

WIRELESS TELEGRAPHY ACT 2006

OFFICE OF COMMUNICATIONS

WT TELEVISION MULTIPLEX SERVICE LICENCE WTLM 003 TO MULTIPLEX BROADCASTING SERVICES N.I. LIMITED

Licence no: WTLM003

Date of issue: 1 June 2012

Commencement Date: 24 October 2012

1. The Office of Communications (Ofcom) grants this licence under the Wireless Telegraphy Act 2006 ("the Act") to:

Multiplex Broadcasting Services N.I. Limited, ("the Licensee")
Company number NI 605600,
Murray House,
Murray Street,
Belfast BT1 6DN

to establish, install and use wireless telegraphy stations and/or wireless telegraphy apparatus as described in Schedule 1 ("the Radio Equipment") subject to the terms set out below.

LICENCE TERM

2. The Licence shall enter into force on 24 October 2012 and shall continue in force for 12 years unless revoked by Ofcom in accordance with Paragraphs 4 to 6 below or surrendered by the Licensee.
3. The Licensee:
 - (1) must surrender the Licence if it decides not to establish, install or use Radio Equipment in accordance with this Licence; or
 - (2) may surrender the Licence in any other circumstances on the basis of twelve months notice.

LICENCE REVOCATION AND VARIATION

4. Pursuant to section 10 and Schedule 1, paragraph 8 of the Act, Ofcom may not revoke this Licence under Schedule 1, paragraph 6 of the Act except:
 - (1) at the request of, or with the consent of, the Licensee;

- (2) in accordance with paragraph 6 of this Licence;
 - (3) in accordance with Schedule 1 paragraph 8 (5) of the Act;
 - (4) if there has been a breach of a term of the Licence;
 - (5) 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 or under section 5 of the Communications Act 2003;
 - (6) there has been a change in control of the Licensee;
 - (7) For reasons related to the management of the radio spectrum, provided that in such case the power to revoke may only be exercised after six (6) month's notice is given in writing to the Licensee;
5. Ofcom may revoke the Licence by notification in writing to the Licensee if the Radio Equipment is not established, installed and used in accordance with the provisions specified in Schedule 1 of this Licence or if Ofcom is satisfied that the Licensee has ceased use of the Radio Equipment specified in Schedule 1 and Ofcom is satisfied it is appropriate to revoke the Licence.
 6. Ofcom may 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.

RADIO EQUIPMENT USE

7. The Licensee must ensure that the Radio Equipment is established, installed and used only in accordance with the provisions, restrictions and requirements specified in Schedule 1 of this Licence. Any proposal to amend any detail specified in Schedule 1 of this Licence 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 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 the Licence.
9. The Licensee may only carry the television and radio services set out in paragraph 7(2) of Schedule 1 of this Licence. If the Licensee wishes to carry additional television or radio services to those set out in that paragraph, it must obtain prior written consent from Ofcom. Ofcom may consult with the Secretary of State as it thinks appropriate when determining whether or not to give such consent.
10. The Licensee must comply with any direction given to it by Ofcom, pursuant to a notification to Ofcom by the Secretary of State.

FEES

11. The Licensee shall pay to Ofcom the relevant sums as provided in sections 12 and 13 of the Act and the regulations made thereunder:
12. The Licensee must comply with the regulations referred to in paragraph 11 and with the relevant terms, provisions and limitations of the Licence, failing which Ofcom may revoke this Licence.
13. The Licensee shall pay interest to Ofcom on any amount which is due under the terms of this Licence or provided for in any regulations made by Ofcom under sections 12 and 13(2) of the Act from the date such amount falls due until the date of payment, calculated with reference to the current Bank of England base rate. In accordance with section 15 of the Act, any such amount and any such interest is recoverable by Ofcom.
14. If the Licence is surrendered or revoked, no refund, whether in whole or in part, of any amount which is due under the terms of this Licence or provided for in any regulations made by Ofcom under sections 12 and 13(2) of the Act will be made, except at the absolute discretion of Ofcom in accordance with any regulations made under the Act.

ACCESS AND INSPECTION

15. The Licensee shall permit a person authorised by Ofcom:
 - (1) to have access to the Radio Equipment; and
 - (2) 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 that the Radio Equipment is being used in accordance with the terms of this Licence.

