s) "Licensee" means the holder of this Licence named in Section 1 of the Licence;
- t) "Main Station Address" means the main station address stated in Section 1 of this Licence:
- u) "Maritime Mobile" means the Radio Equipment is located on any Vessel at Sea;
- v) "Message" means a signal which conveys information to or from Radio Equipment operated by an Amateur in accordance with a United Kingdom Amateur Radio Licence;
- w) "Mobile" means the Radio Equipment is located in the United Kingdom:
  - I. in or on any vehicle or conveyance;
  - II. on the person of the Licensee where the Licensee is a pedestrian; or
  - III. on any Vessel on Inland Waters:
- x) "Modifier" means the applicable Regional Secondary Locator and may also include a suffix in accordance with note (d) to this Licence;
- y) "Ofcom" means the Office of Communications;
- (aa) "Paper Licence" means a Licence that is issued to the Licensee in paper form by Ofcom:
- (bb) "Radio Amateurs' Examination Pass Certificate" means an original certificate issued by an examination body which is recognised by Ofcom which confirms that that person named on the certificate has achieved the level of competence required to hold either a Full, Intermediate or Foundation United Kingdom Amateur Radio Licence;
- (cc) "Radio Equipment" has the meaning given to it in Section 1 of this Licence;
- (dd) "Recognised Foundation Training Course" means a training course which, if successfully completed, will lead to the person attending the course being issued with a Radio Amateurs' Examination Pass Certificate which confirms that that person has achieved the level of competence required by Ofcom to be issued with a Foundation Licence:
- (ee) "Regional Secondary Locator" means a letter used by the Licensee to convey the location of the Radio Equipment in accordance with Clause 2(2) and note (c) to this Licence;
- (ff) "Remote Control Operation" means Unattended Operation but where the Radio Equipment is operated by remote control, that is, where the Licensee has the ability to control the Radio Equipment from a different location to that where the Radio Equipment is located;
- (gg) "Secretary of State" means the Secretary of State for Trade and Industry;

- (hh) "Telecommunication Convention" and "Radio Regulations" mean the International Telecommunication Convention and the Radio Regulations annexed thereto and include any Convention or Regulation which may from time to time be enacted or brought into force in substitution for, in amendment of, or in addition to, the Telecommunication Convention or Radio Regulations;
- (ii) "Temporary Licence" means a Licence which is issued to a radio amateur who is already licensed by a foreign (non-UK) licensing administration and who wishes to operate on a temporary basis in the UK. A UK Callsign will not be issued with a Temporary Licence;
- (jj) "Temporary Location" means a fixed location in the United Kingdom which is not the Main Station Address or an Alternative Address;
- (II) "Unattended Operation" means the operation of Radio Equipment by the Licensee when the Licensee is in a different location to that where the Radio Equipment is located; (mm) "Undue Interference" shall have the meaning given by Section 115 of the Act;
- (nn) "United Kingdom" means the United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man;
- (oo) "United Kingdom Amateur Radio Licence" means a Full, Intermediate, Foundation, Full (Reciprocal), Full (Temporary Reciprocal), or Full (Club) Amateur Radio Licence; (pp) "Unwanted Emissions" means spurious emissions and out-of-band emissions as defined in the Radio Regulations:
- (qq) "User Service" means the British Red Cross, St John Ambulance, the St Andrew's Ambulance Association, the Women's Royal Voluntary Service, the Salvation Army, any Government Department, any 'Category 1' responder, and any Category 2 responder as defined in the Civil Contingencies Act 2004;
- (rr) "Vessel" means any floating structure which is capable of being manned;
- (ss) "Vessel at Sea" means a Vessel operating on the seaward side of the low-water line along the coastline as marked on large scale charts officially recognised by the relevant coastal state:
- (tt) "Vessel on Inland Waters" means a Vessel operating on the landward side of the low-water line along the coastline as marked on large scale charts officially recognised by the relevant coastal state; and
- (uu) "Wireless Telegraphy Acts" means the Wireless Telegraphy Act 2006 and the Wireless Telegraphy (Content of Transmission) Regulations 1988 as either of them have been or may be amended from time to time.
- 17(2) The Licence consists of Section 1 and Section 2 (which includes Schedule 1 and Schedule 2) together with the notes thereto, as any of them may be varied from time to time.
- 17(3) The headings in this Licence are for ease of reference only and shall not affect the interpretation of the Licence.
- 17(4) To the extent that they do not conflict with or are not inconsistent with any of the Clauses herein, the notes to the Schedules and the notes to the Licence are binding on the Licensee.
- 17(5) The Interpretation Act 1978 shall apply to this Licence as it applies to an Act of Parliament.

#### Section 4

# Broadcasting

# Restricted Radio Services Transmission (Class A-Freely radiating),

# RESTRICTED RADIO SERVICES TRANSMISSION LICENCE CLASS A - FREELY RADIATING

The Schedules form part of the Licence. Schedule I shows the person who is authorised to use the radio equipment "the Licensee" and, along with Schedule II describes the limitations on the installation and use of the Radio Equipment covered by the licence and other special conditions.

Issued on behalf of: Office of Communications (Ofcom) Riverside House 2a Southwark Bridge Road London SE1 9HA

#### NOTES TO SCHEDULE I

- (A) The symbols used to designate the classes of emission in Box J have the meanings assigned to them in the International Telecommunication Convention and Radio Regulations.
- (B) The maximum power specified in Box K is the effective monopole radiated power (emrp) in respect of medium wave transmissions, and the effective radiated power (erp) in respect of VHF transmissions.
- (C) In the case of VHF transmissions, the polarisation specified in Box L is horizontal (H), vertical (V) or mixed (M).
- (D) Unless otherwise stated in Box N, the level of suppression of radiated unwanted emissions shall be that specified in the Radio Regulations of the International Telecommunication Union (Appendix 8-2).

#### SCHEDULE II

#### **Special Conditions to the Licence**

# **Purpose of Use**

(1) The Licensee named in Box B of Schedule I shall use the station named in Box G of Schedule I for emitting and receiving wireless telegraphy messages by the method of telephony for the purpose of providing a restricted sound broadcasting service in the United Kingdom.

#### **Limitations on Use**

(2) The Radio Equipment may only be used:

- (a) On the frequency shown in Box M of Schedule I;
- (b) At a power not exceeding that in Box K of Schedule I;
- (c) With the emission characteristics described in Box J of Schedule I;
- (d) With the polarisation shown in Box L of Schedule I;
- (e) At the location shown in Box H of Schedule I.

# **Change of Address of Emergency Contact**

(3) The Licensee shall give to Ofcom (at the address given on Schedule I of the Licence) prior written notice of any change of name, address, or telephone number of the emergency contact identified in Box D of Schedule I.

# Interpretation

#### (4) In this Licence:

"United Kingdom" means the United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man; and

"restricted sound broadcasting service" means a service of the type defined in section 84(2)(a)(iii) of the Broadcasting Act 1990.

#### **General Terms and Conditions of the Licence**

1 This Licence granted under section 8 of the Wireless Telegraphy Act 2006 ("the Act") by Ofcom on their behalf authorises the Licensee to establish, install and use radio transmitting and receiving stations and/or radio apparatus as described in Schedule I (hereinafter together called the "Radio Equipment") subject to the terms set out below.

#### **Licence Term**

2 This Licence shall continue in force until the date of expiry shown in Schedule I, unless revoked earlier by Ofcom or surrendered by the Licensee.

# **Licence Variation and Revocation**

3 Ofcom may exercise their power to vary or revoke this Licence by a written notice served on the Licensee or by a general notice.

#### Changes

- 4 This Licence may not be transferred.
- 5 The Licensee must give prior or immediate notice to Ofcom of any change of the name and/or address shown in Schedule I.

#### **Fees**

6 The Licensee shall pay to Ofcom the fee as shown at the top of page 1 of the Licence in accordance with the Wireless Telegraphy Act 2006 and the regulations made thereunder, before the date of issue of this Licence.

#### **Radio Equipment Use**

- 7 The Licensee must ensure that the Radio Equipment is constructed and used only in accordance with the provisions specified in the schedules. Any proposal to amend any detail specified in the schedule(s) must be agreed with Ofcom in advance and implemented only after this Licence has been varied or reissued accordingly.
- 8 The Licensee must ensure that the Radio Equipment is only used by persons who have been authorised by the Licensee to do so and that such persons are made aware of, and comply with, the terms of this Licence.

# Access and Inspection

- 9 The Licensee shall permit any person authorised by Ofcom:
  - i) to have access to the Radio Equipment; and
  - ii) to inspect this Licence and the Radio Equipment at any and all reasonable times or, when in the opinion of that person an urgent situation exists, at any time, to ensure the Radio Equipment is being used in accordance with the terms of this Licence.

# **Modification, Restriction and Closedown**

- 10 A person authorised by Ofcom may require the Radio Equipment to be modified in operation, restricted or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:
  - i) a breach of this Licence has occurred; and/or
  - ii) the use of the Radio Equipment is causing or contributing to undue interference to the use of other authorised radio equipment.

# **Powers of Notice**

- 11 Ofcom may serve written notice on the Licensee and require the Radio Equipment to be modified in operation, restricted or temporarily or permanently closed down either immediately or on the expiry of such period as may be specified in the notice:
  - i) in the interests of long term spectrum planning; or
  - ii) in the event of a national or local state of emergency being declared.

#### Interpretation

12 In this Licence:-

- i) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Act;
- ii) the expression "undue interference" shall have the same meaning that it has under the Act, as modified by the Communications Act 2003;
- iii) the expression "inspect" includes examine and test;
- iv) the schedules form part of this Licence together with any subsequent schedules which Ofcom may issue as a variation to this Licence at a later date;
- v) the Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.

#### **NOTES TO THE LICENCE**

- (1) The Licensee shall surrender the licence to any person acting on behalf of Ofcom forthwith upon its revocation.
- (2) The holding of this Licence does not relieve the Licensee (or any person whose services the Licensee is contracted to transmit) of any requirement to hold any other licences (particularly that required by the Broadcasting Act 1990).
- (3) The technical specifications of the transmitter shall be as set out in Ofcom's "RSLs: Notes of Guidance for applicants".

## Restricted Radio Services Transmission (Class B-Radiating Cable)

#### RESTRICTED RADIO SERVICES TRANSMISSION LICENCE

The Schedules form part of the Licence. Schedule I shows the person who is authorised to use the radio equipment "the Licensee" and, along with Schedule II describes the limitations on the installation and use of the Radio Equipment covered by the licence and other special conditions.

Issued on behalf of:
Office of Communications (Ofcom)
Riverside House
2a Southwark Bridge Road
London
SE1 9HA

#### NOTES TO SCHEDULE I

- (A) The symbols used to designate the classes of emission in Box H have the meanings assigned to them in the International Telecommunication Convention and Radio Regulations.
- (B) Unless otherwise stated in Box K, the level of suppression of radiated unwanted emissions shall be that specified in the Radio Regulations of the International Telecommunication Union (Appendix 8-2).

#### **SCHEDULE II**

#### **Special Conditions to the Licence**

#### **Purpose of Use**

(1) The Licensee named in Box B of Schedule I shall use the station named in Box F of Schedule I for emitting and receiving wireless telegraphy messages by the method of telephony for the purpose of providing a restricted sound broadcasting service in the United Kingdom.

# **Limitations on Use**

- (2) The Radio Equipment may only be used:
  - (a) On the frequencies shown in Box J of Schedule I;

- (b) With the emission characteristics described in Box H of Schedule I;
- (c) At the location shown in Box G of Schedule I.
- (d) with a field strength at the boundary of the installation not exceeding that specified in Box I of Schedule I;
- (e) with the level of suppression of unwanted emissions specified in Box K of Schedule I.

# **Change of Address of Emergency Contact**

(3) The Licensee shall give to the Ofcom (at the address given on page 1 of the Licence) prior written notice of any change of name, address, or telephone number of the emergency contact identified in Box D of Schedule I.

#### Interpretation

- (4) In this Licence:
  - "United Kingdom" means the United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man; and
  - "restricted sound broadcasting service" means a service of the type defined in section 245(4)(c) of the Communications Act 2003.

#### **General Terms and Conditions of the Licence**

1 This Licence granted under section 8 of the Wireless Telegraphy Act 2006 ("the Act") by Ofcom authorises the "Licensee" to establish, install and use radio transmitting and receiving stations and/or radio apparatus as described in Schedule I (hereinafter together called the "Radio Equipment") subject to the terms set out below.

#### **Licence Term**

2 This Licence shall enter into force on the Commencement Date (shown in Box E of Schedule I) and , subject to the payment of the fees in the manner described in clause 6, continue in force from year to year unless revoked by Ofcom or surrendered by the Licensee.

#### **Licence Variation and Revocation**

3 Ofcom may exercise its power to vary or revoke this Licence by a written notice served on the Licensee or by a general notice.

#### **Changes**

- 4 This Licence may not be transferred.
- 5 The Licensee must give prior or immediate notice to Ofcom of any change of the name and/or address as shown in Schedule I.

#### **Fees**

- 6 The Licensee shall pay to Ofcom the relevant fee as provided in section 12 of the Act and the Regulations made thereunder:
  - (a) on or before the date of issue of this Licence; and

(b) on or before the anniversary date of the Commencement Date in each year the fee on renewal;

failing which Ofcom may revoke this licence.

# **Radio Equipment Use**

- 7 The Licensee must ensure that the Radio Equipment is constructed and used only in accordance with the provisions specified in the schedules. Any proposal to amend any detail specified in the schedules must be agreed with Ofcom in advance and implemented only after this Licence has been varied or reissued accordingly.
- 8 The Licensee must ensure that the Radio Equipment is only used by persons who have been authorised by the Licensee to do so and that such persons are made aware of, and comply with, the terms of this Licence.

#### **Access and Inspection**

- 9 The Licensee shall permit any person authorised by Ofcom:
  - i) to have access to the Radio Equipment; and
  - ii) to inspect this Licence and the Radio Equipment at any and all reasonable times or, when in the opinion of that person an urgent situation exists, at any time, to ensure the Radio Equipment is being used in accordance with the terms of this Licence.

# **Modification, Restriction and Closedown**

- 10 A person authorised by Ofcom may require the Radio Equipment to be modified in operation, restricted or temporarily or permanently closed down immediately if in the opinion of the person authorised by the Ofcom:
  - i) a breach of this Licence has occurred; and/or
  - ii) the use of the Radio Equipment is causing or contributing to undue interference to the use of other authorised radio equipment.

#### **Powers of Notice**

- 11 Ofcom may serve written notice on the Licensee and require the Radio Equipment to be modified in operation, restricted or temporarily or permanently closed down either immediately or on the expiry of such period as may be specified in the notice:
  - i) in the interests of long term spectrum planning; or
  - ii) in the event of a national or local state of emergency being declared.

#### Interpretation

12 In this Licence:-

- i) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Act;
- ii) the expression "undue interference" shall have the same meaning that it has under the Act:
- iii) the expression "inspect" includes examine and test;

- iv) the schedules form part of this Licence together with any subsequent schedules which Ofcom may issue as a variation to this Licence at a later date;
- v) the Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.

## **NOTES TO THE LICENCE**

- (1) The Licensee shall surrender the licence to the Agent or any other person acting on behalf of Ofcom forthwith upon its revocation.
- (2) The holding of this Licence does not relieve the Licensee (or any person whose services the Licensee is contracted to transmit) of any requirement to hold any other licences (particularly that required by the Broadcasting Act 1990).
- (3) The technical specifications of the transmitter shall be as set out in Ofcom's "Restricted Service Licences: Notes for Applicants".

# Restricted Radio Services Transmission (Class C-Freely radiating very low power)

#### RESTRICTED RADIO SERVICES TRANSMISSION LICENCE

#### **CLASS C- FREELY RADIATING VERY LOW POWERED**

The Schedules form part of the Licence. Schedule 1 shows the person who is authorised to use the radio equipment "the Licensee" and, along with Schedule II describes the limitations on the installation and use of the Radio Equipment covered by the licence and other special conditions.

Issued on behalf of:
Office of Communications (Ofcom)
Riverside House
2a Southwark Bridge Road
London
SE1 9HA

#### **NOTES TO SCHEDULE I**

- (A) The symbols used to designate the classes of emission in Box I have the meanings assigned to them in the International Telecommunication Convention and Radio Regulations.
- (B) The maximum power specified in Box J is the effective monopole radiated power (emrp) in respect of medium wave transmissions, and the effective radiated power (erp) in respect of VHF transmissions.
- (C) Unless otherwise stated in Box M, the level of suppression of radiated unwanted emissions shall be that specified in the Radio Regulations of the International Telecommunication Union (Appendix 8-2).

#### **SCHEDULE II**

## **Special Conditions to the Licence**

#### **Purpose of Use**

(1) The Licensee named in Box B of Schedule I shall use the station named in Box F of Schedule I for emitting and receiving wireless telegraphy messages by the method of telephony for the purpose of providing a restricted sound broadcasting service in the United Kingdom.

#### **Limitations on Use**

- (2) The Radio Equipment may only be used:
  - (a) On the frequency shown in Box L of Schedule I;
  - (b) At a power not exceeding that in Box J of Schedule I;
  - (c) With the emission characteristics described in Box I of Schedule I;
  - (d) With the polarisation shown in Box K of Schedule I;
  - (e) At the location shown in Box M of Schedule I.

## **Change of Address of Emergency Contact**

(3) The Licensee shall give to Ofcom (at the address given on Schedule I of the Licence) prior written notice of any change of name, address, or telephone number of the emergency contact identified in Box D of Schedule I.

## Interpretation

(4) In this Licence:

"United Kingdom" means the United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man; and

"restricted sound broadcasting service" means a service of the type defined in section 84(2)(a)(iii) of the Broadcasting Act 1990.

#### **General Terms and Conditions of the Licence**

1 This Licence granted under section 8 of the Wireless Telegraphy Act 2006 ("the Act") by Ofcom authorises the "Licensee" to establish, install and use radio transmitting and receiving stations and/or radio apparatus as described in Schedule I (hereinafter together called the "Radio Equipment") subject to the terms set out below.

## **Licence Term**

2 This Licence shall enter into force on the Commencement Date (shown in Box E of Schedule I) and, subject to the payment of the fees in the manner described in clause 6, continue in force from year to year unless revoked by Ofcom or surrendered by the Licensee.

## **Licence Variation and Revocation**

3 Ofcom may exercise its power to vary or revoke this Licence by a written notice served on the Licensee or by a general notice.

## **Changes**

- 4 This Licence may not be transferred.
- 5 The Licensee must give prior or immediate notice to Ofcom of any change of the name and/or address as shown in Schedule I.

## **Fees**

- 6 The Licensee shall pay to Ofcom the relevant fee as provided in section 12 of the Act and the Regulations made thereunder:
  - (a) on or before the date of issue of this Licence; and
  - (b) on or before the anniversary date of the Commencement Date in each year the fee on renewal;

failing which Ofcom may revoke this licence.

## **Radio Equipment Use**

- 7 The Licensee must ensure that the Radio Equipment is constructed and used only in accordance with the provisions specified in the schedules. Any proposal to amend any detail specified in the schedules must be agreed with Ofcom in advance and implemented only after this Licence has been varied or reissued accordingly.
- 8 The Licensee must ensure that the Radio Equipment is only used by persons who have been authorised by the Licensee to do so and that such persons are made aware of, and comply with, the terms of this Licence.

## Access and Inspection

- 9 The Licensee shall permit any person authorised by Ofcom:
  - i) to have access to the Radio Equipment; and
  - ii) to inspect this Licence and the Radio Equipment at any and all reasonable times or, when in the opinion of that person an urgent situation exists, at any time, to ensure the Radio Equipment is being used in accordance with the terms of this Licence.

