

SUBJECT TO CONTRACT

Reference Offer for the Provision of Network Access



Version 3.0

Publication Date: 29 September 2006

© Copyright Arqiva Ltd 2006.

SUBJECT TO CONTRACT

Table of Contents

1.	Introduction	1
2.	Specification	1
2.1	Multiplexes	1
2.2	Stations	1
2.3	Antenna Systems	1
2.4	Accommodation.....	2
2.5	Structures	3
2.6	Electricity Supply	3
2.7	Switchover Timetable.....	3
3.	Network Access Charges	4
3.1	Summary of Charges For Post-DSO Network Access.....	4
3.2	Breakdown of Charges For Post-DSO Network Access.....	5
3.3	Summary of Network Access Charges Over DSO Rollout	6
3.4	Explanation of Charges for Network Access.....	6
4.	Engagement Process - Ordering and Processing	9
4.1	Ordering Process	9
4.2	Antenna System Design Sign-Off	10
4.3	Station Schedules	15
5.	Appendices:.....	16
5.1	Appendix 1 - Description of Network Access: Principles and Proposed Methodology.....	16
5.2	Appendix 2 - Outline Technical Principles of Antenna Access Arrangements	19
5.3	Appendix 3 - List of Main Stations and Gain Calculations	27
5.4	Appendix 4 - List of Relay Stations and Gain Calculations.....	28
5.5	Appendix 5 - Station Details.....	39
6.	Reference Offer Terms and Conditions	50

1. Introduction

This Reference Offer is issued pursuant to Condition JA4 (Requirement to publish a reference offer) of the Notification issued by Ofcom under Sections 48(1) and 79(4) of the Communications Act 2003 contained in the document "Broadcasting Transmission Services: a review of the market, Final statement" issued by Ofcom on 28 April 2005.

This Reference Offer sets out the terms and conditions on, and the charges for, which Arqiva is willing to provide access to its mast and site network and shared or shareable antenna systems for the purpose of providing high power digital terrestrial broadcasting transmission services in the United Kingdom to deliver content to end users by means of a Television Multiplex Service licensed under Part 1 of the Broadcasting Act 1996 ("Network Access").

Other defined terms used in this Reference Offer can be found at Schedule 1 (Definitions) to the Reference Offer Terms and Conditions.

The technical characteristics, Stations, charges, terms of payment and billing procedures on which Arqiva is willing to provide access to the network referred to above for the purposes of the delivery of content to end users other than by means of a Television Multiplex Service licensed under Part 1 of the Broadcasting Act 1996 will be determined by Arqiva by applying principles and methodology similar to and consistent with those applied to determine such matters for Network Access (for television), in particular by applying the cost methodology discussed with and approved by Ofcom.

A copy of this Reference Offer, as updated from time to time, will be placed on Arqiva's website: www.arqiva.com (or any replacement or successor website).

Arqiva will provide at least three months' notice of any intention to withdraw this Reference Offer by publishing details of any revised reference offer on its website and specifying the date (being not less than three months from the date the revised reference offer is published) on which the revised reference offer will become available for acceptance and this Reference Offer will be withdrawn.

2. Specification

The Specification for Network Access and/or the methodology by which it will be derived is described in detail in Appendix 1 (Description of Network Access: Principles and Proposed Methodology) to this Reference Offer and in Appendix 2 (Outline Technical Principles of Antenna Access Arrangements) to this Reference Offer. This Section 2 summarises what is (and what is not) included in the Specification for Network Access.

2.1 Multiplexes

The Specification assumes that Network Access will be provided in respect of six multiplexes (3 PSBs and 3 COMs).

2.2 Stations

Where Network Access is being provided in respect of a PSB it will be provided at all 560 Stations listed in Appendix 5 (Station Details) to this Reference Offer; and, where Network Access is being provided in respect of a COM, it will be provided at the 32 Stations identified with the word "yes" in the column headed "COM Mux" in that Appendix.

2.3 Antenna Systems

2.3.1 At the 32 Stations where the 3 PSBs and 3 COMs will be transmitted the Antennas will generally provide omni-directional coverage and the power level will be -7db ERP relative to the current analogue ERP.

- 2.3.2 At the remaining 528 Stations most of the existing analogue antennas will be used as contemplated in the JPP Plan.
- 2.3.3 Reserve antennas will be provided at the 23 Stations identified with the word "yes" in the column headed "Reserve Antenna" in Appendix 5 (Station Details) to this Reference Offer.
- 2.3.4 Arqiva will provide the feeder(s) from the combiner(s) to an Interface Point.
- 2.3.5 Provision has been made for performance of one helicopter test of the Antenna System at 32 Stations. Such test will only be performed where it is deemed safe for the helicopter and its crew to operate. A decision by Arqiva to measure performance of an Antenna System by helicopter will be based on several factors e.g. new antenna and/or modifications, channel changes and ability to measure the antenna. It may not be possible for safety reasons to measure low (<50m) antenna systems. No provision has been made for any other helicopter measurements.
- 2.3.6 Provision has been made for RBL receive-only antenna modifications/replacements at 38 Stations only. This requirement may change once the full RBL analysis has been completed by the spectrum planners.
- 2.3.7 No provision has been made for replacement of RBL antenna systems with telecom or any other type of programme feeds. Also, no provision has been made for any intermediary RBL link sites in order to either re-generate or re-transmit the signal on to any Station.
- 2.3.8 No provision has been made for any satellite downlink back-up system for RBL antenna systems.
- 2.3.9 No provision has been made for transmitters for power testing of antennas and combiner units.
- 2.3.10 The Antenna System is described in more detail in Appendix 2 (Outline Technical Principles of Antenna Access Arrangements) to this Reference Offer.

2.4 Accommodation

- 2.4.1 The nature of the accommodation will be dependent on the size and facilities of the Station. As regards accommodation, Stations are classified by the column headed "Accommodation" in Appendix 5 (Station Details) to this Reference Offer as one of three types as follows:

Type 1 Stations

Secure, segregated accommodation with independent access for Customer. Generally this accommodation will be of brick-built construction.

Type 2 Stations

Accommodation shared with other customers, with sufficient space for the Customer's equipment rack(s). Generally this accommodation will be of brick-built construction.

Type 3 Stations

Shared accommodation generally in the form of a pre-fabricated cabin. This will be equipped with a common 19 inch rack to take the transmission equipment of all customers.

- 2.4.2 No provision has been made for the construction of new buildings or major refurbishment of existing buildings for Customer Equipment.
- 2.4.3 Provision has been made for 8 new combiner buildings at the following Stations: Caldbeck, Black Hill, Caradon Hill, Belmont, Stockland Hill, Sandy Heath, Beacon Hill and Angus. No provision has been made for any additional combiner buildings at any other Stations.
- 2.4.4 Provision has been made for replacement or refurbishment of all cabins.

2.5 Structures

- 2.5.1 Provision has been made for complete replacement of masts at the Caldbeck and Black Hill Stations. No provision has been made for replacement of masts at any other Stations.
- 2.5.2 Provision has been made for certain structural solution work, including mast strengthening and guy replacement. All proposed structural solutions are subject to carrying out a detailed structural analysis once the Antenna Technical Specification is established.

2.6 Electricity Supply

- 2.6.1 A suitable low voltage electricity supply, derived from the Station electricity supply, will be made available to Customer. Arqiva has assumed that the operating efficiency of all Customer Equipment shall be not less than ten per cent (10%).
- 2.6.2 A standby diesel generator will be provided at the 33 Stations identified with the word "yes" in the column headed "Generator" in Appendix 5 (Station Details) to this Reference Offer. These standby supplies will maintain the Normal Load Capacity previously advised to Arqiva in writing by Customer, provided Arqiva has confirmed that Customer's request in this respect can be reasonably met.
- 2.6.3 Where practicable, Arqiva will install separate electricity sub-metering for Customer at Type 1 Stations and Type 2 Stations.

2.7 Switchover Timetable

- 2.7.1 Subject to the Reference Offer Terms and Conditions, Network Access will be provided in accordance with version B11 of DigitalUK's roll-out timetable as set out at Schedule 6 (Switchover Timetable) to the Reference Offer Terms and Conditions.

3. Network Access Charges

3.1 Summary of Charges For Post-DSO Network Access

Type of Network Access	Per Multiplex Per Annum Charge (£'000)
Provision of Network Access for purpose of providing transmission services in respect of a PSB	12,453
Provision of Network Access for purpose of providing transmission services in respect of a COM	5,551

Note:

The Charges outlined above are on a per Multiplex, per annum basis for post-DSO (i.e. steady state) Network Access based on the Specification and subject to the Reference Offer Terms and Conditions. The Charges are stated in real terms at 2005 prices and are subject to indexation (see Section 3.4.6 below). The above Charges include an indicative estimate of Pass-Through Costs (but such estimate does not include electricity) and an uplift for contingencies. The Charges are stated exclusive of VAT.

3.2 Breakdown of Charges For Post-DSO Network Access

	Total for 6 multiplexes (£'000)	Per PSB (£'000)	Per COM (£'000)
Return on existing assets	9,311	2,284	820
Depreciation on existing assets	2,826	725	217
Non Pass-Through Operating costs	15,799	3,613	1,654
Adjustments ¹	(511)	(123)	(47)
Charges for existing assets	27,425	6,499	2,643
Return on Future Capital Expenditure (forecast)	14,694	3,127	1,771
Depreciation on Future Capital Expenditure (forecast)	5,157	1,147	572
Adjustments ¹	669	112	111
Charges for Future Capital Expenditure (forecast) *	20,520	4,387	2,453
Charges without Pass-Through Costs and without uplift for contingencies²	47,945	10,885	5,096
Pass-Through Costs (indicative, excluding electricity)	3,435	1,005	140
Charges including Pass-Through Costs but without uplift for contingencies²	51,380	11,891	5,236
Uplift for contingencies ²	2,631	563	315
Charges including Pass-Through Costs and including uplift for contingencies²	54,012	12,453	5,551

The Charges outlined above are on a per annum basis for post-DSO (i.e. steady state) Network Access based on the Specification and subject to the Reference Offer Terms and Conditions. The Charges are stated in real terms at 2005 prices and are subject to indexation (see Section 3.4.6 below). The Pass-Through Costs outlined above include indicative estimates of rent and rates based on current levels. The Pass-Through Costs outlined above exclude any estimate for electricity as this cost is not yet known and will be determined by transmitter sizes. The Charges are stated exclusive of VAT.

Note 1: The breakdown above reflects calendar year 2014 - see Section 3.4.13 below regarding the calculation of Adjustments.

Note 2: The uplift for contingencies has been included to provide a best estimate of the likely costs of providing Network Access, in accordance with the Ofcom Guidance "Terrestrial Transmission Market Review: Updated general guidance for setting of charges and review mechanism" dated 31 July 2006. The Charges will be reviewed under the process set out in Schedule 9 (Review Process).

* : See Schedule 9 (Review Process).

3.3 Summary of Network Access Charges Over DSO Rollout

Charges over rollout of Switchover stated in real terms at 2005 prices:

Calendar Years (January – December)	Total for 6 multiplexes (£'000)	Per PSB (£'000)	Per COM (£'000)
2008	209	48	21
2009	9,565	2,205	983
2010	29,200	6,732	3,001
2011	40,991	9,451	4,213
2012	49,663	11,451	5,104
2013	53,682	12,377	5,517
2014	54,012	12,453	5,551

Note: The Charges outlined above are on a per annum basis from 2008 to 2014 inclusive, covering the period of rollout of Switchover to the first full steady state calendar year (2014). The Charges are for Network Access based on the Specification and subject to the Reference Offer Terms and Conditions. The Charges are stated in real terms at 2005 prices and are subject to indexation (see Section 3.4.6 below). The above Charges include an indicative estimate of Pass-Through Costs (but such estimate does not include electricity) and an uplift for contingencies. The Charges are stated exclusive of VAT.

3.4 Explanation of Charges for Network Access

- 3.4.1 This Section details the key parameters that underpin the calculation of the Charges.
- 3.4.2 The Charges are based on the Specification set out in Section 2 and are subject to the Reference Offer Terms and Conditions set out in Section 6. The Specification is based on the assumption that Network Access will be provided to six multiplexes. In the event that there is an additional multiplex or multiplexes, this would affect the Charges and it is likely that the Charges would decrease. The Charges for COMs are based on the assumption that each COM will require Network Access at the 32 Stations referred to in Section 2.2 of this Reference Offer. In the event that any COM requires access to more Stations, this would affect the Charges and it is likely that the Charges would increase in respect of the relevant COM or COMs and decrease in respect of PSBs. Any change to the Charges for any of these reasons shall be implemented using the Change Control Procedure and will reflect a revised allocation across all multiplexes (or relevant Stations, as applicable) on the basis of the costing and calculation methodologies that have been agreed between Arqiva and Ofcom as part of Ofcom's guidance process.
- 3.4.3 The Charges are based on Network Access being provided in accordance with version B11 of DigitalUK's roll-out timetable as set out at Schedule 6 (Switchover Timetable) to the Reference Offer Terms and Conditions.
- 3.4.4 The Charges will become payable on a Sub-Region by Sub-Region basis once Switchover in that Sub-Region has occurred. The Charges are based on the assumption that Switchover will in fact proceed in accordance with the Switchover Timetable.
- 3.4.5 The Charges are based upon the provision of Network Access through to end of December 2032.
- 3.4.6 The Charges are subject to annual indexation in line with RPI commencing in 2006 (as further detailed in the Reference Offer Terms and Conditions set out in Section 6).
- 3.4.7 The Charges reflect costing and calculation methodologies that have been agreed between Arqiva and Ofcom as part of Ofcom's guidance process.

- 3.4.8 In the calculation of the Charges the return on existing assets and the return on Future Capital Expenditure is calculated using the real pre-tax Applicable WACC which at the date of publication of this Reference Offer is calculated at 7.71% ("Applicable WACC"). Arqiva reserves the right to amend the Charges to reflect changes in the calculation of the Applicable WACC as a result of material and prolonged fluctuations in interest rates. Any change to the Charges for these reasons shall be implemented through the Change Control Procedure.
- 3.4.9 The values of existing assets and Future Capital Expenditure over the Term are calculated using a depreciated replacement cost methodology with asset lives reflecting the useful lives of these assets. The 2005 valuation of existing assets was determined by an independent third party.
- 3.4.10 Future Capital Expenditure is based on the Arqiva capital expenditure forecast which is based on the Specification and Switchover Timetable. This is subject to review under the process set out in Schedule 9 (Review Process).
- 3.4.11 Depreciation is calculated in line with a depreciated replacement cost methodology on a straight line basis using asset lives that reflect the useful lives of these assets.
- 3.4.12 Operating costs to be recovered through the Charges are calculated based on an appropriate allocation of costs to the provision of Network Access. This allocation was validated by an independent third party. If Arqiva ceases to provide Network Access in respect of any multiplex (other than the Multiplex), the Charges may be increased to reflect the allocation of operating costs across the remaining multiplexes (including the Multiplex) in respect of which Arqiva continues to provide Network Access.
- 3.4.13 Adjustments are applied to smooth the post-DSO Charges over the Term (Smoothing Adjustment) and to allow for the delay between rollout capital expenditure and the initiation of invoicing for the Charges following the Switchover of each Sub-Region (Timing Adjustment). To make both the Smoothing Adjustment and the Timing Adjustment the un-adjusted Charges are changed to the required adjusted profile whilst ensuring that the Net Present Value of the Charges (using the Applicable WACC as a discount rate) is equal both before and after the adjustments.
- 3.4.14 As outlined in Section 3.2 above, in addition to the Charges, an appropriate share of the following costs will be payable by Customer on a pass-through basis:
- rent;
 - existing rates, assessments and outgoings and any new taxes or environmental levies whether similar or of a wholly new or novel nature;
 - electricity;
 - fees and any other charges payable under any Arqiva Licence;
 - any other costs, charges and fees (including fees for legal, planning, surveyor, engineering and other professional services) which may be required to be paid to a Landlord or other third party under the terms of the relevant lease/licence or otherwise as a result of or in connection with the provision of Network Access to Customer at a particular Station; and
 - reasonable administration costs incurred by Arqiva in arranging for the provision of any Pass-Through Cost item,

(together, "Pass-Through Costs").

The Pass-Through Costs referred to in Section 3.2 above include indicative estimates of rent and rates based on current levels. These indicative estimates exclude electricity as this cost is not yet known and will be determined by transmitter sizes.

- 3.4.15 The Charges assume any Customer exclusive programme distribution and connectivity equipment will be located inside the accommodation location areas designated and set aside at each Station by Arqiva to house Customer Equipment for television broadcasting purposes. Where Customer requires additional space outside those designated areas (for example, for

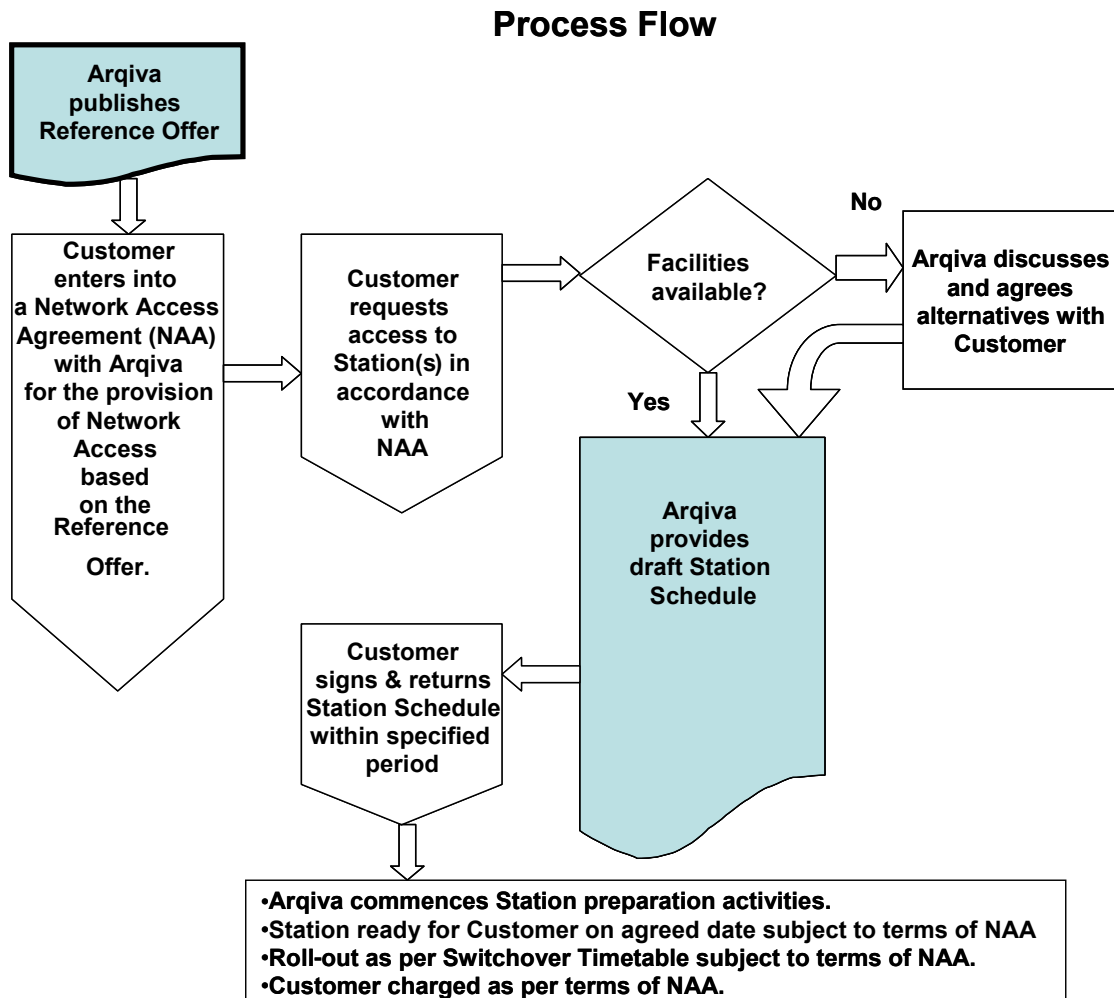
ancillary telecommunications distribution and connectivity purposes) then where such additional space is available it will be provided and charged to Customer at the applicable Arqiva telecommunications site sharing ratecard applicable for the Station where such additional facilities are requested.

- 3.4.16 Arqiva reserves the right to amend the Charges under the Change Control Procedure to reflect any Exceptional Risk, including any change to the Specification or the JPP Plan (for a full list of Exceptional Risks, see Schedule 7 (Risks)).

4. Engagement Process - Ordering and Processing

4.1 Ordering Process

The Arqiva ordering and provisioning procedure for Network Access is summarised in the Process Flow below:



4.2 Antenna System Design Sign-Off

The Antenna details in Appendix 3 (List of Main Stations and Gain Calculations) and Appendix 4 (List of Relay Stations and Gain Calculations) are included as part of this Reference Offer. These Antennas are not based on Station-specific specification and represent approximations for all Stations of the antennas that could be used to support DTT services with the capacity to handle the power levels specified in the JPP Plan.

It should be noted that the radiation patterns used in the design process have been simplistic since specific VRP and HRP international or national transitional and final restrictions have not been available. The Antennas detailed in Appendix 2 (Outline Technical Principles of Antenna Access Arrangements) are based on these simplistic designs. The provision of such Antennas is subject to confirmation of the required specification and detailed structural analysis.

In order to confirm the exact Antenna specifications, to allow the design to be confirmed and to allow the structural analysis to take place, the Antenna requirements will need to be specified in a timely manner, design proposals will need to be produced and customers will need to confirm acceptance of the predicted coverage to allow procurement and installation to commence.

To this end, Digital-UK, in association with broadcasters, MTS providers and Network Access providers, have developed an Antenna Selection Process as set out below to allow the characteristics, specification and design of Antennas to be developed, analysed and confirmed ("**ASP**").

Antenna Selection Process (ASP)

The Antenna System design process for each Station will commence on delivery to Arqiva by the Customer of an Antenna Characteristics Proposal which includes information as to channels, inner and outer templates, the relevant maximum ERP, beam tilt and aperture information, antenna heights and any international or UK restrictions that are necessary to be achieved by each DTT channel ("**ACP**"). Customer shall deliver the ACP for each Station at least three months prior to the relevant ADS Required Authorisation Date shown in Table 1 below.

Upon receipt of the ACP for a Station, Arqiva will, as soon as reasonably practicable, prepare and publish an Antenna Design Proposal which will set out the antenna options available to the Customer ("**ADP**").

Customer shall use reasonable endeavours to procure that the selected antenna option is approved by the Multiplex Operator and by the Other Multiplex Operators in sufficient time to permit Customer to confirm its selected antenna option within the required timescales.

Following receipt of Customer's written confirmation of its selected antenna option, Arqiva shall use its reasonable endeavours to publish as soon as reasonably practicable an Antenna Design Specification for the Antenna System such specification to include the selected antenna physical configuration, computer-modelled HRPs, computer-modelled VRPs, provisional system gain calculations and provisional implementation plans ("**ADS**").

Customer shall sign-off each ADS by, at the latest, the ADS Required Authorisation Date specified in Table 1 below.

In order to speed up the ASP process Arqiva will accept ACPs and authorisation of ADPs and ADSs from the Digital UK Regional Rollout Group in the event that the Customer provides to Arqiva written instructions to do so.

Whilst Arqiva will use all reasonable endeavours to provide Antenna Systems in a timely manner, it shall have no liability to any party for the late delivery of any Antenna System due to the failure of all relevant parties to approve an ADS by the ADS Required Authorisation Date specified in Table 1 below.

The ASP will give rise to Changes, which will be administered by Arqiva using the Change Control Procedure. Arqiva shall be entitled to treat the approval of an ADS by Customer (or the approval of any ADS by DigitalUK if Customer requests their recognition as an authorised approver in writing as referred to above) as Customer's approval to modify an Antenna from that specified in Appendix 3 (List of Main Stations and Gain Calculations) and Appendix 4 (List of Relay Stations and Gain Calculations) of the Reference Offer where such circumstances arise.