GENERAL PROVISION OF INFORMATION TO OFCOM

16. The Licensee shall furnish to Ofcom in such manner and at such times as Ofcom may reasonably require such documents, accounts, returns, estimates, reports, notices or other information as Ofcom may require for the purpose of exercising the functions assigned to it under the Act including (but without prejudice to the generality of the foregoing):
 - (1) a declaration as to its corporate structure in such form and at such times as Ofcom shall specify;
 - (2) such information as Ofcom may reasonably require from time to time for the purposes of determining whether the Licensee is complying with the terms of this Licence.

CHANGES

17. This Licence is not transferable.

18. The Licensee must:

- (1) give prior notice to Ofcom in writing of:
 - (a) any proposed change to the Licensee's name and address from that recorded in the Licence;
 - (b) proposals affecting shareholdings in the Licensee or any body corporate which controls the Licensee, or the directors of the Licensee or the directors of any body corporate which controls the Licensee, and of any proposals to enter into any arrangements of the type referred to in paragraph 19 below, by giving advance notice of such proposals where they are known to the Licensee as soon as reasonably practical where such proposals would constitute a change in the persons having control over the Licensee within the meaning of paragraph 19 below;
 - (c) of changes, transactions or events affecting shareholdings in the Licensee or any body corporate which controls the Licensee, or the directors of the Licensee or the directors of any body corporate which controls the Licensee (irrespective of whether proposals for them have fallen to be notified), within 28 days of the Licensee becoming aware of any such change, transaction or event and where such change, transaction or event would constitute a change in the persons having control over the Licensee within the meaning of paragraph 19 below; and
 - (d) of any other circumstances which may result in there being a change of control of the Licensee within the meaning of paragraph 19(1) below.
- (2) notify Ofcom within 28 days if any person:
 - (a) holding or being beneficially entitled to 50 per cent of the equity share capital in the Licensee or in any body corporate which controls the Licensee; or
 - (b) possessing 50 per cent of the voting power in the Licensee or any body which controls the Licensee

enters into any arrangement with any other participant in the Licensee or in any such body which controls the Licensee as to the manner in which any voting power in the body possessed by either of them is to be exercised, or as to the omission by either of them to exercise such voting power.

19. For the purposes of paragraph 18:

- (1) a person “controls” a body (including, for the avoidance of doubt, the Licensee) if:
 - (a) he holds, or is beneficially entitled to, more than 50 per cent of the equity share capital in the body, or possesses more than 50 per cent of the voting power in it; or
 - (b) although he does not have such an interest in the body, it is reasonable, having regard to all the circumstances, to expect that he would (if he chose to) be able in most cases or in significant respects by whatever means and whether directly or indirectly to achieve the result that the affairs of the body are conducted in accordance with his wishes; or
 - (c) he holds, or is beneficially entitled to, 50 per cent of the equity share capital in that body, or possesses 50 per cent of the voting power in it, and an arrangement exists between him and any other participant in the body as to the manner in which any voting power in the body possessed by either of them is to be exercised, or as to the omission by either of them to exercise such voting power.
- (2) a person shall be treated as holding, or being beneficially entitled to, any equity share capital which is held by a body which he controls or to which such a body is beneficially entitled, and as possessing any voting power possessed by such a body.
- (3) the expressions:
 - (a) “arrangement” includes any agreement or arrangement, whether or not it is, or intended to be legally enforceable;
 - (b) “equity share capital” has the same meaning as in the Companies Acts; and
 - (c) “participant” in relation to a body means a person who holds or is beneficially entitled to shares in that body or who possesses voting power in that body.

MODIFICATION, RESTRICTION AND CLOSEDOWN

20. 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:

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

21. 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 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.

THE 700MHZ DTT CLEARANCE PROGRAMME

22. The licensee shall comply with, or procure compliance with the 700MHz DTT Clearance Programme requirements set out in the Schedule.