## **Modification, Restriction and Closedown**

- 10 A person authorised by Ofcom may require the Radio Equipment to be modified in operation, restricted or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:
  - i) a breach of this Licence has occurred; and/or
  - ii) the use of the Radio Equipment is causing or contributing to undue interference to the use of other authorised radio equipment.

## **Powers of Notice**

11 Ofcom may serve written notice on the Licensee and require the Radio Equipment to be modified in operation, restricted or temporarily or permanently closed down either immediately or on the expiry of such period as may be specified in the notice:

- i) in the interests of long term spectrum planning; or
- ii) in the event of a national or local state of emergency being declared.

## Interpretation

#### 12 In this Licence:-

- i) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Act;
- ii) the expression "undue interference" shall have the same meaning that it has under the Act;
- iii) the expression "inspect" includes examine and test:
- iv) the schedules form part of this Licence together with any subsequent schedules which the Secretary of State may issue as a variation to this Licence at a later date;
- v) the Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.

## **NOTES TO THE LICENCE**

- (1) The Licensee shall surrender the licence to Ofcom or any person acting on behalf of Ofcom forthwith upon its revocation.
- (2) The holding of this Licence does not relieve the Licensee (or any person whose services the Licensee is contracted to transmit) of any requirement to hold any other licences (particularly that required by the Broadcasting Act 1990).
- (3) The technical specifications of the transmitter shall be as set out in Ofcom's "Guidance Notes for Freely Radiating Restricted Services".

## **Community Radio**

## General

This Licence is granted under section 8 of the Wireless Telegraphy Act 2006 ("the Act") by the Office of Communications ("Ofcom") and authorises the Licensee to establish, install and use radio transmitting stations and/or radio apparatus described in the Schedule (hereinafter together called the "Radio Equipment") subject to the terms set out below and in the Schedule.

This Licence is issued to the Licensee for transmission sound broadcasting services described in the Broadcasting Act Licence referred to above.

## 2. Licence term

This Licence shall enter into force on the Commencement Date and, subject to earlier revocation by Ofcom in accordance with condition 3 below, shall continue in force only until the Termination Date.

#### 3. Licence variation and revocation

Pursuant to schedule 1, of the Act, Ofcom may not revoke this Licence before the termination date above under schedule 1, paragraph 6 of the Act except:

- (a) at the request of, or with the consent of, the Licensee;
- (b) in accordance with Condition 5;
- (c) if there has been a breach of any of the conditions of this Licence;
- (d) in accordance with Schedule 1 paragraph 8(5) of the Act;
- (e) if it appears to Ofcom to be necessary or expedient to revoke this Licence for the purposes of complying with a direction by the Secretary of State given to Ofcom under section 5 of the Act;
- (f) for reasons related to the management of the radio spectrum, provided that in such case the power to revoke may only be exercised after one (1) years notice is given in writing to the Licensee;
- (g) If the Broadcasting Act licence ceases to remain in force.

Where Ofcom exercise their power to revoke or vary the Licence, in accordance with Schedule 1 paragraph 6 of the Act, the Licensee shall be notified in writing or by a general notice.

## 4. Changes

This Licence may not be transferred.

The Licensee must give prior or immediate notice to Ofcom of any change of the Licensee's name or address.

## 5. Fees

The Licensee shall pay to Ofcom the relevant sums as provided in section 12 of the Act and the regulations made thereunder:

- (a) on or before the date of issue of the Licence; and
- (b) on or before the payment date indicated in the table on the first page of this Licence for subsequent payments or such other date or dates as shall be notified in writing to the Licensee.

in accordance with those regulations and any relevant terms, provisions and limitations of the Licence, failing which Ofcom may revoke this Licence.

## 6. Radio equipment use

The Licensee must ensure that the Radio Equipment is constructed, established, installed and used only in accordance with the provisions specified in Schedule. Any proposal to amend any detail specified in those schedules must be agreed with Ofcom in advance and implemented only after that Licence has been varied or reissued accordingly.

The Licensee must ensure that the Radio Equipment is used only by persons who have been authorised by the Licensee to do so, and that such persons are made aware of, and of the requirement to comply with, the terms of the Licence.

## 7. Access and inspection

The Licensee shall permit any person authorised by Ofcom:

- (a) to have access to the Radio Equipment; and
- (b) to inspect this Licence and the Radio Equipment at any and all reasonable times or, when in the opinion of that person an urgent situation exists, at any time, to ensure the Radio Equipment is being used in accordance with the terms of this Licence.

## 8. Modification, restriction and closedown

A person authorised by Ofcom may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:

- (a) a breach of the Licence has occurred; and/or
- (b) the use of the Radio Equipment is causing or contributing to Undue Interference to the authorised use of other radio equipment.

Ofcom may also require the Radio Equipment to be modified or restricted in use, or temporarily closed down either immediately or on the expiry of such period as may be specified in the event of a national or local state of emergency being declared. Ofcom may only exercise this power after a written notice is served on the Licensee or a general notice applicable to holders of a named class of Licence is published.

## 9. Interpretation

In this Licence (including the Schedule);

- (a) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8(1) of the Wireless Telegraphy Act 2006;
- (b) the term "Undue Interference" shall have the meaning given by Section 115 of the Wireless Telegraphy Act 2006;
- (c) the expression "inspect" includes examine and test;
- (d) the term "Broadcasting Act Licence" means the licence granted by Ofcom under Part III of the Broadcasting Act 1990 to the Licensee with the reference number indicated in table on page 1 of this Licence;
- (e) the "Commencement Date" means the date indicated in the table on the first page of this Licence:
- (f) the "Termination Date" means the date indicated in the table on the first page of this Licence;

#### Schedule

The Schedule to this Licence shall form part of this Licence together with any subsequent variations to this Licence and the Schedule(s).

The Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.

## 1. The Radio Equipment

The transmitting radio apparatus which is authorised by this Licence is the radio station at the site described in Box G at the location indicated in Box H, of the table below (the "Radio Equipment").

## 2. Purpose of Use

The Licensee shall use the station Radio Equipment for emitting wireless telegraphy messages for the purpose of providing the sound broadcasting service.

## 3. Technical Requirements

The Licensee shall comply with the following technical requirements:

- (a) The Radio Equipment may only be used for wireless telegraphy on the frequency set out in box M of the table below.
- (b) The radiating elements of the aerial used in connection with the Radio Equipment shall be at the height specified in box I in the table below.
- (c) The class of emissions shall be as specified in Box J of the table below. [This is the symbol used to designate the permitted class of emission, having the meaning assigned to it in the international Telecommunication Convention and Radio Regulations.]
- (d) The maximum permitted radiated power in the azimuthal direction of greatest strength shall not exceed that specified in Box K of the table below. More detailed limits and directional constraints may be contained in Annex 4 of the Broadcasting Act Licence.
- (e) For VHF transmissions the polarisation shall be within that specified in Box L. More detailed limits for the radiated power in each plane of polarisation may be contained in Annex 4 of the Broadcasting Act Licence.
- (f) All VHF transmissions are required to meet minimum suppression levels in the aeronautical bands, as specified in the Radio Regulations of the International Telecommunication Union (Appendix 8-2). Further to this, the Licensee shall ensure that the output of the licensed transmitter complies with any additional suppression levels set out in Box N, at the aeronautical frequencies specified there. Also shown in Box N are any other broadcast frequencies at the site that may contribute towards the subject interference mechanism and also require to meet the additional suppression requirements. The Licensee must liaise with the operators of those frequencies at the start of transmissions, or following any modifications to their equipment that might affect the radiated output on the aeronautical frequency(s) concerned.

Licensees are also expected to comply in full with their Broadcasting Act Licence, which contains at Annex 4, specific parameters for each transmitting site. That licence also requires compliance with the Ofcom Site Engineering Code for Analogue Radio Broadcast Transmission

Systems, which contains general rules on site engineering, to be applied in the installation, testing and measurement of radio broadcast transmission system.

## **Notes to Schedule**

- (G) Is the recognised site name from which the assignment is to be radiated. There may be more than one site name describing the same location, also one site name may describe more than one mast.
- (H) Is the permitted location, given in both Geographical and Ordnance Survey coordinates containing the mast from which the assignment is to be radiated.
- (I) Is the permitted height of the radiating elements of the antenna above local ground level and ignores the height of any buildings upon which masts may be mounted.
- (K) Radiated power is specified here as the effective monopole radiated power (emrp) in respect of MF transmissions, and the effective radiated power (erp), as the sum of the maxima permitted in each plane of polarisation, in respect of VHF transmissions.

## Section 5

## **Business Radio**

## **Business Radio (Area Defined)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises «name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

#### **SCHEDULE 1 TO LICENCE «LicNo»**

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the conditions related to the use of the Radio Equipment.

## 1. Description of the Radio Equipment licensed

In this Licence the Radio Equipment means any radio transmitting and receiving stations and/or any radio apparatus.

#### 2. Interface Requirements for the Radio Equipment use

Use of the radio equipment shall be in accordance with the following Interface Requirement:

IR 2044 for "Business Radio Land Mobile Services, covering Area Defined, Technically Assigned and Light Licence Authorisations";

or for equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

## 3. Special conditions relating to the operation of the Radio Equipment

- (a) The Licensee shall ensure that the Radio Equipment is:
  - i. not used to transmit music, broadcast programmes or obscene or offensive language;
  - ii. not used as a public address system; and
  - iii. not used to send misleading messages.
- (b) Upon receipt of messages not connected with the business of the Licensee, the Licensee or any person using the Radio Equipment shall not:
  - i. make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person, except to a duly authorised officer of the Her Majesty's Government, a person authorised by Ofcom or in the course of legal proceedings or for the purpose of any report thereof; and
  - ii. retain any copy or make any use of any such message, or allow it to be reproduced in writing, copied or made use of.

- (c) The Licensee shall ensure that the Radio Equipment is operated in accordance with the relevant site clearance conditions for that type of equipment, and that it is in possession of valid site clearance documentation issued by Ofcom. (See section 5).
- (d) During the period that this Licence remains in force and for 6 months thereafter, the Licensee shall compile and maintain accurate records of the following details relating to the Radio Equipment:
  - · postal address;
  - National Grid Reference (to 100 metres resolution);
  - antenna height and type;
  - radio frequencies in operation at the time the information is requested;
- (e) The Licensee shall inform Ofcom of the address of the premises at which this Licence and the information detailed at sub-paragraph (d) above shall be kept.
- (f) The Licensee must submit to Ofcom copies of the records detailed in sub-paragraph (d) above at such intervals as Ofcom shall notify to the Licensee.
- (g) The Licensee must also submit to Ofcom in such manner and at such times, all information relating to the establishment, installation or use of the Radio Equipment, whether stored in hard copy or electronic form, as reasonably requested for the purposes of verifying compliance with this Licence or for statistical purposes;
- (h) The Licensee must ensure that the Radio Equipment is established and installed for terrestrial use only.

## 4. Geographical Boundaries

This Licence authorises the establishment and use of the Radio Equipment only in the defined area(s) specified in Schedule 2 of this licence.

## 5. Coordination

The Licensee must ensure that the Radio Equipment is operated in compliance with the domestic and cross-border coordination procedures set out in the Business Radio Technical Frequency Assignment Criteria (OfW164 - available from the Ofcom website

at <a href="http://licensing.ofcom.org.uk/radiocommunication-licences/business-radio/guidance-for-licensees/information/technical-information/tfac/">http://licensing.ofcom.org.uk/radiocommunication-licences/business-radio/guidance-for-licensees/information/technical-information/tfac/</a>.

## 6. Maximum ERP

The Maximum permitted ERP for Base Stations is 100 Watts for a 25 kHz channel bandwidths, 50 Watts for 12.5 kHz channel bandwidths and 25 Watts for 6.25 kHz channel bandwidths;

The Maximum permitted ERP for Mobile Stations is 25 Watts for all channel bandwidths;

## 7. Power Spectral Density at the geographical boundary

The Licensee must operate the Radio Equipment with a power spectral density of not more than -116 dBm/12.5kHz from a single transmitter at and beyond the geographical boundary(ies) specified in Schedule 2 of this document.

#### 8. Interpretation

In this Schedule:

(a) "ERP" means the effective radiated power of a radio antenna in a given direction, that is the product of the power supplied to the antenna and the antenna gain relative to a half wave dipole in a given direction; (b) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment (S.I. 2000/730);

## **Business Radio (Technically Assigned)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises "name" ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

## **Business Radio (Technically Assigned)**

#### **SCHEDULE 1 TO LICENCE «LicNo»**

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment licensed

In this Licence, the Radio Equipment means sending and receiving station(s) ("base stations") and sending and receiving station(s) ("mobile stations) for wireless telegraphy as defined in paragraph 2 below.

#### 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and the subsequent schedule(s) to this Licence, the Licensee and any person authorised to act on the Licensee's behalf is hereby authorised to:

- (a) send and receive messages concerning the business of the Licensee between the base station(s) and the mobile station(s); and/or
- (b) send and receive messages concerning the business of the Licensee between the mobile stations.

## 3. Interface Requirements for the Radio Equipment use

Use of the radio equipment shall be in accordance with the following Interface Requirement:

IR 2044 for "Business Radio Land Mobile Services, covering Area Defined, Technically Assigned and Light Licence Authorisations";

or for equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

#### 4. Special conditions relating to the activities of the Licensee

- (a) The Licensee shall ensure that the Radio Equipment is:
  - i. not used to transmit music, broadcast programmes or obscene or offensive language;
  - ii. not used as a public address system; and
  - iii.not used to send misleading messages.
- (b) Upon receipt of messages not connected with the business of the Licensee, the Licensee or any person using the Radio Equipment shall not:
  - i. make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person, except to a duly authorised officer of the Her Majesty's Government, a person authorised by Ofcom or in the course of legal proceedings or for the purpose of any report thereof; and
  - ii. retain any copy or make any use of any such message, or allow it to be reproduced in writing, copied or made use of.

## Interpretation

In this and the subsequent schedule(s):

- (a) "ERP" means the effective radiated power of a radio antenna in a given direction, that is the product of the power supplied to the antenna and the antenna gain relative to a half wave dipole in a given direction;
- (b) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of Directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations (S.I. 2000/730).

## **Business Radio (Simple Site)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises «name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

## **BUSINESS RADIO (SIMPLE SITE) LICENCE**

## **SCHEDULE 1 TO LICENCE NUMBER «LicNo»**

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date» and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment licensed

In this Licence, the Radio Equipment means sending and receiving station(s) ("base stations")

and sending and receiving station(s) ("mobile stations) for wireless telegraphy as defined in paragraph 2 below.

## 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and the subsequent schedule(s) to this Licence, the Licensee and any person authorised to act on the Licensee's behalf is hereby authorised to:

- (a) send and receive messages concerning the business of the Licensee between the base station(s) and the mobile station(s); and/or
- (b) send and receive messages concerning the business of the Licensee between the mobile stations.

## 3. Interface Requirements for the Radio Equipment use

(a) Use of the radio equipment shall be in accordance with the following Interface Requirement:

IR 2044 for "Business Radio Land Mobile Services, covering Area Defined, Technically Assigned and Light Licence Authorisations";

or for equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

(b) The Licensee shall provide acceptable documentary evidence of conformity on request within 28 days, for all or any part of the systems, to an Ofcom representative.

## 4. Special conditions relating to the activities of the Licensee

- (a) The Licensee shall ensure that the Radio Equipment is:
  - i. not used to transmit music, broadcast programmes or obscene or offensive language;
  - ii. not used as a public address system; and
  - iii. not used to send misleading messages.
- (b) Upon receipt of messages not connected with the business of the Licensee, the Licensee or any person using the Radio Equipment shall not:
  - make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person, except to a duly authorised officer of the Her Majesty's Government, a person authorised by Ofcom or in the course of legal proceedings or for the purpose of any report thereof; and
  - ii. retain any copy or make any use of any such message, or allow it to be reproduced in writing, copied or made use of.

## 5. Technical conditions

(a) Base stations must not communicate directly with other base stations;

- (b) The maximum permitted ERP for base stations is 2 Watts except where Schedule 2 specifies otherwise:
- (c) The maximum permitted ERP for mobile stations is 2 Watts except where Schedule 2 specifies otherwise;
- (d) The maximum permitted base station antenna height above ground level is 15 metres except where Schedule 2 specifies otherwise.

## 6. Interpretation

In this schedule:

- (a) "ERP" means effective radiated power, which is the power radiated from the antenna in the direction of maximum radiation; and is relative to a half wave dipole.
- (b) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of Directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations (S.I. 2000/730).

## **BUSINESS RADIO (SIMPLE SITE) LICENCE**

#### **SCHEDULE 2**

## Base transmit frequencies (not exceeding 12.5 kHz bandwidth)::

The following frequencies may be used as base station transmit/mobile receive frequencies only at a channel bandwidth not exceeding 12.5 kHz and a maximum ERP of 2 Watts:

49.00000 MHz	49.01250 MHz	49.02500 MHz	49.03750 MHz	49.05000 MHz	49.06250 MHz
49.07500 MHz	49.08750 MHz	49.10000 MHz	49.11250 MHz	49.12500 MHz	49.13750 MHz
49.15000 MHz	49.16250 MHz	49.17500 MHz	49.18750 MHz	49.20000 MHz	49.21250 MHz
49.22500 MHz	49.23750 MHz	49.25000 MHz	49.26250 MHz	49.27500 MHz	49.28750 MHz
49.30000 MHz	49.31250 MHz	49.32500 MHz	49.33750 MHz	49.35000 MHz	49.36250 MHz
49.37500 MHz	49.38750 MHz	49 40000 MHz	49 41250 MHz	49 48750 MHz	

## Base transmit frequencies (not exceeding 25 kHz bandwidth):

The following frequencies may be used as base station transmit/mobile station receive frequencies only at a channel bandwidth not exceeding 25 kHz and at a maximum ERP of 2 Watts:

```
26.23750 MHz 26.41000 MHz 26.43750 MHz 26.46250 MHz 26.54500 MHz 26.58800 MHz 26.61550 MHz 26.66950 MHz 26.72550 MHz 26.81550 MHz 26.86550 MHz 26.86500 MHz
```

## Mobile transmit frequencies (not exceeding 12.5 kHz bandwidth)::

The following frequencies may be used as mobile station transmit/base station receive frequencies only at a channel bandwidth not exceeding 12.5 kHz and at a maximum ERP of 0.02 Watts:

## Base and mobile transmit frequencies (not exceeding 25 kHz bandwidth)::

The following frequencies may be used as base or mobile station transmit frequencies. Base stations may transmit on these frequencies at a channel bandwidth not exceeding 25 kHz and at a maximum ERP of 2 Watts. The mobile stations may transmit on these frequencies at a channel bandwidth not exceeding 25 kHz and at a maximum power of 2 Watts:

#### CTCSS/DCS

For a list of CTCSS tones and/or DCS codes that can be used for this type of Licence please refer to the Ofcom Business Radio Technical Frequency Assignment Criteria (TFAC) located on the Ofcom website.

## **Business Radio (Simple UK)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises "name" ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

## **BUSINESS RADIO (SIMPLE UK) LICENCE**

# SCHEDULE 1 TO LICENCE «LicNo» DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment licensed

In this Licence, the Radio Equipment means sending and receiving station(s) ("mobile stations") for wireless telegraphy as defined in paragraph 2 below.

## 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and the subsequent schedule(s) to this Licence, the Licensee and any person authorised to act on the Licensee's behalf is hereby authorised to send and receive messages concerning the business of the Licensee between the mobile stations.

## 3. Interface Requirements for the Radio Equipment use

(a) Use of the radio equipment shall be in accordance with the following Interface Requirement:

IR 2044 for "Business Radio Land Mobile Services, covering Area Defined, Technically Assigned and Light Licence Authorisations";

or for equipment first placed on the market before 8 April 2000, is required to be type

approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

(b) The Licensee shall provide acceptable documentary evidence of conformity on request within 28 days, for all or any part of the systems, to an Ofcom representative.