Table 1

Region	Station	ADS Required Authorisation Date
Border	Caldbeck	31-Aug-06
Border	Caldbeck Scotland	31-Aug-06
Border	Beary Park	30-Sep-06
Border	Cambret Hill	30-Nov-06
Border	Gosforth	30-Sep-06
Border	Whitehaven	30-Sep-06
Border	Selkirk	31-Jul-06
Border	Galashiels	31-Jan-07
Border	Eyemouth	31-Dec-06
West Country	Beacon Hill	30-Sep-06
West Country	Occombe Valley	31-Mar-07
West Country	Torquay Town	31-Mar-07
West Country	Stockland Hill	30-Sep-06
West Country	Charmouth	31-Mar-07
West Country	Slapton	30-Apr-07
West Country	St Thomas (Exeter)	31-Mar-07
West Country	Huntshaw Cross	31-Oct-06
West Country	Relay (TBD)	31-Jul-07
West Country	Bossiney	30-Jun-07
West Country	Relay (TBD)	30-Jun-07
West Country	Caradon Hill	31-Aug-06
West Country	Mevagissey	30-Jun-07
West Country	Plympton	30-Nov-06
West Country	St Austell	30-Jun-07
West Country	Relay (TBD)	31-Jul-07
Wales	Presely	31-Oct-06
Wales	Relay (TBD)	31-Aug-07
Wales	Relay (TBD)	31-Aug-07
Wales	Relay (TBD)	31-Aug-07
Wales	Relay (TBD)	30-Sep-07
Wales	Relay (TBD)	30-Sep-07
Wales	Relay (TBD)	30-Nov-07
Wales	Relay (TBD)	30-Nov-07
Wales	Arfon	31-Oct-06

Region	Station	ADS Required Authorisation Date
Wales	Moel-Y-Parc	31-Oct-06
Wales	Relay (TBD)	30-Nov-07
Wales	Relay (TBD)	30-Nov-07
Wales	Relay (TBD)	30-Nov-07
Wales	Wrexham Rhos	31-Oct-06
Wales	Relay (TBD)	28-Feb-08
Wales	Relay (TBD)	28-Feb-08
Wales	Relay (TBD)	31-Mar-08
Wales	Relay (TBD)	31-Mar-08
Wales	Relay (TBD)	31-Mar-08
Wales	Relay (TBD)	31-Mar-08
Wales	Relay (TBD)	31-Mar-08
Wales	Relay (TBD)	31-Mar-08
Wales	Relay (TBD)	31-Mar-08
Wales	Relay (TBD)	31-Mar-08
Wales	Relay (TBD)	31-Mar-08
Granada	Winter Hill	30-Sep-06
Granada	Lancaster	28-Feb-07
Granada	Pendle Forest	31-Jan-07
Granada	Saddleworth	28-Feb-07
Granada	Relay (TBD)	30-Nov-07
Granada	Relay (TBD)	30-Nov-07
Granada	Relay (TBD)	30-Nov-07
Granada	Relay (TBD)	30-Nov-07
Granada	Relay (TBD)	30-Nov-07
West	Relay (TBD)	30-Apr-08
West	Relay (TBD)	30-Apr-08
West	Relay (TBD)	30-Apr-08
West	Relay (TBD)	30-Apr-08
West	Relay (TBD)	30-Apr-08
West	Relay (TBD)	30-Apr-08
Grampian	Relay (TBD)	31-May-08
Grampian	Relay (TBD)	31-May-08
Grampian	Relay (TBD)	31-May-08
Grampian	Rumster Forest	28-Feb-07
Grampian	Relay (TBD)	31-Jul-08
Grampian	Relay (TBD)	31-Jul-08
Grampian	Angus	31-Mar-07
Grampian	Relay (TBD)	31-Aug-08
Grampian	Relay (TBD)	31-Aug-08
Grampian	Relay (TBD)	31-Aug-08

Region	Station	ADS Required Authorisation Date
Grampian	Durris	31-Oct-06
Grampian	Gartley Moor	30-Jun-07
Grampian	Peterhead	31-May-07
Grampian	Rosehearty	31-Jul-07
Grampian	Knockmore	28-Feb-07
Grampian	Relay (TBD)	30-Sep-08
STV	Craigkelly	31-Jul-07
STV	Relay (TBD)	31-Oct-08
STV	Darvel	31-May-07
STV	Relay (TBD)	30-Nov-08
STV	Relay (TBD)	30-Nov-08
STV	Relay (TBD)	30-Nov-08
STV	Relay (TBD)	30-Nov-08
STV	Rosneath	30-Jun-07
STV	Relay (TBD)	30-Nov-08
STV	Relay (TBD)	28-Feb-09
STV	Relay (TBD)	28-Feb-09
STV	Black Hill	30-Nov-06
STV	Relay (TBD)	28-Feb-09
STV	Relay (TBD)	28-Feb-09
STV	Relay (TBD)	28-Feb-09
STV	Relay (TBD)	28-Feb-09
Central	Nottingham	30-Nov-08
Central	Relay (TBD)	31-Mar-09
Central	Ridge Hill	31-Jan-08
Central	Relay (TBD)	31-Jul-09
Central	Relay (TBD)	31-Jul-09
Central	Relay (TBD)	30-Sep-09
Central	Relay (TBD)	30-Sep-09
Central	Relay (TBD)	30-Sep-09
Central	Relay (TBD)	30-Sep-09
Central	Relay (TBD)	30-Sep-09
Yorkshire	Belmont	30-Jun-08
Yorkshire	Relay (TBD)	31-Aug-09
Yorkshire	Emley Moor	28-Feb-08
Yorkshire	Chesterfield	31-Oct-08
Yorkshire	Idle	31-Oct-08
Yorkshire	Keighley	31-Jul-08
Yorkshire	Relay (TBD)	30-Sep-09
Yorkshire	Relay (TBD)	30-Sep-09

Region	Station	ADS Required Authorisation Date
Anglia	Sandy Heath	30-Jun-08
Anglia	Relay (TBD)	30-Nov-09
Anglia	Relay (TBD)	30-Nov-09
Anglia	Relay (TBD)	30-Nov-09
Anglia	Relay (TBD)	30-Nov-09
Meridian	Relay (TBD)	30-Jun-08
Meridian	Relay (TBD)	31-Jan-10
Meridian	Relay (TBD)	31-Jan-10
Meridian	Relay (TBD)	31-Jan-10
Meridian	Relay (TBD)	28-Feb-10
Meridian	Relay (TBD)	28-Feb-10
Meridian	Relay (TBD)	31-Mar-10
Meridian	Dover	31-Dec-08
Meridian	Margate	31-Mar-09
Meridian	Ramsgate	31-Dec-08
Carlton/LWT	Relay (TBD)	28-Feb-10
Carlton/LWT	Relay (TBD)	28-Feb-10
Carlton/LWT	Relay (TBD)	28-Feb-10
Carlton/LWT	Relay (TBD)	28-Feb-10
Carlton/LWT	Relay (TBD)	28-Feb-10
Tyne Tees	Chatton	31-Jan-09
Tyne Tees	Relay (TBD)	31-Jan-09
Tyne Tees	Relay (TBD)	31-May-10
Tyne Tees	Relay (TBD)	31-May-10
Tyne Tees	Relay (TBD)	30-Jun-10
Tyne Tees	Relay (TBD)	30-Jun-10
Tyne Tees	Relay (TBD)	30-Jun-10
Ulster	Relay (TBD)	31-May-10
Ulster	Relay (TBD)	31-May-10
Ulster	Relay (TBD)	30-Jun-10
Ulster	Relay (TBD)	31-Jul-10
Ulster	Relay (TBD)	31-Jul-10
Ulster	Relay (TBD)	31-Jul-10
Channel	Fremont Point	30-Apr-09
Channel	Relay (TBD)	30-Apr-09

Please note that the dates contained within this table are still under discussion and once agreed the dates will be republished.

4.3 Station Schedules

Arqiva will provide a completed Station Schedule for each Station not less than twelve (12) months prior to the relevant Station Target Switchover Date.

Customer shall sign and return all such Station Schedules not later than thirty (30) days after receipt thereof from Arqiva.

5. Appendices:

5.1 Appendix 1 - Description of Network Access: Principles and Proposed Methodology

Provision of Network Access

Arqiva will provide Network Access at all of the Stations as described in Section 2.2 of this Reference Offer. The provision of Network Access will include access to the following (subject to the Reference Offer Terms and Conditions and the applicable Station Access Licence(s)):

- a. Masts
- b. Antenna Systems including feeders and combining units
- c. Buildings and/or cabins
- d. Power systems including back-up power in a form of fixed generators
- e. Existing RBLs at the relay Stations
- f. Remote monitoring of all the Stations

Where possible, existing Masts will be used. At some stations the existing structure may require strengthening or replacing to support the new high power DTT Antennas and feeders required.

Existing antennas will be utilised or, where Arqiva considers it necessary, new Antennas will be provided. Where existing Antennas are not suitable, Arqiva has produced a range of Antenna designs and configurations depending on the requirements of the Station. In all cases the Antenna will be designed to meet the radiation pattern requirements as specified within the JPP Plan. At present, where new Antennas are proposed, such Antennas have been designed to provide an omni-directional pattern and have been sized to make efficient use of the available aperture. All new (and existing) Antenna Systems may need to be reviewed following the publication of any new version of the JPP Plan. All new Antenna designs are subject to securing JPP approval prior to finalising the design and Arqiva progressing with the Antenna build.

Main/Reserve Antennas

It is currently planned that the Type 1 Stations will benefit from having both main and reserve Antenna Systems. Both the main and reserve Antenna Systems will be independently fed and have similar characteristics. Generally, the reserve Antenna will be designed to radiate all of the six (6) multiplexes at full power in the event that the main Antenna is unavailable either due to a fault or planned maintenance (there are some exceptions to this rule). The Antenna switch between main and reserve Antenna will be located in the Customer Accommodation and operated by Customer, although for safety reasons Customer must secure Arqiva's approval prior to performing Antenna switching.

During periods of an Antenna System fault or planned Antenna maintenance, the main or reserve Antenna System may not be available and the relevant Antenna System will be isolated. Remote Antenna switching facilities will be required to be disabled during these periods.

A further eight (8) Type 2 Stations will generally be provided with split main Antennas only. These Antennas will be capable of operating in half Antenna configuration with an ERP as specified within the relevant Station Schedule. An independent reserve facility will not be provided at these Stations.

The remaining Stations (which are generally low power relays) will be provided with single thread combiner and Antenna System and will have one input feed. A large number of the Antennas at existing Relay Stations will be retained.

For all the Stations, Customer will be provided with either a dual Antenna feed or a single Antenna feed (depending on the type of Station) to an agreed specification as more particularly described in Appendix 2 (Outline Technical Principles of Antenna Access Arrangements) to this Reference Offer.

Accommodation

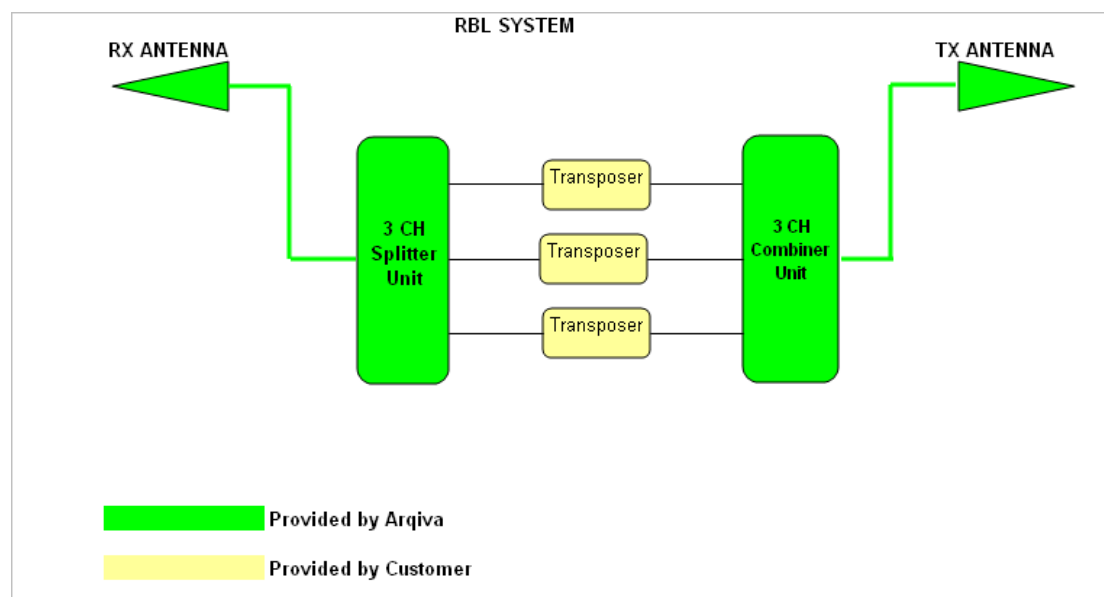
At Type 1 Stations, Arqiva will make use of existing buildings to provide separate accommodation to Customer. At Type 2 Stations, existing buildings will be used but Customer will be allocated adequate space within a room shared with MTS Providers. Cable management systems, domestic lighting and power sockets will be provided by Arqiva into each of these shared areas. At Type 3 Stations, Arqiva will provide accommodation in small cabins which will be replaced or refurbished.

Power Supply

The power supply arrangements at the Stations will be as detailed in Appendix 5 (Station Details) to this Reference Offer, but are summarised here. At Type 1 Stations, the power system will generally comprise dual electricity supplies into the Station. These Stations will be backed up by standby diesel generators. In the event of a mains failure on the A supply, the system will switch to the B supply feed and if both feeds fail then the system will switch to the back up generator. The capacity of the power supply is designed to be such that it will support the entire normal station load (i.e. six transmitters running simultaneously) plus two transmitters running into test load. However, due to Antenna configurations, provision will be made at Angus, Beacon Hill, Darvel, Moel-y-Parc and Ridge Hill for all 12 transmitters powered to aerial.. A further ten (10) Type 2 Stations will be provided with a single electricity supply and a back-up generator. All the remaining Stations will be provided with a single electricity supply without a generator back-up, although generator sockets will be provided so that mobile generators could be used in cases of emergency and when there are extensive power outages.

RBLs

Under the current analogue system a large number of the Relay Stations are fed off-air from the parent Station using an RBL feed. Arqiva will use the same system to feed the all new high power DTT relay Stations for the three (3) PSB multiplexes. There is a considerable discussion presently taking place amongst the broadcasters and the JPP as to the suitability of the current RBLs for use by the new high power DTT system. A significant number of RBL paths are predicted to be problematic for high power DTT and evaluations are ongoing. It is expected that some will have to be replaced by other distribution means such as satellite or SHF telecom links. Arqiva is currently not providing any distribution links which are of the non-RBL type. A typical RBL system proposed for the three (3) PSB multiplexes is as shown below.



Remote Monitoring of Antenna Systems

Arqiva intends to provide remote monitoring at certain of the Type 1 Stations, the precise list of such Stations to be notified to Customer as soon as reasonably practicable. Arqiva anticipates modifying the existing analogue antenna monitoring to work in conjunction with the new high power DTT Antenna Systems. This system will be designed to detect faults and if necessary, allow Arqiva to isolate the transmitters. It is anticipated that the monitoring equipment will also provide Arqiva with an alarm for remote monitoring.

Security Monitoring

Arqiva will remotely monitor Station security at all Stations. In addition, Arqiva intends to provide remote monitoring of the electricity supply at some Stations, the precise list of such Stations to be notified to Customer as soon as reasonably practicable. Remote alarms and indications will be monitored by Arqiva's NCSC monitoring centre located at Emley Moor near Huddersfield.

Transition Arrangements

Switchover will inevitably have an impact on the current analogue and low power DTT services and other services transmitted from the affected Stations. For each Station there are two distinct phases where there is likely to be a change to the radiation characteristics of the existing services. These are described in more detail below:

1. Impact on existing services during the new high power DTT Antenna construction

Antenna construction will take place approximately two (2) years prior to the relevant Target Switchover Date and usually in periods of good weather which generally means between March and October (depending on the geographic location of the Station). During this period it is expected that the existing services will be disrupted whilst the new Antennas are being installed in the place of the existing antennas and switching between the old and the new takes place.

Once the new Antenna System has been installed and commissioned satisfactorily it will be ready for use by the existing analogue and/or the low power DTT services. As these are new Antennas designed ultimately for high power DTT services and used in the interim by the existing services, there will be changes to the radiation characteristics (i.e. gain, horizontal and vertical radiation patterns etc) compared to the current system.

2. Impact on existing services during Customer Equipment installation

Arqiva will make use of the existing buildings in order to accommodate all new high power DTT Equipment for all six (6) multiplexes. The buildings will have to be cleared of existing equipment and modified in order to enable them to be used to install the new high power DTT transmission equipment (i.e. Customer Equipment). Arqiva will make use of transportable containerised transmitters (and CCUs where required) which can be transported between Stations and Regions in order to provide continuity for existing services.

At each Station the transportable transmitters will be in use for a period of approximately nine to twelve months depending on the type of Station. This period should include the time taken to install the transportable transmitters at the Station and the transfer of service onto them, the decommissioning and removal of the existing plant, the building modifications and preparation, the installation of the new high power DTT Equipment and the transition activities. The transportable transmitters will be removed from the Station once services have transitioned to the new high power DTT Equipment.

During the use of the transportable transmitters, the affected services may need to operate under reduced power.

5.2 Appendix 2 - Outline Technical Principles of Antenna Access Arrangements

Preamble

Arqiva will provide and maintain items of common infrastructure, including Antenna facilities for new high power DTT services.

Customer will need to interface its systems with the Facilities provided by Arqiva.

This Appendix defines the principles that will be applied to the design of the Interface Point in respect of the Antenna System.

The Station Schedule will give details for each Station. The Station Schedule will also specify the permitted Customer Output Signal parameters for each Station. Arqiva currently anticipates that these parameters will be substantially as set out in Appendix 3 (List of Main Stations and Gain Calculations) and Appendix 4 (List of Relay Stations and Gain Calculations) to this Reference Offer.

Antenna Systems - General

The Antenna facilities provided by Arqiva will be as set out in the following paragraphs. Each paragraph is expanded upon in the corresponding subsection later in this Appendix.

- A. A main Antenna or Antennas such that each of the three PSB and three COM multiplexes can be radiated with a radiation pattern in accordance with the JPP Plan.
- B. At some Stations, a reserve Antenna or Antennas, which will be able to radiate some or all the multiplexes in the event that the main Antenna is unavailable because of an equipment fault or planned work. At some other Stations, capability to install a temporary reserve Antenna in the event that the main Antenna fails or is taken out of service. At other Stations, there will be no specific reserve Antenna facilities provided.
- C. The Equipment required to combine multiple Customer Output Signals into a shared Antenna (Channel Combining Units, or "CCU") appropriate to the design of the Station.
- D. Interface Point from which the Customer Output Signals are carried to the CCUs. At some Stations this will include a U-link patch panel close to the CCU. Arqiva will use this when it considers it necessary so as to ensure that the Antenna is isolated from any source of radio frequency power.
- E. Interconnections between the CCU and the Antenna, which may include facilities to cross patch between the main and reserve Antennas where appropriate.
- F. Signal quality monitoring facilities at the output of the CCU, providing a representative sample of the radiated signal for that Antenna System. Part of this sample is fed back to the relevant Interface Point.
- G. At Type 1 Stations, an Antenna interlock circuit indicating that the Antenna is ready to accept power from the Customer Equipment. Where it is provided, Customer must connect this circuit to its Customer Equipment in such a manner as to ensure that there is no power output from the Customer Equipment when the circuit is broken.

Additional Information

A. MAIN ANTENNA

The Antenna configurations which may be employed are categorised and shown schematically below. The Station Schedule will give details indicating which Antenna configurations exist at any given Station.

Class 1, 2, 3, 4, 5: - Single Antenna input

- Where the Antenna is fed from a single CCU.
- If there are two CCUs, but each half of the Antenna is only capable of accepting half the normal transmitter power.

The Antenna System and CCU feed will be presented to Customer at the Interface Point as a single coaxial input connector.

Class 6 and 7: - Duplicated Antenna

Where there is no reserve Antenna, the main Antenna System may be divided such that Customer can feed the upper and lower half independently. Each half of the Antenna will be provided to Customer at the Interface Point as two separate coaxial input connectors. The two inputs shall normally be fed with equal co-phased signals.

Where half Antenna working is possible, this will be stated in the Station Schedule for the Station. In all cases there is a limit on the maximum power that can be used. The available options in this situation are:

Class 6: The full normal transmitter power is used. The ERP of the Station will be reduced by approximately 3dB.

Class 7: Twice the normal transmitter power is used. The ERP of the Station will be approximately the same as normal.

B. RESERVE ANTENNA

Some Stations will have a main Antenna and a reserve Antenna. Reserve Antennas will be classified in the same way as the main Antennas. Where main and reserve Antennas are provided, the Customer Output Signals shall be fed to one or other of the separate coaxial input connectors, but not both.

Customer shall switch his service to the reserve Antenna when instructed to do so by Arqiva. This would be required in order for Arqiva to work on the main Antenna System. It is envisaged that the majority of operations required for repair or maintenance of the main Antenna System will then be possible without the need for a shutdown of the transmissions.

C. CHANNEL COMBINING UNITS

DTT spectrum offsets

The CCUs and filters to which Customer will be granted access pursuant to the Reference Offer have been designed on the assumption that high power DTT signals are to be broadcast in channels based on 8 MHz wide UHF channels and comprise a signal of 7.6 MHz bandwidth. Additionally it has been assumed that the centre frequency of the digital signal may be offset by plus or minus 167 kHz from the centre of the 8 MHz channel ("Offset"). The permitted Offset is yet to be defined by Ofcom and, in the event that Offsets are not allowed or are permitted on different terms, this may impact on CCU and filter designs.

Isolation between inputs

The CCUs will provide a specified level of isolation between the inputs. This will normally be a minimum of 30dB. There will be a residual level of power fed back from the other multiplexes that share the Antenna System, and under fault conditions this may increase. Customer shall ensure it has operational procedures that recognise this and the associated hazards.

Minimum Attenuation (or Filtering) provided within the CCU

Arqiva will install CCUs which achieve the level of passband filtering for out-of-band emissions as specified below. This level of stopband attenuation passband filtering was the result of early discussions with Ofcom and does not achieve the full ETSI filter specifications. Further discussions are underway which may result in a change to the filtering requirements. Any change will impact on the total system design and will require Ofcom approval.

Generally, for Stations where the ERP is greater than 1kW, attenuation in accordance with stopband Code A will be provided. This attenuation will be relaxed proportionately for Stations where the ERP is less than 1000 watts, down to 100 watts, in which case Stopband Code Bx (where x = 0 to 9) will be utilised.

Stopband Code C will only be provided for Channel 21 multiplexes, and only where the ERP is greater than 1kW.

For Stations where the ERP is less than 100 watts, Customer should assume that filtering will NOT be provided within the CCU. Non-selective combining may be used at these low power Stations; however, where selective (or filtered) CCU are utilised some filtering will be provided.

Attenuation and group delay data will be provided to the Customer when the equipment is available.

Customer remains responsible for ensuring that any applicable spectrum mask is met in respect of the radio frequency emissions from the Antenna which relate to the relevant Customer Output Signals.

Stopband Attenuation

The CCU must provide attenuation to any components of the input signals that are at frequencies outside the specified passband.

The required attenuation is indicated by the code given in the Station Schedule details and is as follows:

Stopband Code A:

(Generally used for Stations where ERP > 1 kW)

At frequencies + or – 6MHz from the centre frequency: 18 dB

At frequencies + or – 12MHz or more from the centre frequency: 43 dB

Stopband Code B:

A single digit, in the range 0 to 9, will follow code B. Use this as "x" in the formula below.