INTERPRETATION

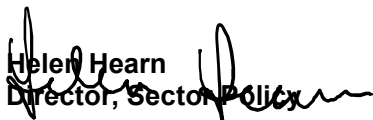
23. In this Licence:

- (1) The “Act” referred to in this Licence is the Wireless Telegraphy Act 2006;
- (2) The expression “a.g.l.” means above ground level;
- (3) [Not used]
- (4) The expression “e.r.p.” means the effective radiated power. This is the power fed to the antenna multiplied by the maximum gain of the antenna with respect to a half-wave dipole;
- (5) 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 Act;
- (6) The expression “frequencies” means the frequencies specified in paragraph 4(a) of Schedule 1 of this Licence and a “frequency” means any of the frequencies;
- (7) The expression ‘interference’ shall have the meaning given by section 115 of the Act;
- (8) The expressions “RTÉ 1” and “RTÉ 2” means television services Raidió Teilifís Éireann 1 and Raidió Teilifís Éireann 2 respectively ;
- (9) The expression “TG4” means television service Teilifís na Gaeilge 4;
- (10) The expression ‘wireless telegraphy apparatus’ and ‘wireless telegraphy station’ shall have the meanings given by section 117 of the Act;
- (11) The expressions ‘television multiplex service’ and ‘radio multiplex service’ shall have the meanings set out in section 241(2) and section 258(2) of the Communications Act 2003, respectively;

- (12) the expression “700 MHz DTT Clearance Programme” means the clearance of digital terrestrial television (DTT) services from the frequencies 694 MHz to 790 MHz and the associated reassignment of DTT services within the frequency range 470 MHz to 694 MHz. This policy is set out in Ofcom’s statement *Decision to make the 700 MHz band available for mobile data* published on 19 November 2014 and *Maximising the benefits of 700 MHz clearance* statement published on 17 October 2016.
- (13) the expression “700 MHz DTT Clearance Date” means the date set out in or fixed in accordance with Schedule 2, by which the 700MHz DTT Clearance Programme must be completed.
- (14) “Clearance Delivery Plan” means the plan, including the technical roll-out plan, setting out how the Licensee and holders of other multiplex licences shall manage and coordinate the delivery of the 700 MHz DTT Clearance Programme, which was notified to the Licensee by Ofcom in December 2016, and as amended from time to time as reasonably required, where such amendments are agreed with Ofcom.
24. The schedules to this Licence form part of this Licence together with any subsequent schedules which Ofcom may issue as a variation to this Licence at a later date; and
25. The Interpretation Act 1978 shall apply to this Licence as it applies to an Act of Parliament.

SIGNED FOR OFCOM ON 1 MARCH 2017

Helen Hearn
Director, Sector Policy



SCHEDULE 1 TO LICENCE NUMBER WTLM 003

Licence Category: Spectrum Access Licence 540 to 710 Mhz Band

1. Description of Radio Equipment Licensed

In this Licence, the Radio Equipment means any radio transmitting and receiving stations and/or any radio apparatus that transmits in accordance with the following requirements of this Schedule 1.

2. Interface requirements for the Radio Equipment use

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

IR 2022 Broadcast transmitters operating in frequency bands administered by Ofcom (98/34/EC Notification number 2007/124/UK)

In addition, spurious emissions shall comply with the limits defined in CEPT/ERC/REC 74-01 Unwanted Emissions in the Spurious Domain.

3. Cross-border coordination

The Licensee must ensure that the Radio Equipment is operated in compliance with such cross-border coordination and sharing procedures as may be notified by to the Licensee by Ofcom.

4. 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 the column headed "Channel (frequency range)" in Table 1 below;
- (b) The radiating elements of the aerial used in connection with the Radio Equipment shall be at the height specified in the column headed "Aerial Height" in Table 1 below;
- (c) The maximum permitted effective radiated power shall not exceed that specified in the column headed "Power" in Table 1 below.

Table 1: Details of broadcasting stations

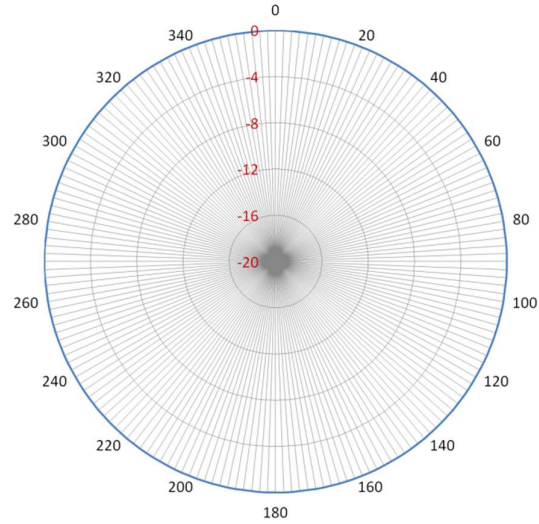
**SCHEDULE TO WT TELEVISION MULTIPLEX SERVICE LICENCE NUMBER- WTLM 003,
ISSUED TO MULTIPLEX BROADCASTING SERVICES N.I. LIMITED**