## 4. Special conditions relating to the activities of the Licensee

- (a) The Licensee shall ensure that the Radio Equipment is:
  - not used to transmit music, broadcast programmes or obscene or offensive language;
  - ii. not used as a public address system; and
  - iii. not used to send misleading messages.
- (b) Upon receipt of messages not connected with the business of the Licensee, the Licensee or any person using the Radio Equipment shall not:
  - make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person, except to a duly authorised officer of Her Majesty's Government, a person authorised by Ofcom or in the course of legal proceedings or for the purpose of any report thereof; and
  - ii. retain any copy or make any use of any such message, or allow it to be reproduced in writing, copied or made use of.
- (c) The Licensee shall be permitted to use the frequencies set out in the Schedule(s) to this licence anywhere in the UK.

#### 5. Technical conditions

- (a) The maximum permitted ERP for mobile stations is 5 Watts;
- (b) The frequencies listed in this schedule shall be used in single frequency mode only;
- (c) The use of base stations is not permitted.

## 6. Interpretation

In this and the subsequent schedule(s):

- (a) "ERP" means effective radiated power, which is the power radiated from the antenna in the direction of maximum radiation and is relative to a half wave dipole; and
- (b) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of Directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations (S.I. 2000/730).

## **BUSINESS RADIO (SIMPLE UK) LICENCE**

#### **SCHEDULE 2**

## Frequencies (all 12.5kHz Bandwidth)

Low Band	Mid Band	High Band	UHF 1
77.6875 MHz	164.0500 MHz	169.0875 MHz	449.3125 MHz
86.3375 MHz	164.0625 MHz	169.3125 MHz	449.4000 MHz
86.3500 MHz		173.0500 MHz	449.4750 MHz
86.3625 MHz		173.0625 MHz	
86.3750 MHz		173.0875 MHz	

#### CTCSS/DCS

For a list of CTCSS tones and/or DCS codes that can be used for this type of Licence please refer to the Ofcom Business Radio Technical Frequency Assignment Criteria (TFAC) located on the Ofcom website.

## **Business Radio (Suppliers Light)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises "name" ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

## **BUSINESS RADIO (SUPPLIERS LIGHT) LICENCE**

## **SCHEDULE 1 TO LICENCE «LicNo»**

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment licensed

In this Licence the Radio Equipment means any radio transmitting and receiving stations and/or any radio apparatus used for wireless telegraphy as defined in paragraph 2 below.

## 2. Purpose of the Radio Equipment

Subject to the technical and administrative requirements set out in this and any subsequent schedule(s) to this Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

- (a) install and make test transmissions during the service and repair of Business Radio ("BR") and marine equipment ("service and repair");
- (b) hire to a person ("the customer") for use in connection with the business of the customer ("hiring"):
  - (i) BR equipment for a period not exceeding one year;

- (c) allocate to a customer for use in connection with the business of the customer, pending an application by that customer for an operational licence granted under the Wireless Telegraphy Act 2006 ("parking"):
  - (i) BR equipment for a period not exceeding 3 months;
- (d) demonstrate to a customer for use in connection with the business of the customer ("demonstration"):
  - (i) BR equipment for a period not exceeding 28 days.

## 3. Interface Requirements for the Radio Equipment use

(a) Use of the radio equipment shall be in accordance with the following Interface Requirement:

IR 2044 for "Business Radio Land Mobile Services, covering Area Defined, Technically Assigned and Light Licence Authorisations";

or the Merchant Shipping (Marine Equipment Regulations 1999);

or for equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

## 4. Special conditions relating to the activities of the Licensee

The Licensee shall ensure that:

- (a) all reasonable steps are taken to ensure that the use of Radio Equipment by a customer complies with the conditions of this Licence;
- (b) the Radio Equipment:
  - (i) is operated in accordance with the transmission characteristics (including frequencies, ERP, and antenna heights) specified in the schedule(s) except where prior written authority has been obtained from Ofcom;
  - (ii) is not used to transmit music, broadcast programmes or obscene or offensive language;
  - (iii) not used as a public address system; and
  - (iv) not used to send misleading messages.
- (c) Upon receipt of messages not connected with the business of the Licensee, the Licensee or any person using the Radio Equipment shall not:
  - (i) make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person, except to a duly authorised officer of the Her Majesty's Government, a person authorised by Ofcom or in the course of legal proceedings or for the purpose of any report thereof; and
  - (ii) retain any copy or make any use of any such message, or allow it to be reproduced in writing, copied or made use of.

#### 5. Information

#### The Licensee shall:

- (a) inform customers of the following matters in writing before use of the Radio Equipment commences:
  - (i) the terms of the licence that governs the use of the Radio Equipment supplied;
  - (ii) that failure to meet the terms of this Licence may result in the closedown of the Radio Equipment;
  - (iii) the penalties for improper use of the Radio Equipment.
- (b) inform hire customers in writing before use of the Radio Equipment commences that where the Radio Equipment is used beyond the time limits specified in paragraph 2 above, they must apply to Ofcom for an appropriate BR licence.
- (c) give to hire customers a copy of the hire contract before use of the Radio Equipment commences, which must be kept with the Radio Equipment.

## 6. Technical Conditions

- (a) The maximum permitted ERP for base stations is 10 Watts;
- (b) The maximum permitted ERP for mobile stations is 25 Watts;
- (c) The maximum permitted base station antenna height above ground level is 20 metres.

## 7. Interpretation

In this schedule:

- (a) "ERP" means effective radiated power, which is the power radiated from the antenna in the direction of maximum radiation and is relative to a half wave dipole; and
- (b) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations (S.I. 2000/730).

#### **BUSINESS RADIO SUPPLIERS LICENCE**

## **SCHEDULE 2**

## **Dual Frequencies**

Base (MHz)	Mobile (MHz)	Bandwidth (kHz)	
82.1250	68.6250	12.5	
85.8750	72.3750	12.5	
163.2875	158.7875	12.5	
163.6875	159.1875	12.5	
163.7500	159.2500	12.5	
163.8500	159.3500	12.5	
163.9000	159.4000	12.5	

163.9250	159.4250	12.5
163.9500	159.4500	12.5
167.2000	172.0000	12.5
453.6875	460.1875	12.5
454.4250	461.4250	25
456.3875	461.8875	12.5
456.9875	462.4875	12.5
456.0125	461.5125	12.5
456.3375	461.8375	12.5
456.4625	461.9625	12.5
456.5625	462.0625	12.5
456.6875	462.1875	12.5
456.9250	462.4250	12.5
456.9625	462.4625	12.5

## **Single Frequencies**

Base/Mobile (MHz)	Bandwidth(kHz)
26.8350	25
26.9200	25
48.9750	12.5
48.9875	12.5
68.6250	12.5
72.3750	12.5
82.1250	12.5
85.8750	12.5
158.7875	12.5
159.1875	12.5
159.2500	12.5
159.3500	12.5
159.4500	12.5
159.4875	12.5
159.5000	12.5
159.5875	12.5
159.6250	12.5
159.6875	12.5
163.2875	12.5
163.6875	12.5
163.7500	12.5
163.8500	12.5
163.9000	12.5
163.9250	12.5
163.9500	12.5
163.9875	12.5
164.0000	12.5
164.0875	12.5
164.1250	12.5
164.1875	12.5
167.2000	12.5
169.0125	12.5
169.1375	12.5
169.1625	12.5
169.1875	12.5
172.000	12.5

453.6875	12.5
454.4250	25
456.3875	12.5
456.8625	12.5
456.9250	12.5
456.9875	12.5
460.1875	12.5
461.4250	25
461.8875	12.5
462.3625	12.5
462.4250	12.5
462.4750	12.5

## CTCSS/DCS

For a list of CTCSS tones and/or DCS codes that can be used for this type of Licence please refer to the Ofcom Business Radio Technical Frequency Assignment Criteria (TFAC) located on the Ofcom website.

## Section 6

# **Fixed Links**

#### **Point to Point Fixed Links**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises "name" ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

#### POINT TO POINT FIXED LINKS

#### SCHEDULE 1 TO LICENCE NUMBER «LicNo»

#### LICENCE TERM AND EQUIPMENT SPECIFICATION

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment licensed

Radio Fixed Stations for sending and receiving wireless telegraphy at the sites (hereinafter referred to as "the Fixed Stations") specified in the attached schedule.

## 2. Radio Equipment Use

- a) The Licensee must ensure that the Radio Equipment is constructed and used only in accordance with the provisions specified in the schedule(s). Any proposal to amend any detail specified in the schedule(s) must be agreed with Ofcom in advance and implemented only after the Licence has been varied and/or re-issued accordingly.
- b) The Licensee must ensure that the Radio Equipment is only used by persons who have been authorised by the Licensee to do so and that such persons are made aware of, and of the requirement to comply with, the terms of this Licence.

#### 3. Restrictions

In accordance with the notice of variation made by Ofcom in September 2006 and April 2007, any authorisation conferred by this licence for the use of frequencies in the 1452 MHz to 1492 MHz range shall cease with effect from 31st December 2007.

## 4. Conformity Assessment Requirements

The Radio Equipment covered by this Licence shall be subject to and comply with the appropriate UK Radio Interface Requirement (IR) as specified below:

a) In accordance with Articles 4.1 and 7.2 of Directive 1999/5/EC, UK Radio Interface

Requirement 2000 (UK IR 2000) specifies the requirements for the licensing and appropriate use of fixed terrestrial (point to point) radio systems.

b) It is a condition of this licence that the installed equipment meets the minimum requirements specified in UK IR 2000 for the stated equipment types and for the stated frequency bands.

Equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

## 5. Technical Performance Requirements

The Licensee must ensure that the Radio Equipment performs in accordance with the subsequent technical schedule(s).

#### 6. Interpretation

In this schedule:

- (a) "ETSI" means the European Telecommunications Standards Institute;
- (b) "ETS" means European Telecommunications Standard;
- (c) "EIRP" means the effective radiated power of a radio transmitter of the power supplied to the antenna and the antenna gain relative to an isotropic antenna:
- (d) "ITU" means the International Telecommunications Union, and "Emission designation" shall have the meaning as defined in the ITU Radio Regulations RR 4- 2 and Appendix 6 Parts A & B.
- (e) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of Directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations 2000 S.I. 2000/730.

## **Point to Point Security CCTV**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises «name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

## **Issued by Ofcom**

POINT TO POINT Security CCTV

SCHEDULE 1 TO LICENCE NUMBER «LicNo»

LICENCE TERM AND EQUIPMENT SPECIFICATION

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment licensed

Radio Fixed Stations for sending and receiving wireless telegraphy at the sites (hereinafter referred to as "the Fixed Stations") specified in the attached schedule.

#### 2. Apparatus

- (a) In accordance with Articles 4.1 and 7.2 of Directive 1999/5/EC, UK Radio Interface Requirements 2000 (IR 2000) specifies the requirements for the licensing and appropriate use of fixed terrestrial (point to point) radio systems.
- (b) It is a condition of the licence that the installed equipment meets the minimum requirements specified in IR2000 for the stated equipment types and for the stated frequency bands.

## **Self Co-ordinated Links**

- 1. This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the equipment subject to this Licence by Ofcom or by the Secretary of State.
- 2. This Licence authorises "name" ("the Licensee") to establish and use stations for wireless telegraphy and install and use wireless telegraphy apparatus subject to the terms, provisions, limitations and conditions of this licence
- 3. Any schedule to this Licence shall form part of it together with any subsequent schedule which Ofcom may issue as a variation to this Licence.

## **Self Co-ordinated Links**

## **SCHEDULE 1 TO LICENCE NUMBER «LicNo»**

This schedule forms part of Licence «LICENCE Number», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment covered by this Licence

- 1.1 The Licensee is authorised to establish and use stations for wireless telegraphy and install and use wireless telegraphy apparatus (the "Radio Equipment") only:
- (a) which operates within:
  - (i) the frequency band 64-66 GHz or
  - (ii) either of the two frequency bands at 71.125-75.875 GHz and 81.125-85.875 GHz;
- (b) which is for use for the purpose of a fixed wireless telegraphy link between two places;
- (c) where that link:
  - (i) when operating in the 64-66 GHz band has been fully registered in the name of the Licensee on the 65 GHz section of Ofcom's wireless telegraphy register (the "Register")<sup>91</sup> or

<sup>&</sup>lt;sup>9</sup> The Register can be accessed at http://licensing.ofcom.org.uk/radiocommunication-

(ii) when operating in the 71.125-75.875 GHz and/or 81.125-85.875 GHz band has been fully registered in the name of the Licensee on the 70/80 GHz section of the Register,in accordance with the terms of this Licence.

## 2. Registration of fixed wireless telegraphy links

The Licensee must not register or attempt to register a fixed wireless telegraphy link which:

- (a) has already been registered on the Register; or
- (b) is likely to cause or receive undue Interference to or from any link which has already been registered on the Register.

#### 3. Restrictions

- 3.1 The maximum EIRP is limited to 55dBW.
- 3.2 The maximum transmit power delivered to the antenna in the 71.125-75.875 GHz and 81.125-85.875 GHz bands is limited to 0dBW;
- 3.3 New fixed wireless telegraphy links may only be registered and operate where the occupied bandwidth falls entirely within the frequency bands:
  - a) 64-66 GHz:
  - b) 73.375 75.875 GHz; and
  - c) 83.375 85.875 GHz.
- 3.4 Fixed wireless telegraphy links operating within the 71.125 75.875 GHz and 81.125 85.875 GHz bands registered before 21 August 2013 may remain unchanged, including where the occupied bandwidth overlaps the 71.125 73.375 and 81.125 83.375 GHz bands, until surrendered by the licensee or withdrawn by Ofcom.

## 4. Conformity assessment requirements

4.1 The Radio Equipment shall be subject to and comply with the requirements of the IR.

## 5. Technical performance requirements

5.1 The Licensee must ensure that the Radio Equipment performs in accordance with the specifications in the relevant entry in the Register.

## 6. Radio Equipment Use

- 6.1 The Licensee must ensure that the Radio Equipment is constructed and used only in accordance with this Licence. No changes to parameters, including the frequencies assigned, technical parameters relating to the antenna, transmitter and receiver, power of transmission or height or geographical location of the Radio Equipment will be permitted once the link has been registered on the Register.
- 6.2 The Licensee must ensure that the Radio Equipment is used only by persons who have been authorised by the Licensee to do so and that such persons are made aware of the terms of this Licence and of the requirement to comply with them.

#### 7. Licence Term, Variation and Revocation

- 7.1 This Licence shall continue in force until revoked by Ofcom or surrendered by the Licensee.
- 7.2 Pursuant to schedule 1, paragraph 8 of the Wireless Telegraphy Act 2006 (the "Act") Ofcom may not revoke this Licence under schedule 1, paragraph 6 except:
  - (a) at the request of, or with the consent of, the Licensee;
  - (b) if there has been a breach of any of the conditions of the Licence;
  - (c) if, in connection with the transfer or proposed transfer of rights and obligations arising by virtue of this Licence, there has been a breach of any provision of regulations made by Ofcom under the powers conferred by section 30(1) and (3) of the Act<sup>10</sup>;
  - (d) in accordance with schedule 1, paragraph 8(5) of the Act;
  - (e) if it appears to Ofcom to be necessary or expedient to revoke the Licence for the purposes of complying with a direction by the Secretary of State given to Ofcom under section 5 of the Act or section 5 of the Communications Act 2003; or
  - (f) for reasons related to the management of the radio spectrum, provided that in such case the power to revoke may only be exercised after five (5) year's notice is given in writing to the Licensee.
- 7.3 Ofcom may at any time vary this Licence to remove from the authorisation conferred by this Licence any wireless telegraphy fixed link which has been registered by the Licensee but which is causing or which may cause or materially contribute to undue Interference to other registered wireless telegraphy fixed links which were registered by another person at any time before the registration of that link registered by the Licensee.
- 7.4 Where Ofcom exercise their power to revoke or vary this Licence in accordance with schedule 1, paragraph 6 of the Act, the Licensee shall be notified in writing or by a general notice. Any general notices will be posted on the Ofcom website<sup>11</sup>.
- 7.5 Subject to condition 6.1, Ofcom may amend the name or address of the Licensee on request from the Licensee.

#### 8. Changes

- 8.1 This Licence may not be transferred<sup>12</sup>.
- 8.2 The Licensee must give immediate notice to Ofcom in writing of any change to the Licensee's name and address from that recorded on this Licence.

## 9. Licence Fee

9.1 The Licensee shall pay to Ofcom the relevant sums as provided in section 12 of the Act and the regulations made thereunder:

<sup>&</sup>lt;sup>10</sup> These are regulations on spectrum trading

<sup>11</sup> https://www.ofcom.org.uk

However rights and obligations arising by virtue of certain wireless telegraphy licences may be transferred in accordance with regulations made by Ofcom under powers conferred by section 30 of the Act. See Ofcom's website for the latest position on which licences are subject to spectrum trading.

- (a) on or before the date of issue of this Licence; and
- (b) on or before each anniversary of the date of issue of this Licence for subsequent payments or such other date or dates as shall be notified in writing to the Licensee, in accordance with that section and those regulations and any relevant terms, provisions and limitations of this Licence.

## 10. Access and Inspection

- 10.1 The Licensee shall permit any person authorised by Ofcom:
  - (a) to have access to the Radio Equipment; and
  - (b) to inspect this Licence and the Radio Equipment,

at any and all reasonable times or, when in the opinion of that person an urgent situation exists, or at any time to ensure that the Radio Equipment is being used in accordance with the terms of this Licence.

#### 11. Modification, Restriction and Closedown

- 11.1 A person authorised by Ofcom may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:
  - (a) a breach of this Licence has occurred; and/or
  - (b) the use of the Radio Equipment is causing or contributing to undue Interference to the authorised use of other radio equipment.
- 11.2 Ofcom may require the Radio Equipment to be modified or restricted in use, or temporarily closed down either immediately or on the expiry of such period as may be specified in the event of a national or local state of emergency being declared. Ofcom may only exercise this power after a written notice is served on the Licensee or a general notice applicable to holders of a named class of Licence is published.

## 12. Records of Registered Links

12.1 The Register will record the details of all authorised links. The Licensee shall print off and at all times keep a paper copy of all registered links, and shall produce them when demanded by Ofcom or a person authorised by Ofcom. Ofcom will not issue paper copies of any registered links.

## 13. Interpretation

- 13.1 In this Licence:
  - (a) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Act;
  - (b) "Interference" shall have the meaning given by section 115 of the Act;
  - (c) "inspect" includes examine and test;
  - (d) "EIRP" means the effective radiated power of a radio transmitter of the power supplied to the antenna and the antenna gain relative to an isotropic antenna;
  - (e) "IR" means the UK Radio Interface Requirement 2000 (UK RIR 2000), which specifies the requirements for the licensing and appropriate use of fixed terrestrial (point to point) radio

systems and was published by Ofcom in accordance with Article 4.1 of Directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations 2000 (S.I. 2000/730);

- (f) "Radio Equipment" means the radio equipment specified in Condition 1;
- (g) "dBW" means the power level in decibels (logarithmic scale) referenced against 1 watt (i.e. a value of 0 dBW is 1 Watt); and
- (h) Occupied bandwidth means the width of a frequency band as defined in Article 1 (1.153) of the International Radio Regulations.
- 13.2 The Interpretation Act 1978 shall apply to this Licence as it applies to an Act of Parliament.