At frequencies + or – 6MHz from the centre frequency: (8 + x) dB

At frequencies + or – 12MHz or more from the centre frequency: (33 + x) dB

Stopband Code C:

("Critical Mask" for special cases)

At frequencies + or – 6MHz from the centre frequency: 28 dB

At frequencies + or – 12MHz or more from the centre frequency: 53 dB

Stopband Code D:

(Generally used for Stations where ERP < 100 W)

For these Stations stopband filtering will not be provided.

D. INTERFACE POINT

Arqiva will provide the Interface Point in accordance with the following:

Type 1 Stations

The standard position for the Interface Point is at high level, one metre inside the Customer Accommodation. Where there are two inputs to an Antenna System which is implemented as two

halves, the two inputs shall be fed in phase with equal power. Feeders will be clearly labelled with channel number, multiplex and main or reserve.

Type 2 Stations

Arqiva shall provide an Interface Point within the Customer rack space. Where there are two inputs to an Antenna which is implemented as two halves, the two inputs shall be fed in phase with equal power. Feeders will be clearly labelled with channel number, multiplex and main or reserve.

Type 3 Stations

Arqiva shall provide an Interface Point at the output connector of the Customer Equipment. Feeders will be clearly labelled with channel number and multiplex.

Connector type

The connector type provided by Arqiva will be dependent on the nominal transmitter power for the multiplex, and will be one of the following:

- N (female)
- 7-16 (female)
- 7/8" IEC flange (female)
- 1 5/8" IEC flange (female)
- 3 1/8" IEC flange (female)

The type of connector employed will be stated in the relevant Station Schedule.

Feeder type

Normal practice would be to use foam filled semi flexible feeders appropriate for the power. The highest powers may require the use of air-spaced semi-flexible feeders or rigid feeders. Feeders on the Customer side of the Interface Point shall not rely on the Interface Point for mechanical support.

Feeder pressurisation

Air spaced feeders or rigid feeders will not be pressurised where the entire length is in an indoor environment of reasonably uniform temperature. However, where they are outdoors, such as passing between buildings, they will be pressurised with dry air by Arqiva.

Isolation of feeders

At most Type 1 Stations Arqiva will provide a facility to isolate the Customer Equipment and interconnecting feeder from the CCU. This is provided for the safety of Arqiva's personnel when working on the Antenna System.

At Type 1 Stations this facility will usually take the form of a U-link which is located close to the CCU and is under the control of Arqiva. At other Stations the cable will be disconnected from the CCU. The method of isolation will be stated in the relevant Station Schedule. If Customer requires its feeder cable to be isolated from the CCU when working on its own Equipment, this service can be provided under the normal terms for Arqiva attendance at the Station.

E. ANTENNA INTERCONNECTIONS

CCU to Antenna Interconnections will be provided by Arqiva. These interconnections may include U-link patching facilities to enable the main CCU to feed the reserve Antenna and the reserve CCU to feed the main Antenna. When the main CCU feeds the reserve Antenna, there may be a resultant change to the maximum power that the system can accept from Customer Equipment. The system ERP and radiation pattern may also change.

It is envisaged that the requirement to operate the system in this cross patched configuration would arise only occasionally in the case of a fault or major works on the Antenna or Mast. The existence of these cross patching facilities will be stated in the relevant Station Schedule.

F. SIGNAL QUALITY MONITORING FACILITIES

A directional coupler will be installed at the base of the main feeder to each Antenna or half Antenna, after all CCU or filters which could introduce any distortion of the signal.

The output from this coupler will be split and distributed via a coaxial cable to Customer. Where Arqiva makes this facility available, the feed will be presented at a type 'N' female connector at the relevant Interface Point.

Customer should note:

- In addition to its own Multiplex, the monitoring feed will carry samples of any other multiplex which shares the Antenna System.
- Any multiplex which does not share the same Antenna System will not be present on the monitoring feed.
- One feed will be provided from an Antenna System, even if that Antenna System comprises one or more CCUs or main feeder cables to the Antenna. The feed provided will represent the total signal as radiated in the main beam of the Antenna.
- Where there are main and permanent reserve Antenna Systems, a separate monitoring feed will be provided from each Antenna System.
- The RF level at the Interface Point will be at least -10 dBm and not greater than $+10$ dBm in 50 ohms.

G. ANTENNA INTERLOCK CIRCUIT

The interlock circuit associated with each Antenna System is intended to indicate that the system is ready to accept power from Customer.

It will provide a normally closed circuit, isolated from ground. It will become open circuit in the event that the system is unavailable.

The reason for this could include:

- Open U-links for system isolation
- Operation of main to reserve switching or half Antenna switching is taking place
- Detection of a fault by automatic Antenna monitoring equipment
- Fire alarms
- Other circumstances as required by Arqiva

The automatic Antenna monitoring equipment mentioned above has traditionally been included on high power broadcast Antennas to prevent damage caused by a transmitter continuing to power into a faulty Antenna.

The status of the automatic equipment in the Antenna interlock circuit is remotely monitored at Arqiva's monitoring centre.

Customer shall ensure that no voltages greater than 24 volts are applied to the interlock circuit, and the maximum current available in the event of a short circuit to ground is 500 milliamperes.

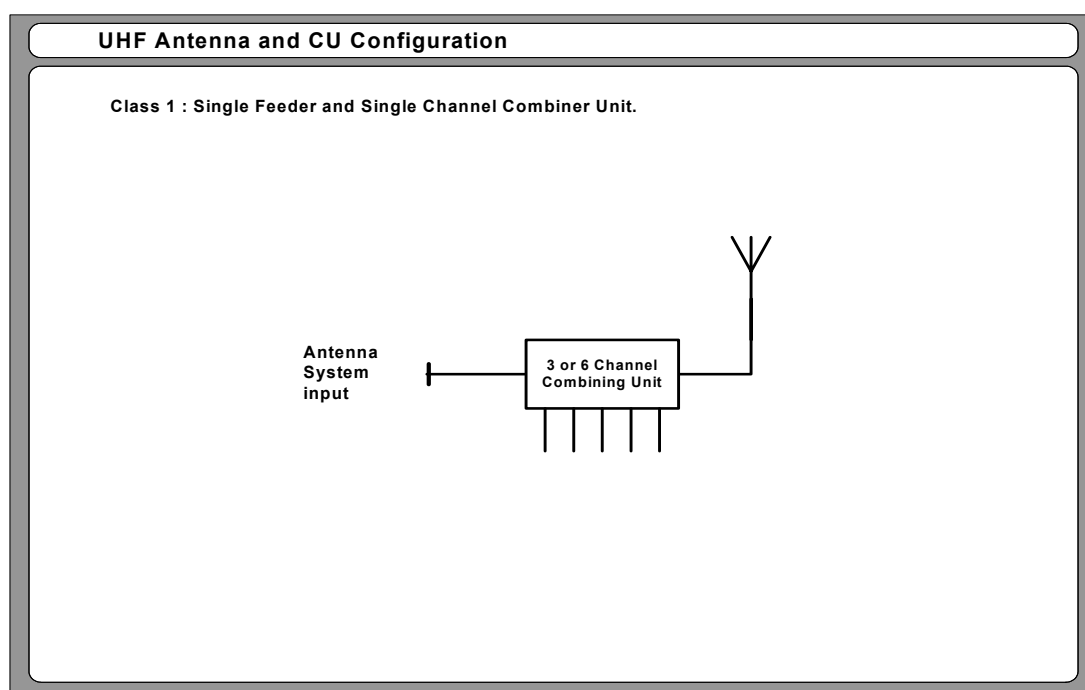
In the event that the interlock goes open circuit, Customer shall ensure the output from any transmitter connected to the associated Antenna System should be removed and disabled within 100 milliseconds.

Classification of Antenna System Architecture

An Antenna System has a class as outlined in the table below. At a given Station, Customer will have access to:

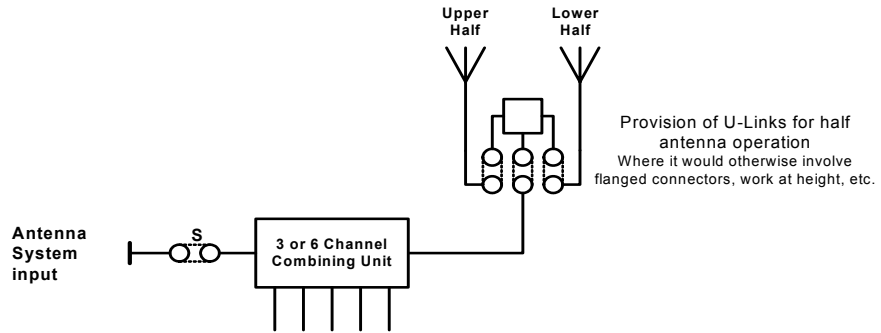
- A main Antenna System of a certain class, and
- In some cases a reserve Antenna System which may or may not be the same class

Class 1	This Antenna System is fed by one feeder, and has one CCU chain
Class 2	This Antenna System is fed by two feeders each half is rated for half transmitter power, and has one CCU chain rated for full transmitter power
Class 3	This Antenna System is fed by two feeders each half is rated for full transmitter power, and has one CCU chain rated for full transmitter power
Class 4	This Antenna System is fed by two feeders each half is rated for double transmitter power, and has one CCU chain rated for double transmitter power
Class 5	This Antenna System is fed by two feeders each rated for half transmitter power, and has two CCU chains each rated for half transmitter power
Class 6	This Antenna System is fed by two feeders each rated for full transmitter power, and has two CCU chains each rated for full transmitter power
Class 7	This Antenna System is fed by two feeders each rated for double transmitter power, and has two CCU chains each rated for double transmitter power



UHF Antenna and CU Configuration

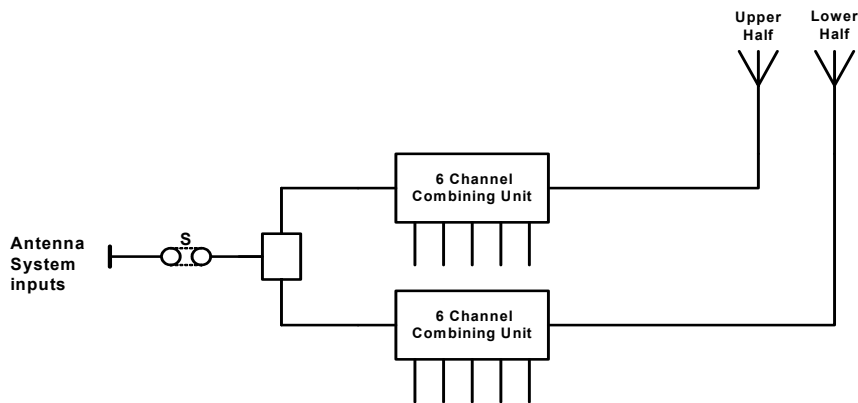
Class 2, 3, 4: Duplicated Antenna and Single Ended Combiner Unit



- Class 2: Antenna System rated for Normal power only. Half antenna ERP = -6dB maximum.
 - Class 3: Antenna System rated for Full power, Half antenna. (FPHA) Half antenna ERP = -3dB maximum.
 - Class 4: Antenna System rated for Double power, Half antenna. (DPHA) Half antenna ERP = 0dB maximum.
- S: Safety U-links for isolation from power source

UHF Antenna and CU Configuration

Class 5: Duplicated Antenna and Channel Combiner Unit

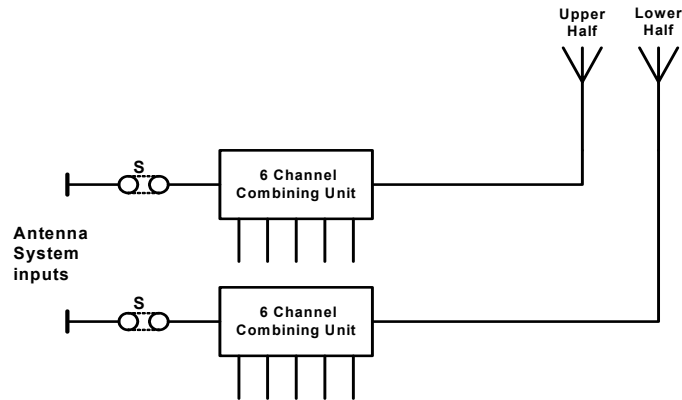


Antenna System rated for Normal operation. Half antenna ERP = -6dB maximum.

S: Safety U-links for isolation from power source

UHF Antenna and CU Configuration

Class 6, 7: Duplicated Antenna and Channel Combiner Units



Class 6: Antenna System rated for Full power, Half antenna. (FPHA) Half antenna ERP = -3dB maximum.
Class 7: Antenna System rated for Double power, Half antenna. (DPHA) Half antenna ERP = 0dB maximum.

S: Safety U-links for isolation from power source

5.3 Appendix 3 - List of Main Stations and Gain Calculations

Antenna System	Channels used by each mux					ERP kW	TX Power PSB1 kW	TX Power PSB2 kW	TX Power PSB3 kW	TX Power COM4 kW	TX Power COM5 kW	TX Power COM6 kW	Antenna Class	Half Antenna ERP if applicable dB	Tx Interlocks Installed	Isolating U links	IC Feeder quantity	IC Feeder type	IC Feeder length	IC Feeder connector size	Helitest included?	Comments	Last Change	
	P1	P2	P3	C4	C5																			C6
Angus main	57	60	53	54	58	61	20k	1.15	1.15	1.13	1.14	1.15	2	n/a	Yes	Yes	1	HCA158-50	56.0 m	1.5/8" EIA	Yes		01-Nov-05	
Angus reserve	57	60	53	54	58	61	20k	2.97	2.86	2.92	2.93	2.92	2	n/a	Yes	Yes	1	HCA158-50	56.0 m	1.5/8" EIA	Yes		01-Nov-05	
Beacon Hill	53	57	60	42	45	51	20k	0.84	0.85	0.89	0.98	0.95	2	n/a	Yes	Yes	1	HCA78-50	25.0 m	7/8" EIA	Yes		14-Nov-05	
Beacon Hill PSB reserve	53	57	60				20k	3.82	4.03	4.34			1	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05	
Beacon Hill COM reserve				42	45	51	20k				3.59	3.59	3.59	1	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Belmont PSB main	22	25	28	30			100k	6.40	7.13	7.83	7.81		2	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05	
Belmont main COM5, COM6				53	60		100k				6.26	6.38	2	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05	
Belmont Res cantilever	22	25	28	30	53	60	100k	7.09	6.17	5.80	5.83	6.43	6.36	1	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Black Hill Main	43	46	50	41	44	47	100k	6.06	6.57	6.78	6.48	6.07	6.79	2	n/a	Yes	Yes	1	HCA318-50	25.0 m	3/18" EIA	Yes		14-Nov-05
Black Hill Reserve	43	46	50	41	44	47	100k	6.06	6.57	6.78	6.48	6.07	6.79	2	n/a	Yes	Yes	1	HCA318-50	25.0 m	3/18" EIA	Yes		14-Nov-05
Caldbeck main	28	29	25	23	26	29	100k	8.13	8.05	8.47	7.71	8.53	8.16	2	n/a	Yes	Yes	1	HCA318-50	58.0 m	3/18" EIA	Yes		14-Nov-05
Caldbeck reserve	28	29	25	23	26	29	100k	8.13	8.05	8.47	7.71	8.53	8.16	2	n/a	Yes	Yes	1	HCA318-50	58.0 m	3/18" EIA	Yes		14-Nov-05
Caldbeck STV ITV	24	27					100k	2.89	2.91					7	0dB	Yes	Yes	2	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Caldbeck STVBBC	22						100k	7.47						7	0dB	Yes	Yes	2	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Cambret Hill	41	44	47				20k	0.24	0.23	0.21				4	0dB	No	No	1	HCA78-50	25.0 m	7/8" EIA	No		14-Nov-05
Caradon Hill PSB Antenna	22	25	28	21	24	27	100k	9.05	9.15	9.25	4.51	4.56	4.61	2	n/a	Yes	Yes	1	HCA318-50	60.0 m	3/18" EIA	Yes	Also acts as reserve for COM Muxs.	11-Nov-05
Caradon Hill COM Antenna	22	25	28	21	24	27	50k	11.07	11.18	11.29	5.52	5.57	5.63	2	n/a	Yes	Yes	1	HCA318-50	61.0 m	3/18" EIA	Yes	Also acts as reserve for PSB Muxs. Please note deviation from V4_Beta SP (50kW ERP not 100kW ERP).	11-Nov-05
Chatton main	42	45	49	41	44	47	20k	1.78	1.44	1.53	2.06	1.73	1.49	2	n/a	Yes	Yes	1	HCA78-50	25.0 m	7/8" EIA	Yes		14-Nov-05
Chatton reserve	42	45	49	41	44	47	20k	3.04	2.99	2.82	3.11	3.06	2.87	2	n/a	Yes	Yes	1	HCA78-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Chesterfield PSB	23	26	29				0.4k	0.05	0.06	0.05				7	0dB	No	No	2	HCA78-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Chesterfield COM				43	46	50	0.4k				0.19	0.18	0.17	6	-3dB	No	No	2	HCA78-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Craigkelly main	21	24	27	42	45	49	20k	1.22	1.13	1.07	1.09	1.06	1.07	2	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		25-Nov-05
Craigkelly reserve	21	24	27	42	45	49	20k	2.96	2.88	2.91	2.54	2.29	2.26	2	n/a	Yes	Yes	1	HCA78-50	25.0 m	1.5/8" EIA	Yes		25-Nov-05
Darvel main	22	25	28	23	26	29	20k	1.82	1.70	1.54	1.79	1.70	1.61	2	n/a	Yes	Yes	1	HCA78-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Darvel Reserve	22	25	28	23	26	29	20k	2.63	2.90	2.99	2.72	3.05	2.88	2	n/a	Yes	Yes	1	HCA78-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Dover main	50	56	53	55	59	62	20k	1.49	1.51	1.46	1.55	1.41	1.45	2	n/a	Yes	Yes	1	LCF158-50A	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Dover reserve	50	56	53	55	59	62	20k	1.49	1.51	1.46	1.55	1.41	1.45	2	n/a	Yes	Yes	1	LCF158-50A	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Durris main	22	25	28	23	26	29	100k	4.40	3.69	3.37	4.18	3.63	2.99	2	n/a	Yes	Yes	1	HCA214-50	44.0 m	3/18" EIA	Yes		14-Nov-05
Durris Res	22	25	28	23	26	29	100k	5.81	4.81	3.99	5.74	4.48	3.51	2	n/a	Yes	Yes	1	HCA318-50	44.0 m	3/18" EIA	Yes		14-Nov-05
Emley Moor PSB	41	44	47				174k	12.84	12.61	13.20				2	n/a	Yes	Yes	1	HCA318-50	25.0 m	3/18" EIA	Yes		14-Nov-05
Emley Moor COM				51	48	52	174k				12.90	12.39	13.06	2	n/a	Yes	Yes	1	HCA318-50	25.0 m	3/18" EIA	Yes		14-Nov-05
Emley Moor Reserve PSB or COM	41	44	47	51	48	52	174k	12.16	14.11	11.32	11.25	11.13	11.28	2	n/a	Yes	Yes	1	HCA318-50	25.0 m	3/18" EIA	Yes	Reserve for either PSB or COM Muxs (not both at same time at Full ERP).	14-Nov-05
Fremont Point main	41	44	47	51	52	48	6.4k/1.6k	0.85	0.82	0.83	0.85	0.19	0.21	2	n/a	Yes	Yes	1	HCA318-50	40.0 m	3/18" EIA	Yes		01-Dec-05
Fremont Point reserve	41	44	47	51	52	48	6.4k/1.6k	1.58	1.58	1.68	1.48	0.36	0.41	1	n/a	Yes	Yes	1	HCA318-50	40.0 m	3/18" EIA	Yes		01-Dec-05
Huntsaw Cross main	55	59	62	48	52	56	20k	1.56	1.57	1.50	1.34	1.53	1.55	2	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Huntsaw Cross reserve	55	59	62	48	52	56	20k	1.24	1.16	1.16	0.93	1.27	1.27	1	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Idle	21	24	27				0.05	0.009	0.008	0.009				7	0dB	No	No	2	HCA78-50	25.0 m	7/8" EIA	Yes		14-Nov-05
Idle COM				42	45	49	0.05				0.025	0.025	0.023	7	0dB	No	No	2	HCA78-50	25.0 m	7/8" EIA	Yes		14-Nov-05
Keighley	54	58	61	53	57	60	2k	0.16	0.16	0.16	0.16	0.16	0.16	6	-3dB	No	No	2	HCA78-50	25.0 m	7/8" EIA	Yes		14-Nov-05
Knockmore main	26	23	29	22	25	28	20k/8k	1.34	1.50	1.50	0.53	0.54	0.55	2	n/a	Yes	Yes	1	HCA78-50	25.0 m	7/8" EIA	Yes		14-Nov-05
Knockmore reserve	26	23	29	22	25	28	20k/8k	2.01	2.12	1.84	0.95	0.85	0.80	2	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Lancaster	21	24	27	22	25	28	2k	0.22	0.22	0.21	0.22	0.22	0.22	6	-3dB	No	No	2	HCA78-50	25m	7/8" EIA	Yes		14-Nov-05
Les Touilletts	41	44	47	51	54	56	1.6/2	0.13	0.13	0.11	0.12	0.13	0.14	4	0dB	No	No	1	HCA78-50	25m	7/8" EIA	No		14-Nov-05
Moel-Y-Parc main	42	45	49	52	48	51	20k	2.21	2.14	2.08	2.11	2.07	2.10	2	n/a	Yes	Yes	1	HCA158-50	74.0 m	1.5/8" EIA	Yes		14-Nov-05
Moel-Y-Parc reserve	42	45	49	52	48	51	20k	3.62	3.75	3.63	3.35	3.70	3.49	2	n/a	Yes	Yes	1	HCA158-50	74.0 m	1.5/8" EIA	Yes		14-Nov-05
Nottingham	21	24	27				0.4	0.04	0.03	0.03				7	0dB	No	No	2	HCA78-50	25.0 m	7/8" EIA	Yes		14-Nov-05
Nottingham COM				48	52	56	0.4				0.19	0.19	0.19	7	0dB	No	No	2	HCA78-50	25.0 m	7/8" EIA	Yes		14-Nov-05
Pendle Forest	22	25	28	21	24	27	0.1k	0.019	0.019	0.017	0.019	0.019	0.015	7	0dB	No	No	2	LCF12-50	20.0 m	7-16 DIN	Yes		14-Nov-05
Plympton	54	58	61	42	45	56	0.4k	0.009	0.009	0.009	0.009	0.009	0.008	7	0dB	No	No	2	LCF12-50	25.0 m	7-16 DIN	Yes		14-Nov-05
Presely main	46	43	50	41	44	47	20k	1.92	2.06	1.82	2.12	2.01	1.74	2	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Presely reserve	46	43	50	41	44	47	20k	1.95	1.76	1.74	1.89	1.90	1.65	2	n/a	Yes	Yes	1	HCA158-50	25.0 m	1.5/8" EIA	Yes		14-Nov-05
Ridge Hill main	22	25	28	48	52	56	20k	1.44	1.33	1.20	1.54	1.75	1.83	2	n/a	Yes	Yes	1	LCF78-50A	25.0 m	7/8" EIA	Yes		14-Nov-05
Ridge Hill reserve	22	25	28	48	52	56	20k	3.99	3.97	3.90	4.09	4.25	3.75	2	n/a	Yes	Yes	1	LCF78-50A	25.0 m	7/8" EIA	Yes		14-Nov-05
Rosneath main	54	58	61	53	57	60	2k	0.37	0.35	0														

5.4 Appendix 4 - List of Relay Stations and Gain Calculations

Note 1: ERPs and channels as per the JPP Plan

Note 2: Transmitter powers have been calculated using historic system gain information and may be modified once more detailed information is available. Where historic gain calculations have not been available 7dB system gain has been utilised

Note 3: For Stations with an ERP <25W non selective combiner systems may be utilised and Antenna System gains may reduce by up to 6dB. In this instance transmitter power would quadruple compared to the published data.