TRANSMITTING OPERATING CONDITIONS

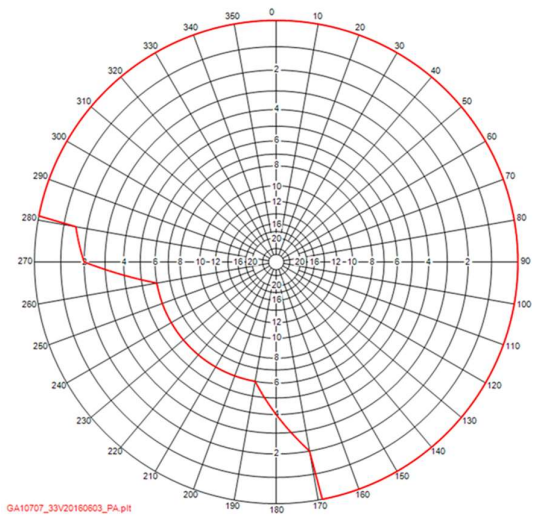
A	Transmitter Name	Black Mountain
B	National Grid Reference	NW 40100 28600
C	Mean Antenna Height	217 m agl
D	Class of Emission	8M00X7FXF
E	Transmission Type	DVB-T2
F	Maximum Effective Radiated Power	2 kW (33 dBW) until 4 September 2019
		3.2 kW (35 dBW) from 4 September 2019
G	Description of Antenna	omni-directional until 4 September 2019
		directional (GA10707_33V20160603_PA) from 4 September 2019
H	Polarisation	Horizontal
I	Channel Number	39 (614 – 622 MHz) until 4 September 2019
		33 (566 – 574 MHz) from 4 September 2019
	Spurious Emissions	As defined in UK Interface Requirements 2022
	Frequency Tolerance	1 kHz
	Frequency Offset	+167 kHz until 4 September 2019
		0 kHz after 4 September 2019

J Additional Requirements

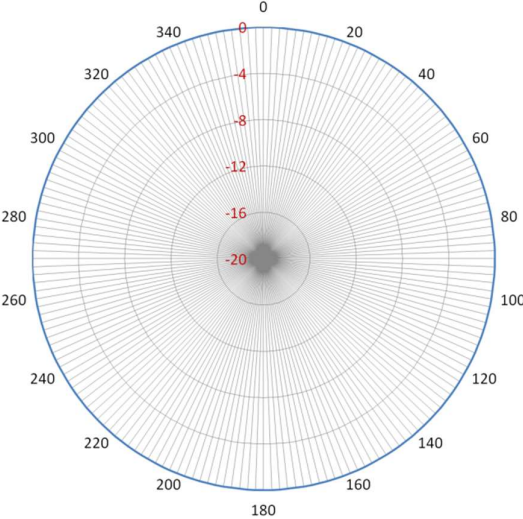
To meet Antenna Restrictions Template below until 4 September 2019:

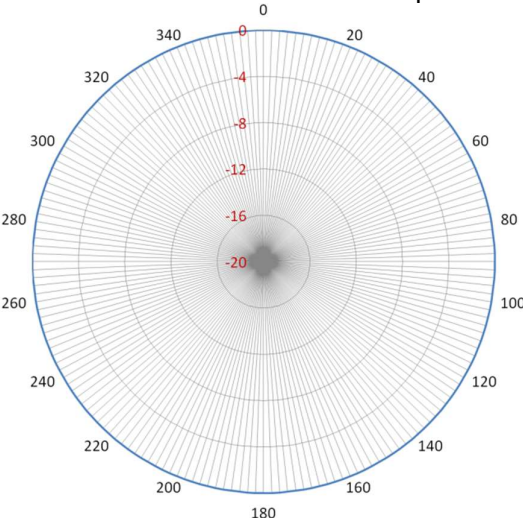


To meet Antenna Restrictions Template below after 4 September 2019

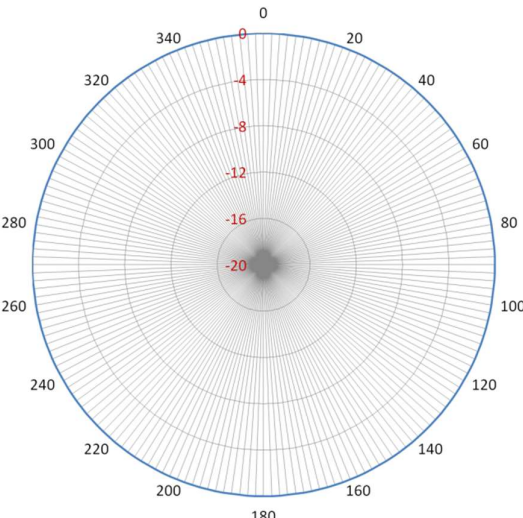


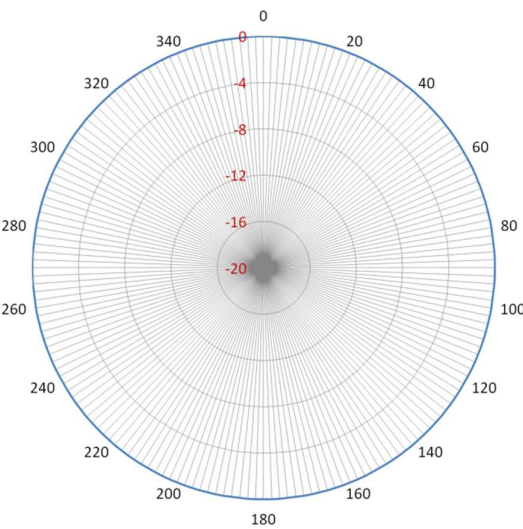
GA10707_33V20180803_PA.ppt

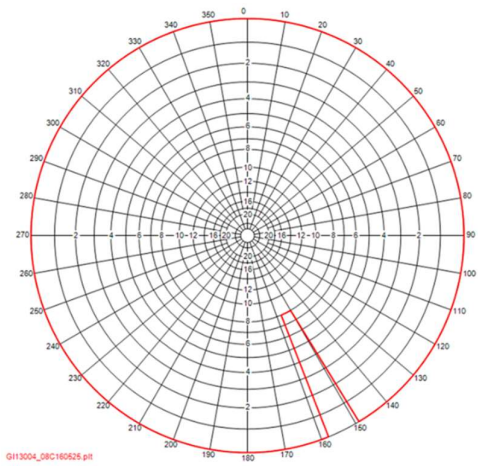
A	Transmitter Name	Brouger Mountain
B	National Grid Reference	NV 45860 16830
C	Mean Antenna Height	61 m agl
D	Class of Emission	8M00X7FXF
E	Transmission Type	DVB-T2
F	Maximum Effective Radiated Power	1 kW (30 dBW)
G	Description of Antenna	omni-directional
H	Polarisation	Horizontal
I	Channel Number	30 (542 – 550 MHz)
	Spurious Emissions	As defined in UK Interface Requirements 2022
	Frequency Tolerance	1 kHz
	Frequency Offset	-167 kHz until 4 September 2019
		0 kHz from 4 September 2019
J	Additional Requirements	<p>To meet Antenna Restrictions Template below:</p> 