## **Scanning Telemetry**

- This Licence is issued by the Office of Communications ("Ofcom") on "date" and
  replaces any previous authority granted in respect of the service subject to this Licence
  by Ofcom or by the Secretary of State.
- 2. This Licence authorises «\_name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

**ISSUED BY OFCOM** 

#### **Scanning Telemetry**

#### SCHEDULE 1 TO LICENCE NUMBER «LicNo»

## LICENCE TERMS AND EQUIPMENT SPECIFICATION

This schedule forms part of Licence «LicNo», issued to «\_name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment licensed

Fixed Scanner Station(s) and outstation(s) for sending and receiving wireless telegraphy at the sites, frequencies and technical parameters specified in the technical schedule(s) to be issued by OFCOM and attached to the licence.

## 2. Apparatus

- (a) In accordance with Articles 4.1 and 7.2 of Directive 1999/5/EC, UK Radio Interface Requirement 2037 (UK RIR 2037) specifies the requirements for the licensing and appropriate use of such radio systems.
- (b) It is a condition of this licence that the installed equipment meets the minimum requirements specified in this UK RIR2037 for the stated equipment types.

## 3. Frequency Assignment Criteria and Channel Allocation Arrangements

The assignment criteria used by **<Atkins Limited>** will be in accordance with the version of Technical Frequency Assignment Criteria (Ofcom document OF 49W) in force at the time the assignment is made, covering services operating in the frequency band 457.5 to 458.5 MHz paired with 463.0 to 464.0 MHz.

Assignment(s) will normally be made in the channels reserved for non-Utility Organisations (channels T73 to T80).

#### 4. Annual Licence Renewal Fees

The annual renewal fee will be calculated on the basis of the channel fee set out in the current Ofcom Fees Regulations.

## 5. Radio interference and/or channel sharing disputes

In the event of radio interference and/or channel sharing disputes, the [licensee] should contact **<Atkins Limited>**, unless an urgent situation exists, in which case the appropriate Ofcom National/Regional Centre should be approached.

## 6 Interpretation

In this schedule **Atkins Limited>** means the organisation which manages, on behalf of Ofcom, the blocks of UHF scanning telemetry spectrum allocated to the <water industry and the non-Utility Organisations>.

#### **5.8 GHz Fixed Wireless Access**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises «name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

## **5.8 GHz Fixed Wireless Access**

## SCHEDULE 1 TO LICENCE NUMBER «LicNo»

#### **DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE**

This schedule forms part of Licence number «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment licensed

In this Licence, the Radio Equipment means registered Fixed Wireless Access sending and receiving station(s) ("terminals") for wireless telegraphy.

## 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and the subsequent

schedule(s) to this Licence, the Licensee and any person authorised by the licensee to use the terminals under authority of this Licence are hereby authorised to send and receive transmissions between terminals for Fixed Wireless Access purposes.

## 3. Conformity Assessment Requirements

The Radio Equipment covered by this Licence shall be subject to and comply with Interface Requirement IR2007 - Fixed Broadband Services operating in the 5725 -5850 MHz band

## 4. Special conditions relating to the activities of the Licensee

The Licensee shall ensure that:

- (a) the Radio Equipment is only used for the purpose of Fixed Wireless Access; and
- (b) the location of each terminal forming part of the Radio Equipment is registered with Ofcom in accordance with Ofcom's registration procedures prior to installation and use.

#### 5. Terminals

The Licensee shall ensure that terminals:

- (a) are fixed and only used at the registered location; and
- (b) are only installed or used in accordance with the conditions defined in Schedule 2 of this licence

#### 6. Interpretation

In this and the subsequent schedule(s):

"Fixed Wireless Access" is a system used to connect two or more fixed points for the purpose of sending or receiving data. The system can include a point to point network, a point to multi-point network, a MESH network or any other network configuration;

"IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of Directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (R&TTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations (S.I. 2000/730).

#### 5.8 GHz Fixed Wireless Access

## **SCHEDULE 2**

- 1. Use of radio equipment is permitted in the frequency bands between 5725MHz to 5795MHz and 5815MHz to 5850MHz in the United Kingdom, except where exclusion zones have been applied through the online registration system.
- 2. Please use the 5.8 GHz registration tool on the Ofcom website to register the location of terminals.
- 3. This licence is issued on the basis that interference is not caused by the radio equipment to other authorised spectrum users and that the Radio Equipment will not be protected

from interference caused by other authorised spectrum users.

## Section 7

## **Maritime**

## **Coastal Station Radio (UK)**

Wireless Telegraphy Act 2006

This Licence is issued by the Office of Communications ("Ofcom") on "date" and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises "name" ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet.

# COASTAL STATION RADIO ( UK ) SCHEDULE 1 TO LICENCE «LICENCE» DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE

This schedule forms part of Licence «LICENCE», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## 1. Description of the Radio Equipment licensed

In this Licence, the Licensee is authorised to use the base transceiver or transmitter and/or mobile transceiver or receiver stations for use in accordance with paragraph 2 below (the "Radio Equipment").

## 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and Schedule 2 to this Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

- 1. establish sending and receiving stations for wireless telegraphy on land at the location specified in Schedule 2 to this Licence ("the Base Stations");
- 2. establish the sending and receiving stations for wireless telegraphy on board vessels specified in Schedule 2 of this licence ("the Mobile Stations");
- 3. use the Base Stations and Mobile Stations for the purpose of sending and receiving voice and data messages concerning the business of the Licensee between the Base Stations and the Mobile Stations and between the Mobile Stations.

## 3. Approved Standards for the Radio Equipment

The Radio Equipment covered by this Licence shall be subject to and comply with the appropriate Interface Requirement (IR) or the Merchant Shipping (Marine Equipment Regulations 1999). Equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance

standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom, as specified below:

- 1. MPT 1250; or
- 2. Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may also be considered by Ofcom for use as Base Station equipment as long as all channels, other than the channel(s) shown on subsequent schedules to this licence, can be made inoperable or
- 3. Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may be used as Mobile Station apparatus.

## 4. Special conditions relating to the activities of the Licensee

The Licensee shall ensure that:

- 1. the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified in Schedule 2 to this Licence except with prior written authority from Ofcom;
- 2. Mobile Stations operate only on frequencies set out in Schedule 2. A Ship Radio Licence issued by Ofcom is required for use of any other frequencies, including International Channel 80;
- 3. land-to-land communication is prohibited unless otherwise specified in Schedule 2 or in an emergency where there is a risk to life;
- 4. continuous transmissions are prohibited unless otherwise specified in Schedule 2 to this Licence;
- 5. the connection of any of the Stations with the Public Telephone Network (PSTN) or with other Private Branch Exchanges (PBX) is prohibited unless otherwise specified in Schedule 2;
- 6. in an emergency involving risk to life or navigation, the Licensee may use the Base Stations or Mobile Stations for the purpose of sending and receiving messages between the Base Stations and any other station for wireless telegraphy;
- 7. the Licensee must ensure that the Base Stations or Mobile Stations are only used by persons who have been authorised by the Licensee to do so and who have been made aware of, and comply with, the terms of this Licence. In the event of an emergency where there is a risk to life, the Base Stations and Mobile Stations may be used by any person;
- 8. the Base Stations and Mobile Stations shall be called and identified by their authorised call signs.
- 9. Hand portables may be used within a 4km radius of the base station.

## Interpretation

In this and subsequent schedule(s):

(a) "ERP" means effective radiated power, which is the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction. The power supplied to the antenna is expressed in the form of peak envelope power. The peak envelope power is defined as the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions;

- (b) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna top the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation;
  - (c) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006.
  - (d) "Radio Regulations" means the 2004 edition of the Radio Regulations made under Article 13 of the Constitution of the International Telecommunication Union as may be amended or substituted from time to time;

## Coastal Station Radio (UK) Area Defined

- 1. This Licence is issued by the Office of Communications ("Ofcom") on <<date>> and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.
- 2. This Licence authorises Royal National Lifeboat <<Name>> ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet (Version OF195.1).

Issued by Ofcom.

# Coastal Station Radio (UK) Area Defined SCHEDULE 1 TO LICENCE <<LIC NO>>

This schedule forms part of Licence <<LicNO>>, issued to <<Name>> the Licensee on <<date>>, and describes the Radio Equipment covered by the Licence and the conditions related to the use of the Radio Equipment.

## 1. Description of the Radio Equipment licensed

In this Licence the Radio Equipment means any radio transmitting and receiving stations and/or any radio apparatus.

#### 2. Radio Equipment use and conformity requirements

Subject to the administrative and technical requirements set out in this and Schedule 2 to this

Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

- a) establish sending and receiving stations for wireless telegraphy on land at the location specified in Schedule 2 to this Licence ("the Base Stations");
- b) establish the sending and receiving stations for wireless telegraphy on board vessels specified in Schedule 2 of this Licence ("the Mobile Stations");
- c) use the Base Stations and Mobile Stations for the purpose of sending and receiving voice and data messages concerning the business of the Licensee between the Base Stations

and the Mobile Stations and between the Mobile Stations.

Use of the radio equipment shall be in accordance with the applicable UK Interface Requirement available from the Ofcom website or, for equipment first placed on the market before 8 April 2000, be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

## 3. Special conditions relating to the operation of the Radio Equipment

- a) The Licensee shall ensure that the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified in Schedule 2 to this Licence except with prior written authority from Ofcom;
- b) Mobile Stations may operate only on frequencies set out in Schedule 2. A Ship Radio Licence issued by Ofcom (or, in the case of vessels not registered in the UK, the appropriate overseas administration) is required for use by mobiles of any channel contained in Appendix 18 of the Radio Regulations, including Channel 80;
- c) continuous transmissions are prohibited unless otherwise specified in Schedule 2 to this Licence:
- d) in an emergency involving risk to life or navigation, the Licensee may use the Base Stations or Mobile Stations for the purpose of sending and receiving messages between the Base Stations and any other station for wireless telegraphy;
- e) the Licensee must ensure that the Base Stations or Mobile Stations are only used by persons who have been authorised by the Licensee to do so and who have been made aware of, and comply with, the terms of this Licence. In the event of an emergency where there is a risk to life, the Base Stations and Mobile Stations may be used by any person;
- f) The Licensee shall ensure that the Radio Equipment:
  - i. is not used to transmit music, broadcast programmes or obscene or offensive language;
  - ii. is not used as a public address system; and
  - iii. is not used to send misleading messages.
- g) Upon receipt of messages not connected with the business of the Licensee, the Licensee or any person using the Radio Equipment shall not:
  - i. make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person, except to a duly authorised officer of the Her Majesty's Government, a person authorised by Ofcom or in the course of legal proceedings or for the purpose of any report thereof; and
  - ii. retain any copy or make any use of any such message, or allow it to be reproduced in writing, copied or made use of.
- h) During the period that this Licence remains in force and for 6 months thereafter, the Licensee shall compile and maintain accurate records of the following details relating to the Radio Equipment:

- postal address:
- National Grid Reference (to 100 metres resolution);
- antenna type, direction, gain, height above ground level and power in e.r.p.;
- radio frequency(ies) in operation at the time the information is requested;
- i) The Licensee shall inform Ofcom of the address of the premises at which this Licence and the information detailed at sub-paragraph (h) above shall be kept.
- j) The Licensee must submit to Ofcom copies of the records detailed in sub-paragraph above at such intervals as Ofcom shall notify to the Licensee.
- k) The Licensee must also submit to Ofcom in such manner and at such times as Ofcom may reasonably require, all information relating to the establishment, installation or use of the Radio Equipment, whether stored in printed or electronic form, for the purposes of verifying compliance with this Licence or for statistical purposes;
- I) The Licensee must ensure that the Radio Equipment is established and installed for terrestrial use only.

## 4. Geographical Boundaries

This Licence authorises the establishment and use of the Radio Equipment only in the defined area(s) specified in Schedule 2 of this licence.

## 5. Maximum e.r.p.

- a) The Maximum permitted e.r.p. for Coastal Station (Base) Stations is 25 Watts.;
- b) The Maximum permitted e.r.p. for Mobile Stations is 25 Watts.

## 6. Power Spectral Density at the geographical boundary

The Licensee must operate the Radio Equipment with a power spectral density of not more than -113 dBm/25 kHz from a single transmitter at and beyond the geographical boundary(ies) specified in Schedule 2 of this document.

## 7. Interpretation

In this Schedule:

- a) "e.r.p." means the effective radiated power of a radio antenna in a given direction, that is the product of the power supplied to the antenna and the antenna gain relative to a half wave dipole in a given direction;
- b) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations (S.I. 2000/730);
- c) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna top the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same

power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation;

- d) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006;
- e) "Radio Regulations" means the 2008 edition of the Radio Regulations made under Article 13 of the Constitution of the International Telecommunication Union as may be amended or substituted from time to time;
- f) "Ship Station" means a station authorised for use under a Ship Radio Licence.

## **Coastal Station Radio (International)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises « \_name » ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet.

Issued by Ofcom.

# COASTAL STATION RADIO (INTERNATIONAL) SCHEDULE 1 TO LICENCE «LICENCE» DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE

This schedule forms part of Licence «LICENCE», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

## **Description of the Radio Equipment licensed**

In this Licence, the Licensee is authorised to use the base transceiver or transmitter and/or mobile transceiver or receiver stations for use in accordance with paragraph 2 below (the "Radio Equipment").

## **Purpose of the Radio Equipment**

Subject to the administrative and technical requirements set out in this and Schedule 2 to this Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

establish sending and receiving stations for wireless telegraphy on land at the location specified in Schedule 2 to this Licence ("the Base Stations");

use the Base Stations for the purpose of sending and receiving voice and data messages relating to the operational handling, movement and safety of ships and, in an emergency, the safety of persons between the Base Stations and any Ship Stations.

## **Approved Standards for the Radio Equipment**

The Radio Equipment covered by this Licence shall be subject to and comply with the appropriate Interface Requirement (IR) or the Merchant Shipping (Marine Equipment Regulations 1999). Equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom, as specified below:

- 1. MPT 1250; or
- 2. Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may also be considered by Ofcom for use as Base Station equipment as long as all channels, other than the channel(s) shown on subsequent schedules to this licence, can be made inoperable or
- 3. Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may be used as Mobile Station apparatus.

#### Special conditions relating to the activities of the Licensee

The Licensee shall ensure that:

- 1. the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified in Schedule 2 to this Licence except with prior written authority from the Ofcom;
- 2. Mobile Stations operate only on frequencies set out in Schedule 2. A Ship Radio Licence issued by Ofcom is required for use of any other frequencies, including International Channel 80;
- 3. land-to-land communication is prohibited unless otherwise specified in Schedule 2 or in an emergency where there is a risk to life;
- 4. continuous transmissions are prohibited unless otherwise specified in Schedule 2 to this Licence;
- 5. the connection of any of the Stations with the Public Telephone Network (PSTN) or with other Private Branch Exchanges (PBX) is prohibited unless otherwise specified in Schedule 2;
- 6. in an emergency involving risk to life or navigation, the Licensee may use the Base Stations or Mobile Stations for the purpose of sending and receiving messages between the Base Stations and any other station for wireless telegraphy;
- 7. the Licensee must ensure that the Base Stations or Mobile Stations are only used by persons who have been authorised by the Licensee to do so and who have been made aware of, and comply with, the terms of this Licence. Users must also hold, or be under the direct supervision of a holder of, a Marine Radio Operators' Certificate of Competence and a valid Authority to Operate issued by Ofcom. In the event of an emergency where there is a risk to life, the Base Stations and Mobile Stations may be used by any person;
- 8. the Base Stations and Mobile Stations shall be called and identified by their authorised call signs;
- in addition to use of the frequencies specified in Schedule 2 to this Licence, the Base Stations may also be used for reception only on frequencies in the band 156.025 to 162.025 MHz specified in Appendix 18 of the Radio Regulations of the International Telecommunications Union (ITU);
- 10. data messages are restricted to Digital Selective Calling (DSC) unless otherwise specified in Schedule 2 to this Licence.
- 11. Where they have been authorised, Channels 10, 67 and 73 and the channel on 156.00 MHz (sometimes known as 'Channel 0'), may only be used in coordination

with HM Coastguard (the MCA) in the UK or the with the sea rescue authorities of the Channel Islands.

12. Hand portables may be used within a 4km radius of the base station.

## Interpretation

In this and subsequent schedule(s):

- (a) "ERP" means effective radiated power, which is the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction. The power supplied to the antenna is expressed in the form of peak envelope power. The peak envelope power is defined as the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions;
- (b) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna top the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation:
- (c) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006;
- (d) "Radio Regulations" means the 2004 edition of the Radio Regulations made under Article 13 of the Constitution of the International Telecommunication Union as may be amended or substituted from time to time;
- (e) "Ship Station" means a station authorised for use under a Ship Radio Licence.

# **Coastal Station Radio (International) Area Defined**

- 1. This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom.
- 2. This Licence authorises « name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet (Version OF195.1).

# Coastal Station Radio (Int.) Area Defined SCHEDULE 1 TO LICENCE «LICENCE»

This schedule forms part of Licence «LicNo», issued to « name», the Licensee on <date>, and describes the Radio Equipment covered by the Licence and the conditions related to the use of the Radio Equipment.

### 1. Description of the Radio Equipment licensed

In this Licence, the Licensee is authorised to use the base transceiver or transmitter for use in accordance with paragraph 2 below (the "Radio Equipment").

#### 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and Schedule 2 to this

Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

- (a) establish sending and receiving stations for wireless telegraphy on land at the location specified in Schedule 2 to this Licence ("the Base Stations");
- (b) use the Base Stations for the purpose of sending and receiving voice and data messages relating to the operational handling, movement and safety of ships and, in an emergency, the safety of persons between the Base Stations and any Ship Stations.

#### 3. Approved Standards for the Radio Equipment

The radio equipment covered by this licence shall be subject to and comply with the appropriate Interface requirement (IR) or the Merchant Shipping (Maritime Equipment) Regulations 1999. Equipment first paced on the market before 8 April 2000 is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio equipment, subject to any modifications authorised by Ofcom, as specified below.

- (a) MPT 1250; or
- (b) Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may also be considered by Ofcom for use as Base Station equipment as long as all channels, other than the channel (s) shown on subsequent schedules to this licence, can be made inoperable or
- (c) Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may be used as Mobile Station apparatus.

#### 4. Special conditions relating to the activities of the Licensee

The Licensee shall ensure that:

- (a) the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified in Schedule 2 to this Licence except with prior written authority from the Ofcom;
- (b) Mobile Stations may operate only on frequencies set out in Schedule 2. A Ship Radio Licence issued by Ofcom is required for use by mobile stations of any other channel contained in Appendix 18 of the Radio Regulations, including Channel 80;
- (c) land-to-land communication is prohibited unless otherwise specified in Schedule 2 or in an emergency where there is a risk to life;
- (d) continuous transmissions are prohibited unless otherwise specified in Schedule 2 to this Licence;
- (e) the connection of any of the Stations with the Public Telephone Network (PSTN) or with other Private Branch Exchanges (PBX) is prohibited unless otherwise specified in Schedule 2;
- (f) in an emergency involving risk to life or navigation, the Licensee may use the Base Stations or Mobile Stations for the purpose of sending and receiving messages between the Base Stations and any other station for wireless telegraphy;
- (g) the Licensee must ensure that the Base Stations or Mobile Stations are only used by persons who have been authorised by the Licensee to do so and who have been made aware of, and comply with, the terms of this Licence. Users must also hold, or be under the direct supervision of a holder of, a Marine Radio Operators' Certificate of Competence and a valid Authority to Operate issued by the Secretary of State. In the event of an emergency where there is a risk to life, the Base Stations and Mobile Stations may be used by any person;
- (h) the Base Stations and Mobile Stations shall be called and identified by their authorised call signs;

- (i) in addition to use of the frequencies specified in Schedule 2 to this Licence, the Base Stations may also be used for reception only on frequencies in the band 156.025 to 162.025 MHz specified in Appendix 18 of the Radio Regulations of the International Telecommunication Union (ITU);
- (j) data messages are restricted to Digital Selective Calling (DSC) unless otherwise specified in Schedule 2 to this Licence.
- (I) Hand portables may be used within a 4km radius of the base station.