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
10637	ABERBEEG	2	5.0	46	0.63	43	0.63	50	0.63
10668	ABERCYNON	2	4.9	58	0.65	54	0.65	61	0.65
14705	ABERFOYLE	18	10.4	54	1.65	58	1.65	61	1.65
10618	ABERGAVENNY	200	8.3	45	29.63	49	29.63	42	29.63
12908	ABERGWFYFI	2	2.3	21	1.17	27	1.17	24	1.17
10631	ABERTRIDWR	10	7.0	57	2.00	60	2.00	53	2.00
10504	ABINGTON	2	4.9	53	0.65	57	0.65	60	0.65
10427	ADDINGHAM	5	5.6	43	1.28	46	1.28	50	1.28
12803	ALDERNEY	40	6.7	58	8.59	61	8.59	64	8.59
10227	ALLESLEY PARK	7	5.6	22	1.84	25	1.84	28	1.84
10636	ALLTWEN	2	7.0	46	0.40	43	0.40	50	0.40
12608	ALTON	2	8.2	53	0.30	57	0.30	60	0.30
14911	ANDOVERSFORD	11	7.3	55	2.09	59	2.09	62	2.09
15226	ARDNADAM	14	7.0	48	2.79	52	2.79	56	2.79
11806	ARFON	1000	5.6	41	277.01	44	277.01	47	277.01
10564	ARISAIG	2	7.0	23	0.40	26	0.40	29	0.40
10706	ARMAGH	24	10.0	45	2.40	49	2.40	42	2.40
10447	ARMITAGE BRIDGE	2	7.8	54	0.33	58	0.33	61	0.33
15225	ARROCHAR	2	5.5	21	0.57	24	0.57	27	0.57
13604	ASHBURTON	2	7.7	21	0.34	24	0.34	27	0.34
12312	AUCHTERMUCHTY	10	8.2	45	1.51	42	1.51	49	1.51
10376	AUSTWICK	6	5.1	42	1.96	45	1.96	49	1.96
11004	AVENING	2	4.1	41	0.77	44	0.77	47	0.77
13130	AVETON GIFFORD	2	4.7	44	0.68	47	0.68	41	0.68
15303	AVIEMORE	3	10.3	22	0.25	28	0.25	25	0.25
15244	AYR SOUTH	2	7.0	41	0.40	44	0.40	47	0.40
11046	BACKWELL	19	11.2	22	1.43	25	1.43	28	1.43
10308	BACUP	50	8.0	43	7.88	46	7.88	50	7.88
14538	BAGILLT	5	2.0	53	3.13	57	3.13	60	3.13
14508	BALA	40	13.7	26	1.73	23	1.73	29	1.73
11204	BALGOWNIE	8	14.2	46	0.31	43	0.31	50	0.31
13735	BALLANTRAE	2	5.9	54	0.51	58	0.51	61	0.51
13010	BALLINTOY	2	7.0	45	0.40	49	0.40	42	0.40
13002	BALLYCASTLE	3	6.8	45	0.55	49	0.55	42	0.55
12322	BALMULLO	2	7.0	45	0.40	49	0.40	42	0.40
13204	BAMPTON	6	6.5	45	1.36	49	1.36	42	1.36
10723	BANBRIDGE	2	4.0	44	0.80	46	0.80	50	0.80
11208	BANFF	56	4.6	42	19.53	45	19.53	49	19.53
10732	BANGOR	2	2.4	62	1.16	55	1.16	59	1.16
13815	BARNSTAPLE	8	4.3	43	3.01	46	3.01	50	3.01
13717	BARSKEOCH HILL	400	11.2	55	30.52	59	30.52	62	30.52
13707	BASSENTHWAITE	32	7.0	42	6.38	45	6.38	49	6.38

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
10443	BATLEY	3	7.5	54	0.45	58	0.45	61	0.45
13207	BEAMINSTER	4	11.8	55	0.25	59	0.25	62	0.25
13711	BEARY PEARK	50	8.8	43	6.59	46	6.59	50	6.59
13548	BEDDGELERT	2	7.0	55	0.40	62	0.40	59	0.40
13547	BEDDGELERT LINK	2	7.0	21	0.40	24	0.40	27	0.40
10643	BEDLINOG	2	7.7	21	0.34	27	0.34	24	0.34
13202	BEER	2	1.2	55	1.53	59	1.53	62	1.53
10911	BELLINGHAM	10	8.4	21	1.44	24	1.44	27	1.44
13127	BERRYNARBOR	2	7.0	22	0.40	25	0.40	28	0.40
16109	BERWICK	8	13.8	21	0.32	24	0.32	27	0.32
10503	BIGGAR	100	9.8	22	10.47	25	10.47	28	10.47
10707	BLACK MOUNTAIN	5	4.6	45	1.72	49	1.72	42	1.72
10339	BLACKBURN	2	8.1	43	0.31	46	0.31	50	0.31
10653	BLACKMILL	2	8.6	22	0.28	25	0.28	28	0.28
11053	BLAKENEY	2	7.1	21	0.39	24	0.39	27	0.39
13729	BLEACH GREEN VP	2	9.9	53	0.26	57	0.26	60	0.26
11211	BODDAM	2	5.4	45	0.58	42	0.58	49	0.58
10359	BOLLINGTON	4	2.8	21	2.22	24	2.22	27	2.22
16105	BONCHESTER BRIDGE	2	5.0	42	0.63	45	0.63	49	0.63
14105	BOSCASTLE	2	5.1	23	0.63	26	0.63	29	0.63
14104	BOSSINEY	2	12.3	54	0.12	58	0.12	61	0.12
13622	BOVEY TRACEY	2	7.0	42	0.40	45	0.40	49	0.40
10848	BOVINGTON	2	7.0	41	0.40	44	0.40	47	0.40
11032	BOX	2	4.7	42	0.69	45	0.69	49	0.69
10467	BRADFORD WEST	2	7.3	55	0.47	59	0.47	62	0.47
10243	BRAILES	8	4.8	21	2.66	24	2.66	27	2.66
11417	BRAMFORD	2	7.0	21	0.40	24	0.40	27	0.40
13221	BRANSCOMBE	2	4.8	41	0.66	44	0.66	47	0.66
13812	BRAUNTON	2	6.0	42	0.50	45	0.50	49	0.50
11921	BRECHFA	4	9.9	21	0.37	27	0.37	24	0.37
11210	BRECHIN	2	5.3	46	0.60	43	0.60	50	0.60
10649	BRECON	200	7.7	58	34.16	61	34.16	54	34.16
10549	BRIDGE O ALLAN	2	7.0	23	0.40	26	0.40	29	0.40
13206	BRIDPORT	17	10.9	41	1.40	44	1.40	47	1.40
10830	BRIGHTSTONE	28	7.5	41	5.00	44	5.00	47	5.00
10389	BRINSCALL	2	2.2	21	1.21	24	1.21	27	1.21
11031	BRISTOL MONTPELIER	2	6.5	23	0.45	26	0.45	29	0.45
10671	BRITON FERRY	4	9.6	46	0.44	43	0.44	50	0.44
13614	BRIXHAM	4	10.4	43	0.33	46	0.33	50	0.33
10390	BROADBOTTOM	2	7.0	42	0.40	45	0.40	49	0.40
10470	BROCKWELL	2	7.0	49	0.40	42	0.40	45	0.40
10366	BROOK BOTTOM	2	4.9	58	0.65	61	0.65	54	0.65
10548	BROUGHTON	2	6.2	21	0.49	24	0.49	27	0.49
11039	BRUTON	2	5.1	42	0.62	45	0.62	49	0.62
13609	BUCKFASTLEIGH	2	5.0	41	0.64	44	0.64	47	0.64
11910	BUILTH WELLS	5	11.3	22	0.39	28	0.39	25	0.39
13411	BURGAR HILL VP	2	7.0	21	0.40	24	0.40	27	0.40
11408	BURNHAM	15	5.4	41	4.44	44	4.44	47	4.44
11041	BURRINGTON	32	12.0	53	2.02	57	2.02	60	2.02
11413	BURY ST EDMUNDS	3	12.0	22	0.21	25	0.21	28	0.21
10927	BYRNES	2	7.0	21	0.40	24	0.40	27	0.40
10507	CALLANDER	20	10.0	22	2.00	25	2.00	28	2.00
11005	CALNE	10	6.5	21	2.22	24	2.22	27	2.22
13721	CAMBRET HILL	2800	12.2	41	170.67	44	170.67	47	170.67

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
12313	CAMPERDOWN	2	3.6	26	0.87	23	0.87	29	0.87
10845	CANFORD HEATH	2	7.0	45	0.40	42	0.40	49	0.40
14707	CANNONGATE HP	3	7.0	54	0.52	58	0.52	61	0.52
13535	CASTLE CAEREINION	2	6.0	46	0.50	43	0.50	50	0.50
13007	CASTLEDERG	2	7.8	54	0.37	58	0.37	61	0.37
10508	CATHCART	2	6.7	48	0.43	52	0.43	56	0.43
15252	CATRINE	2	13.1	55	0.10	59	0.10	62	0.10
10909	CATTON BEACON	28	12.9	43	1.45	46	1.45	50	1.45
14515	CEFN MAWR A	7	3.5	44	3.07	41	3.07	47	3.07
14505	CEFN MAWR B	32	7.0	58	6.38	61	6.38	54	6.38
10317	CHAIGLEY	2	7.0	21	0.40	24	0.40	27	0.40
11021	CHALFORD	25	10.0	21	2.50	24	2.50	27	2.50
11066	CHALFORD VALE	2	4.5	41	0.71	44	0.71	47	0.71
13122	CHAMBERCOMBE	2	6.4	21	0.46	24	0.46	27	0.46
13220	CHARMOUTH	2	7.0	41	0.40	44	0.40	47	0.40
11305	CHARTHAM	50	11.0	21	3.97	27	3.97	24	3.97
10377	CHATBURN	2	5.6	23	0.55	26	0.55	29	0.55
15802	CHATHAM TOWN	2	3.0	58	1.10	57	1.10	52	1.10
10228	CHEADLE	5	11.6	48	0.33	52	0.33	56	0.33
11052	CHEPSTOW	2	5.8	21	0.53	24	0.53	27	0.53
13230	CHIDEOCK VP	2	5.3	42	0.60	45	0.60	49	0.60
10123	CHINGFORD	2	4.5	48	0.71	52	0.71	56	0.71
11051	CHISELDON	4	11.3	23	0.30	26	0.30	29	0.30
11063	CHITTERNE	2	5.8	42	0.53	45	0.53	49	0.53
13621	CHUDLEIGH	2	7.0	41	0.40	44	0.40	47	0.40
10616	CILFREW	3	10.3	45	0.28	49	0.28	52	0.28
11925	CILYCWM	2	4.8	21	0.66	27	0.66	24	0.66
11019	CIRENCESTER	50	7.6	23	8.79	26	8.79	29	8.79
15222	CLAONAIG	15	7.0	55	2.95	59	2.95	62	2.95
11056	CLEARWELL	2	7.1	23	0.39	26	0.39	29	0.39
10480	CLECKHEATON	2	3.8	55	0.83	59	0.83	62	0.83
13624	CLENNON VALLEY	2	5.0	42	0.63	45	0.63	49	0.63
16112	CLOVENFORDS	2	7.0	21	0.40	24	0.40	27	0.40
10611	CLYDACH	2	5.7	29	0.54	26	0.54	23	0.54
11013	COLEFORD	2	7.9	42	0.33	45	0.33	49	0.33
13113	COMBE MARTIN	14	9.7	42	1.50	45	1.50	49	1.50
13147	COMPTON	2	2.4	44	1.15	47	1.15	41	1.15
10472	CONISBROUGH	2	4.8	53	0.66	57	0.66	60	0.66
10735	CONLIG	13	7.6	45	2.19	49	2.19	42	2.19
13607	COOMBE	2	5.2	21	0.61	24	0.61	27	0.61
10411	COP HILL	200	7.5	22	35.57	25	35.57	28	35.57
10468	COPLEY	2	5.3	55	0.59	59	0.59	62	0.59
10463	CORNHOLME	8	7.0	54	1.68	58	1.68	61	1.68
10461	COWLING	3	8.1	42	0.40	45	0.40	49	0.40
10455	CRAGG VALE	5	4.7	54	1.71	58	1.71	61	1.71
10670	CRAIGCEFNPARC	2	11.3	46	0.15	43	0.15	50	0.15
15304	CRAIGELLACHIE	14	7.0	57	2.79	60	2.79	53	2.79
11406	CREAKE	2	4.2	48	0.76	52	0.76	56	0.76
13723	CREETOWN	6	12.2	55	0.39	59	0.39	62	0.39
11061	CREWKERNE	2	4.6	41	0.69	44	0.69	47	0.69
10652	CRICKHOWELL	30	14.2	21	1.14	27	1.14	24	1.14
12302	CRIEFF	50	10.9	26	4.09	23	4.09	29	4.09
11001	CROCKERTON	11	7.0	41	2.14	44	2.14	47	2.14
12912	CROESERW VP	24	10.5	58	2.14	61	2.14	54	2.14

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
13747	CROSTHWAITE	2	7.0	53	0.48	57	0.48	60	0.48
13121	CROYDE	2	5.1	41	0.63	44	0.63	47	0.63
10675	CRUCORNEY	2	7.8	21	0.37	24	0.37	27	0.37
10694	CRUMLIN	2	5.8	56	0.53	60	0.53	53	0.53
10441	CULLINGWORTH	3	10.8	55	0.22	59	0.22	62	0.22
13205	CULM VALLEY	12	7.6	42	2.00	45	2.00	49	2.00
12303	CUPAR	4	10.2	44	0.38	47	0.38	41	0.38
11905	CWM TWRCH	3	5.7	21	0.86	27	0.86	24	0.86
10624	CWMAFON	14	7.5	21	2.52	27	2.52	24	2.52
10658	CWMAMAN	2	5.0	45	0.64	49	0.64	42	0.64
10665	CWMFELINFACH	2	4.7	52	0.68	45	0.68	48	0.68
11912	CWMGORS	5	11.5	21	0.37	27	0.37	24	0.37
12401	DALLINGTONPARK	20	9.6	55	2.19	59	2.19	62	2.19
10348	DALTON	5	5.2	43	1.51	46	1.51	50	1.51
13603	DARTMOUTH	2	7.0	41	0.40	44	0.40	47	0.40
10301	DARWEN	100	10.5	42	8.96	45	8.96	49	8.96
13212	DAWLISH	2	5.7	55	0.54	59	0.54	62	0.54
10556	DEANSTON	2	4.7	53	0.68	57	0.68	60	0.68
10333	DELPH	2	2.3	23	1.18	26	1.18	29	1.18
11102	DERBY	40	4.3	30	15.03	48	15.03	52	15.03
10657	DERI	10	7.0	22	2.00	28	2.00	25	2.00
10355	DOG HILL	17	7.2	43	3.24	46	3.24	50	3.24
10536	DOLLAR	2	7.6	54	0.35	58	0.35	61	0.35
11813	DOLWYDDELAN	2	7.6	41	0.38	44	0.38	47	0.38
10827	DONHEAD	6	4.4	41	2.12	44	2.12	47	2.12
11303	DOVER TOWN	20	10.1	26	1.97	23	1.97	30	1.97
10672	DOWLAIS	3	7.5	58	0.46	61	0.46	54	0.46
13107	DOWNDERRY	5	4.2	55	1.98	59	1.98	62	1.98
10710	DRAPERSTOWN	2	11.1	45	0.19	49	0.19	42	0.19
10724	DROMORE	2	4.7	58	0.68	61	0.68	54	0.68
10431	DRONFIELD	2	2.4	55	1.16	59	1.16	62	1.16
12928	DUFFRYN	2	5.5	22	0.56	28	0.56	25	0.56
13730	DUMFRIES SOUTH	5	10.5	46	0.41	50	0.41	43	0.41
14712	DUNKELD TOWN	2	7.0	23	0.40	26	0.40	29	0.40
13216	DUNSFORD	2	5.1	45	0.62	49	0.62	42	0.62
15231	DUNURE	2	7.7	43	0.41	46	0.41	50	0.41
11033	DURSLEY	11	6.7	42	2.37	45	2.37	49	2.37
11010	EASTER COMPTON	2	8.0	53	0.39	57	0.39	60	0.39
11105	EASTWOOD	2	5.1	22	0.61	25	0.61	28	0.61
10633	EBBW VALE SOUTH	2	4.4	21	0.73	27	0.73	24	0.73
15108	EDERNY	11	7.4	54	2.04	58	2.04	61	2.04
13619	EDGINSWELL	2	7.5	45	0.36	49	0.36	42	0.36
10677	EFAIL FACH	2	8.0	49	0.32	45	0.32	52	0.32
11316	ELHAM	2	7.0	26	0.40	23	0.40	30	0.40
10473	ELLAND	2	9.4	54	0.23	58	0.23	61	0.23
11209	ELLON	2	8.3	45	0.30	49	0.30	42	0.30
10304	ELTON	13	7.8	21	2.10	24	2.10	27	2.10
11914	ERWOOD	2	3.0	57	1.00	60	1.00	53	1.00
13725	ESKDALE GREEN	2	7.0	22	0.40	25	0.40	28	0.40
14921	EWYAS HAROLD	2	5.4	41	0.58	44	0.58	47	0.58
13201	EXETER ST THOMAS	50	7.7	41	8.44	44	8.44	47	8.44
16101	EYEMOUTH	400	10.9	23	32.51	26	32.51	29	32.51
10925	FALSTONE	2	5.0	41	0.63	44	0.63	47	0.63
11306	FAVERSHAM	3	7.0	22	0.52	28	0.52	25	0.52
11506	FELIXSTOWE	80	7.4	43	14.56	46	14.56	50	14.56

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
10638	FERNHILL	2	2.2	55	1.20	62	1.20	59	1.20
11808	FFESTINIOG	240	7.0	22	47.89	28	47.89	25	47.89
10541	FINTRY	4	11.4	24	0.28	27	0.28	21	0.28
14535	FLINT	4	1.8	53	2.91	57	2.91	60	2.91
11315	FOLKESTONE	40	10.3	26	3.78	23	3.78	30	3.78
10122	FOREST ROW	24	10.8	45	1.98	48	1.98	56	1.98
13138	FOWEY	2	7.0	54	0.40	58	0.40	61	0.40
11036	FROME	2	5.8	21	0.53	24	0.53	27	0.53
16102	GALASHIELS	20	10.1	41	1.94	44	1.94	47	1.94
14902	GARTH HILL VP	5	7.0	53	1.00	57	1.00	60	1.00
11202	GARTLEY MOOR	440	11.7	58	29.58	61	29.58	54	29.58
10505	GLASGOW WEST CENTRAL	6	5.3	62	1.90	55	1.90	59	1.90
13726	GLENLUCE	3	8.2	53	0.45	57	0.45	60	0.45
13749	GLENRIDDING	2	5.4	53	0.58	57	0.58	60	0.58
13748	GLENRIDDING LINK	2	4.2	21	0.77	24	0.77	27	0.77
10552	GLESPIN	2	5.0	54	0.64	58	0.64	61	0.64
14507	GLYN CEIRIOG	2	4.9	58	0.64	61	0.64	54	0.64
12909	GLYNCORRWG	2	2.0	42	1.25	45	1.25	49	1.25
14520	GLYNDYFRDWY	2	6.1	55	0.50	62	0.50	59	0.50
12806	GOREY	4	5.8	41	1.05	44	1.05	47	1.05
11421	GORLESTON ON SEA	2	7.0	23	0.40	26	0.40	29	0.40
13706	GOSFORTH	10	6.2	54	2.39	58	2.39	61	2.39
11222	GOURDON	2	5.5	55	0.56	62	0.56	59	0.56
14713	GRANGEMOUTH	2	7.0	53	0.40	57	0.40	60	0.40
15310	GRANTOWN LINK	150	7.0	55	29.93	59	29.93	62	29.93
13745	GRASMERE	4	12.0	53	0.25	57	0.25	60	0.25
10460	GRASSINGTON	12	7.9	23	1.94	26	1.94	29	1.94
10149	GRAVESEND	2	3.3	55	1.04	59	1.04	57	1.04
13804	GREAT TORRINGTON	2	5.0	42	0.63	45	0.63	49	0.63
13738	GREYSTOKE	2	7.5	53	0.41	57	0.41	60	0.41
12007	GRIMSBY	2	2.2	42	1.21	45	1.21	49	1.21
13104	GUNNISLAKE	6	13.6	43	0.28	46	0.28	50	0.28
10522	HADDINGTON	4	11.7	54	0.27	58	0.27	61	0.27
10450	HAGG WOOD	7	4.7	55	2.26	59	2.26	62	2.26
10406	HALIFAX	100	10.4	21	9.23	24	9.23	27	9.23
13630	HALWELL	2	7.0	41	0.40	44	0.40	47	0.40
13911	HAM STREET	2	5.8	26	0.52	23	0.52	30	0.52
13612	HARBERTONFORD	2	7.0	42	0.40	45	0.40	49	0.40
13103	HARTLAND	6	5.3	48	1.79	52	1.79	56	1.79
10432	HASLAND	2	9.5	53	0.22	57	0.22	60	0.22
10303	HASLINGDEN	2000	11.2	23	151.72	26	151.72	29	151.72
10853	HATCH BOTTOM	40	10.4	54	3.65	58	3.65	61	3.65
10352	HAUGHTON GREEN	2	5.1	43	0.62	46	0.62	50	0.62
16103	HAWICK	10	8.6	23	1.37	26	1.37	29	1.37
10913	HAYDON BRIDGE	20	10.4	41	1.83	44	1.83	47	1.83
10414	HEADINGLEY	2	7.5	54	0.43	58	0.43	61	0.43
10409	HEBDEN BRIDGE	50	7.4	22	9.05	25	9.05	28	9.05
13618	HELE	2	5.6	43	0.55	46	0.55	50	0.55
10444	HEYSHAW	100	10.4	53	9.23	57	9.23	60	9.23
15237	HIGH KEIL	4	7.0	41	0.76	44	0.76	47	0.76
10459	HOLMFIELD	4	7.5	55	0.79	59	0.79	62	0.79
10449	HOLMFIRTH	5	10.3	54	0.48	58	0.48	61	0.48
15232	HOLMHEAD	2	7.6	41	0.42	44	0.42	47	0.42
14536	HOLYWELL	8	3.0	53	4.01	57	4.01	60	4.01