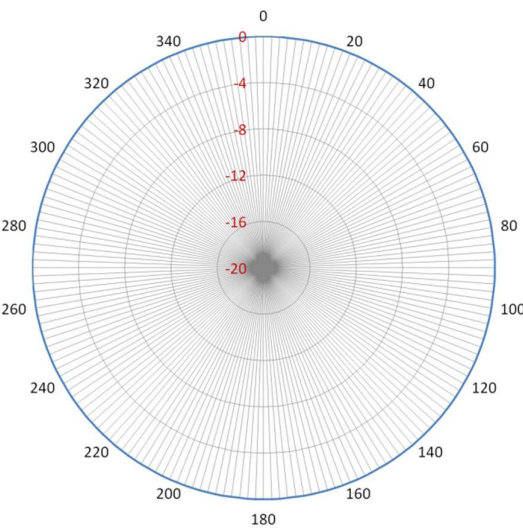
A	Transmitter Name	Carnmoney Hill
B	National Grid Reference	NW 46800 38400
C	Mean Antenna Height	47 m a.g.l.
D	Class of Emission	8M00X7FXF
E	Transmission Type	DVB-T2
F	Maximum Effective Radiated Power	0.016 kW (12 dBW)
G	Description of Antenna	omni-directional
H	Polarisation	Vertical
I	Channel Number	48 (694 – 702 MHz)
	Spurious Emissions	As defined in UK Interface Requirements 2022
	Frequency Tolerance	1 kHz
	Frequency Offset	0 kHz
J	Additional Requirements	<p>To meet Antenna Restrictions Template below:</p> 

A	Transmitter Name	Armagh
B	National Grid Reference	NV 9923 0399
C	Mean Antenna Height	47 m.a.g.l.
D	Class of Emission	8M00X7FXF
E	Transmission Type	DVB-T2
F	Maximum Effective Radiated Power	0.024kW (14 dBW) from 4 September 2019
G	Description of Antenna	Omni-directional
H	Polarisation	Vertical
I	Channel Number	48 (686 – 694 MHz) from 4 September 2019
	Spurious Emissions	As defined in UK Interface Requirements 2022
	Frequency Tolerance	1 kHz
	Frequency Offset	0 kHz
J	Additional Requirements	<p>To meet Antenna Restrictions Template below:</p>

A	Transmitter Name	Divis
B	National Grid Reference	NW 4119 3098
C	Mean Antenna Height	148 m.a.g.l.
D	Class of Emission	8M00X7FXF
E	Transmission Type	DVB-T2
F	Maximum Effective Radiated Power	0.2 (23 dBW) from 4 September 2019
G	Description of Antenna	Omni-directional
H	Polarisation	Horizontal
I	Channel Number	48 (686 – 694 MHz) from 4 September 2019
	Spurious Emissions	As defined in UK Interface Requirements 2022
	Frequency Tolerance	1 kHz
	Frequency Offset	0 kHz
J	Additional Requirements	<p>To meet Antenna Restrictions Template below:</p> 

A	Transmitter Name	Newcastle
B	National Grid Reference	SB 4480 8570
C	Mean Antenna Height	35 m.a.g.l.
D	Class of Emission	8M00X7FXF
E	Transmission Type	DVB-T2
F	Maximum Effective Radiated Power	0.2 kW (23 dBW) from 4 September 2019
G	Description of Antenna	Omni-directional
H	Polarisation	Vertical
I	Channel Number	48 (686 – 694 MHz) from 4 September 2019
	Spurious Emissions	As defined in UK Interface Requirements 2022
	Frequency Tolerance	1 kHz
	Frequency Offset	0 kHz
J	Additional Requirements	<p>To meet Antenna Restrictions Template below:</p> 

A	Transmitter Name	Strabane
B	National Grid Reference	NV 5370 5810
C	Mean Antenna Height	309 m.a.g.l.
D	Class of Emission	8M00Z7FXF
E	Transmission Type	DVB-T2
F	Maximum Effective Radiated Power	0.02 kW (13 dBW) from 4 September 2019
G	Description of Antenna	Directional (GI13004_08C160525)
H	Polarisation	Vertical
I	Channel Number	48 (686 – 694 MHz) from 4 September 2019
	Spurious Emissions	As defined in UK Interface Requirements 2022
	Frequency Tolerance	1 kHz
	Frequency Offset	0 kHz
J	Additional Requirements	<p>To meet Antenna Restrictions Template below:</p>  <p>GI13004_08C160525.ppt</p>

A	Transmitter Name	Whitehead
B	National Grid Reference	NW 6160 4720
C	Mean Antenna Height	16 m.a.g.l.
D	Class of Emission	8M00X7FXF
E	Transmission Type	DVB-T2
F	Maximum Effective Radiated Power	0.0024 kW (4 dBW) from 4 September 2019
G	Description of Antenna	Omni-directional
H	Polarisation	Vertical
I	Channel Number	48 (686 – 694 MHz) from 4 September 2019
	Spurious Emissions	As defined in UK Interface Requirements 2022
	Frequency Tolerance	1 kHz
	Frequency Offset	0 kHz
J	Additional Requirements	<p>To meet Antenna Restrictions Template below:</p> 

5. Interoperability

The Licensee shall ensure that any labelling of transport stream components, including logical channel numbers, service identification and network identification,

used in the provision of a television multiplex service or a radio multiplex service does not conflict with the labelling used by other operators providing technically compatible services.