#### 5. Geographical Boundaries

This Licence authorises the establishment and use of the Radio Equipment only in the defined area(s) specified in Schedule 2 of this licence.

#### 6. Maximum e.r.p.

- a) The Maximum permitted e.r.p. for Coastal Station (Base) Stations is 25 Watts.;
- b) The Maximum permitted e.r.p. for Mobile Stations is 25 Watts.

## 7 Power Spectral Density at the geographical boundary

The Licensee must operate the Radio Equipment with a power spectral density of not more than -113 dBm/25 kHz from a single transmitter at and beyond the geographical boundary(ies) specified in Schedule 2 of this document.

#### 8. Interpretation

In this Schedule:

- a) "e.r.p." means the effective radiated power of a radio antenna in a given direction, that is the product of the power supplied to the antenna and the antenna gain relative to a half wave dipole in a given direction;
- b) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations (S.I. 2000/730);
- c) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna top the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation;
- d) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006;
- e) "Radio Regulations" means the 2008 edition of the Radio Regulations made under Article 13 of the Constitution of the International Telecommunication Union as may be amended or substituted from time to time;
- f) "Ship Station" means a station authorised for use under a Ship Radio Licence.

# **Coastal Radio station (Marina)**

This Licence is issued by the Office of Communications ("Ofcom") on "date" and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises « name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

# **Coastal Station Radio (Marina)**

#### SCHEDULE 1 TO LICENCE NUMBER «LicNo»

#### **DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE**

This schedule forms part of Licence «LicNo», issued to « name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

# 1. Description of the Radio Equipment licensed

In this Licence, the Licensee is authorised to use the base transceiver or transmitter for use in accordance with paragraph 2 below (the "Radio Equipment").

# **Purpose of the Radio Equipment**

Subject to the administrative and technical requirements set out in this and Schedule 2 to this Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

- (a) establish sending and receiving stations for wireless telegraphy on land at the location specified in Schedule 2 to this Licence ("the Base Stations");
- (b) establish the sending and receiving stations for wireless telegraphy on board vessels specified in Schedule 2 of this licence ("the Mobile Stations");
- (c) use the Base Stations and Mobile Stations for the purpose of sending and receiving voice and data messages relating to pleasure activities, including matters of mooring, berthing and race control, between the Base Stations and the Mobile Stations and between the Mobile Stations.

#### **Approved Standards for the Radio Equipment**

The Radio Equipment covered by this Licence shall be subject to and comply with the appropriate Interface Requirement (IR) or the Merchant Shipping (Marine Equipment Regulations 1999). Equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom, as specified below:

- (a) MPT 1250; or
- (b) Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may also be considered by Ofcom for use as Base Station equipment as long as all channels, other than the channel(s) shown on subsequent schedules to this licence, can be made inoperable or
- (c) Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may be used as Mobile Station apparatus.

# 4. Special conditions relating to the activities of the Licensee

#### The Licensee shall ensure that:

- (a) the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified in Schedule 2 to this Licence except with prior written authority from Ofcom;
- (b) Mobile Stations may operate only on frequencies set out in Schedule 2. A Ship Radio Licence issued by Ofcom is required for use by mobiles of any other channel contained in Appendix 18 of the Radio Regulations, including Channel 80;
- (c) land-to-land communication is prohibited unless otherwise specified in Schedule 2 or in an emergency where there is a risk to life;
- (d) continuous transmissions are prohibited unless otherwise specified in Schedule 2 to this Licence;
- (e) the connection of any of the Stations with the Public Telephone Network (PSTN) or with other Private Branch Exchanges (PBX) is prohibited unless otherwise specified in Schedule 2;
- (f) in an emergency involving risk to life or navigation, the Licensee may use the Base Stations or Mobile Stations for the purpose of sending and receiving messages between the Base Stations and any other station for wireless telegraphy;
- (g) the Licensee must ensure that the Base Stations or Mobile Stations are only used by persons who have been authorised by the Licensee to do so and who have been made aware of, and comply with, the terms of this Licence. If International Channel 80 is operable in the Stations apparatus, the user must hold, or be under the direct supervision of a holder of, a Marine Radio Operator's Certificate of Competence and a valid Authority to Operate issued by the Secretary of State. In the event of an emergency where there is a risk to life, the Base Stations and Mobile Stations may be used by any person;
- (h) the Base Stations and Mobile Stations shall be called and identified by their authorised call signs.

## Interpretation

In this and subsequent schedule(s):

- (a) "ERP" means effective radiated power, which is the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction. The power supplied to the antenna is expressed in the form of peak envelope power. The peak envelope power is defined as the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions;
- (b) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna top the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation;
- (c) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006.

(d) "Radio Regulations" means the 2004 edition of the Radio Regulations made under Article
 13 of the Constitution of the International Telecommunication Union as may be amended or substituted from time to time;

# **Coastal Station Radio (Training School)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises "name" ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

#### **COASTAL STATION RADIO (TRAINING SCHOOL)**

#### **SCHEDULE 1 TO LICENCE «LicNo»**

#### **DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE**

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

#### 1. Description of the Radio Equipment licensed

In this Licence, the Licensee is authorised to use the base transceiver or transmitter for use in accordance with paragraph 2 below (the "Radio Equipment").

# 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and Schedule 2 to this Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

- (a) establish sending and receiving stations for wireless telegraphy on land at the location specified in Schedule 2 to this Licence ("the Base Stations");
- (b) use the Base Stations for the purpose of sending and receiving voice and data messages relating to the training of radio operators.

#### 3. Equipment Use

- (a) All radio equipment must be used only within and be rendered incapable of transmission outside of the building of the Licensee Address.
- (b) The station subject to the Licence shall only have a maximum permitted field strength limited to 0 dBμv/m at 10 metres distance.
- (c) The station subject to the Licence shall cause no interference during the conduct of training to any other licensed radio services, domestic broadcast reception apparatus, telephone, computer, domestic entertainment equipment or otherwise. If interference is caused, remedial action must be taken by the Licensee to the satisfaction of the Ofcom.

#### 4. Approved Standards for the Radio Equipment

The Radio Equipment covered by this Licence shall be subject to and comply with the appropriate Interface Requirement (IR) or the Merchant Shipping (Marine Equipment Regulations 1999). Equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom, as specified below:

- (a) MPT 1250; or
- (b) Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may also be considered by the Ofcom for use as Base Station equipment as long as all channels, other than the channel(s) shown on subsequent schedules to this licence, can be made inoperable or
- (c) Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may be used as Mobile Station apparatus.

# 5. Special conditions relating to the activities of the Licensee

The Licensee shall ensure that:

- (a) the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified in (b) below and in Schedule 2 to this Licence except with prior written authority from Ofcom;
- (b) in addition to use of the frequencies specified in Schedule 2 to this Licence, the Base Stations may also be used for reception only on frequencies in the band 156.025 to 162.025 MHz as specified in Appendix 18 of the Radio Regulations of the International Telecommunications Union (ITU);
- (c) land-to-land communication is prohibited unless otherwise specified in Schedule 2 or in an emergency where there is a risk to life;
- (d) continuous transmissions are prohibited unless otherwise specified in Schedule 2 to this Licence:
- (e) the connection of any of the Stations with the Public Telephone Network (PSTN) or with other Private Branch Exchanges (PBX) is prohibited unless otherwise specified in Schedule 2;
- (f) in an emergency involving risk to life or navigation, the Licensee may use the Base Stations for the purpose of sending and receiving messages between the Base Stations and any other station for wireless telegraphy;
- (g) the Licensee must ensure that the Base Stations are only used by persons who have been authorised by the Licensee to do so and who have been made aware of, and comply with, the terms of this Licence. Users must also hold, or be under the direct supervision of a holder of, a Marine Radio Operators' Certificate of Competence and a valid Authority to Operate issued by Ofcom. In the event of an emergency where there is a risk to life, the Base Stations may be used by any person;
- (h) the Base Stations shall be called and identified by appropriate call signs or by one of the MMSIs listed in Schedule 2.

#### Interpretation

In this and subsequent schedule(s):

- (a) "ERP" means effective radiated power, which is the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction. The power supplied to the antenna is expressed in the form of peak envelope power. The peak envelope power is defined as the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions;
- (b) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna top the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation;
- (c) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006;
- (d) "Radio Regulations" means the 2004 edition of the Radio Regulations made under Article 13 of the Constitution of the International Telecommunications Union as may be amended or substituted from time to time.

# **Maritime Navigational Aids and Radar**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises «name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

#### **Maritime Navigational Aids and Radar**

#### SCHEDULE 1 TO LICENCE NUMBER «LicNo»

# **DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE**

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

#### 1, Description of the Radio Equipment licensed

In this Licence, the Licensee is authorised to use the base transceiver or transmitter and/or mobile transceiver or receiver stations for use in accordance with paragraph 2 below (the "Radio Equipment").

### 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and Schedule 2 to this Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

(a) establish sending and receiving stations for wireless telegraphy on land at the location

- specified in Schedule 2 to this Licence ("the Base Stations");
- (b) establish the sending and receiving stations for wireless telegraphy on board vessels specified in Schedule 2 of this licence ("the Mobile Stations");
- (c) use the Base Stations and Mobile Stations for the purpose aiding the navigation and/or location of any Ship Station and only to send, receive or re-transmit a message or signal by automatic or non-automatic means in order to indicate to the Ship Station its position, velocity, or any other relating to this activity, including obstruction warning.

# 3. Approved Standards for the Radio Equipment

The Radio Equipment covered by this Licence shall be subject to and comply with the appropriate Interface Requirement (IR) or the Merchant Shipping (Marine Equipment Regulations 1999). Equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards (MPT 1200 series) authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

## Special conditions relating to the activities of the Licensee

The Licensee shall ensure that:

- (a) the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified in Schedule 2 to this Licence except with prior written authority from Ofcom;
- (b) use of the Radio Equipment complies with the relevant provisions of the Radio Regulations;
- (c) Mobile Stations operate only on frequencies set out in Schedule 2. A Ship Radio Licence issued by Ofcom is required for use of any other frequencies, including International Channel 80:
- (d) land-to-land communication is prohibited unless otherwise specified in Schedule 2 or in an emergency where there is a risk to life;
- (e) continuous transmissions are prohibited unless otherwise specified in Schedule 2 to this Licence;
- (f) the connection of any of the Stations with the Public Telephone Network (PSTN) or with other Private Branch Exchanges (PBX) is prohibited unless otherwise specified in Schedule 2;
- (g) in an emergency involving risk to life or navigation, the Licensee may use the Base Stations or Mobile Stations for the purpose of sending and receiving messages between the Base Stations and any other station for wireless telegraphy;
- (h) the Licensee must ensure that the Base Stations or Mobile Stations are only used by persons who have been authorised by the Licensee to do so and who have been made aware of, and comply with, the terms of this Licence. In the event of an emergency where there is a risk to life, the Base Stations and Mobile Stations may be used by any person;
- (i) the Base Stations and Mobile Stations shall be called and identified by their authorised call signs.

#### Interpretation

In this and subsequent schedule(s):

- (a) "ERP" means effective radiated power, which is the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction. The power supplied to the antenna is expressed in the form of peak envelope power. The peak envelope power is defined as the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions;
- (b) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna top the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation;
- (c) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006;
- (d) "Radio Regulations" means the 2001 edition of the Radio Regulations made under Article 13 of the Constitution of the International Telecommunications Union as may be amended or substituted from time to time.

# **Maritime Radio (Suppliers and Demonstration)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises «name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

#### MARITIME RADIO (SUPPLIERS AND DEMONSTRATION)

#### SCHEDULE 1 TO LICENCE «LicNo»

#### **DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE**

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

# 1. Description of the Radio Equipment Licensed

In this Licence, the Licensee is authorised to use coastal station radio equipment, ship radio equipment and navigational aids for use in the Maritime Radio service in accordance with paragraph 2 below (the "Radio Equipment").

#### 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and Schedule 2 to this

Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

- (a) install, demonstrate and make test transmissions during the service and repair of maritime radio equipment;
- (b) install and demonstrate maritime radio equipment during the course of the licensee's retail business.

## 3. Approved Standards for the Radio Equipment

The Radio Equipment covered by this Licence shall be subject to and comply with the appropriate Interface Requirement (IR) or the Merchant Shipping (Marine Equipment Regulations 1999). Equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom, as specified below:

- (a) MPT 1250; or
- (b) Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may also be considered Ofcom for use as Base Station equipment as long as all channels, other than the channel(s) shown on subsequent schedules to this licence, can be made inoperable; or
- (c) Radio Equipment specified to MPT1251 or MPT1252 or ETS300162 or ETS300225 may be used as Mobile Station apparatus;
- (d) Merchant Shipping Notice MSN 1735 (M+F) published by the Maritime and Coastguard Agency.

#### 4. Special Conditions Relating to the Activities of the Licensee

The Licensee shall ensure that:

- (a) the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified in (b) below or in Schedule 2 to this Licence except with prior written authority from Ofcom;
- (b) the Radio Equipment shall be used only on ship frequencies and in accordance with the maximum powers and classes of emission, within the maritime allocations only, of the frequency bands as designated in the Radio Regulations;
- (c) the Radio Equipment is only used at the location specified in Schedule 2 to this Licence or at temporary locations notified in writing Ofcom Operations Licensing at Riverside House, 2a Southwark Bridge Road, London SE1 9HA;
- (d) land-to-land communication is prohibited unless otherwise specified in Schedule 2 or in an emergency where there is a risk to life;
- (e) continuous transmissions are prohibited unless otherwise specified in Schedule 2 to this Licence;
- (f) the connection of any of the Stations with the Public Telephone Network (PSTN) or with other Private Branch Exchanges (PBX) is prohibited unless otherwise specified in Schedule 2:
- (g) the Radio Equipment shall be called and identified by their authorised call signs. The call

sign must be announced at the beginning of all transmissions and transmitted in the same format for the remainder of the transmission.

- (h) their customers are aware of the requirement for and the terms of the licence that governs the use of the Radio Equipment and the penalties for improper use thereof.
- (i) The Radio Equipment shall be operated on a 'Non-Interference Non-Protected' basis, that is, the Radio Equipment shall not cause harmful interference to, and shall not claim protection from, other stations operating in accordance with the Radio Regulations

# 5. Test Conditions Relating to Distress and Safety Frequencies

The licensee shall ensure that whilst carrying out tests on the specific distress and safety frequencies that the following conditions apply.

- (a) All transmissions relating to this licence should be carried out in accordance with agreed international maritime procedures.
- (b) The licensee shall notify Ofcom in writing at the address specified below before any transmission take place:

Ofcom Licensing Centre, Riverside House, 2a Southwark Bridge Road, London, SE1 9HA.

E-mail: spectrum.licensing@ofcom.org.uk
Telephone Number: 020-7981-3198 / 3087
Fax Number: 020-7981-3061

(c) the duration of the test should be kept to a minimum and the licensee should make confirmatory calls to the listed authorities both before and upon completion of the test.

#### Listed Authorities:

UKMCC- RAF Kinloss. FORRES, MORAY IV36 3UH Tel: 01309-692360

Distress and Diversion SARS-ATC West Drayton and ATC Prestwick.

MRCC- Falmouth-HM Coastguard, Pendennis Point, Castle Drive, Falmouth CORNWALL TR11 4WZ Tel: 01326 310 800 The following specific conditions relating to specific frequencies should be followed:

- (d) 121.5/243MHz- Aeronautical Distress frequencies.
  - i. Inappropriate transmissions on these frequencies could affect Search and Rescue (SAR) operations. All tests relating to inspections or demonstrations, where possible, should be carried out under suppressed conditions.
  - ii. Radiating tests on 121.5MHz and 243MHz can only be authorised by prior, specific, written agreement with the listed authorities stating the requested time, duration and location of the test.
  - iii. Transmissions of non-operational test signals on the emergency frequencies 121.5MHz and 243MHz must be coordinated with the competent listed authorities and carried out only during the first five minutes of each hour, with each test transmission lasting no longer than 10 seconds. This is in accordance with the provisions of §17B of Appendix 13 to the International Telecommunication Union Radio Regulations in order to avoid unjustified alerts in automatic emergency systems
  - iv. The duration of the test should be kept to a minimum and the licensee should inform the listed authorities both before and upon completion of the test.
  - (e) 123.1MHz
    - i. Inappropriate transmissions on this frequency could interfere with SAR incidents in progress.
    - ii. Tests on this frequency can only be carried out with prior agreement with the listed authorities.
  - (f) 406-406.1 MHz
    - i. Due to the instantaneous response of SAR authorities, distress beacons operating on frequencies within the 406-406.1MHz band, coded with operational protocols, may **not** be operated under radiating conditions.
    - ii.Distress beacons operating within the 406-406.1MHz band and coded with the Test User Protocol may be tested after having coordinated the test with, and received approval from the listed authorities.
  - (g) 1.6GHz
    - i. Radiated tests on this frequency can initiate a search and rescue response.
    - ii. Tests on this frequency can only be carried out with the prior agreement of the listed authorities.

#### 6. Service, Repair and Installation

While undertaking service and repair of Maritime radio equipment, the licensee shall ensure that:

(a) the Radio Equipment is connected to either a suitable radio frequency, non-radiating termination (dummy load), or radio frequency test apparatus containing a dummy load or an appropriate radiating antenna; and

- (b) the frequency on which the Radio Equipment is intended to be operated must be monitored prior to any transmission, which may only take place if the frequency is not in use; and
- (c) all transmissions shall be of the minimum possible duration to facilitate the necessary service and repair; and
- (d) all transmissions on international maritime channels shall be made by a holder of, or under the direct supervision of a holder of, the appropriate Maritime Radio Operators' Certificate of Competence and a valid Authority to Operate issued by Ofcom; and
- (e) only the MMSI number assigned to the vessel under a Ship radio licence is used.

#### **Maritime Radio Demonstration**

While undertaking demonstration of the Radio Equipment, the licensee shall ensure that:

- (a) prior authority is obtained from Ofcom; and
- (b) any MMSI number used for demonstration purposes must have been authorised in writing by Ofcom; and
- (c) the frequency on which the Radio Equipment is intended to be operated must be monitored prior to any transmission, which may only take place if the frequency is not in use; and
- (d) all transmissions shall be of the minimum possible duration to facilitate the necessary demonstration; and
- (e) all transmissions on international Maritime channels shall be made by a holder of, or under the direct supervision of a holder of the appropriate Maritime Radio Operators' Certificate and Authority to Operate issued by Ofcom.

#### 8. Interpretation

In this and subsequent schedule(s):

- (a) "ERP" means effective radiated power, which is the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction. The power supplied to the antenna is expressed in the form of peak envelope power. The peak envelope power is defined as the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions;
- (b) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna top the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation;
- (c) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006;
- (d) "Radio Regulations" means the 2001 edition of the Radio Regulations made under Article 13 of the Constitution of the International Telecommunications Union as may be amended or substituted from time to time.

# **Differential Global Positioning System**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises «name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

#### **Differential Global Positioning System**

#### SCHEDULE 1 TO LICENCE NUMBER «LicNo»

#### **DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE**

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

# 1, Description of the Radio Equipment licensed

In this Licence, the Licensee is authorised to use the base transceiver or transmitter and/or mobile transceiver or receiver stations for use in accordance with paragraph 2 below (the "Radio Equipment").