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
14916	HOPE UNDER DINMORE	2	5.8	53	0.52	57	0.52	60	0.52
11314	HORN STREET	2	2.1	43	1.24	45	1.24	46	1.24
10844	HORNDEAN	2	6.7	56	0.53	50	0.53	62	0.53
11030	HUTTON	28	10.0	53	2.84	57	2.84	60	2.84
10852	HYTHE MARINA	10	7.0	53	2.00	57	2.00	60	2.00
13112	ILFRACOMBE	56	8.6	54	7.69	58	7.69	61	7.69
16108	INNERLEITHEN	16	11.5	54	1.14	58	1.14	61	1.14
11502	IPSWICH STOKE	2	7.0	22	0.40	25	0.40	28	0.40
13115	IVYBRIDGE	50	9.1	42	6.22	45	6.22	49	6.22
16104	JEDBURGH	32	7.0	41	6.38	44	6.38	47	6.38
10452	KEIGHLEY TOWN	2	5.7	23	0.54	26	0.54	29	0.54
10566	KELVINDALE	2	7.0	30	0.40	48	0.40	52	0.40
13702	KESWICK	24	11.0	21	1.91	24	1.91	27	1.91
10469	KETTLEWELL	26	12.0	42	1.65	45	1.65	49	1.65
11040	KEWSTOKE	16	7.7	48	2.72	52	2.72	56	2.72
10506	KILLEARN	100	9.9	55	10.17	59	10.17	62	10.17
10591	KILMELFORD	6	7.0	55	1.28	59	1.28	62	1.28
12403	KINGS LYNN	68	5.3	43	20.01	46	20.01	51	20.01
13116	KINGSBRIDGE	34	9.4	43	3.88	46	3.88	50	3.88
13628	KINGSKERSWELL	2	1.6	55	1.37	59	1.37	62	1.37
14901	KINGTON	20	11.8	42	1.34	45	1.34	49	1.34
14709	KINROSS	25	10.6	54	2.18	61	2.18	58	2.18
10575	KINTRAW	4	7.0	43	0.80	46	0.80	50	0.80
13739	KIRKBY STEPHEN	2	7.9	53	0.39	57	0.39	60	0.39
15202	KIRKCONNEL	50	7.6	54	8.74	58	8.74	61	8.74
10538	KIRKFIELD BANK	2	4.6	48	0.70	52	0.70	56	0.70
15230	KIRKMICHAEL	4	2.7	45	2.05	49	2.05	42	2.05
15229	KIRKOSWALD VP	4	7.0	22	0.80	25	0.80	28	0.80
14914	KNUCKLAS	2	7.0	42	0.40	45	0.40	49	0.40
13715	LANGHOLM	4	11.5	53	0.28	57	0.28	60	0.28
15234	LARGS	2	8.8	42	0.31	45	0.31	49	0.31
16106	LAUDER	2	8.0	22	0.36	25	0.36	28	0.36
10136	LEA BRIDGE	2	5.5	55	0.56	59	0.56	62	0.56
10551	LEADHILLS	2	2.2	54	1.21	58	1.21	61	1.21
10221	LEAMINGTON SPA	40	13.9	55	1.64	59	1.64	62	1.64
10346	LEES	2	6.2	22	0.48	25	0.48	28	0.48
10728	LEITRIM	100	7.0	57	19.95	60	19.95	53	19.95
12802	LES TOUILLETS	1600	11.8	41	105.10	44	105.10	47	105.10
15204	LETHANHILL	50	8.0	53	7.94	57	7.94	60	7.94
12004	LINCOLN CENTRAL	2	7.0	42	0.40	45	0.40	49	0.40
12320	LINDORES	6	10.7	46	0.54	43	0.54	50	0.54
11414	LINNET VALLEY	3	7.7	23	0.54	26	0.54	29	0.54
11405	LITTLE WALSINGHAM	2	7.9	41	0.36	44	0.36	47	0.36
10322	LITTLEBOROUGH	100	10.4	21	9.23	24	9.23	27	9.23
13627	LIVERTON	2	5.4	55	0.72	59	0.72	62	0.72
14521	LLANDDERFEL	2	5.9	55	0.51	62	0.51	59	0.51
11815	LLANENGAN	2	5.0	58	0.63	61	0.63	54	0.63
10654	LLANFACH	2	4.7	57	0.68	60	0.68	53	0.68
10666	LLANFOIST	14	10.4	57	1.32	60	1.32	53	1.32
13512	LLANFYLLIN	25	11.3	22	1.85	28	1.85	25	1.85
13529	LLANGADFAN	2	6.2	22	0.48	28	0.48	25	0.48
13536	LLANGYNOG	2	5.3	55	0.59	62	0.59	59	0.59
10678	LLANHARAN	2	5.5	21	0.56	27	0.56	24	0.56
14514	LLANUWCHLLYN	6	5.2	46	1.82	43	1.82	50	1.82

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
11909	LLANWRTYD WELLS	2	7.6	21	0.35	27	0.35	24	0.35
10625	LLYSWEN	6	6.2	21	1.45	27	1.45	24	1.45
12324	LOCHEARNHEAD	2	7.0	58	0.40	61	0.40	54	0.40
15235	LOCHGOILHEAD	2	7.0	53	0.40	57	0.40	60	0.40
15217	LOCHWINNOCH	17	7.2	53	3.28	57	3.28	60	3.28
10474	LONGWOOD EDGE	8	4.2	55	3.04	59	3.04	62	3.04
13102	LOOE	2	5.3	43	0.60	46	0.60	50	0.60
13737	LORTON	10	7.9	53	1.61	57	1.61	60	1.61
13128	LOSTWITHIEL	2	5.9	43	0.52	46	0.52	50	0.52
13733	LOWTHER VALLEY	5	12.4	46	0.30	50	0.30	43	0.30
10428	LUDDENDEN	12	6.9	57	2.42	60	2.42	53	2.42
11213	LUMPHANAN	2	7.0	49	0.40	42	0.40	45	0.40
11054	LYDBROOK	2	6.1	41	0.49	44	0.49	47	0.49
11317	LYDDEN	2	4.0	46	0.80	43	0.80	45	0.80
10456	LYDGATE	2	3.0	23	1.00	26	1.00	29	1.00
11313	LYMINGE	2	6.4	22	0.46	28	0.46	25	0.46
10326	MACCLESFIELD	7	13.2	22	0.35	25	0.35	28	0.35
10644	MACHEN UPPER	7	12.0	55	0.46	62	0.46	59	0.46
11816	MAENTWROG	3	9.3	46	0.38	43	0.38	50	0.38
10328	MANCHESTER HULME	2	5.1	41	0.62	44	0.62	47	0.62
11302	MARGATE	4	6.6	22	0.89	28	0.89	25	0.89
13151	MARYSTOW	2	2.4	42	1.15	45	1.15	49	1.15
10374	MELLING VP	5	7.0	53	1.00	57	1.00	60	1.00
12315	METHVEN	2	5.3	22	0.60	28	0.60	25	0.60
13126	MEVAGISSEY	2	5.4	43	0.58	46	0.58	50	0.58
10385	MIDDLETON	8	4.7	22	2.71	25	2.71	28	2.71
10829	MILLBROOK VP	8	5.7	41	2.25	44	2.25	47	2.25
10476	MILLHOUSE GREEN	2	7.0	54	0.40	58	0.40	61	0.40
15212	MILLPORT	2	7.0	54	0.40	58	0.40	61	0.40
13751	MINNIGAFF	2	7.0	23	0.40	26	0.40	29	0.40
13131	MODBURY	2	7.0	55	0.40	59	0.40	62	0.40
13513	MOEL Y SANT	23	5.0	27	7.27	24	7.27	21	7.27
13709	MOFFAT	2	4.9	42	0.65	45	0.65	49	0.65
10711	MONEYMORE	2	5.8	45	0.53	49	0.53	42	0.53
10663	MONMOUTH	46	7.6	55	8.09	62	8.09	59	8.09
11830	MORFA NEFYN	14	7.6	22	2.43	28	2.43	25	2.43
10910	MORPETH	9	7.9	22	1.44	25	1.44	28	1.44
10315	MOSS BANK	2	7.0	21	0.40	24	0.40	27	0.40
10368	MOTTRAM IN LONGDENDALE	2	4.7	43	0.68	46	0.68	50	0.68
13805	MUDDIFORD	2	6.0	41	0.50	44	0.50	47	0.50
15201	MUIRKIRK	20	10.8	41	1.66	44	1.66	47	1.66
10642	MYNYDD BACH	50	8.1	58	7.70	61	7.70	54	7.70
11020	NAILSWORTH	6	5.7	23	1.69	26	1.69	29	1.69
10667	NANT Y MOEL	2	12.0	57	0.13	60	0.13	53	0.13
15220	NEW CUMNOCK	2	10.1	43	0.24	46	0.24	50	0.24
13718	NEW GALLOWAY	20	7.0	23	3.99	26	3.99	29	3.99
14913	NEW RADNOR	25	11.6	41	1.74	44	1.74	47	1.74
14706	NEWBATTLE	2	7.0	55	0.40	59	0.40	62	0.40
10705	NEWCASTLE	200	14.4	55	7.35	62	7.35	59	7.35
10380	NEWCHURCH	2	2.2	21	1.21	24	1.21	27	1.21
11310	NEWNHAM	7	12.4	21	0.40	27	0.40	24	0.40
10713	NEWRY NORTH	2	7.0	41	0.40	44	0.40	47	0.40
10715	NEWRY SOUTH	4	7.7	45	0.68	49	0.68	42	0.68
13608	NEWTON ABBOT VP	2	7.0	43	0.40	46	0.40	50	0.40

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
13111	NEWTON FERRERS	2	4.8	55	0.66	59	0.66	62	0.66
10388	NORDEN	2	7.0	57	0.40	53	0.40	60	0.40
10325	NORTH OLDHAM	8	13.8	21	0.34	24	0.34	27	0.34
10851	NORTH WINCHESTER	1	7.0	56	0.20	59	0.20	49	0.20
11409	NORWICH CENTRAL	7	4.6	43	2.36	46	2.36	52	2.36
10331	OAKENHEAD	20	9.8	41	2.09	44	2.09	47	2.09
13616	OCCOMBE VALLEY	2	2.0	21	1.25	24	1.25	27	1.25
13743	ORTON	6	4.8	43	2.04	46	2.04	50	2.04
10458	OUGHTIBRIDGE	8	6.9	55	1.58	59	1.58	62	1.58
11415	OVERSTRAND	13	4.7	41	4.27	44	4.27	47	4.27
10417	OXENHOPE	40	14.0	22	1.59	25	1.59	28	1.59
11055	PARKEND	2	5.3	41	0.59	44	0.59	47	0.59
16107	PEEBLES	20	10.6	22	1.74	25	1.74	28	1.74
13110	PENALIGON DOWN	20	10.3	42	1.88	45	1.88	49	1.88
14701	PENICUIK	400	11.1	54	31.07	58	31.07	61	31.07
10655	PENNORTH	10	8.9	26	1.28	23	1.28	29	1.28
13223	PENNSYLVANIA	2	5.2	54	0.60	58	0.60	61	0.60
10639	PENRHIWCEIBER	2	5.3	57	0.59	60	0.59	53	0.59
12301	PERTH	200	7.9	45	32.81	49	32.81	42	32.81
14910	PETERCHURCH	15	10.0	53	1.53	57	1.53	60	1.53
11201	PETERHEAD	20	11.6	55	1.40	62	1.40	59	1.40
11622	PETERLEE	2	7.3	45	0.37	49	0.37	42	0.37
11076	PILLOWELL HP	2	7.0	42	0.40	45	0.40	49	0.40
13734	PINWHERRY	11	8.1	22	1.74	25	1.74	28	1.74
13118	PLYMOUTH NORTH RD VP	2	8.7	43	0.32	46	0.32	50	0.32
13141	PLYMOUTH WESTON MILL	2	5.9	42	0.52	45	0.52	49	0.52
13125	POLPERRO	2	1.7	53	1.37	57	1.37	60	1.37
10656	PONTARDAWE	25	8.9	58	3.26	61	3.26	54	3.26
14510	PONTFADOG	2	5.0	22	0.63	28	0.63	25	0.63
13708	POOLEY BRIDGE	3	10.9	46	0.21	50	0.21	43	0.21
15208	PORT ELLEN	16	7.0	22	3.19	25	3.19	28	3.19
11045	PORTISHEAD	7	5.2	55	2.23	59	2.23	62	2.23
15251	PORTNAHAVEN	2	7.0	23	0.40	26	0.40	29	0.40
13720	PORTPATRICK	2	7.0	54	0.40	58	0.40	61	0.40
10391	PORTWOOD	2	7.0	22	0.40	25	0.40	28	0.40
10847	POULNER	2	3.0	42	1.00	45	1.00	49	1.00
10341	PRESTBURY	2	1.5	43	1.43	46	1.43	50	1.43
13228	PRESTON	2	2.4	54	1.15	58	1.15	61	1.15
10446	PRIMROSE HILL	6	5.2	57	1.70	60	1.70	53	1.70
10347	RAMSBOTTOM	16	8.9	53	2.09	57	2.09	60	2.09
11311	RAMSGATE	2	7.0	26	0.40	23	0.40	30	0.40
10537	RAVENS CRAIG VP	2	4.2	21	0.92	24	0.92	27	0.92
13742	RAVENSDALE	2	7.5	53	0.39	57	0.39	60	0.39
11072	REDBROOK	2	6.0	42	0.51	45	0.51	49	0.51
11006	REDCLIFF BAY	10	7.6	53	1.74	57	1.74	60	1.74
10680	RHONDDA B	2	7.0	49	0.40	45	0.40	42	0.40
10673	RHONDDA FACH	2	5.5	22	0.57	28	0.57	25	0.57
10362	RIBBLESDALE	6	4.2	41	2.28	44	2.28	47	2.28
10410	RIPPONDEN	12	9.0	54	1.52	58	1.52	61	1.52
10640	RISCA	2	3.0	46	1.00	43	1.00	50	1.00
10358	ROMILEY	2	6.6	41	0.48	44	0.48	47	0.48
11619	ROOKHOPE	2	5.0	42	0.63	45	0.63	49	0.63
11203	ROSEHEARTY	400	11.0	44	31.59	41	31.59	47	31.59

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
14924	ROSS ON WYE	2	5.0	55	0.63	59	0.63	62	0.63
10714	ROSTREVOR	12	10.3	48	1.10	46	1.10	50	1.10
15502	ROTHBURY	10	6.8	55	2.09	59	2.09	62	2.09
15215	ROTHESAY	400	10.5	22	35.86	25	35.86	28	35.86
15221	ROTHESAY TOWN	2	10.6	55	0.17	59	0.17	62	0.17
13124	SALCOMBE	3	12.5	41	0.19	44	0.19	47	0.19
13744	SEDBERGH	100	9.7	43	10.84	46	10.84	50	10.84
10650	SENNYBRIDGE	13	9.8	46	1.36	43	1.36	50	1.36
10806	SHREWTON	2	7.0	41	0.40	44	0.40	47	0.40
10839	SINGLETON	3	10.7	41	0.22	44	0.22	47	0.22
11609	SKINNINGROVE	3	8.0	42	0.48	45	0.48	49	0.48
10404	SKIPTON	2000	11.2	42	153.47	45	153.47	49	153.47
10442	SKIPTON TOWN	3	7.7	21	0.44	24	0.44	27	0.44
11034	SLAD	2	8.1	23	0.31	26	0.31	29	0.31
13119	SLAPTON	25	7.8	54	4.15	58	4.15	61	4.15
11508	SOMERSHAM	2	4.9	22	0.65	25	0.65	28	0.65
13613	SOUTH BRENT VP	2	7.0	43	0.40	46	0.40	50	0.40
10610	SOUTH TREDEGAR	3	5.0	52	0.82	45	0.82	49	0.82
13154	SOUTHWAY	2	7.0	55	0.40	59	0.40	62	0.40
13101	ST AUSTELL	20	11.0	55	1.59	59	1.59	62	1.59
13727	ST BEES	2	7.8	54	0.40	58	0.40	61	0.40
12807	ST BRELADES BAY	40	3.6	55	17.46	59	17.46	62	17.46
14909	ST BRIAVELS	2	8.4	43	0.35	46	0.35	50	0.35
12323	ST FILLANS	13	4.7	44	4.27	47	4.27	41	4.27
12801	ST HELIER	80	3.0	55	40.09	59	40.09	62	40.09
13137	ST NEOT	2	5.0	42	0.63	45	0.63	49	0.63
12804	ST PETER PORT	10	6.5	21	2.25	24	2.25	27	2.25
11106	STAMFORD	2	2.5	42	1.12	45	1.12	49	1.12
10342	STOCKPORT	2	4.7	21	0.68	24	0.68	27	0.68
10457	STOCKSBRIDGE	2	7.4	54	0.44	58	0.44	61	0.44
13215	STOKEINTEIGNHEAD	2	7.0	41	0.40	44	0.40	47	0.40
16110	STOW	2	4.2	23	0.77	26	0.77	29	0.77
13004	STRABANE	400	8.6	45	55.53	49	55.53	42	55.53
13719	STRANRAER	50	8.5	53	7.14	57	7.14	60	7.14
12314	STRATHALLAN	6	4.7	45	1.98	42	1.98	49	1.98
10545	STRATHBLANE	2	6.8	21	0.42	24	0.42	27	0.42
10596	STRATHYRE	2	7.0	21	0.40	24	0.40	27	0.40
11018	STROUD	200	10.3	55	18.77	59	18.77	62	18.77
10453	SUTTON IN CRAVEN	2	8.2	23	0.36	26	0.36	29	0.36
12607	SUTTON ROW	50	7.0	22	9.98	25	9.98	28	9.98
13806	SWIMBRIDGE	2	5.8	23	0.53	26	0.53	29	0.53
10629	TAFFS WELL	10	7.9	55	1.71	62	1.71	59	1.71
13108	TAVISTOCK	20	11.1	53	1.55	57	1.55	60	1.55
12308	TAY BRIDGE	100	9.8	44	10.41	41	10.41	47	10.41
13813	TEDBURN ST MARY	4	7.0	42	0.80	45	0.80	49	0.80
13605	TEIGNMOUTH	5	4.8	45	1.67	49	1.67	42	1.67
10229	TENBURYWELLS	3	7.2	53	0.54	57	0.54	60	0.54
11911	TENBY	5	5.1	48	1.56	52	1.56	56	1.56
12602	THE BOURNES	7	4.6	53	2.40	57	2.40	60	2.40
13716	THORNHILL	100	11.3	53	7.46	57	7.46	60	7.46
13703	THRELKELD	2	7.6	53	0.38	57	0.38	60	0.38
12605	TIDWORTH	3	7.0	22	0.52	25	0.52	28	0.52
15216	TIGHNABRUAICH	18	9.3	42	2.15	45	2.15	49	2.15
10802	TILL VALLEY	15	11.3	46	1.11	50	1.11	43	1.11
10539	TILLICOUNTRY	2	4.8	53	0.67	57	0.67	60	0.67

Station No	Station Name	ERP (W)	Antenna Gain dB	PSB1		PSB2		PSB3	
				Channel No	Transmitter Power W	Channel No	Transmitter Power W	Channel No	Transmitter Power W
11048	TINTERN	2	5.0	21	0.64	24	0.64	27	0.64
13203	TIVERTON	18	11.0	43	1.43	46	1.43	50	1.43
10465	TODMORDEN	100	8.4	42	14.45	45	14.45	49	14.45
10635	TONYPANDY	2	12.0	55	0.13	62	0.13	59	0.13
10676	TONYREFAIL	4	12.5	55	0.23	62	0.23	59	0.23
13617	TORQUAY TOWN	8	6.1	41	1.98	44	1.98	47	1.98
13611	TOTNES	2	8.5	21	0.28	24	0.28	27	0.28
10318	TRAWDEN	40	14.8	57	1.32	60	1.32	53	1.32
10641	TREBANOG	2	6.9	21	0.41	27	0.41	24	0.41
10661	TRECASTLE	2	7.0	22	0.40	28	0.40	25	0.40
10674	TREFECHAN	2	7.0	45	0.40	42	0.40	49	0.40
11819	TREFOR B	2	7.0	45	0.40	49	0.40	42	0.40
13531	TREGYNON	7	6.7	22	1.51	28	1.51	25	1.51
10623	TREHARRIS	10	8.7	56	1.36	48	1.36	52	1.36
15213	TROON	4	10.1	54	0.39	58	0.39	61	0.39
13120	TRURO	4	10.2	54	0.42	58	0.42	61	0.42
11319	TURNPIKE HILL	2	4.0	43	0.80	45	0.80	46	0.80
10544	TWECHAR	2	5.7	22	0.54	25	0.54	28	0.54
10669	TYNEWYDD	4	7.0	55	0.80	62	0.80	59	0.80
11025	UPAVON	14	10.9	23	1.14	26	1.14	29	1.14
10567	UPLAWMOOR	5	10.5	54	0.44	58	0.44	61	0.44
14917	UPPER SOUDLEY	2	4.7	43	0.68	46	0.68	50	0.68
10664	USK	4	7.0	52	0.72	45	0.72	48	0.72
10687	VAN TERRACE	2	7.0	45	0.40	49	0.40	42	0.40
10464	WALSDEN	10	8.0	57	1.58	60	1.58	53	1.58
10466	WALSDEN SOUTH	2	4.7	43	0.69	46	0.69	50	0.69
10125	WALTHAMSTOW NORTH	2	6.3	42	0.47	45	0.47	49	0.47
10396	WALTON LE DALE	2	7.0	21	0.40	24	0.40	27	0.40
15228	WANLOCKHEAD	2	4.7	41	0.68	44	0.68	47	0.68
10387	WARDLE	2	4.6	22	0.69	25	0.69	28	0.69
10621	WATTSVILLE	2	7.0	57	0.40	60	0.40	53	0.40
11809	WAUNFAWR	5	11.6	22	0.36	28	0.36	25	0.36
11407	WELLS NEXT THE SEA	18	5.5	43	5.07	46	5.07	51	5.07
15203	WEST KILBRIDE	70	9.3	41	8.18	44	8.18	47	8.18
11011	WEST LAVINGTON	2	8.1	21	0.37	24	0.37	27	0.37
14703	WEST LINTON	5	3.9	23	2.03	26	2.03	29	2.03
13807	WESTWARD HO	6	6.4	23	1.48	26	1.48	29	1.48
10319	WHALLEY	10	7.7	43	1.71	46	1.71	50	1.71
10401	WHARFEDALE	400	10.9	22	32.33	25	32.33	28	32.33
10483	WHEATLEY	3	9.9	54	0.33	58	0.33	61	0.33
13701	WHITEHAVEN	400	10.2	43	38.20	46	38.20	50	38.20
10332	WHITEWELL	16	10.4	57	1.47	60	1.47	53	1.47
10312	WHITWORTH	50	8.1	22	7.83	25	7.83	28	7.83
13150	WIDECOMBE IN THE MOOR	2	6.8	43	0.42	46	0.42	50	0.42
10255	WINCHCOMBE	2	6.5	54	0.45	58	0.45	61	0.45
10448	WINCOBANK	2	5.0	55	0.64	59	0.64	62	0.64
11501	WOODBIDGE	20	10.8	48	1.65	52	1.65	61	1.65
10247	WOODFORD HALSE	2	7.0	22	0.40	25	0.40	28	0.40
10378	WOODNOOK	2	6.9	45	0.41	49	0.41	42	0.41
13109	WOOLACOMBE	2	4.8	42	0.66	45	0.66	49	0.66
15503	WOOLER	2	7.0	22	0.40	25	0.40	28	0.40
13728	WORKINGTON	2	7.6	55	0.35	59	0.35	62	0.35
14512	WREXHAM RHOS	80	9.2	22	9.67	28	9.67	25	9.67

<u>Station No</u>	<u>Station Name</u>	<u>ERP (W)</u>	<u>Antenna Gain dB</u>	<u>PSB1</u>		<u>PSB2</u>		<u>PSB3</u>	
				<u>Channel No</u>	<u>Transmitter Power W</u>	<u>Channel No</u>	<u>Transmitter Power W</u>	<u>Channel No</u>	<u>Transmitter Power W</u>
13908	WYE	6	6.1	22	1.51	28	1.51	25	1.51
16111	YETHOLM	2	5.1	41	0.62	44	0.62	47	0.62
10632	YNYSOWEN	16	8.1	55	2.51	62	2.51	59	2.51
11903	YSTALYFERA	10	8.6	45	1.38	49	1.38	42	1.38

5.5 Appendix 5 - Station Details

Notes

Single Combiner:	Single Combiner Unit
Dual Combiner:	Dual Combiner Unit - Configured as two independent main and reserve chains.
Parallel Combiner:	Parallel Unit - Configured as a phased pair.