6. Information provision

- (1) During the period that this Licence remains in force, unless consent has otherwise been given by Ofcom, the Licensee shall compile and maintain accurate records of:
 - a. The following details relating to the Radio Equipment
 - i. Postal address (including post code);
 - ii. National Grid Reference (to 100 meters resolution);
 - iii. Antenna height (a.g.l) and type;
 - iv. Radio frequencies which the Radio Equipment is able to use and radio frequencies which the Radio Equipment uses;
 - v. The technical characteristics of the Radio Equipment both in terms of transmission and reception of wireless telegraphy;
 - b. A statement of the estimated number of receivers and/or the number of subscribing customers;

The Licensee must produce these records if requested by a person authorised by Ofcom.

- (2) The Licensee shall inform Ofcom of the address of the premises at which this Licensee and the information detailed at sub-paragraph (1) (a) above shall be kept.
- (3) The Licensee must submit to Ofcom copies of such parts of the records detailed in sub-paragraph (1)(a) above at such intervals as Ofcom shall notify to the Licensee. Without prejudice to any information which Ofcom is required by law to publish or disclose, Ofcom may, from time to time, publish such extracts of this information as it sees fit, regarding
 - (a) The Licensee must also submit to The Radio Equipment which is operational;
 - (b) The location of the Radio Equipment, aggregated by outward postcode;
 - (c) The frequencies used by the Radio Equipment.
- (4) Ofcom in such a 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, for statistical purposes and more generally for the purpose of ensuring that Ofcom can perform its spectrum management functions.

7. Purpose of Use

- (1) The Licensee shall use the Radio Equipment for the purpose of providing a digital terrestrial television multiplex, using the DVB-T2 technical standard.
- (2) The Licensee must ensure that where the frequencies are used they must carry the following services:
 - (a) TG4;
 - (b) RTÉ 1;
 - (c) RTÉ 2;
 - (d) RTÉ Raidió na Gaeltachta

SCHEDULE 2 TO LICENCE NUMBER WTLM 003

Licence Category: Spectrum Access Licence 540 to 710 MHz Band

Requirements relating to the 700MHz DTT Clearance Programme

1. Cooperation and coordination with other parties

- (1) The Licensee shall use all reasonable endeavours to cooperate in all respects, including promptly and in good faith with:
 - (a) Other Ofcom licensees, the BBC and S4C;
 - (b) Government;
 - (c) Digital UK; and
 - (d) With such other parties, as necessary, or as notified to him by Ofcom, in the administration, organisation or implementation of the 700 MHz DTT Clearance Programme in the United Kingdom.

- (2) The Licensee shall contribute to the plan being prepared for Ofcom by the BBC and other holders of multiplex licences in relation to the management, coordination and delivery of the 700 MHz DTT Clearance Programme. The Licensee's contribution shall be limited to those aspects of the plan that are relevant to the Licensee's particular locality, radio equipment and frequencies.

2. 700MHz DTT Clearance Date

- (1) The Licensee shall take all reasonable steps necessary to give effect to the Clearance Delivery Plan.
- (2) The Licensee shall complete the 700 MHz DTT Clearance Programme by the 700 MHz DTT Clearance Date.
- (3) The 700MHz DTT Clearance Date shall be determined by Ofcom following consultation with the Licensee.
- (4) The 700MHz DTT Clearance Date shall be any such date as may be notified by Ofcom following consultation with the Licensee.

The Licensee shall broadcast the Licensed Service from the transmission sites listed in the Table of Digital Terrestrial Broadcasting Stations for Multiplex Licences using the relevant frequencies and transmission parameters set out therein, and in accordance with the order set out.