# 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and Schedule 2 to this Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

- (a) establish sending and receiving stations for wireless telegraphy on land at the location specified in Schedule 2 to this Licence ("the Base Stations");
- (b) establish the sending and receiving stations for wireless telegraphy on board vessels specified in Schedule 2 of this licence ("the Mobile Stations");
- (c) use the Base Stations and Mobile Stations for the purpose aiding the navigation and/or location of any Ship Station and only to send, receive or re-transmit a message or signal by automatic or non-automatic means in order to indicate to the Ship Station its position, velocity, or any other relating to this activity, including obstruction warning.

#### 3. Approved Standards for the Radio Equipment

The Radio Equipment covered by this Licence shall be subject to and comply with the appropriate Interface Requirement (IR) or the Merchant Shipping (Marine Equipment Regulations 1999). Equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards (MPT 1200 series) authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

#### Special conditions relating to the activities of the Licensee

The Licensee shall ensure that:

- (a) the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified in Schedule 2 to this Licence except with prior written authority from Ofcom;
- (b) use of the Radio Equipment complies with the relevant provisions of the International Telecommunications Convention and the Radio Regulations thereunder. In particular, and without limiting the generality of type foregoing, the Licensee shall comply with the provisions concerning the notification of modification or working of a radiodetermination station, as set out in the Radio Regulations;
- (c) Mobile Stations operate only on frequencies set out in Schedule 2. A Ship Radio Licence issued by Ofcom is required for use of any other frequencies, including International Channel 80:
- (d) land-to-land communication is prohibited unless otherwise specified in Schedule 2 or in an emergency where there is a risk to life;
- (e) continuous transmissions are prohibited unless otherwise specified in Schedule 2 to this Licence;
- (f) the connection of any of the Stations with the Public Telephone Network (PSTN) or with other Private Branch Exchanges (PBX) is prohibited unless otherwise specified in Schedule 2:
- (g) in an emergency involving risk to life or navigation, the Licensee may use the Base Stations or Mobile Stations for the purpose of sending and receiving messages between the Base Stations and any other station for wireless telegraphy;
- (h) the Licensee must ensure that the Base Stations or Mobile Stations are only used by persons who have been authorised by the Licensee to do so and who have been made aware of, and comply with, the terms of this Licence. In the event of an emergency where there is a risk to life, the Base Stations and Mobile Stations may be used by any person;
- (i) the Base Stations and Mobile Stations shall be called and identified by their callsign

# Interpretation

In this and subsequent schedule(s):

- (a) "ERP" means effective radiated power, which is the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction. The power supplied to the antenna is expressed in the form of peak envelope power. The peak envelope power is defined as the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions;
- (b) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna top the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation;

- (c) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006;
- (d) "The Telecommunications Convention" means the International elecommunications Convention signed at Malaga, Torremolinos on 25 October 1973 and the Radio Regulations and Additional Radio Regulations in force thereunder, and includes any Convention and regulations which may from time to time be in force in substitution for or in amendment of the said Convention or the said Regulations.

# **Ship and Ship Portable**

# United Kingdom of Great Britain & Northern Ireland, the Chanel Islands and Isle of Man

Note: The Licence is valid only if the vessel and Licensee accord with the details of the Licence and shall continue in force until the Licence is surrendered by the Licensee or revoked by Ofcom.

#### Schedule 1

Where this is a Ship Radio Licence, this Licence, Granted by the Office of Communications ("Ofcom"), authorises the Licensee to establish, install and use radio transmitting and receiving equipment as indicated in the table below and subject to the terms set out in Section 2, on board the vessel detailed above.

Where this is a Ship Portable Radio Licence, Granted by the Office of Communications ("Ofcom") and intended for use in the United Kingdom territorial waters, authorises the Licensee to establish, install and use radio transmitting and receiving equipment as indicated in the table below and subject to the terms set out in Section 2.

This Licence, the relevant Maritime Radio Operator's Certificate of Compliance and valid Authority to Operate, and any notices of variation to the Licence shall be kept with or near to the radio equipment at all times, where it is physically practicable to do so.

# **Automatic Identification System**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises "name" ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

# Automatic Identification Systems (AIS) SCHEDULE 1 TO LICENCE NUMBER «LicNo» DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE

This schedule forms part of Licence <LicNO>, issued to <Name>, the Licensee on <Date>, and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

#### 1. Description of the Radio Equipment licensed

In this Licence, the Licensee is authorised to use the Base and or Aids to Navigation (AtoN) station(s) for use in accordance with paragraph 2 below (the "Radio Equipment").

#### 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and Schedule 2 to this Licence, the Licensee and any person authorised to act on their behalf is hereby authorised to:

(a) Establish sending and receiving station(s) for wireless telegraphy at the location(s) specified in the Schedule(s) to this Licence.

#### 3. Approved Standards for the Radio Equipment

(a) The Radio Equipment covered by this Licence shall be subject to and comply with the R&TTE Directive, the appropriate Interface Requirement (IR) or the Merchant Shipping (Marine Equipment Regulations 1999). Equipment first placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

#### 4. Special conditions relating to the activities of the Licensee

The Licensee shall ensure that:

- (a) the Radio Equipment is used only in accordance with the frequencies, powers, characteristics, antenna details and any other requirements specified below or in Schedule 2 to this Licence except with prior written authority from Ofcom;
- (b) the Licensee must ensure that the Radio Equipment is only used by persons who have been authorised by the Licensee to do so and who have been made aware of, and comply with, the terms of this Licence;
- (c) the Base and or Aids to Navigation (AtoN) station(s) shall be identified by their authorised MMSI number.

#### 5. Technical Performance Requirements

The Licensee must ensure that:

(a) The equipment is operated in accordance with the designated time slots and other conditions as per the Schedule(s).

#### 6. Interpretation

In this and subsequent schedule(s):

- (a) "ERP" means effective radiated power, which is the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction. The power supplied to the antenna is expressed in the form of peak envelope power. The peak envelope power is defined as the average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions;
- (b) "EIRP" means the equivalent isotropically radiated power, which is the product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna;
- (c) the "antenna gain" is the ratio, usually expressed in decibels, of the power required at the input of a loss-free reference antenna to the power supplied to the input of the given antenna to produce, in a given direction, the same field strength or the same power flux density at the same distance. The antenna gain is expressed in decibels relative to a half-wave dipole (dBd) and refers to the direction of maximum radiation;

- (d) "AGL" means height above ground level
- (e) "AMSL" means height above mean sea level
- (f) words and expressions in this licence have the same meaning as they have in the Wireless Telegraphy Act 2006;

#### Section 9

# Programme Making and Special Events

# Programme Making and Special Events: Fixed Site, Links, Low Power and UK Wireless Microphone

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises **«Company»** ("the Licensee") to establish, install and use radio transmitting and receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms and geographic restrictions set out below and subject to the terms of the Ofcom General Licence Conditions booklet (PMSE version 8 February 2007) available from Ofcom.

This Licence shall continue in force until **«date»**, unless earlier revoked by Ofcom or surrendered by the Licensee, but the Radio Equipment may only be used during the period of use specified in Schedule 2.

# PROGRAMME MAKING AND SPECIAL EVENTS LICENCE

#### SCHEDULE 1 TO LICENCE NUMBER «LicNo»

#### DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE

This schedule forms part of Licence «LicNo», issued to «name», the Licensee, on «date» and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

#### 1. (a) The Radio Equipment may only be used:

- (1) on such frequencies ("the Licensed Frequency"), shown in column 2 of Schedule 2 to the Licence in relation to the particular Radio Equipment in Column 1 of Schedule 2;
- (2) at a bandwidth not exceeding that specified in column 3 of Schedule 2 in relation to the Licensed Frequency;
- (3) at a power not exceeding that specified in column 4 of Schedule 2 in relation to the Licensed Frequency;
- (4) with the emission characteristics described in column 5 of Schedule 2 in relation to the Licensed Frequency;
- (5) in accordance with the restrictions contained in column 6 of Schedule 2 in relation to the Licensed Frequency, and where airborne operation is permitted, at a height above ground level not greater than specified in that column;

- (6) with the signalling (if any) described in column 7 of Schedule 2 in relation to the Licensed Frequency;
- (7) with the polarisation described where appropriate in column 8 of Schedule 2 in relation to the Licensed Frequency;
- (8) in conjunction with the duplex frequency (if any) shown in column 9 of Schedule 2 in relation to the Licensed Frequency;
- (9) at the location(s) or within the area(s) shown and in accordance with the restrictions contained in column 10 of Schedule 2 in relation to the Licensed Frequency;
- (10) during the period of use shown in column 11 of Schedule 2.
- (b) The Radio Equipment may not be used to transmit from any aircraft (for the avoidance of doubt, this includes any helicopter, model aircraft or helicopter, or any other airborne object, whether powered or not and whether captive or not), except where specified in column 5 of Schedule 2 in relation to the Licensed Frequency, and such power, subject to such restrictions noted.

# 2. Technical Performance Requirements

The Radio Equipment shall at all times be installed, maintained and used in such a way that its use does not cause any undue interference with any authorised wireless telegraphy

# 3. Purpose of Use

The Licensee shall use the Radio Equipment only:

- (a) for Programme Making; or
- (b) to enable those directly engaged in Programme Making to communicate with each other; or
- (c) to transmit the material produced in Programme Making to a receiving station of the Licensee; or to any receiving station owned and operated by a public telecommunications operator; or to a holder of a Programme Making and Special Events Licence issued under section 8 of the Wireless Telegraphy Act 2006; or to any other person approved by Ofcom; or
- (d) to send or receive verbal or non-verbal test messages in connection with subclauses (a), (b) or (c) above.

# 4. Call Sign

Use of the Radio Equipment must whenever practicable be preceded and terminated by the following call sign: «CallSign»

#### 5. Facilities

The use of the following methods of voice privacy are permitted without specific authorisation, provided that no undue interference is caused to other authorised radio users:

- (i) frequency inversion;
- (ii) band inversion;

- (iii) band scrambling; and
- (iv) rolling code inversion.

# 6. Conformity Assessment Requirements

The Radio Equipment covered by this licence shall be subject to and comply with the appropriate Interface Requirement IR2038 ("IR") or, for equipment placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

# 7. Interpretation

In this Licence:

- (a) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Wireless Telegraphy Act 2006;
- (b) the expression "Programme Making" includes the making of a programme for broadcast, the making of a film, presentation, advertisement or audio or video tape, and the staging or performance of an entertainment, sporting or other public event;
- (c) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of directive 1999/5/EC of the European Parliament and of the Council on the radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive (O.J.No.L91) was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations (S.I. 2000/730).

#### **Audio Distribution System**

# SOUND LINK LICENCE EXTENDED TO INCLUDE AUDIO DISTRIBUTION SYSTEMS AT SPECIAL EVENTS

### SCHEDULE 1 TO LICENCE NUMBER «LicNo»

#### DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE

This schedule forms part of Licence «LicNo», issued to «name», the Licensee, on «date» and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

#### 1. (a) The Radio Equipment may only be used:

- (1) if the Licensee holds a valid Radio Restricted Service Licence issued by Ofcom under part III of the Broadcasting Act 1990 which authorises broadcasting from the radio equipment;
- (2) on such frequencies ("the Licensed Frequency"), shown in column 2 of Schedule 2 to the Licence in relation to the particular Radio Equipment in Column 1 of Schedule 2;

- (3) at a bandwidth not exceeding that specified in column 3 of Schedule 2 in relation to the Licensed Frequency;
- (4) at a power not exceeding that specified in column 4 of Schedule 2 in relation to the Licensed Frequency;
- (5) with the emission characteristics described in column 5 of Schedule 2 in relation to the Licensed Frequency;
- (6) in accordance with the restrictions contained in column 6 of Schedule 2 in relation to the Licensed Frequency, and where airborne operation is permitted, at a height above ground level not greater than specified in that column;
- (7) with the signalling (if any) described in column 7 of Schedule 2 in relation to the Licensed Frequency;
- (8) with the polarisation described where appropriate in column 8 of Schedule 2 in relation to the Licensed Frequency;
- (9) at the location(s) or within the area(s) shown and in accordance with the restrictions contained in column 10 of Schedule 2 in relation to the Licensed Frequency;
- (10) during the period of use shown in column 11 of Schedule 2.
- **(b)** The Radio Equipment may not be used to transmit from any aircraft (for the avoidance of doubt, this includes any helicopter, model aircraft or helicopter, or any other airborne object, whether powered or not and whether captive or not).

#### 2. Technical Performance Requirements

The Radio Equipment shall at all times be installed, maintained and used in such a way that its use does not cause any undue interference with any authorised wireless telegraphy

#### 3. Purpose of Use

The Licensee shall use the Radio Equipment only:

- (a) for the local distribution of audio signals; or
- (d) to send or receive verbal or non-verbal test messages in connection with subclauses (a) above.

# 4. Call Sign

Use of the Radio Equipment must whenever practicable be preceded and terminated by the following call sign: «CallSign»

### 5. Facilities

The use of the following methods of voice privacy are permitted without specific authorisation, provided that no undue interference is caused to other authorised radio users:

- (v) frequency inversion;
- (vi) band inversion;

- (vii) band scrambling; and
- (viii) rolling code inversion.

# 6. Conformity Assessment Requirements

The Radio Equipment covered by this licence shall be subject to and comply with the appropriate Interface Requirement IR2038 ("IR") or, for equipment placed on the market before 8 April 2000, is required to be type approved in accordance with the appropriate published technical performance standards authorised at the date of installation of the Radio Equipment, subject to any modifications authorised by Ofcom.

# 7. Interpretation

In this Licence:

- (a) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Wireless Telegraphy Act 2006;
- (b) "IR" means the United Kingdom Radio Interface Requirement published by Ofcom in accordance with Article 4.1 of directive 1999/5/EC of the European Parliament and of the Council on the radio equipment and telecommunications terminal equipment (RTTE) and mutual recognition of their conformity. The Directive (O.J.No.L91) was implemented in the UK by the Radio Equipment and Telecommunications Terminal Equipment Regulations (S.I. 2000/730).

#### Section 10

# Satellite

# **Satellite (Earth Station Network)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises "name" ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

#### SATELLITE (EARTH STATION NETWORK) LICENCE

#### SCHEDULE 1 TO LICENCE NUMBER «LicNo»

#### TERMS, PROVISIONS AND LIMITATIONS COVERED BY THIS LICENCE

This schedule forms part of Licence «LicNo», issued to «name», the Licensee on «date», and describes the terms and equipment specifications covered by this licence.

#### 1. The Licensee may establish and use:

Permanent, transportable or mobile sending and receiving Network Earth Station(s) ("the Station(s)") for the purpose of providing Wireless Telegraphy links between the Station(s) and Geostationary Satellite(s).

# 2. Limitations on use

The Stations(s) shall:

- a) transmit within one or more of the following frequency ranges: 14.0-14.25 GHz, 27.5 27.8185 GHz, 28.4545 28.8265 GHz, 29.4625 30 GHz;
- b) transmit only to the satellite and its associated orbital longitude specified in Schedule 2:
- c) Additionally:
  - a. stations(s) that transmit with e.i.r.p. greater than 50 dBW shall operate only with prior consent from Ofcom and registration of the station(s) against the licence;
  - stations(s) that transmit within the frequency band 14.0 GHz to 14.25 GHz inclusive shall not operate at any location within the two geographical areas specified in Schedule 3 without prior consent from Ofcom and registration of the station(s) against the licence; and
  - c. station(s) shall not operate within the perimeter fence of any of the aerodromes specified in Schedule 4 without prior consent from the Civil Aviation Authority or stated Airport Authority.

#### 3. Apparatus

#### The Licensee shall ensure that:

- a) The apparatus comprised in the Station(s) (" the Apparatus ") is so designed, constructed, maintained and operated, that its use does not cause any undue interference to other users of the spectrum.
- b) The apparatus complies with (and is maintained in accordance with) the relevant performance specification(s) published by the operator(s) of the Geostationary Satellite(s).
- c) The apparatus used for transmission complies with the R&TTE Directive and the appropriate UK National Interface Requirements.

# 3. Additional conditions for mobile operation

- a) The Radio Equipment shall be established or installed so that transmissions from the Radio Equipment may only be made when the Radio Equipment's operation is enabled by the crew of the vehicle, aircraft or train upon which it is mounted, and under the operational control of the Network Control Facility. The Radio Equipment shall provide the crew with a means immediately to terminate transmissions.
- b) Where an aircraft is registered in the United Kingdom, Channel Islands or the Isle of Man, the Licensee shall ensure that all Radio Equipment on board that aircraft is endorsed by either a separate licence or exemption under the Wireless Telegraphy Act 2006.
- c) The Radio Equipment installed on an aircraft shall not be permitted to operate when the aircraft is below 7000 feet altitude, or operate during take-off, initial climb-out, final approach, landing or taxiing, unless specifically authorised by the CAA.
- d) Transmissions from the Radio Equipment shall automatically be terminated on loss or significant degradation of the downlink signal from the relevant Geostationary Satellite.
- e) The Radio Equipment shall employ a stabilised platform with the ability to maintain a pointing accuracy +/-0.2 degrees towards the relevant Geostationary Satellite throughout transmissions.
- f) The maximum EIRP at angles greater than or equal to 2.5 degrees from the antenna main beam axis shall not exceed 20 dBW/40 kHz from any individual station.

#### 5. National and international obligations

- a) The relevant satellite data shall have been submitted to ITU in accordance with established ITU procedures.
- b) All transmissions in the Fixed Satellite Service must be terminated prior to any change of location; unless the apparatus used for transmission is designed for mobile operation and incorporates an established platform or is operating under a specific exemption authorised by Ofcom.

#### 6. Requirements specific to Satellite (Earth Station Network) Licences

a) The Licensee shall keep a record of the operational characteristics of all terminals in

the network, including the locations of fixed installations or, for mobile operation, details of the vehicles, aircraft or trains on which the terminals are installed and the associated route or defined area of operation, which Ofcom may wish to have access to for enforcement purposes

- b) Terminals that are included as part of a Network Licence shall implement independent local control and monitoring functions at the terminal, and be authorised, supervised and administered by a Network Control and Monitoring centre.
- c) The Licensee shall have the facility to disable individual terminal transmission.
- d) For satellite networks in MESH configuration, the network operator must nominate and notify Ofcom of those earth station(s) located in the UK which have independent centralised control and monitoring functionality and possess the capability to suppress transmissions from any earth station within thenetwork. Earth stations that are capable of dynamic assignment as point-to- multipoint and point-to-point configuration may only be licensed as permanent earth stations.

#### Interpretation

In this and subsequent schedule(s):

- a) "Earth Station" means a radio transmitter located on the surface of the earth or mounted on a vehicle or train and intended for communication with one or more satellites.
- b) "Geostationary Satellite" means a satellite in geostationary orbit which remains approximately in a fixed position relative to a position on the surface of the earth.

#### **Notes**

- 1. This Licence does not affect the requirement, when necessary, to obtain licences or authorisations under other Acts, such as the Broadcasting Act.
- 2. Some terminal installations require Local Authority Planning Approval. Advice should be sought from the Department for Business, Enterprise and Regulatory Reform and the appropriate Local Authority planning department.
- 3. The licensee must apply for a variation of the licence from Ofcom before making any changes which may contravene the conditions of the licence.
- 4. Technical terms used in clause 2 shall have the meanings assigned to them in the Radio Regulations.
- 5. For Radio Equipment installed on aircraft, licensees are advised that they must comply with Civil Aviation Authority (CAA) airworthiness requirements and regulations
- 6. Further information, in respect of airworthiness requirements and certification requirements before installation, can be obtained by contacting the Civil Aviation Authority (CAA):

**Civil Aviation Authority** 

CAA House 45-59 Kingsway London WC2B 6TE Tel: 020 7379 7311 http://www.caa.co.uk

#### **SCHEDULE 2**

Operations are subject to the provision of Article 4.4 of the Radio Regulations (non-interference basis to users of this spectrum) prior to International Co-ordination

#### Schedule 3

Permission to operate equipment subject to this licence from any location **within 5km** of the following National Grid References must be obtained from Ofcom. Stations approved by Ofcom will be registered against the licence.