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
12300	ANGUS	Type 1	Dual	Yes	Yes	Yes	Dual
13600	BEACON HILL (TORBAY)	Type 1	Dual	Yes	Yes	Yes	Dual
12000	BELMONT	Type 1	Dual	Yes	Yes	Yes	Dual
9305	BLACK HILL SC/CSC	Type 1	Dual	Yes	Yes	Yes	Dual
9337	CALDBECK SC	Type 1	Dual	Yes	Yes	Yes	Dual
9331	CARADON HILL SC	Type 1	Dual	Yes	Yes	Yes	Dual
15500	CHATTON	Type 1	Dual	Yes	Yes	Yes	Dual
14700	CRAIGKELLY	Type 1	Dual	Yes	Yes	Yes	Dual
15200	DARVEL	Type 1	Dual	Yes	Yes	Yes	Dual
9313	DOVER SC	Type 1	Dual	Yes	Yes	Yes	Dual
9312	DURRIS SC	Type 1	Dual	Yes	Yes	Yes	Dual
9304	EMLEY MOOR CSC/SC	Type 1	Dual	Yes	Yes	Yes	Dual
9328	FREMONT POINT	Type 1	Dual	Yes	Yes	Yes	Dual
13800	HUNTSHAW CROSS	Type 1	Dual	Yes	Yes	Yes	Dual
15300	KNOCKMORE	Type 1	Dual	Yes	Yes	Yes	Dual
9345	MOEL-Y-PARC SC	Type 1	Dual	Yes	Yes	Yes	Dual
9329	PRESELI	Type 1	Dual	Yes	Yes	Yes	Dual
14900	RIDGE HILL	Type 1	Dual	Yes	Yes	Yes	Dual
14800	RUMSTER FOREST	Type 1	Dual	Yes	Yes	Yes	Dual
9414	SANDY HEATH	Type 1	Dual	Yes	Yes	Yes	Dual
16100	SELKIRK	Type 1	Dual	Yes	Yes	Yes	Dual
9332	STOCKLAND HILL SC	Type 1	Dual	Yes	Yes	Yes	Dual
9303	WINTER HILL SC	Type 1	Dual	Yes	Yes	Yes	Dual
10618	ABERGAVENNY	Type 2	Single	No	No	No	Single
11806	ARFON	Type 2	Single	No	No	No	Single
10308	BACUP	Type 2	Single	No	No	No	Single
13717	BARSKEOCH HILL	Type 2	Single	No	No	No	Single
13711	BEARY PEARK	Type 2	Single	No	No	No	Single
10503	BIGGAR	Type 2	Single	No	No	No	Single
9307	BLACK MOUNTAIN MC	Type 2	Single	No	No	No	Single
10649	BRECON	Type 2	Single	No	No	No	Single
13721	CAMBRET HILL	Type 2	Single	Yes	No	No	Single
10405	CHESTERFIELD	Type 2	Single	Yes	No	Yes	Parallel
11019	CIRENCESTER	Type 2	Single	No	No	No	Single
10411	COP HILL	Type 2	Single	No	No	No	Single
10301	DARWEN	Type 2	Single	No	No	No	Single
16101	EYEMOUTH	Type 2	Single	No	No	No	Single
11808	FFESTINIOG	Type 2	Single	No	No	No	Single
11202	GARTLY MOOR	Type 2	Single	No	No	No	Single
10406	HALIFAX	Type 2	Single	No	No	No	Single
10303	HASLINGDEN	Type 2	Single	No	No	No	Single
10409	HEBDEN BRIDGE	Type 2	Single	No	No	No	Single
10444	HEYSHAW	Type 2	Single	No	No	No	Single
10413	IDLE	Type 2	Single	Yes	No	Yes	Parallel

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
10407	KEIGHLEY	Type 2	Single	Yes	No	Yes	Parallel
12403	KINGS LYNN	Type 2	Single	No	No	No	Single
15202	KIRKCONNEL	Type 2	Single	No	No	No	Single
10335	LANCASTER	Type 2	Single	Yes	No	Yes	Parallel
12802	LES TOUILLETS	Type 2	Single	No	No	No	Single
15204	LETHANHILL	Type 2	Single	No	No	No	Single
10322	LITTLEBOROUGH	Type 2	Single	No	No	No	Single
10642	MYNYDD BACH	Type 2	Single	No	No	No	Single
10705	NEWCASTLE	Type 2	Single	No	No	No	Single
11101	NOTTINGHAM	Type 2	Single	Yes	No	Yes	Parallel
10302	PENDLE FOREST	Type 2	Single	Yes	No	Yes	Parallel
14701	PENICUIK	Type 2	Single	No	No	No	Single
12301	PERTH	Type 2	Single	No	No	No	Single
13105	PLYMPTON	Type 2	Single	Yes	No	Yes	Parallel
11203	ROSEHEARTY	Type 2	Single	No	No	No	Single
15211	ROSNEATH	Type 2	Single	Yes	Yes	Yes	Dual
15215	ROTHESAY	Type 2	Single	No	No	No	Single
10306	SADDLEWORTH	Type 2	Single	Yes	No	Yes	Dual
13744	SEDBERGH	Type 2	Single	No	No	No	Single
10404	SKIPTON	Type 2	Single	No	No	No	Single
13119	SLAPTON	Type 2	Single	No	No	No	Single
13201	ST THOMAS (EXETER)	Type 2	Single	No	No	No	Single
13004	STRABANE	Type 2	Single	No	No	No	Single
11018	STROUD	Type 2	Single	No	No	No	Single
12308	TAY BRIDGE	Type 2	Single	No	No	No	Single
10465	TODMORDEN	Type 2	Single	No	No	No	Single
10401	WHARFDALE	Type 2	Single	No	No	No	Single
13701	WHITEHAVEN	Type 2	Single	No	No	No	Single
10312	WHITWORTH	Type 2	Single	No	No	No	Single
14512	WREXHAM RHOS	Type 2	Single	No	No	No	Single
10637	ABERBEEG	Type 3	Single	No	No	No	Single
10668	ABERCYNON	Type 3	Single	No	No	No	Single
14705	ABERFOYLE	Type 3	Single	No	No	No	Single
12908	ABERGWYNFI	Type 3	Single	No	No	No	Single
10631	ABERTRIDWR	Type 3	Single	No	No	No	Single
10504	ABINGTON	Type 3	Single	No	No	No	Single
10427	ADDINGHAM	Type 3	Single	No	No	No	Single
12803	ALDERNEY	Type 3	Single	No	No	No	Single
10227	ALLESLEY PARK	Type 3	Single	No	No	No	Single
10636	ALLTWN	Type 3	Single	No	No	No	Single
12608	ALTON	Type 3	Single	No	No	No	Single
14911	ANDOVERSFORD	Type 3	Single	No	No	No	Single
15224	ARDENTINNY	Type 3	Single	No	No	No	Single
10706	ARMAGH	Type 3	Single	No	No	No	Single
10447	ARMITAGE BRIDGE	Type 3	Single	No	No	No	Single
15225	ARROCHAR	Type 3	Single	No	No	No	Single
13604	ASHBURTON	Type 3	Single	No	No	No	Single
12312	AUCHTERMUCHTY	Type 3	Single	No	No	No	Single
10376	AUSTWICK	Type 3	Single	No	No	No	Single
11004	AVENING	Type 3	Single	No	No	No	Single
13130	AVETON GIFFORD	Type 3	Single	No	No	No	Single
15303	AVIEMORE	Type 3	Single	No	No	No	Single
15244	AYR SOUTH	Type 3	Single	No	No	No	Single
11046	BACKWELL	Type 3	Single	No	No	No	Single
14538	BAGILLT	Type 3	Single	No	No	No	Single
14508	BALA	Type 3	Single	No	No	No	Single

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
11204	BALGOWNIE	Type 3	Single	No	No	No	Single
13735	BALLANTRAE	Type 3	Single	No	No	No	Single
13010	BALLINTOY	Type 3	Single	No	No	No	Single
13002	BALLYCASTLE FOREST	Type 3	Single	No	No	No	Single
12322	BALMULLO	Type 3	Single	No	No	No	Single
13204	BAMPTON	Type 3	Single	No	No	No	Single
10723	BANBRIDGE	Type 3	Single	No	No	No	Single
11208	BANFF	Type 3	Single	No	No	No	Single
10732	BANGOR	Type 3	Single	No	No	No	Single
13815	BARNSTAPLE	Type 3	Single	No	No	No	Single
13707	BASSENTHWAITE	Type 3	Single	No	No	No	Single
10443	BATLEY	Type 3	Single	No	No	No	Single
13207	BEAMINSTER	Type 3	Single	No	No	No	Single
13548	BEDDGELEERT	Type 3	Single	No	No	No	Single
13547	BEDDGELEERT LINK	Type 3	Single	No	No	No	Single
10643	BEDLINOG	Type 3	Single	No	No	No	Single
13202	BEER	Type 3	Single	No	No	No	Single
10911	BELLINGHAM	Type 3	Single	No	No	No	Single
13127	BERRYNARBOR	Type 3	Single	No	No	No	Single
16109	BERWICK-UPON-TWEED	Type 3	Single	No	No	No	Single
10339	BLACKBURN	Type 3	Single	No	No	No	Single
10653	BLACKMILL	Type 3	Single	No	No	No	Single
11053	BLAKENEY	Type 3	Single	No	No	No	Single
13729	BLEACHGREEN	Type 3	Single	No	No	No	Single
11211	BODDAM	Type 3	Single	No	No	No	Single
10359	BOLLINGTON	Type 3	Single	No	No	No	Single
16105	BONCHESTER BRIDGE	Type 3	Single	No	No	No	Single
14105	BOSCASTLE	Type 3	Single	No	No	No	Single
14104	BOSSINEY	Type 3	Single	No	No	No	Single
13622	BOVEY TRACEY	Type 3	Single	No	No	No	Single
10848	BOVINGTON	Type 3	Single	No	No	No	Single
11032	BOX	Type 3	Single	No	No	No	Single
10467	BRADFORD WEST	Type 3	Single	No	No	No	Single
10243	BRAILES	Type 3	Single	No	No	No	Single
11417	BRAMFORD	Type 3	Single	No	No	No	Single
13221	BRANSCOMBE	Type 3	Single	No	No	No	Single
13812	BRAUNTON	Type 3	Single	No	No	No	Single
11921	BRECHFA	Type 3	Single	No	No	No	Single
11210	BRECHIN	Type 3	Single	No	No	No	Single
10549	BRIDGE OF ALLAN	Type 3	Single	No	No	No	Single
13206	BRIDPORT	Type 3	Single	No	No	No	Single
10830	BRIGHSTONE	Type 3	Single	No	No	No	Single
10389	BRINSCALL	Type 3	Single	No	No	No	Single
11031	BRISTOL MONTPELIER	Type 3	Single	No	No	No	Single
10671	BRITON FERRY	Type 3	Single	No	No	No	Single
13614	BRIXHAM	Type 3	Single	No	No	No	Single
10390	BROADBOTTOM	Type 3	Single	No	No	No	Single
11140	BROCKWELL	Type 3	Single	No	No	No	Single
10366	BROOK BOTTOM	Type 3	Single	No	No	No	Single
10548	BROUGHTON	Type 3	Single	No	No	No	Single
11039	BRUTON	Type 3	Single	No	No	No	Single
13609	BUCKFASTLEIGH	Type 3	Single	No	No	No	Single
11910	BUILTH WELLS	Type 3	Single	No	No	No	Single
13411	BURGAR HILL	Type 3	Single	No	No	No	Single

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
11408	BURNHAM	Type 3	Single	No	No	No	Single
11041	BURRINGTON	Type 3	Single	No	No	No	Single
11413	BURY ST EDMUNDS	Type 3	Single	No	No	No	Single
10927	BYRNES	Type 3	Single	No	No	No	Single
10507	CALLANDER	Type 3	Single	No	No	No	Single
11005	CALNE	Type 3	Single	No	No	No	Single
12313	CAMPERDOWN	Type 3	Single	No	No	No	Single
10845	CANFORD HEATH	Type 3	Single	No	No	No	Single
14707	CANONGATE	Type 3	Single	No	No	No	Single
13535	CASTLE CAEREINION	Type 3	Single	No	No	No	Single
13007	CASTLEDERG	Type 3	Single	No	No	No	Single
10508	CATHCART	Type 3	Single	No	No	No	Single
15252	CATRINE	Type 3	Single	No	No	No	Single
10909	CATTON BEACON	Type 3	Single	No	No	No	Single
14515	CEFN MAWR	Type 3	Single	No	No	No	Single
10317	CHAIGLEY	Type 3	Single	No	No	No	Single
11021	CHALFORD	Type 3	Single	No	No	No	Single
11066	CHALFORD VALE	Type 3	Single	No	No	No	Single
13122	CHAMBERCOMBE	Type 3	Single	No	No	No	Single
13220	CHARMOUTH	Type 3	Single	No	No	No	Single
11305	CHARTHAM	Type 3	Single	No	No	No	Single
10377	CHATBURN	Type 3	Single	No	No	No	Single
15802	CHATHAM TOWN	Type 3	Single	No	No	No	Single
10228	CHEADLE	Type 3	Single	No	No	No	Single
11052	CHEPSTOW	Type 3	Single	No	No	No	Single
13230	CHIDEOCK	Type 3	Single	No	No	No	Single
10123	CHINGFORD	Type 3	Single	No	No	No	Single
11051	CHISELDON	Type 3	Single	No	No	No	Single
11063	CHITTERNE	Type 3	Single	No	No	No	Single
13621	CHUDLEIGH	Type 3	Single	No	No	No	Single
10616	CILFREW	Type 3	Single	No	No	No	Single
11925	CILYCWM	Type 3	Single	No	No	No	Single
11056	CLEARWELL	Type 3	Single	No	No	No	Single
10480	CLECKHEATON	Type 3	Single	No	No	No	Single
13624	CLENNON VALLEY	Type 3	Single	No	No	No	Single
16112	CLOVENFORDS	Type 3	Single	No	No	No	Single
10611	CLYDACH	Type 3	Single	No	No	No	Single
11013	COLEFORD	Type 3	Single	No	No	No	Single
13113	COMBE MARTIN	Type 3	Single	No	No	No	Single
13147	COMPTON	Type 3	Single	No	No	No	Single
10472	CONISBROUGH	Type 3	Single	No	No	No	Single
10735	CONLIG	Type 3	Single	No	No	No	Single
13607	COOMBE	Type 3	Single	No	No	No	Single
10468	COPLEY	Type 3	Single	No	No	No	Single
10463	CORNHOLME	Type 3	Single	No	No	No	Single
10461	COWLING	Type 3	Single	No	No	No	Single
10455	CRAGG VALE	Type 3	Single	No	No	No	Single
10670	CRAIG CEFN PARC	Type 3	Single	No	No	No	Single
15304	CRAIGELLACHIE	Type 3	Single	No	No	No	Single
11406	CREAKE	Type 3	Single	No	No	No	Single
13723	CREETOWN	Type 3	Single	No	No	No	Single
11061	CREWKERNE	Type 3	Single	No	No	No	Single
10652	CRICKHOWELL	Type 3	Single	No	No	No	Single
12302	CRIEFF	Type 3	Single	No	No	No	Single
11001	CROCKERTON	Type 3	Single	No	No	No	Single
12912	CROESERW	Type 3	Single	No	No	No	Single

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
13747	CROSTHWAITE	Type 3	Single	No	No	No	Single
13121	CROYDE	Type 3	Single	No	No	No	Single
10675	CRUCORNEY	Type 3	Single	No	No	No	Single
10694	CRUMLIN	Type 3	Single	No	No	No	Single
10441	CULLINGWORTH	Type 3	Single	No	No	No	Single
13205	CULM VALLEY	Type 3	Single	No	No	No	Single
10568	CUMBERNAULD VILLAGE	Type 3	Single	No	No	No	Single
12303	CUPAR	Type 3	Single	No	No	No	Single
10624	CWMAFAN	Type 3	Single	No	No	No	Single
10658	CWMAMAN	Type 3	Single	No	No	No	Single
10665	CWMFELINFACH	Type 3	Single	No	No	No	Single
11912	CWMGORS	Type 3	Single	No	No	No	Single
11905	CWM-TWRCH	Type 3	Single	No	No	No	Single
12401	DALLINGTON PARK	Type 3	Single	No	No	No	Single
10348	DALTON	Type 3	Single	No	No	No	Single
13603	DARTMOUTH	Type 3	Single	No	No	No	Single
13212	DAWLISH	Type 3	Single	No	No	No	Single
10556	DEANSTON	Type 3	Single	No	No	No	Single
10333	DELPH	Type 3	Single	No	No	No	Single
11102	DERBY - LITTLEOVER DFS	Type 3	Single	No	No	No	Single
10657	DERI	Type 3	Single	No	No	No	Single
10355	DOG HILL	Type 3	Single	No	No	No	Single
10536	DOLLAR	Type 3	Single	No	No	No	Single
11813	DOLWYDDELAN	Type 3	Single	No	No	No	Single
10827	DONHEAD	Type 3	Single	No	No	No	Single
11303	DOVER TOWN	Type 3	Single	No	No	No	Single
10672	DOWLAIS	Type 3	Single	No	No	No	Single
13107	DOWNDERRY	Type 3	Single	No	No	No	Single
10710	DRAPERSTOWN	Type 3	Single	No	No	No	Single
10724	DROMORE	Type 3	Single	No	No	No	Single
10431	DRONFIELD	Type 3	Single	No	No	No	Single
12928	DUFFRYN	Type 3	Single	No	No	No	Single
13730	DUMFRIES SOUTH	Type 3	Single	No	No	No	Single
14712	DUNKELD TOWN	Type 3	Single	No	No	No	Single
10578	DUNOON	Type 3	Single	No	No	No	Single
13216	DUNSFORD	Type 3	Single	No	No	No	Single
15231	DUNURE	Type 3	Single	No	No	No	Single
11033	DURSLEY	Type 3	Single	No	No	No	Single
11010	EASTER COMPTON	Type 3	Single	No	No	No	Single
11105	EASTWOOD	Type 3	Single	No	No	No	Single
10633	EBBW VALE SOUTH	Type 3	Single	No	No	No	Single
15108	EDERNY	Type 3	Single	No	No	No	Single
13619	EDGINSWELL	Type 3	Single	No	No	No	Single
10677	EFAIL FACH	Type 3	Single	No	No	No	Single
11316	ELHAM	Type 3	Single	No	No	No	Single
10473	ELLAND	Type 3	Single	No	No	No	Single
11209	ELLON	Type 3	Single	No	No	No	Single
10304	ELTON	Type 3	Single	No	No	No	Single
11914	ERWOOD	Type 3	Single	No	No	No	Single
13725	ESKDALE GREEN	Type 3	Single	No	No	No	Single
14921	EWYAS HAROLD	Type 3	Single	No	No	No	Single
13499	FAIR ISLE	Type 3	Single	No	No	No	Single
10925	FALSTONE	Type 3	Single	No	No	No	Single
11306	FAVERSHAM	Type 3	Single	No	No	No	Single
11506	FELIXSTOWE	Type 3	Single	No	No	No	Single

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
10638	FERNHILL	Type 3	Single	No	No	No	Single
10541	FINTRY	Type 3	Single	No	No	No	Single
11315	FOLKESTONE	Type 3	Single	No	No	No	Single
10122	FOREST ROW	Type 3	Single	No	No	No	Single
13138	FOWEY	Type 3	Single	No	No	No	Single
11036	FROME	Type 3	Single	No	No	No	Single
16102	GALASHIELS	Type 3	Single	No	No	No	Single
15227	GARELOCHHEAD	Type 3	Single	No	No	No	Single
14902	GARTH HILL	Type 3	Single	No	No	No	Single
10505	GLASGOW (WEST CENTRAL)	Type 3	Single	No	No	No	Single
13726	GLENLUCE	Type 3	Single	No	No	No	Single
13749	GLENRIDDING	Type 3	Single	No	No	No	Single
13748	GLENRIDDING LINK	Type 3	Single	No	No	No	Single
10552	GLESPIN	Type 3	Single	No	No	No	Single
14507	GLYN CEIRIOG	Type 3	Single	No	No	No	Single
12909	GLYNCORRWG	Type 3	Single	No	No	No	Single
14520	GLYNDYFRDWY	Type 3	Single	No	No	No	Single
12806	GOREY	Type 3	Single	No	No	No	Single
11421	GORLESTON-ON-SEA	Type 3	Single	No	No	No	Single
13706	GOSFORTH	Type 3	Single	No	No	No	Single
11222	GOURDON	Type 3	Single	No	No	No	Single
14713	GRANGEMOUTH	Type 3	Single	No	No	No	Single
13745	GRASMERE	Type 3	Single	No	No	No	Single
10460	GRASSINGTON	Type 3	Single	No	No	No	Single
10149	GRAVESEND	Type 3	Single	No	No	No	Single
13804	GREAT TORRINGTON	Type 3	Single	No	No	No	Single
13738	GREYSTOKE	Type 3	Single	No	No	No	Single
12007	GRIMSBY	Type 3	Single	No	No	No	Single
13104	GUNNISLAKE	Type 3	Single	No	No	No	Single
10522	HADDINGTON	Type 3	Single	No	No	No	Single
10450	HAGG WOOD	Type 3	Single	No	No	No	Single
13630	HALWELL	Type 3	Single	No	No	No	Single
13911	HAMSTREET	Type 3	Single	No	No	No	Single
13612	HARBERTONFORD	Type 3	Single	No	No	No	Single
13103	HARTLAND	Type 3	Single	No	No	No	Single
10432	HASLAND	Type 3	Single	No	No	No	Single
10853	HATCH BOTTOM	Type 3	Single	No	No	No	Single
10352	HAUGHTON GREEN	Type 3	Single	No	No	No	Single
16103	HAWICK	Type 3	Single	No	No	No	Single
10913	HAYDON BRIDGE	Type 3	Single	No	No	No	Single
10414	HEADINGLEY	Type 3	Single	No	No	No	Single
13618	HELE	Type 3	Single	No	No	No	Single
10459	HOLMFIELD	Type 3	Single	No	No	No	Single
10449	HOLMFIRTH	Type 3	Single	No	No	No	Single
15232	HOLMHEAD	Type 3	Single	No	No	No	Single
14916	HOPE UNDER DINMORE	Type 3	Single	No	No	No	Single
11314	HORN STREET	Type 3	Single	No	No	No	Single
10844	HORNDEAN	Type 3	Single	No	No	No	Single
10328	HULME	Type 3	Single	No	No	No	Single
11030	HUTTON	Type 3	Single	No	No	No	Single
10852	HYTHE (HANTS)	Type 3	Single	No	No	No	Single
13112	ILFRACOMBE	Type 3	Single	No	No	No	Single
16108	INNERLEITHEN	Type 3	Single	No	No	No	Single
11502	IPSWICH (STOKE)	Type 3	Single	No	No	No	Single

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
13115	IVYBRIDGE	Type 3	Single	No	No	No	Single
16104	JEDBURGH	Type 3	Single	No	No	No	Single
10452	KEIGHLEY TOWN	Type 3	Single	No	No	No	Single
10566	KELVINDALE	Type 3	Single	No	No	No	Single
13702	KESWICK	Type 3	Single	No	No	No	Single
10469	KETTLEWELL	Type 3	Single	No	No	No	Single
11040	KEWSTOKE	Type 3	Single	No	No	No	Single
10506	KILLEARN	Type 3	Single	No	No	No	Single
13116	KINGSBRIDGE	Type 3	Single	No	No	No	Single
13628	KINGSKERSWELL	Type 3	Single	No	No	No	Single
14901	KINGTON	Type 3	Single	No	No	No	Single
14709	KINROSS	Type 3	Single	No	No	No	Single
13739	KIRKBY STEPHEN	Type 3	Single	No	No	No	Single
10538	KIRKFIELD BANK	Type 3	Single	No	No	No	Single
15230	KIRKMICHAEL	Type 3	Single	No	No	No	Single
15229	KIRKOSWALD	Type 3	Single	No	No	No	Single
14914	KNUCKLAS	Type 3	Single	No	No	No	Single
13715	LANGHOLM	Type 3	Single	No	No	No	Single
15234	LARGS	Type 3	Single	No	No	No	Single
16106	LAUDER	Type 3	Single	No	No	No	Single
10136	LEA BRIDGE	Type 3	Single	No	No	No	Single
10551	LEADHILLS	Type 3	Single	No	No	No	Single
10221	LEAMINGTON SPA	Type 3	Single	No	No	No	Single
10346	LEES	Type 3	Single	No	No	No	Single
10728	LEITRIM	Type 3	Single	No	No	No	Single
12004	LINCOLN CENTRAL	Type 3	Single	No	No	No	Single
12320	LINDORES	Type 3	Single	No	No	No	Single
11414	LINNET VALLEY	Type 3	Single	No	No	No	Single
11405	LITTLE WALSINGHAM	Type 3	Single	No	No	No	Single
13627	LIVERTON	Type 3	Single	No	No	No	Single
14521	LLANDDERFEL	Type 3	Single	No	No	No	Single
11815	LLANENGAN	Type 3	Single	No	No	No	Single
10654	LLANFACH	Type 3	Single	No	No	No	Single
10666	LLANFOIST	Type 3	Single	No	No	No	Single
13512	LLANFYLLIN	Type 3	Single	No	No	No	Single
13529	LLANGADFAN	Type 3	Single	No	No	No	Single
13536	LLANGYNOG	Type 3	Single	No	No	No	Single
10678	LLANHARAN	Type 3	Single	No	No	No	Single
14514	LLANUWCHLLYN	Type 3	Single	No	No	No	Single
11909	LLANWRTYD WELLS	Type 3	Single	No	No	No	Single
10625	LLYSWEN	Type 3	Single	No	No	No	Single
12324	LOCHEARNHEAD	Type 3	Single	No	No	No	Single
15235	LOCHGOILHEAD	Type 3	Single	No	No	No	Single
15253	LOCHGOILHEAD ACTIVE DEFLECTOR	Type 3	Single	No	No	No	Single
15217	LOCHWINNOCH	Type 3	Single	No	No	No	Single
10474	LONGWOOD EDGE	Type 3	Single	No	No	No	Single
13102	LOOE	Type 3	Single	No	No	No	Single
13737	LORTON	Type 3	Single	No	No	No	Single
13128	LOSTWITHIEL	Type 3	Single	No	No	No	Single
13733	LOWTHER VALLEY	Type 3	Single	No	No	No	Single
10428	LUDDENDEN	Type 3	Single	No	No	No	Single
11213	LUMPHANAN	Type 3	Single	No	No	No	Single
11054	LYDBROOK	Type 3	Single	No	No	No	Single
11317	LYDDEN	Type 3	Single	No	No	No	Single
49308	LYDGATE	Type 3	Single	No	No	No	Single

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
11313	LYMINGE	Type 3	Single	No	No	No	Single
10326	MACCLESFIELD	Type 3	Single	No	No	No	Single
10644	MACHEN UPPER	Type 3	Single	No	No	No	Single
11816	MAENTWROG	Type 3	Single	No	No	No	Single
11302	MARGATE	Type 3	Single	No	No	No	Single
13151	MARYSTOW	Type 3	Single	No	No	No	Single
10374	MELLING	Type 3	Single	No	No	No	Single
12315	METHVEN	Type 3	Single	No	No	No	Single
13126	MEVAGISSEY	Type 3	Single	No	No	No	Single
10385	MIDDLETON	Type 3	Single	No	No	No	Single
10829	MILLBROOK	Type 3	Single	No	No	No	Single
10476	MILLHOUSE GREEN	Type 3	Single	No	No	No	Single
15212	MILLPORT	Type 3	Single	No	No	No	Single
13751	MINNIGAFF	Type 3	Single	No	No	No	Single
13131	MODBURY	Type 3	Single	No	No	No	Single
13513	MOEL-Y-SANT	Type 3	Single	No	No	No	Single
13709	MOFFAT	Type 3	Single	No	No	No	Single
10711	MONEYMORE	Type 3	Single	No	No	No	Single
10663	MONMOUTH	Type 3	Single	No	No	No	Single
11830	MORFA NEFYN	Type 3	Single	No	No	No	Single
10910	MORPETH	Type 3	Single	No	No	No	Single
10315	MOSSBANK	Type 3	Single	No	No	No	Single
10368	MOTTRAM	Type 3	Single	No	No	No	Single
13805	MUDDIFORD	Type 3	Single	No	No	No	Single
15201	MUIRKIRK	Type 3	Single	No	No	No	Single
11020	NAILSWORTH	Type 3	Single	No	No	No	Single
10667	NANTYGLO	Type 3	Single	No	No	No	Single
15220	NEW CUMNOCK	Type 3	Single	No	No	No	Single
13718	NEW GALLOWAY	Type 3	Single	No	No	No	Single
14913	NEW RADNOR	Type 3	Single	No	No	No	Single
14706	NEWBATTLE	Type 3	Single	No	No	No	Single
10380	NEWCHURCH	Type 3	Single	No	No	No	Single
11310	NEWNHAM (KENT)	Type 3	Single	No	No	No	Single
10713	NEWRY NORTH	Type 3	Single	No	No	No	Single
10715	NEWRY SOUTH	Type 3	Single	No	No	No	Single
13608	NEWTON ABBOT	Type 3	Single	No	No	No	Single
13111	NEWTON FERRERS	Type 3	Single	No	No	No	Single
10388	NORDEN	Type 3	Single	No	No	No	Single
10325	NORTH OLDHAM	Type 3	Single	No	No	No	Single
10851	NORTH WINCHESTER	Type 3	Single	No	No	No	Single
11409	NORWICH(CENTRAL)	Type 3	Single	No	No	No	Single
10331	OAKENHEAD	Type 3	Single	No	No	No	Single
13616	OCCOMBE VALLEY	Type 3	Single	No	No	No	Single
13743	ORTON	Type 3	Single	No	No	No	Single
10458	OUGHTIBRIDGE	Type 3	Single	No	No	No	Single
11415	OVERSTRAND	Type 3	Single	No	No	No	Single
10417	OXENHOPE	Type 3	Single	No	No	No	Single
11055	PARKEND	Type 3	Single	No	No	No	Single
16107	PEEBLES	Type 3	Single	No	No	No	Single
13110	PENALIGON DOWNS	Type 3	Single	No	No	No	Single
10655	PENNORTH	Type 3	Single	No	No	No	Single
13223	PENNSYLVANIA	Type 3	Single	No	No	No	Single
10639	PENRHIWCEIBER	Type 3	Single	No	No	No	Single
14910	PETERCHURCH	Type 3	Single	No	No	No	Single
11201	PETERHEAD	Type 3	Single	No	No	No	Single
11622	PETERLEE	Type 3	Single	No	No	No	Single

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
	(HORDEN)						
11076	PILLOWELL	Type 3	Single	No	No	No	Single
13734	PINWHERRY	Type 3	Single	No	No	No	Single
13118	PLYMOUTH (NORTH ROAD)	Type 3	Single	No	No	No	Single
13125	POLPERRO	Type 3	Single	No	No	No	Single
10656	PONTARDAWE	Type 3	Single	No	No	No	Single
14510	PONTFADOG	Type 3	Single	No	No	No	Single
13708	POOLEY BRIDGE	Type 3	Single	No	No	No	Single
11045	PORTISHEAD	Type 3	Single	No	No	No	Single
13720	PORTPATRICK	Type 3	Single	No	No	No	Single
10391	PORTWOOD	Type 3	Single	No	No	No	Single
10847	POULNER	Type 3	Single	No	No	No	Single
10341	PRESTBURY	Type 3	Single	No	No	No	Single
13228	PRESTON	Type 3	Single	No	No	No	Single
10446	PRIMROSE HILL	Type 3	Single	No	No	No	Single
10347	RAMSBOTTOM	Type 3	Single	No	No	No	Single
11311	RAMSGATE	Type 3	Single	No	No	No	Single
10537	RAVENS CRAIG	Type 3	Single	No	No	No	Single
13742	RAVENSTONEDALE	Type 3	Single	No	No	No	Single
11072	REDBROOK	Type 3	Single	No	No	No	Single
11006	REDCLIFF BAY	Type 3	Single	No	No	No	Single
10673	RHONDDA FACH	Type 3	Single	No	No	No	Single
10362	RIBBLESDALE	Type 3	Single	No	No	No	Single
10410	RIPPONDEN	Type 3	Single	No	No	No	Single
10640	RISCA	Type 3	Single	No	No	No	Single
10358	ROMILEY	Type 3	Single	No	No	No	Single
11619	ROOKHOPE	Type 3	Single	No	No	No	Single
14924	ROSS-ON-WYE	Type 3	Single	No	No	No	Single
10714	ROSTREVOR FOREST	Type 3	Single	No	No	No	Single
15502	ROTHBURY	Type 3	Single	No	No	No	Single
15221	ROTHESAY TOWN	Type 3	Single	No	No	No	Single
13124	SALCOMBE	Type 3	Single	No	No	No	Single
10650	SENNYBRIDGE	Type 3	Single	No	No	No	Single
10806	SHREWTON	Type 3	Single	No	No	No	Single
10839	SINGLETON	Type 3	Single	No	No	No	Single
11609	SKINNINGROVE	Type 3	Single	No	No	No	Single
10442	SKIPTON TOWN	Type 3	Single	No	No	No	Single
11034	SLAD	Type 3	Single	No	No	No	Single
11508	SOMERSHAM	Type 3	Single	No	No	No	Single
13613	SOUTH BRENT	Type 3	Single	No	No	No	Single
10610	SOUTH TREDEGAR	Type 3	Single	No	No	No	Single
13154	SOUTHWAY	Type 3	Single	No	No	No	Single
13101	ST AUSTELL	Type 3	Single	No	No	No	Single
13727	ST BEES	Type 3	Single	No	No	No	Single
12807	ST BRELADES BAY	Type 3	Single	No	No	No	Single
14909	ST BRIAVELS	Type 3	Single	No	No	No	Single
12323	ST FILLANS	Type 3	Single	No	No	No	Single
12801	ST HELIER	Type 3	Single	No	No	No	Single
13137	ST NEOT	Type 3	Single	No	No	No	Single
12804	ST PETER PORT	Type 3	Single	No	No	No	Single
11106	STAMFORD	Type 3	Single	No	No	No	Single
10342	STOCKPORT	Type 3	Single	No	No	No	Single
10457	STOCKSBRIDGE	Type 3	Single	No	No	No	Single
13215	STOKEINTEIGNHEAD	Type 3	Single	No	No	No	Single
16110	STOW	Type 3	Single	No	No	No	Single

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
13719	STRANRAER	Type 3	Single	No	No	No	Single
12314	STRATHALLAN	Type 3	Single	No	No	No	Single
10545	STRATHBLANE	Type 3	Single	No	No	No	Single
10596	STRATHYRE	Type 3	Single	No	No	No	Single
10595	STRATHYRE LINK	Type 3	Single	No	No	No	Single
10453	SUTTON IN CRAVEN	Type 3	Single	No	No	No	Single
12607	SUTTON ROW	Type 3	Single	No	No	No	Single
13806	SWIMBRIDGE	Type 3	Single	No	No	No	Single
10629	TAFFS WELL	Type 3	Single	No	No	No	Single
13108	TAVISTOCK	Type 3	Single	No	No	No	Single
13813	TEDBURN ST MARY	Type 3	Single	No	No	No	Single
13605	TEIGNMOUTH	Type 3	Single	No	No	No	Single
10229	TENBURY WELLS	Type 3	Single	No	No	No	Single
11911	TENBY	Type 3	Single	No	No	No	Single
12602	THE BOURNES	Type 3	Single	No	No	No	Single
13716	THORNHILL	Type 3	Single	No	No	No	Single
13703	THRELKELD	Type 3	Single	No	No	No	Single
12605	TIDWORTH	Type 3	Single	No	No	No	Single
15216	TIGHNABRUAICH	Type 3	Single	No	No	No	Single
10802	TILL VALLEY	Type 3	Single	No	No	No	Single
10539	TILlicouLTRY	Type 3	Single	No	No	No	Single
11048	TINTERN	Type 3	Single	No	No	No	Single
13203	TIVERTON	Type 3	Single	No	No	No	Single
10635	TONYPANDY	Type 3	Single	No	No	No	Single
10676	TONYREFAIL	Type 3	Single	No	No	No	Single
13617	TORQUAY TOWN	Type 3	Single	No	No	No	Single
13611	TOTNES	Type 3	Single	No	No	No	Single
10318	TRAWDEN	Type 3	Single	No	No	No	Single
10641	TREBANOG	Type 3	Single	No	No	No	Single
10661	TRECASTLE	Type 3	Single	No	No	No	Single
10674	TREFECHAN	Type 3	Single	No	No	No	Single
14536	TREFFYNNON (HOLYWELL)	Type 3	Single	No	No	No	Single
11819	TREFOR	Type 3	Single	No	No	No	Single
13531	TREGYNON	Type 3	Single	No	No	No	Single
10623	TREHARRIS	Type 3	Single	No	No	No	Single
15213	TROON	Type 3	Single	No	No	No	Single
13120	TRURO	Type 3	Single	No	No	No	Single
11319	TURNPIKE HILL	Type 3	Single	No	No	No	Single
10544	TWECHAR	Type 3	Single	No	No	No	Single
10669	TYNEWYDD	Type 3	Single	No	No	No	Single
11025	UPAVON	Type 3	Single	No	No	No	Single
10567	UPLAWMOOR	Type 3	Single	No	No	No	Single
14917	UPPER SOUDLEY	Type 3	Single	No	No	No	Single
10664	USK	Type 3	Single	No	No	No	Single
10687	VAN TERRACE	Type 3	Single	No	No	No	Single
10464	WALSDEN	Type 3	Single	No	No	No	Single
10466	WALSDEN SOUTH	Type 3	Single	No	No	No	Single
10125	WALTHAMSTOW NORTH	Type 3	Single	No	No	No	Single
10396	WALTON-LE-DALE	Type 3	Single	No	No	No	Single
15228	WANLOCKHEAD	Type 3	Single	No	No	No	Single
10387	WARDLE	Type 3	Single	No	No	No	Single
10621	WATTSVILLE	Type 3	Single	No	No	No	Single
11809	WAUNFAWR	Type 3	Single	No	No	No	Single
11407	WELLS-NEXT-THE-SEA	Type 3	Single	No	No	No	Single
15203	WEST KILBRIDE	Type 3	Single	No	No	No	Single

<u>Station no.</u>	<u>Station Name</u>	<u>Accommodation</u>	<u>Power Supply</u>	<u>Generator</u>	<u>Reserve Antenna</u>	<u>COM Mux</u>	<u>Combiner Unit</u>
11011	WEST LAVINGTON	Type 3	Single	No	No	No	Single
14703	WEST LINTON	Type 3	Single	No	No	No	Single
13141	WESTON MILL	Type 3	Single	No	No	No	Single
13807	WESTWARD HO!	Type 3	Single	No	No	No	Single
10319	WHALLEY	Type 3	Single	No	No	No	Single
10483	WHEATLEY	Type 3	Single	No	No	No	Single
10332	WHITEWELL	Type 3	Single	No	No	No	Single
13150	WIDECOMBE IN THE MOOR	Type 3	Single	No	No	No	Single
10255	WINCHCOMBE	Type 3	Single	No	No	No	Single
10448	WINCOBANK	Type 3	Single	No	No	No	Single
11501	WOODBIDGE	Type 3	Single	No	No	No	Single
10247	WOODFORD HALSE	Type 3	Single	No	No	No	Single
10378	WOODNOOK	Type 3	Single	No	No	No	Single
13109	WOOLACOMBE	Type 3	Single	No	No	No	Single
15503	WOOLER	Type 3	Single	No	No	No	Single
13728	WORKINGTON	Type 3	Single	No	No	No	Single
13908	WYE(ASHFORD)	Type 3	Single	No	No	No	Single
14535	Y FFLINT (FLINT)	Type 3	Single	No	No	No	Single
16111	YETHOLM	Type 3	Single	No	No	No	Single
10632	YNYS OWEN	Type 3	Single	No	No	No	Single
11903	YSTALYFERA	Type 3	Single	No	No	No	Single

6. Reference Offer Terms and Conditions

DATED _____ 20[]

ARQIVA LIMITED

and

[]

**REFERENCE OFFER TERMS AND
CONDITIONS**

The logo for Arqiva, featuring the word "arqiva" in a lowercase, sans-serif font. The letters "ar" are in a dark red color, and the letters "qiva" are in a bright orange color. The letter "q" has a distinctive, curved tail that extends downwards and to the left.

CONTENTS

Clause	Page
1. Definitions and Interpretations	53
2. Arqiva's Obligations prior to Switchover	54
3. Customer's Obligations prior to Switchover	54
4. DSO Risk	55
5. Obligation to Provide Network Access and Fault Handling and Support Services.....	55
6. Customer's Obligations after Switchover	56
7. Arqiva's Rights after Switchover	57
8. Operational Meetings	57
9. Charges and Payment	57
10. Change.....	59
11. Term and Termination.....	60
12. Consequences of Termination	61
13. Liability, Indemnities and Insurance.....	62
14. Force Majeure	64
15. Confidentiality.....	65
16. Assignment	66
17. Governing Law and Dispute Resolution.....	66
18. General	67
Schedule	
SCHEDULE 1	
Definitions.....	70
SCHEDULE 2	
Network Access Availability, Network Access Levels and Network Access Credits	77
SCHEDULE 3	
Fault Handling and Support Services	82
SCHEDULE 4	
Station Schedule Template	83
SCHEDULE 5	
Standard Station Access Terms	84
SCHEDULE 6	
Switchover Timetable	100
SCHEDULE 7	
Risks.....	102
Part 1: Standard Risks	102
Part 2: Exceptional Risks	103
SCHEDULE 8	
Change Control Procedure	104
SCHEDULE 9	
Review Process	107

SUBJECT TO CONTRACT

This Agreement is entered into on [] 20[].

PARTIES

ARQIVA LIMITED, a company incorporated under the laws of England and Wales with registered number 2487597 and having its registered office at Crawley Court, Crawley, Winchester, Hants SO21 2QA ("**Arqiva**"); and

[], a company incorporated under the laws of [] with registered number [] and having its registered office at [] ("**Customer**").

RECITALS

- (A) Pursuant to a final statement published by Ofcom on 28 April 2005 entitled "Broadcasting Transmission Services: a review of the market, Final statement", Arqiva was designated as a person having significant market power in the market for access to Arqiva's mast and site network and shared or shareable antenna systems acquired, constructed or installed by Arqiva for the primary purpose of providing analogue and/or digital terrestrial broadcasting transmission services in the United Kingdom to deliver content to end users by means of a Television Multiplex Service licensed under Part 1 of the Broadcasting Act 1996.
- (B) Such final statement included a notification from Ofcom requiring Arqiva, inter alia, to publish a reference offer setting out the terms and conditions on which it will provide Network Access (as defined herein).
- (C) Ofcom then published a guidance document on 31 July 2006 entitled "Terrestrial Transmission Market Review: Updated general guidance for setting of charges and review mechanism" which set out further guidance relevant to the terms, conditions and charges upon which Arqiva offers Network Access.
- (D) These Reference Offer Terms and Conditions and the other documents comprising the Agreement (as defined herein) have been prepared by Arqiva in fulfilment of the requirements set out in the final statement and in the light of the guidance.

1. DEFINITIONS AND INTERPRETATIONS

- 1.1 Capitalised terms shall have the meaning ascribed to them in Schedule 1 (Definitions).
- 1.2 Where the context so admits or requires words denoting the singular include the plural and vice versa and words denoting any gender include all genders.
- 1.3 Clause headings are purely for ease of reference and do not form part of or affect the interpretation of this Agreement.
- 1.4 Unless otherwise stated, references to Clauses and Schedules are to clauses of and schedules to this Agreement. Unless otherwise stated, references to Sections and Appendices are to sections of and appendices to the Reference Offer.
- 1.5 References to each party herein include references to its successors in title, permitted assigns and novatees.
- 1.6 All references to "include" and "including" shall be construed to mean "include without limitation" and "including without limitation" respectively.
- 1.7 All references to a statute or statutory provision include any consolidation or re-enactment, modification or replacement of the same, any statute or statutory provision of which it is a consolidation, re-enactment, modification or replacement and any subordinate legislation in force under any of the same from time to time.

SUBJECT TO CONTRACT

1.8 In the event of any inconsistency between the provisions of these Reference Offer Terms and Conditions, the provisions of any Schedule hereto and/or any other Section of the Reference Offer (including any Appendices thereto), the following order of precedence shall apply:

1.8.1 these Reference Offer Terms and Conditions (including the Schedules hereto);

1.8.2 other Sections of the Reference Offer; and

1.8.3 any Station Access Licence.

2. ARQIVA'S OBLIGATIONS PRIOR TO SWITCHOVER

Subject to the terms of this Agreement, Arqiva shall:

2.1 undertake and complete such tasks and activities as may be necessary in order to allow Arqiva to offer Network Access for the Multiplex in accordance with the terms of this Agreement. It will be the responsibility of Arqiva to procure and manage any civil works required at any Station, including the provision of electricity, ventilation openings, heat exchanger bases, underground ducts and cable entries;

2.2 comply with its obligations as set out in the Engagement Process;

2.3 for each Station execute a Station Access Licence;

2.4 provide suitable accommodation at each Station for the installation of Customer Equipment;

2.5 use reasonable endeavours to provide Network Access for the Multiplex to Customer on and from the Station Readiness Date for each Station in accordance with the Specification; and

2.6 carry out such tests as may be reasonably required to ensure that Customer Equipment provided or installed by Customer interoperates properly with the relevant Common Equipment and Arqiva Equipment.

3. CUSTOMER'S OBLIGATIONS PRIOR TO SWITCHOVER

Customer shall:

3.1 comply with its obligations as set out in the Engagement Process;

3.2 for each Station execute a Station Access Licence;

3.3 in respect of each Station, install the Customer Equipment and carry out all such tests as are necessary to ensure that it interoperates properly with the Common Equipment and thereafter make the Customer Equipment available to Arqiva for testing by the date that is not less than one (1) month prior to the Station Target Switchover Date;

3.4 indemnify and hold harmless Arqiva on demand against any reasonable additional costs (by way of additional rent or other fees or payments) charges and expenses (or a due and proper proportion thereof) which Arqiva may incur or pay (including planning, legal, agents/surveyors, management or other professional fees or costs of any Landlord or other third party whose licence, consent, permission or approval shall be required) as a result of Customer's access to any Station, and/or Arqiva's efforts to negotiate any associated licence, consent, permission or approval and/or any amendment or variation to any covenant, condition, term, restriction or stipulation in any lease, licence, deed or document or otherwise, relating to or affecting the title (whether belonging to Arqiva or any Landlord or third party) to any Station and/or the access rights to any such Station that may be necessary or requisite to facilitate or accommodate the installation, use and operation of the Customer Equipment and/or the sharing of the use and/or occupation of the Station and/or to allow the Customer to use and/or share the Station and/or the Customer Equipment and/or the Common Equipment for the Permitted Use; and

SUBJECT TO CONTRACT

3.5 promptly provide all information, co-operation and assistance as may be reasonably requested by Arqiva in connection with the performance of either party's obligations pursuant to this Agreement, which may include providing information, co-operation and assistance in relation to any testing of Customer Equipment, and co-operating and sharing information with MTS Providers where reasonably requested by Arqiva.

4. DSO RISK

4.1 If an Exceptional Risk occurs, then the Charges shall be adjusted through the Change Control Procedure over the remainder of the Term so as: (i) to include all additional costs, losses and expenses Arqiva incurs as a result of the occurrence of that Exceptional Risk; and (ii) to apply the methodology set out in Section 3 of the Reference Offer including the application of the Applicable WACC to any additional existing assets or capital expenditure required (as described in Section 3.4.8 of the Reference Offer) and the adjustments for timing and smoothing (as described in Section 3.4.13 of the Reference Offer) and allowing for the reduced period over which Charges will be paid as a result of Network Access not being provided on and from the Station Target Switchover Date (if applicable).

4.2 If a Standard Risk occurs, there shall be no adjustment to the Charges in respect of the impact of such Standard Risk on Future Capital Expenditure required other than pursuant to the 2014 Review as described in Schedule 9 (Review Process). Arqiva shall, however, provide the information required by and otherwise comply with the provisions of the Review procedure set out in Schedule 9 (Review Process) in respect of proposed changes to Future Capital Expenditure.