SE 20900 56100 SS 20500 12600

#### Schedule 4

Permission to operate equipment subject to this licence from any location within the perimeter fence of the aerodromes listed below must be obtained from either the CAA or the Airport Authority.

CAA Contact: 0207 453 6531

# **Satellite (Permanent Earth Station)**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises "name" ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

#### **SATELLITE (PERMANENT EARTH STATION)**

#### SCHEDULE 1 TO LICENCE NUMBER <Lic\_No>,

# TERMS, PROVISIONS AND LIMITATIONS COVERED BY THIS LICENCE

This schedule forms part of Licence <Lic\_No>, issued to <Lic\_Name>, the Licensee on <Issue\_Date>, and describes the terms and equipment specifications covered by this licence.

# 1. The Licensee may establish and use:

A Permanent sending and receiving Earth Station ("the Station") at the location specified in the attached schedule for the purpose of providing Wireless Telegraphy links between the Station and Geostationary Satellite.

# 2. Limitations on use.

#### The Stations shall use only:

- the classes of emission specified in the Designation of Emission column of the attached schedule;
- b) the frequencies specified in the Transmit Frequency and Receive Frequency columns of the schedule:
- c) a power not exceeding that specified in the Equivalent Isotropically Radiated Power column of the schedule:
- d) the antenna type specified in the Antenna Type column of the schedule;
- e) a power density not exceeding that specified in the Spectral Power Density Column of the schedule;
- f) the Station shall be operated only from the location specified on the schedule.

# 3. Apparatus

The Licensee shall ensure that:

- a) the apparatus comprised in the station(s) ("the Apparatus") is so designed constructed, maintained and operated, that it does not cause any undue interference to other users of the spectrum;
- b) the Apparatus complies with (and is maintained in accordance with) the relevant performance specification(s) published by the operator of the Geostationary Satellite;
- the earth station antenna shall not be employed for transmission at elevation of less than 3 degrees measured from the horizontal plane to the direction of maximum radiation as specified in ITU Radio Regulation ITU – RR ART. 21.14;
- d) the component of effective isotropic radiated power directed towards the horizon and the minimum elevation angle above the horizontal must comply with ITU Radio Regulations and not exceed those limits specified by Radio Regulations ITU-RR ART. 21.8 ART. 21.15;
- e) in the band 13.75GHz 14GHz, earth stations with an antenna diameter of less than 4.5m operate in compliance with the pfd limits in RR 5.502, that the e.i.r.p. of any emission from an earth station in the fixed satellite service does not exceed 85dBW and that the e.i.r.p. density of emissions in the band 13.77-13.78 GHz complies with RR 5.503;
- f) in the bands 27.8185-28.4545 GHz and 28.8265-29.4625 GHz, the power flux density produced by the earth station does not exceed -108.5db(W/(m² ·1MHz) for more than 50% of the time produced at 6m above ground level at a distance of 6 kms from the earth station;

- g) the apparatus used for transmission complies with the R&TTE Directive and all appropriate National Interface Requirements for Satellite Earth Stations in force within the UK;
- h) the Antenna Radiation Pattern Envelope meets the minimum performance specified by ITU Recommendation ITU-R S.465, or ITU-R S.580 for antennas installed after 1995:

Where appropriate, Ofcom may require that the Licensee provide additional screening at the installation as a condition of the licence.

# 4. National and international obligations

- a) The earth station must undergo national coordination and site clearance for operation at the specified location.
- b) The relevant satellite data shall have been submitted to ITU in accordance with established ITU procedures.
- c) All transmissions in the Fixed Satellite Service must be terminated prior to any change of location; unless operating under a specific exemption authorised by Ofcom.
- d) The licensee shall comply with any notice given by Ofcom under section 9A of the Wireless Telegraphy Act 2006 requiring the licensee to cease or suspend the uplinking by means of the licensed apparatus of any service specified in such notice by such date as may be specified.
- e) The licensee shall provide such information as Ofcom may request by notice in writing for the purpose of determining whether section 9A of the Wireless Telegraphy Act 2006 applies in relation to a service for which the licensee provides uplink facilities using the licensed apparatus or for any purpose connected with the giving of a notice by Ofcom under section 9A of the Act.
- f) Some or all of the operations listed in Schedule 2 are subject to International Co-ordination in accordance with Article 9 of the Radio Regulations. While international coordination is being carried out by Ofcom, these operations are subject to the provisions of Article 4.4 of the Radio Regulations (non-interference, non protected basis with respect to other users of this spectrum). Where international coordination is not successful, the relevant operations will be removed from the licence.

# 5. Interpretation

In this and subsequent schedule(s):

a) "Earth Station" means a radio transmitter located on the surface of the earth and intended for communication with one satellite.

- b) "Geostationary Satellite" means a satellite in geostationary orbit which remains approximately in a fixed position relative to a position on the surface of the earth.
- c) "Uplink" and any cognate expression refers to a transmission in the Earth-tospace direction

# Satellite (Transportable Earth Stations) CAT 1, CAT 2 & CAT3

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises «name» ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

# SATELLITE (TRANSPORTABLE EARTH STATION) SCHEDULE 1 TO LICENCE NUMBER <Lic\_No>,

## TERMS, PROVISIONS AND LIMITATIONS COVERED BY THIS LICENCE

This schedule forms part of Licence <Lic\_No>, issued to <Lic\_Name>, the Licensee on <Date>, and describes the terms and equipment specifications covered by this licence.

**1.** The Licensee may establish and use:

Transportable sending and receiving Earth Station(s) ("the Station(s)") at the locations specified in the attached schedule for the purpose of providing Wireless Telegraphy links between the Station(s) and Geostationary Satellite(s).

### 2. Limitations on use.

The Stations(s) shall use only:

- a) the antenna type(s) specified in the Antenna Type column of the schedule;
- b) operate only in accordance with the conditions specified in any variation to licence schedule authorised by Ofcom's online clearance and authorisation tool SPECTRAsc.

# 3. Apparatus

The Licensee shall ensure that:

a) The apparatus comprised in the Station(s) (" the Apparatus ") is so designed, constructed, maintained and operated, that its use does not cause any undue interference to other users of the spectrum.

- b) The Apparatus complies with (and is maintained in accordance with) the relevant performance specification(s) published by the operator(s) of the Geostationary Satellite(s).
- c) Earth station antennae shall not be employed for transmission at elevation angles of less than 3 degrees measured from the horizontal plane to the direction of maximum radiation as outlined in ITU Radio Regulation ITU RR ART, 21.14.
- d) The component of effective isotropic radiated power directed towards the horizon and the minimum elevation angle above the horizontal must comply with ITU Radio Regulations and not exceed those limits specified by Radio Regulations RR ART. 21.8 RR ART.21.15.
- e) The apparatus used for transmission complies with the R&TTE Directive and all appropriate National Interface Requirements for Satellite Earth Stations in force within the UK.
- f) The Antenna Radiation Pattern Envelope meets the minimum performance specified by ITU Recommendation ITU-R S465, or ITU-R S580 for antennas installed after 1995.

## **4.** National and international obligations

- a) The earth station must obtain satisfactory site clearance for operation at that location; operators intending to transmit in the Fixed Satellite service frequency bands must obtain national clearance and co-ordination prior to commencing operation in the UK.
- b) The relevant satellite data shall have been submitted to ITU in accordance with established ITU procedures.
- c) All transmissions in the Fixed Satellite Service must be terminated prior to any change of location; unless operating under a specific exemption authorised by Ofcom.
- d) The licensee shall comply with any notice given by Ofcom under section 9A of the Wireless Telegraphy Act 2006 requiring the licensee to cease or suspend the uplinking by means of the licensed apparatus of any service specified in such notice by such date as may be specified.
- e) The licensee shall provide such information as Ofcom may request by notice in writing for the purpose of determining whether section 9A of the Wireless Telegraphy Act 2006 applies in relation to a service for which the licensee provides uplink facilities using the licensed apparatus or for any purpose connected with the giving of a notice by Ofcom under section 9A of the Act.

# 5. Interpretation

In this and subsequent schedules

- a) "Earth Station" means a radio transmitter located on the surface of the earth and intended for communication with one or more satellites.:
- b) "Geostationary Satellite" means a satellite in geostationary orbit which remains approximately in a fixed position relative to a position on the surface of the earth.
- c) "Uplink" and any cognate expression refers to a transmission in the Earth-tospace direction

#### **Notes**

- 1. This licence does not affect the requirement, when necessary, to obtain licences or authorisations under other Acts. Some satellite television or radio broadcasting services also require licences under the Broadcasting Act 1990, and some installations require Local Authority Planning Approval.
- 2. The Licensee must apply for a variation of the Licence from Ofcom before making any changes which may contravene the Licence.
- 3. Technical terms used in clause 2 shall have the meanings assigned to them in the Radio Regulations.

# Satellite (Non-Fixed Satellite Earth Station), Satellite (Non-Geostationary Earth Station)

This Licence is issued by the Office of Communications ("Ofcom") on "date" and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises <Lic\_Name> ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

# SCHEDULE 1 TO LICENCE NUMBER <Lic\_No>

#### TERMS, PROVISIONS AND LIMITATIONS COVERED BY THIS LICENCE

This schedule forms part of Licence <Lic\_No>, issued to <Lic\_Name>, the Licensee on «date», and describes the terms and equipment specifications covered by this licence.

# 1. The Licensee may establish and use :

A Permanent sending and receiving Earth Station (" the Station") at the location specified in the attached schedule for the purpose of providing Wireless Telegraphy links between the Station and Satellite.

#### Limitations on use.

The Station shall use only:

a) the classes of emission specified in the Designation of Emission column of the

attached schedule:

- b) the frequencies specified in the Transmit Frequency and Receive Frequency columns of the schedule:
- c) a power not exceeding that specified in the Equivalent Isotropically Radiated Power column of the schedule:
- d) the antenna type specified in the Antenna Type column of the schedule;
- e) a power density not exceeding that specified in the Spectral Power Density Column of the schedule:
- f) the Station shall be operated only from the location specified on the schedule;

# 3. Apparatus

The Licensee shall ensure that:

- a) the apparatus comprised in the station("the Apparatus") is so designed constructed, maintained and operated, that it does not cause any undue interference to other users of the spectrum;
- b) the Apparatus complies with (and is maintained in accordance with) the relevant performance specification(s) published by the operator of the Satellite;
- c) the earth station antenna shall not be employed for transmission at elevation of less than 3 degrees measured from the horizontal plane to the direction of maximum radiation as specified in ITU Radio Regulation ITU RR ART. 21.14:
- d) the component of effective isotropic radiated power directed towards the horizon and the minimum elevation angle above the horizontal must comply with ITU Radio Regulations and not exceed those limits specified by Radio Regulations ITU-RR ART. 21.8 - ART. 21.15;
- e) in the band 13.75GHz 14GHz, that earth stations with an antenna diameter of less than 4.5m operate in compliance with the pfd limits in RR 5.502, that the e.i.r.p. of any emission from an earth station in the fixed satellite service does not exceed 85dBW and that the e.i.r.p. density of emissions in the band 13.77-13.78 GHz complies with RR 5.503;
- f) the apparatus used for transmission complies with the R&TTE Directive and all appropriate National Interface Requirements for Satellite Earth Stations in force within the UK;
- g) the Antenna Radiation Pattern Envelope meets the minimum performance specified by the operator of the Satellite;

Where appropriate, Ofcom may require that the Licensee provide additional screening at the installation as a condition of the licence.

# National and international obligations

- a) The earth station must undergo national coordination and site clearance for operation at the specified location.
- b) The relevant satellite data shall have been submitted to ITU in accordance with established ITU procedures.

All transmissions in the Fixed Satellite Service must be terminated prior to any change of location; unless operating under a specific exemption authorised by Ofcom.

#### Interpretation

In this and subsequent schedule(s):

a) "Earth Station" means a radio transmitter located on the surface of the earth and intended for communication with one satellite.

#### Notes

1. This Licence does not affect the requirement, where necessary, to obtain licences or authorisations under other Acts. Some satellite television or radio broadcasting services also require licences under the Broadcasting Act 1990, and some installations require Local Authority Planning Approval.

Advice should be sought from:

Ofcom Riverside House 2a Southwark Bridge Road London SE1 9HA Switchboard: 020 7981 3000

Fax: 020 7981 3333

And the appropriate Local Authority planning department.

- 1. The Licensee must apply for a variation of the Licence from Ofcom before making any changes which may contravene the Licence.
- 2. Technical terms used in clause 2 shall have the meanings assigned to them in the Radio Regulations.

# **Global Navigation Satellite System (GNSS) Repeaters**

- 1. This Licence is issued by the Office of Communications ("Ofcom") on <<date>> and replaces any previous authority granted in respect of the equipment subject to this Licence by Ofcom or by the Secretary of State.
- 2. This Licence authorises <<name>> ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet. (Version OF195.1).

**ISSUED BY OFCOM** 

# GNSS Repeater SCHEDULE 1 TO LICENCE NUMBER <<LicNO>> TERMS, PROVISIONS AND LIMITATIONS COVERED BY THIS LICENCE

This schedule forms part of Licence **<<LicNo>>**, issued to **<<Name>>**, the Licensee on **<<date>>**, and describes the terms and equipment specifications covered by this licence.

# 1. Description of the Radio Equipment licensed

In this Licence, the Radio Equipment means a receiving and sending Earth Station ("the Station") for the purpose of providing Wireless Telegraphy links between the Station and Global Navigation Satellite System receivers "GNSS Receivers".

#### 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and the subsequent schedule (s) to this Licence, the Licensee and any person authorised to act on the Licensee 's behalf is hereby authorised to:

(a) Receive and send signals of Global Navigation Satellite systems between the GNSS repeater and a GNSS receiver.

# 3. Interface Requirements for the Radio Equipment use

(a) Use of the radio equipment shall be in accordance with the following Interface Requirement:

UK Interface Requirement 2089 for Global Navigation Satellite Systems Repeaters

#### 4. Special conditions relating to the activities of the Licensee

- a) The station will provide a 24 hour contact telephone number, as listed in Schedule 2.
- b) The Radio Equipment comprised in the Station(s) is so designed, constructed, maintained and operated, that its use does not cause any undue interference to other users of the spectrum.
- c) The Radio Equipment shall be established or installed so that transmissions from the Radio

Equipment may only be made when the licensee enables operation.

d) The Licensee shall have the facility to disbale individual GNSS repeater transmissions.

#### 5. Technical Conditions

The Station shall:

- e) transmit within frequency ranges, as listed in Schedule 2.
- f) only transmit Indoors and towards GNSS receivers located inside the same building;

#### 6. Interpretation

In this and subsequent schedule(s):

- a) "Station" means a radio transmitter located on the surface of the earth intended for communication with one or more GNSS receivers.
- b) "Global Navigation Satellite System" GNSS includes satellites operating in non-geostationary
- or geostationary orbits and providing Radionavigation Satellite Service signals.
- c) "Radionavigation Satellite Service" is as defined by the International Telecommunications Union ITU.
- d) "IR" or "Interface Requirement" means the United Kingdom Interface requirements published
- by Ofcom in accordance with the R&TTE Directive 1999/5/EC of the European Parliament and of the Council on radio equipment and telecommunications equipment (R&TTE) and mutual recognition of conformity. The Directive implemented in the UK, by the Radio Equipment and Telecommunications Terminals Equipments Regulations (S.I 2000/730 and amendments).
- e) "Indoors" means inside a building or a place in which the shielding will typically provide the necessary attenuation to protect wireless telegraphy against harmful interference.

#### **Notes**

- 1. This Licence does not affect the requirement, when necessary, to obtain licences or authorisations under other Acts, such as the Broadcasting Act.
- 2. The licensee must apply for a variation of the licence from Ofcom before making any changes, which may contravene the conditions of the licence.
- 3. Technical terms used in clause 2 shall have the meanings assigned to them in the Radio

# Regulations. Section 11

# Science and Technology

#### **Non-Operational Temporary Use**

This Licence is issued by the Office of Communications ("Ofcom") on <date> and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises censee> to establish, install and/or use Innovative radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet.(Version OF195.1).

#### **ISSUED BY OFCOM**

# Non-Operational Temporary Use SCHEDULE 1 TO LICENCE NUMBER «LicNo»

This schedule forms part of Licence <number> issued to censee>, the Licensee on <date>, and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

# 1. Description of the Radio Equipment licensed

In this Licence, the Radio Equipment means sending and receiving station (s) ("base stations") and sending and receiving station(s) ("mobile stations) for wireless telegraphy as defined in paragraph 2 below.

# 2. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and the subsequent schedule(s) to this Licence, the Licensee and any person authorised to act on the Licensee's behalf is hereby authorised to:

- (a) send and receive transmissions between the base station(s) and the mobile station(s); and/or
- (b) send and receive transmissions between the mobile stations.

# 3. Licence Term

- (a) The Licence shall continue in force for the period stated in the schedule (to a maximum of six months) unless revoked earlier by Ofcom or surrendered by the Licensee.
- (b) This Licence is not renewable.

### 4. Radio Equipment Use

The Licensee must ensure that the Radio Equipment is established, installed and operated in accordance with the provisions of this Licence including the schedules to the Licence.

# 5. Special Conditions Relating To The Activities Of The Licensee

The Licensee shall:

- a) Only operate Radio Equipment on a Non Protected and Non Interference basis
- b) Only operate equipment on a Non-Operational basis
- c) Use measurement equipment to verify from time to time that the Radio Equipment is operating at the frequency and within the frequency tolerance, with the class of emission and at or below the maximum power specified in Schedule 2:
- d) Not transmit until it has been confirmed as far as reasonably possible that the proposed frequency is not in use at the time of the proposed transmission;
- e) Not transmit for longer than the minimum necessary for the purpose of the particular project or operation being performed; and
- f) Use the Radio Equipment:
  - i) As far as possible under suppressed radiation conditions; and
  - ii) Where this is not possible at the minimum power necessary for a particular project or operation being performed and only use the maximum power permitted, not exceeding that specified in the Schedule(s), when necessary.

#### 6. Interpretation

In the Licence, unless the context otherwise requires:

- (a) "Non-Operational" means non-commercial and not for (or in connection with) the provision of any services or sale of goods;
- (b) "Temporary" means 6 months or less.
- (c) "Innovative" means new or not currently in general use.
- (d) "Non Protected" means that protection will not be given from harmful interference received from other authorised services
- (e) "Non Interference" means that the Radio Equipment must not cause harmful interference to any other authorised services

# **Non-Operational Development**

This Licence is issued by the Office of Communications ("Ofcom") on «date» and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.

This Licence authorises clicensee> (the "Licensee") to establish, install and/or use Innovative radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set

out below and subject to the terms of the General Licence Conditions booklet.(Version OF195.1).

#### **ISSUED BY OFCOM**

# **Non-Operational Development**

#### SCHEDULE 1 TO LICENCE NUMBER «LicNo»

#### **DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE**

This schedule forms part of Licence <number> issued to censee>, the Licensee on <date>, and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

#### 7. Description of the Radio Equipment licensed

In this Licence, the Radio Equipment means sending and receiving station (s) ("base stations") and sending and receiving station(s) ("mobile stations) for wireless telegraphy as defined in paragraph 2 below.

# 8. Purpose of the Radio Equipment

Subject to the administrative and technical requirements set out in this and the subsequent schedule(s) to this Licence, the Licensee and any person authorised to act on the Licensee's behalf is hereby authorised to:

- (c) send and receive transmissions between the base station(s) and the mobile station(s); and/or
- (d) send and receive transmissions between the mobile stations.

#### 9. Licence Term

- (c) The Licence shall continue in force for the period stated in the schedule (to a maximum of twelve months) unless revoked earlier by Ofcom or surrendered by the Licensee.
- (d) This Licence is not renewable.

# 10. Radio Equipment Use

The Licensee must ensure that the Radio Equipment is established, installed and operated in accordance with the provisions of this Licence including the schedules to the Licence.

#### 11. Special Conditions Relating To The Activities Of The Licensee

The Licensee shall:

- g) Only operate Radio Equipment on a Non Protected and Non Interference basis
- h) Only operate equipment on a Non-Operational basis

- i) Use measurement equipment to verify from time to time that the Radio Equipment is operating at the frequency and within the frequency tolerance, with the class of emission and at or below the maximum power specified in Schedule 2:
- j) Not transmit until it has been confirmed as far as reasonably possible that the proposed frequency is not in use at the time of the proposed transmission;
- k) Not transmit for longer than the minimum necessary for the purpose of the particular project or operation being performed; and
- I) Use the Radio Equipment:
  - j) As far as possible under suppressed radiation conditions; and
  - iii) Where this is not possible at the minimum power necessary for a particular project or operation being performed and only use the maximum power permitted, not exceeding that specified in the Schedule(s), when necessary.

# 12. Interpretation

In the Licence, unless the context otherwise requires:

- (f) "Non-Operational" means non-commercial and not for (or in connection with) the provision of any services or sale of goods;
- (g) "Development" means experimentation and/or innovation
- (h) "Innovative" means new or not currently in general use.
- (i) "Non Protected" means that protection will not be given from harmful interference received from other authorised services
- (j) "Non Interference" means that the Radio Equipment must not cause harmful interference to any other authorised services

# **Ground Probing Radar**

- 1. This Licence is issued by the Office of Communications ("Ofcom") on <<date>>.
- 2. This Licence authorises <<name>> ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in Schedule 1 (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms set out in the General Licence Conditions Booklet published by Ofcom , version OF195.1 (the "Booklet"), as amended by the terms set out below. For the avoidance of doubt, if there is any conflict or inconsistency between a term in this part of the Licence and a term in the Booklet, the term in this part of the Licence shall take precedence.
- 3. The Licensee must accept any Undue Interference caused by other authorised users of the radio spectrum in which the Radio Equipment may be used as set out in paragraph

- 1(1)(a) of Schedule 1.
- 4. Condition 1.1 of the Booklet shall not apply to this Licence.
- 5. This Licence is valid from <<date>> and shall continue in force until revoked by Ofcom in accordance with Conditions 1.2 and 1.3 of the Booklet or surrendered by the Licensee.

ISSUED BY OFCOM

# GROUND PROBING RADAR SCHEDULE 1 TO LICENCE NUMBER <<LIC\_NO>> DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE

This schedule forms part of Licence number <<LIC\_NO>>, issued to <<Name>> the Licensee on <<date>>, and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

#### 1. Description of the Radio Equipment licensed

The Licensee shall ensure that the Radio Equipment covered by this Licence shall be subject to and comply with the following terms, provisions and limitations:

- (1) The Radio Equipment must:
- (a) only operate in the frequency band between 150 MHz and 4000 MHz;
- (b) not cause or contribute to any Undue Interference to any use of wireless telegraphy:
- (c) transmit at a total radiated power which does not exceed 0.25mW;
- (d) transmit so that the radiated power per spectral line does not exceed 100nW and the radiation measured outside the antenna shield does not exceed 10nW;
- (e) be attached with a label warning that use could be stopped with immediate effect on the request of a person authorised by Ofcom; and
- (f) employ a deactivation mechanism which automatically deactivates the Radio Equipment when permitted use of the equipment in accordance with sections 1(2) (a) and 1(2)(b) of this schedule is interrupted.
- (2) The Licensee and any person authorised by the Licensee to use the Radio Equipment must:
- (a) only operate the Radio Equipment so that it is in contact with or in close proximity to the ground and so that the emissions from the Radio Equipment are at all times directed into the ground;
- (b) only operate the Radio Equipment in accordance with a Code of Practice recognised by Ofcom;
- (c) retain a permanent log of use of the Radio Equipment (the "Log") which must be

updated promptly following each occasion on which the Radio Equipment is used.

The Log must, at a minimum, contain the following information:

- (i) the model number of the Radio Equipment;
- (ii) details of every location at which the Radio Equipment is used;
- (iii) the date and duration of use for each time the Radio Equipment is used;
- (iv) the type of use; and
- (v) the frequency band used to operate the Radio Equipment
- (d) submit a complete and accurate Log to Ofcom at anytime upon request in electronic format; and
- (e) notify Ofcom prior to use of the Radio Equipment within a **7** km radius of a Radio Astronomy site
- 2. Interpretation

In this Licence, in addition to the terms defined in Condition 7 of the Booklet:

- (a) "Ground Probing Radar" means a device that uses radio waves for the purpose of detecting or obtaining the images of buried objects or determining the physical properties beneath the ground. The emissions from the radar are intentionally directed down into the ground for this purpose;
- (b) "inspect" includes examine and test;
- (c) "MHz" means megahertz;
- (d) "mW" means milliWatt;
- (e) "nW" means nanoWatt;
- (f) "Radio Astronomy" means astronomy based on the reception of radio waves of cosmic origin; and
- (g) "Radio Astronomy Site" means one of the sites in the UK used for Radio

# **Radar Level Gauges**

- 1. This Licence is issued by the Office of Communications ("Ofcom") on **<<date>>** and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or by the Secretary of State.
- 2. This Licence authorises <<name>> ("the Licensee") to establish, install and/or use radio transmitting and/or receiving stations and/or radio apparatus as described in the schedule(s) (hereinafter together called "the Radio Equipment") subject to the terms set out below and subject to the terms of the General Licence Conditions booklet . (Version OF195.1).

#### **ISSUED BY OFCOM**

# RADAR LEVEL GAUGE LICENCE SCHEDULE 1 TO LICENCE NUMBER <<LIC\_NO>> DESCRIPTION OF RADIO EQUIPMENT COVERED BY THIS LICENCE

This schedule forms part of Licence <<Lic\_NO>>, issued to <<Name>>, the Licensee on <<date>>, and describes the Radio Equipment covered by the Licence and the purpose for which the Radio Equipment may be used.

# 1. Description of the Radio Equipment licensed

In this Licence, the Radio Equipment means sending and receiving station (s) ("base stations") and sending and receiving station(s) ("mobile stations") for wireless telegraphy as defined in paragraph 2 below.

### 2. Purpose of the Radio Equipment

The licensee may establish and use sending and receiving stations (hereinafter collectively referred to as the "Stations") as specified in the Schedule.

#### 3. Terms, Provisions and Limitations

The Licensee shall operate the Stations in accordance with the limitations specified in the Schedule.

### 4. Apparatus

The Licensee shall ensure that the apparatus comprised in the Stations (the "Apparatus") is so designed, constructed, maintained and operated in such a way as to ensure that it does not cause any undue interference.

# 5. Users of the Stations

Subject to sub-clause 2 below, the Licensee shall not permit or suffer any person to use the Stations unless that person is:

- (i) under the control of the Licensee; and
- (ii) authorised by the Licensee to use the Stations.

Except in an emergency when no written authority is required, the Licensee may authorise a person who is not under the control of the Licensee to use the stations by providing written authority to that person.

The Licensee shall ensure that:

- (i) all the persons operating the Stations are made aware of the terms, provisions and limitations of this Licence.
- (ii) all such persons comply with the terms of this Licence.

#### 6. Notice of Variations or Revocation

Where Ofcom exercises its power to revoke or vary this Licence in accordance with section

1(4) of the Act, a written notice will be send to the Licensee.

# 7. Inspection

The Licensee shall permit a person authorised by Ofcom:

- (a) to have access to any Station; and
- (b) to inspect this Licence and to inspect and test the apparatus at any and all reasonable times (or when, in the opinion of Ofcom, an urgent situation exists, at any time) for the purpose of verifying compliance with the terms, provisions and limitations of this Licence, or of investigating sources of radio interference.

#### 8. Closedown

When, in the opinion of Ofcom, or of a person authorised by him in that behalf:

- (a) the Licensee or any person authorised by the Licensee to use the Stations is in breach of this Licence and such breach justifies immediate restriction or closedown; or
- (b) exceptional circumstances beyond the control of the Licensee have arisen such that the Stations, although not operated in breach of this Licence, are causing or contributing to interference with other wireless telegraphy;

the Licensee shall restrict the operation of, or closedown and cease to operate, the Station, or any apparatus, to which the breach relates, immediately in accordance with the demand of a person authorised by Ofcom either permanently or for a specified temporary period in accordance with the demand of a person authorised by Ofcom.

#### 9. Interpretation

In the Licence, unless the context otherwise requires:

- (a) The Interpretation Act 1978, shall apply to the Licence as it applies to an Act of Parliament: and
- (b) "inspect" includes examine and test.

# **High Duty Cycle Network Relay Points**

- 1. This Licence is issued by the Office of Communications ("Ofcom") on <date> and replaces any previous authority granted in respect of the service subject to this Licence by Ofcom or the Secretary of State.
- 2. This Licence authorises <name> (the "Licensee") to establish, install and use radio transmitting and receiving stations and/or radio apparatus as described in the schedule (the "Radio Equipment") subject to the terms set out below.

#### 3. Licence term

This Licence shall continue in force until revoked by Ofcom in accordance with paragraph 4 below or surrendered by the Licensee.

#### 4. Licence variation and revocation

Pursuant to schedule 1, paragraph 8 of the Wireless Telegraphy Act 2006 (the "Act"), Ofcom may not vary or revoke this Licence under schedule 1, paragraph 6 of the Act except:

- a) at the request of, or with the consent of, the Licensee;
- b) if there has been a breach of a term of this Licence;
- c) in accordance with schedule 1, paragraph 8(5) of the Act;

if it appears to Ofcom to be necessary or expedient for the purposes of complying with a direction by the Secretary of State given to Ofcom under section 5 of the Act or section 5 of the Communications Act 2003; or

for reasons related to the management of the radio spectrum. This power may only be exercised after at least twenty-four (24) months' notice is given in writing to the Licensee.

Ofcom may only revoke or vary this Licence by notification in writing to the Licensee and in accordance with schedule 1, paragraphs 6 and 7 of the Act.

# 5. Changes

The Licence may not be transferred. 13

The Licensee must give Ofcom prior notice in writing of any proposed change to the Licensee's name and address from that recorded in the Licence.

#### 6. Fees

The Licensee shall pay Ofcom the relevant sums as provided in section 12 of the 2006 Act and the Regulations made there under:

- a) on or before the date of issue of the Licence; and
- b) on or before the payment date shown on the Licence for subsequent payments or such other dates or dates as shall be notified in writing to the Licensee, in accordance with those regulations and any relevant terms, provisions and limitations of the Licence.

#### 7. Radio Equipment use

The Licensee must ensure that the Radio Equipment is constructed, established, installed and used only in accordance with the provisions specified in the schedules to this Licence. Any proposal to amend any detail specified in the schedule to this Licence must be agreed with Ofcom in advance and implemented only after this Licence has been varied or reissued accordingly.

The Licensee must ensure that the Radio Equipment is operated in compliance with the terms of this Licence and is used only by persons who have been authorised in writing by the Licensee to do so and that such persons are made aware of, and of the requirement to comply with, the terms of this Licence.

# 8. Access and inspection

<sup>&</sup>lt;sup>13</sup> The transfer of rights and obligations arising by virtue of this Licence may however be authorised in accordance with regulations made by Ofcom under powers conferred by section 30 of the Act

The Licensee shall permit a person authorised by Ofcom:

- a) to have access to the Radio Equipment; and
- b) to inspect this Licence and to inspect, examine and test the Radio Equipment at any and all reasonable times or, when in the opinion of that person an urgent situation exists, at any time to ensure the Radio Equipment is being used in accordance with the terms of this Licence.

# 9. Modification, restriction and closedown

A person authorised by Ofcom may require any of the radio stations or radio apparatus that comprise the Radio Equipment to be modified or restricted in use or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:

- a) a breach of a term of this Licence has occurred; and/or
- b) the use of the Radio Equipment is causing or contributing to undue interference to the use of other authorised radio equipment.

Ofcom may require any of the radio stations or radio apparatus that comprise the Radio Equipment to be modified or restricted in use or temporarily closed down either immediately or on the expiry of such period as may be specified in the event of a national or local state of emergency being declared. Ofcom may only exercise this power after a written notice is served on the Licensee or a general notice applicable to holders of a named class of Licence is published.

#### 10. Special conditions

During the period that this Licence remains in force and for 6 months thereafter, the Licensee shall compile and maintain accurate records of the following details relating to the Radio Equipment:

- a) The postal address; or
- b) National Grid Reference (to 10 metres resolution).
- c) The Licensee shall inform Ofcom of the address of the premises at which this Licence and the information detailed at sub-paragraph (a) above shall be kept.

The Licensee shall submit to Ofcom copies of the records detailed in sub-paragraph (a) above at such intervals as Ofcom shall notify to the Licensee.

The Licensee shall, upon request, supply Ofcom or any person authorised on their behalf with the name and address of any subscribing customers of the Network, or require its agents to provide such information on its behalf.

# 11. Interpretation

In this Licence:

 a) the establishment, installation and use of the Radio Equipment shall be interpreted as establishment or use of wireless telegraphy stations and installation or use of wireless telegraphy apparatus as specified in section 8 of the Act:

- b) the expression "interference" shall have the meaning given by section 115 of the Act; and
- c) the expressions "wireless telegraphy apparatus" and "wireless telegraphy station" shall have the meanings given by section 117 of the Act.

The schedule to this Licence forms part of this Licence together with any subsequent schedules that Ofcom may issue as a variation to this Licence at a later date.

The Interpretation Act 1978 shall apply to this Licence as it applies to an Act of Parliament.

# Wireless Access (High Duty Cycle Network Relay Points (NRP)) SCHEDULE 1 TO LICENCE NUMBER <LicNo>

# 1. Description of Radio Equipment licensed

The Radio Equipment means any radio transmitting and receiving stations and/or any radio apparatus that transmits in accordance with the requirements of paragraphs 2 and 3 of this schedule.

# 2. Purpose of the radio equipment

The Radio Equipment shall form part of an area network for the purpose of data acquisition.

Use of the radio equipment shall be in accordance with the following Interface Requirement:

IR 2095.

# 3. Special conditions relating to the operation of the Radio Equipment

The Licensee shall ensure that the Radio Equipment is operated on a non-interference and non-protected basis; and

Airborne use not permitted.

#### 4. Permitted frequencies

The Radio Equipment must only transmit and/or receive on the following frequencies:

870 – 873 MHz

# 5. Maximum permissible e.r.p.

The maximum permitted e.r.p. for the Radio Equipment is 500 mW.

#### 6. Geographical boundaries

The Licence authorises the Licensee to establish, install and use the Radio Equipment in the United Kingdom, Isle Man and Channel Islands.

#### 7. Interpretation

In this schedule:

"e.r.p." means the effective radiated power. This is the product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (absolute or isotropic gain);

"non-interference, non-protected" means that no harmful interference may be caused to any radiocommunication services that are entitled to protection and that no claim may be made for protection of these devices against harmful interference originating from authorised radiocommunication services.

#### Annex 1

# General licence conditions

#### Introduction

Each Wireless Telegraphy licence issued by the Office of Communications ("Ofcom")<sup>14</sup> under section 8 of the Wireless Telegraphy Act 2006 ("the Act") authorises the licensee to establish and use stations or install or use apparatus for wireless telegraphy, subject to the terms, provisions and limitations of that licence.

The terms contained in this General Licence Conditions Booklet (the "Booklet") are incorporated into and form part of the terms, provisions and limitations of each wireless telegraphy licence to which this Booklet applies. (Each such wireless telegraphy licence is referred to as "the Licence".)

#### Condition 1 – Licence term, variation and revocation

The Licence shall continue in force until revoked by Ofcom or surrendered by the Licensee. Pursuant to schedule 1 paragraph 8 of the Act Ofcom may not revoke this Licence under schedule 1 paragraph 6 except:

- a) At the request of, or with consent of, the Licensee;
- b) If there has been a breach of any of the conditions of the Licence;
- c) If, in connection with the transfer or proposed transfer of rights and obligations arising by virtue of the Licence, there has been a breach of any provision of regulations made by Ofcom under the powers conferred by section 30(1) and (3) of the Act<sup>15</sup>;
- d) In accordance with schedule 1 paragraph 8(5) of the Act;
- e) If it appears to Ofcom to be necessary or expedient to revoke the Licence for the purposes of complying with a direction by the Secretary of State given to Ofcom under section 5 of the Act or section 5 of the Communications Act 2003; or
- f) For reasons related to the management of the radio spectrum, provided that in such case the power to revoke may only be exercised after five (5) years' notice is given in writing to the Licensee.

Where Ofcom exercise their power to revoke or vary the Licence in accordance with schedule 1 paragraph 6 of the Act, the Licensee shall be notified in writing or by a general notice. Any general notices will be posted on the Ofcom website <sup>16</sup>.

# **Condition 2 – Changes**

The Licence	may not be	transferred17
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The Licensee must give immediate notice to Ofcom in writing of any change to the Licensee's name and address from that recorded on the Licence.

#### Condition 3 – Licence fee

The Licensee shall pay to Ofcom the relevant sums as provided in section 12 of the Act and the regulations made thereunder:

- a) on or before the date of issue of the Licence; and
- b) on or before the payment date shown on the Licence for subsequent payments or such other date or dates as shall be notified in writing to the Licensee, in accordance with those regulations and any relevant terms, provisions and limitations of the Licence.

# Condition 4 - Radio equipment use

The Licensee must ensure that the Radio Equipment relevant to each Licence is constructed, established, installed and used only in accordance with the provisions specified in the individual Licence schedules. Any proposal to amend any detail specified in those schedules must be agreed with Ofcom in advance and implemented only after that Licence has been varied or reissued accordingly. The Licensee must ensure that the Radio Equipment is used only by persons who have been authorised by the Licensee to do so, and that such persons are made aware of, and of the requirement to comply with, the terms of the Licence.

# **Condition 5 – Access and inspection**

The Licensee shall permit any person authorised by Ofcom:

- a) To have access to the radio equipment; and
- b) To inspect the Licence and Radio Equipment, at any and all reasonable times or, when in the opinion of that person an urgent situation exists, at any time to ensure that the Radio Equipment is being used in accordance with the terms of the Licence.

# Condition 6 – Modification, restriction and closedown

A person authorised by Ofcom may require the Radio Equipment, or any part thereof, to be modified or restricted in use, or temporarily or permanently closed down immediately if in the opinion of the person authorised by Ofcom:

- a) A breach of the Licence has occurred; and/or
- b) The use of the Radio Equipment is causing or contributing to Undue Interference to the authorised use of other radio equipment.

Ofcom may require the Radio Equipment to be modified or restricted in use, or temporarily closed down either immediately or on the expiry of such period as may be specified in the event of a national or local state of emergency being declared. Ofcom may only exercise this power after a written notice is served on the Licensee or a general notice applicable to holders of a named class of Licence is published.

# **Condition 7 – Interpretation**

In this Booklet and in the Licence:

- The establishment, installation and use of the Radio Equipment shall be interpreted as establishment and use of stations and installation and use of apparatus for wireless telegraphy as specified in section 8 of the Act;
- ii) the expression "Undue Interference" shall have the meaning given by Section 115 of the Act; and
- iii) "inspect" includes examine and test.

In this Booklet "Radio Equipment" means the radio equipment specified in the Licence. Any schedule to the Licence shall form part of the Licence together with any subsequent schedule which Ofcom may issue as a variation to the Licence. The Interpretation Act 1978 shall apply to the Licence as it applies to an Act of Parliament.