4.3 Any Unavoidable Pass-Through Costs incurred by Arqiva during the period between the Station Readiness Date and the Station Switchover Date as a result of the occurrence of any Risk shall become due and payable on presentation of Arqiva's invoice for the same, which invoice Arqiva shall be entitled to present at any time on or after the Station Switchover Date.

4.4 Arqiva shall be entitled to an extension of time for the provision of Network Access at any Station if and to the extent that the provision of Network Access at that Station is delayed by any Exceptional Risk. Any such extension of time shall be determined pursuant to the Change Control Procedure.

4.5 In the event that Network Access is not provided at any Station on the Station Readiness Date, Arqiva shall use reasonable endeavours to provide Network Access at that Station as soon as is reasonably practicable after the Station Readiness Date.

5. OBLIGATION TO PROVIDE NETWORK ACCESS AND FAULT HANDLING AND SUPPORT SERVICES

5.1 In the event that the applications for Network Access received by Arqiva in respect of any Station(s) mean that the available Facilities at such Station(s) are over-subscribed, Arqiva shall apply a fair and non-discriminatory methodology to the allocation of such Facilities to the relevant applicants.

5.2 On and from the Station Switchover Date, Arqiva shall ensure that Network Access Availability at the relevant Station meets or exceeds the applicable Network Access Level. In the event that Arqiva fails to achieve the applicable Network Access Level in respect of any Station, then Arqiva shall pay Network Access Credits to Customer in accordance with the terms set out in Schedule 2 (Network Access Availability, Network Access Levels and Network Access Credits). Customer agrees that any liability of Arqiva to pay Network Access Credits shall represent Customer's sole and exclusive remedy in respect of Arqiva's failure to achieve the applicable Network Access Level.

5.3 Arqiva shall provide fault handling and support services in accordance with the terms set out in Schedule 3 (Fault Handling and Support Services).

SUBJECT TO CONTRACT

- 5.4 Arqiva shall provide Customer with its standard set of regular written reports (including a report detailing Arqiva's performance against the Network Access Levels). If requested, Arqiva may agree to provide to Customer additional or bespoke reports from time to time, but reserves the right to raise an additional reasonable charge for such reports.
- 5.5 Arqiva shall comply with the terms of any WTA Licence(s) applicable to the Multiplex from time to time, to the extent that Customer discloses (or procures the disclosure of) such WTA Licences to Arqiva.

6. CUSTOMER'S OBLIGATIONS AFTER SWITCHOVER

From the Station Switchover Date, and to the extent that Customer is granted access to any Station prior to the Station Switchover Date, Customer shall:

- 6.1 not access any Station until the applicable Station Access Licence has been executed by both parties;
- 6.2 comply, and procure that its employees, agents and/or subcontractors comply, with the terms of the applicable Station Access Licence;
- 6.3 pay Arqiva's reasonable charges for providing supervision in respect of any Customer, Multiplex Operator, or other third party access to any Station;
- 6.4 not commence use of the Customer Equipment at any Station until:
- 6.4.1 authorised to do so by Arqiva in writing; and
- 6.4.2 Customer has secured any and all Customer Licences and any consent, approval, other licence, authorisation or permission that Customer requires from any Government Authority or other third party for the Permitted Use;
- 6.5 indemnify and hold harmless Arqiva on demand against any reasonable additional costs (by way of additional rent or other fees or payments) charges and expenses (or a due and proper proportion thereof) which Arqiva may incur or pay (including planning, legal, agents/surveyors, management or other professional fees or costs of any Landlord or other third party whose licence, consent, permission or approval shall be required) as a result of Customer's access to any Station, and/or Arqiva's efforts to negotiate any associated licence, consent, permission or approval and/or any amendment or variation to any covenant, condition, term, restriction or stipulation in any lease, licence, deed or document or otherwise, relating to or affecting the title (whether belonging to Arqiva or any Landlord or third party) to any Station and/or the access rights to any such Station that may be necessary or requisite to facilitate or accommodate the installation, use and operation of the Customer Equipment and/or the sharing of the use and/or occupation of the Station and/or to allow the Customer to use and/or share the Station and/or the Customer Equipment and/or the Common Equipment for the Permitted Use;
- 6.6 comply with reasonable directions of Arqiva from time to time, which may include requiring Customer to comply with specified sections of the Code of Practice;
- 6.7 during the Term obtain, maintain and comply with all applicable Laws and any consent, approval, licence, authorisation or permission that Customer requires from any Government Authority or other third party, including any Customer Licence, and, to the extent the same are applicable to Arqiva, shall not do or permit anything to be done which might cause or otherwise result in a breach by Arqiva of the same or of any Arqiva Licence; and
- 6.8 without prejudice to any of its other obligations under this Agreement, promptly provide all information, co-operation and assistance as may be reasonably requested by Arqiva in connection with the performance of either party's obligations pursuant to this Agreement, which may include co-operating and sharing information with MTS Providers where reasonably requested by Arqiva.

SUBJECT TO CONTRACT

7. ARQIVA'S RIGHTS AFTER SWITCHOVER

From the Station Switchover Date, and to the extent that Customer is granted access to any Station prior to the Station Switchover Date, Arqiva shall have the right to:

- 7.1 exercise any of its rights under the applicable Station Access Licence, including the right to switch off Customer Equipment;
- 7.2 be the sole and exclusive provider and maintainer of all Common Equipment and Arqiva Equipment;
- 7.3 where Customer, Multiplex Operator, any Approved Contractor or any other third party requires access to any Station for any reason, require that such access is supervised by Arqiva or its nominee, and in such circumstances Arqiva shall also be entitled to levy a reasonable charge to Customer for the provision of such supervision;
- 7.4 use any Station, including any Common Equipment or Arqiva Equipment, for the purpose of providing Network Access to MTS Providers, and grant access to the Station(s) including the Common Equipment and the Arqiva Equipment for the provision of such other services to any party or for such other purposes as Arqiva may in its discretion decide to support from time to time; and/or
- 7.5 require Customer to relocate (other than for the purposes of a temporary relocation which shall be governed by Clause 4.6 of the applicable Station Access Licence) any Customer Equipment at any Station to an alternative station, or, in default of Customer's compliance with such request after such reasonable period as Arqiva may specify, relocate or enter any Customer Accommodation in order to relocate any Customer Equipment to the alternative station (and in such scenario Customer shall pay to Arqiva on demand the costs, charges and expenses properly incurred by Arqiva in so entering and relocating). In such circumstances the relevant Station Access Licence shall, following the removal of the last of the Customer Equipment from the original Station, immediately terminate, and be replaced with a new Station Access Licence for the new station (which shall become a Station) on the same terms as the original Station Access Licence, but the relevant Station Schedule shall be updated to reflect the new Station details, and Arqiva may at its discretion provide to Customer an updated Station Schedule and/or Station Access Licence in consequence of this.

For the avoidance of doubt, Arqiva shall have no liability to Customer in respect of any loss or damage suffered by Customer as a result of Arqiva's exercise of any of its rights set out in this Clause 7, and the exercise by Arqiva of any such rights shall be without prejudice to Customer's obligation to pay the Charges, Pass-Through Costs and other amounts payable hereunder.

8. OPERATIONAL MEETINGS

Each party shall appoint a project manager who shall be responsible for attending meetings relating to the subject matter of this Agreement. The parties shall arrange and attend (by their project managers appointed pursuant to this Clause 8) progress and review meetings at regular intervals and locations to be agreed between the parties from time to time during the Term. Such meetings shall be the forum for the parties to review the relationship between the parties hereunder and to discuss developments, consider proposals, agree actions and seek to resolve any issues arising. Where appropriate, other personnel or representatives of the parties designated or approved by their respective project managers may also attend such meetings.

9. CHARGES AND PAYMENT

- 9.1 Subject to the remainder of this Clause 9, Customer shall pay to Arqiva the Charges, the Pass-Through Costs and any other amounts referred to in this Agreement.

SUBJECT TO CONTRACT

- 9.2 The Charges are subject to indexation as follows. For the period 1 July 2005 to 30 June 2006 the Charges are as set out in Section 3 of the Reference Offer. For the period 1 July 2006 to 30 June 2007 and in each subsequent Year the Charges shall be increased (without taking into account any Network Access Credits or set off pursuant to Clauses 9.7 and 9.13 respectively) by a percentage equal to the percentage increase in RPI. Such percentage increase shall be calculated by comparing the RPI published in the April immediately preceding the Year for which the Charges are being reviewed, with the RPI published twelve (12) months before the April immediately preceding the Year for which the Charges are being reviewed, and expressing the difference as a percentage of the first (i.e. first published) of such RPIs. If any such difference is a negative number, it shall be treated as zero for the purposes of the indexation mechanism set out in this Clause 9.2. Any percentage increase in RPI that is required to be calculated under this Agreement shall be calculated to two decimal places, and conventional rounding shall apply. (By way of illustration only, to calculate the indexation for the Charges for the Year beginning 1 July 2007, the relevant increase in RPI is obtained by comparing the RPI for April 2006 and the RPI for April 2007 and expressing the increase between these two values as a percentage increase of the RPI for April 2006.)
- 9.3 Subject to the remainder of this Clause 9.3, the Charges and the Pass-Through Costs shall become payable on and from the applicable Switchover Date. Arqiva shall invoice:
- 9.3.1 an amount equal to the Charges (or to the aggregate of the Charges for the applicable Regions) divided by twelve (12); and
- 9.3.2 the Pass-Through Costs,
- monthly in advance.
- 9.4 Except as otherwise provided for under this Agreement, all amounts payable by Customer hereunder shall be payable within thirty (30) days of the date of the relevant invoice, the invoice date being the Due Date for such amounts.
- 9.5 Customer shall make payments for the Charges and Pass-Through Costs by direct debit.
- 9.6 Arqiva shall notify Customer of the Sub-Region Charges not less than three (3) months prior to the Target Switchover Date.
- 9.7 At the end of each Year Arqiva shall calculate any Network Access Credits due to Customer pursuant to Clause 5.2, in respect of the previous Year, and shall make the applicable payment to Customer in respect thereof within ninety (90) days of the end of the applicable Year.
- 9.8 All Charges, Pass-Through Costs and other amounts referred to in this Agreement are exclusive of value added tax and any other tax or duty which shall, if and to the extent applicable, be payable by Customer at the rate and in the manner from time to time prescribed by law.
- 9.9 All invoices hereunder shall be raised in, and all debts due hereunder shall be settled in, GB pounds sterling. If the United Kingdom becomes a participating member state for the purposes of European Monetary Union and the Euro accordingly becomes the lawful currency of the United Kingdom, then:
- 9.9.1 that shall not affect the validity of this Agreement or the rights and obligations of the parties hereunder, nor shall it give either party the right to alter or terminate the Agreement unilaterally; and
- 9.9.2 with effect from the date on which it occurs, any amount referred to in this Agreement in GB pounds sterling shall be redenominated in Euros at the rate and in the manner determined by the relevant legislation.

SUBJECT TO CONTRACT

- 9.10 If Customer fails to pay any amount payable by it under this Agreement within thirty (30) days from the Due Date, without prejudice to Arqiva's other remedies, Customer shall become liable for and, on Arqiva's demand from time to time, shall pay interest on such overdue amount from the Due Date up to the date of actual payment whether before or after judgement at the rate of four per cent (4%) per annum over the base rate of the Bank of England. Such interest shall accrue from day to day and shall be computed on the basis of a year of three hundred and sixty-five (365) days for the number of days elapsed.
- 9.11 If Customer is more than thirty (30) days overdue with payment of any amount payable hereunder, Arqiva reserves the right to suspend provision of Network Access until Customer has rectified matters. Moreover, Customer shall not be relieved of any liability to pay Charges or any other amounts due under this Agreement in respect of any period during which Arqiva's provision of Network Access has been suspended pursuant to this Clause.
- 9.12 If Customer disputes any invoice issued by Arqiva hereunder, it shall nevertheless be obliged to pay that invoice. In the event that the outcome of any dispute resolution process provided for in this Agreement is that an overpayment has been made by Customer, Arqiva shall be liable to repay to Customer an amount equal to the overpayment together with interest on such amount calculated at the rate specified in Clause 9.10, such interest to be calculated for the period from the date of payment of the original invoice to the date of repayment by Arqiva of the overpayment.
- 9.13 Arqiva may elect to set off any liability to pay any amounts payable by it hereunder against any amounts payable by Customer to Arqiva hereunder or any liability of Customer to Arqiva howsoever arising.
- 9.14 If Arqiva has reasonable grounds for concern as to the creditworthiness of Customer, it shall be entitled to require Customer to procure a parent company guarantee in such form as Arqiva may reasonably require, or such other security as Arqiva may reasonably require.

10. CHANGE

Change Control Procedure

- 10.1 Except as otherwise provided in this Agreement, if Customer or Arqiva wishes to make any Change to this Agreement, including any change required as a result of any Exceptional Risk, the parties shall follow the Change Control Procedure set out at Schedule 8 (Change Control Procedure), and the timing and manner of applying any Change shall be processed pursuant to and in accordance with such Change Control Procedure. Paragraph 2.8 of the Change Control Procedure sets out the terms that will apply in relation to the approval of any Consensus Change, where the nature of the Change is such that it will require the approval of Customer and also of a party or parties other than Customer.

"Fast Track" Changes

- 10.2 Notwithstanding Clause 10.1, in respect of any Change which Arqiva believes is necessary:
- 10.2.1 as a result of the occurrence of any Exceptional Risk;
 - 10.2.2 in order to meet the Switchover Timetable; or
 - 10.2.3 in order to implement a Consensus Change where only one affected party has not approved the proposed Change,

Arqiva shall be entitled to implement the relevant Change even if it has not secured Customer's approval through the Change Control Procedure.

- 10.3 Before implementing any Change pursuant to its right under Clause 10.2, Arqiva shall:

SUBJECT TO CONTRACT

- 10.3.1 in any event, provide a CCN to Customer for the Change as required by the Change Control Procedure;
- 10.3.2 use all reasonable endeavours to agree a CCN for the Change with Customer.
- 10.4 If Customer does not agree with the impact on the Charges of any Change implemented by Arqiva pursuant to Clause 10.2 as set out in the relevant CCN, Customer may refer the matter to the Expert Procedure.

Antenna Selection Process

- 10.5 Notwithstanding Clause 10.1, in respect of any Change which relates to an Antenna which has been approved under the Antenna Selection Process procedure set out in Section 4.2, Arqiva shall be entitled to implement such Change before if it has secured Customer's approval through the Change Control Procedure. In respect of any Change which relates to an Antenna, Arqiva shall prepare a CCN and shall seek Customer's approval of the same under the Change Control Procedure. If Customer does not agree with the impact on the Charges of any Change implemented by Arqiva pursuant to this Clause 10.5 as set out in the relevant CCN, Customer may refer the matter to the Expert Procedure.

Referral to Expert Procedure

- 10.6 Without prejudice to Clause 10.4 above, either party may refer any dispute relating to any proposed adjustment to the Charges set out in any CCN, or any other matter which the parties cannot agree through the Change Control Procedure, to the Expert Procedure.

11. TERM AND TERMINATION

- 11.1 Subject to the remainder of this Clause 11, and unless otherwise agreed in writing, this Agreement shall come into force on the Execution Date and shall continue until midnight on 31 December 2032 (the "**Expiry Date**").
- 11.2 Each party shall be entitled forthwith on serving a written notice to the other party to terminate this Agreement, in whole or as to the affected part, if the other party shall be in serious breach or persistent material breach of any of the provisions of this Agreement and shall not remedy or otherwise satisfactorily compensate the non-defaulting party in respect of such breach within thirty (30) days of the non-defaulting party notifying the other party in writing of the breach in question.
- 11.3 Each party shall be entitled forthwith on serving a written notice to the other party to terminate this Agreement on any of the following events occurring in respect of the other party:
- 11.3.1 a petition is presented or resolution passed for its winding up, provided that this Clause 11.3.1 shall not apply to a bona fide re-organisation or re-construction of that party whilst solvent;
- 11.3.2 it enters into any composition with its creditors generally, or suffers any similar action in consequence of default by it in its obligations in respect of any indebtedness provided that this Clause 11.3.2 shall not apply to a bona fide re-organisation or re-construction of that party whilst solvent;
- 11.3.3 an administration application is made in respect of it or it suffers a notice of appointment of administrator to be filed at court in respect of it;
- 11.3.4 it has stopped or threatens to stop generally payment of its debts or if it ceases or threatens to cease to carry on its business or any substantial part of it, provided that this Clause 11.3.4 shall not apply to a bona fide re-organisation or re-construction of that party whilst solvent;

SUBJECT TO CONTRACT

- 11.3.5 it has a receiver, administrative receiver or other similar official appointed over all or any substantial part of its property, undertakings or assets;
 - 11.3.6 it suffers a creditor taking possession of all or any part of its business or assets or suffers any execution or other legal process being enforced against its business or any of its substantial assets, which execution or legal process is not discharged within thirty (30) days;
 - 11.3.7 it is deemed for the purpose of Section 123 of the Insolvency Act 1986 to be unable to pay its debts; or
 - 11.3.8 an event or circumstances analogous to any of those referred to in 11.3.1 to 11.3.7 above occurs in any jurisdiction outside England and Wales under the laws of any competent jurisdiction.
- 11.4 Customer may terminate this Agreement (in whole or in part) by not less than twelve (12) months' prior written notice to Arqiva to this effect, expiring at any time on or after 31 December 2022.
- 11.5 Customer may terminate this Agreement in its entirety or as to the relevant parts as applicable on not less than ninety (90) days' notice to Arqiva if, and to the extent that, Customer ceases to provide Managed Transmission Services in respect of the Multiplex for whatever reason (including termination in whole or part of Customer's Managed Transmission Services agreement with the Multiplex Operator for whatever reason).
- 11.6 Either party may terminate this Agreement on not less than ninety (90) days' notice to the other party in the event of DSO Cancellation. Such termination may be in respect of either the entirety of this Agreement or the relevant parts as applicable, provided that the right to terminate shall not apply to such part(s) of this Agreement as relate to any Sub-Region(s) for which Switchover has already occurred.
- 11.7 Either party may terminate this Agreement as to the affected Station or Stations pursuant to Clause 14.
- 11.8 Where this Agreement is terminated in part only pursuant to any provision of this Clause 11, it shall continue in full force and effect as to the remaining part.

12. CONSEQUENCES OF TERMINATION

- 12.1 Upon termination (in whole or part) of this Agreement for whatever reason or upon its expiry, all Station Access Licences granted hereunder (or, in the event of a partial termination, all of such licences in respect of Stations at which Network Access will no longer be provided) shall immediately terminate and Customer shall comply with its relevant obligations pursuant to such Station Access Licences.
- 12.2 Any termination of this Agreement shall be without prejudice to either party's rights to recover any sums payable or due by the other or to any rights accrued by one party to the other in accordance with this Agreement on or prior to the date of such termination.
- 12.3 This Clause 12 and Clauses 7, 9, 13, 15, 17 and 18 shall continue in full force and effect notwithstanding the termination of this Agreement.
- 12.4 If this Agreement expires pursuant to Clause 11.1, Customer shall pay to Arqiva the Expiry Fee.
- 12.5 Without prejudice to Arqiva's other rights and remedies, if this Agreement is terminated by Arqiva pursuant to either of Clauses 11.2 or 11.3, or if this Agreement is terminated by Customer pursuant to either of Clauses 11.4 or 11.5, or if this Agreement is terminated by either party pursuant to Clause 11.7, Customer shall pay to Arqiva the Expiry Fee, or, in the event of a partial termination, the applicable pro rata portion of such amount.

SUBJECT TO CONTRACT

- 12.6 If this Agreement is terminated by either party pursuant to Clause 11.6, Customer shall pay to Arqiva the Early Cancellation Fee, or, in the event of a partial termination, the applicable pro rata portion of such amount, but, for the avoidance of doubt, not the Expiry Fee.

13. LIABILITY, INDEMNITIES AND INSURANCE

Liability

- 13.1 Arqiva accepts liability to Customer only as expressly provided or contemplated in this Clause 13 and Clause 5.2 (and Clause 4.2 of Station Access Licences), and otherwise shall have no liability to Customer under or in connection with this Agreement or any Station Access Licence whether arising in or for breach of contract, tort (including negligence), breach of statutory duty, indemnity or otherwise.
- 13.2 Arqiva accepts liability to Customer for any damage to Customer Equipment caused by Arqiva's negligence in the provision of Network Access up to five million pounds sterling (£5,000,000) per Station per Year. For the avoidance of doubt, neither damage to nor loss or corruption of data shall constitute loss of or damage to physical property.
- 13.3 Subject to Clause 13.2, Arqiva's maximum aggregate liability to Customer arising under or in connection with this Agreement and all Station Access Licences, whether arising in or for breach of contract, tort (including negligence), breach of statutory duty, indemnity or otherwise, in respect of claims relating to any Year shall be limited to the greater of:
- 13.3.1 one hundred and twenty-five per cent (125%) of the Charges (inclusive of the uplift for contingencies but excluding Pass-Through Costs) payable by Customer to Arqiva under this Agreement in respect of that Year; and
- 13.3.2 [*£1,000,000 if the Multiplex is a PSB; or £500,000 if the Multiplex is a COM.*]
- For the avoidance of doubt any amounts paid by Arqiva to Customer by way of Network Access Credits under Clause 5.2 shall count towards the limits set out in this Clause 13.3.
- 13.4 Arqiva shall not be liable to Customer under or in connection with this Agreement or any Station Access Licence for any loss of income, loss of actual or anticipated profits, loss of business, loss of contracts, loss of goodwill or reputation, loss of business, loss of anticipated savings, loss of, damage to or corruption of data, or for any indirect or consequential loss or damage of any kind, in each case howsoever arising, whether such loss or damage was foreseeable or in the contemplation of the parties and whether arising in or for breach of contract, tort (including negligence), breach of statutory duty, indemnity or otherwise.
- 13.5 Nothing in this Clause 13 or otherwise in this Agreement or any Station Access Licence shall exclude or in any way limit Arqiva's liability to Customer (i) for fraud, (ii) for death or personal injury caused by its negligence (including negligence as defined in s. 1 Unfair Contract Terms Act 1977), (iii) for breach of terms regarding title implied by s. 12 Sale of Goods Act 1979 and/or s. 2 Supply of Goods and Services Act 1982, or (iv) to the extent the same may not be excluded or limited as a matter of law.
- 13.6 Arqiva shall have no liability to Customer, and Customer shall have no right or remedy against Arqiva, for any delay by Arqiva in performing or complying with, or any failure by Arqiva to perform or comply with any obligation under or term of this Agreement or any Station Access Licence to the extent that such delay or failure is attributable to any act or omission of or by Customer or any of its employees, agents or contractors (including any breach by Customer of any obligation under or term of this Agreement or any Station Access Licence and any failure by Customer to comply with the Engagement Process).
- 13.7 The exclusions and limitations of liability under this Clause 13 shall have effect in relation both to any liability expressly provided for or contemplated under this Agreement or any Station Access Licence and to any liability arising or incurred by reason of the invalidity or

SUBJECT TO CONTRACT

unenforceability, in whole or in part, of any term of this Agreement or of any Station Access Licence.

- 13.8 This Agreement and the Station Access Licences entered into pursuant to it set forth the full extent of Arqiva's obligations and liabilities arising out of or in connection with this Agreement and all Station Access Licences, and there are no conditions, warranties, representations or terms, express or implied, that are binding on Arqiva except as specifically stated in this Agreement and the Station Access Licences. Any condition, warranty, representation or term which might otherwise be implied into or incorporated in this Agreement or any Station Access Licence, whether by statute, common law or otherwise, is hereby expressly excluded.

Indemnities

- 13.9 Customer shall be liable for and shall indemnify Arqiva against any and all claims, actions, liabilities, losses (including any loss of Arqiva revenue), damages and expenses (including any losses or expenses arising out of any third party demand) and including legal expenses incurred by Arqiva which arise out of or in connection with, directly or indirectly: (i) the operation or malfunction of any Customer Equipment; or (ii) any activity undertaken by Customer or its employees, agents, contractors or customers at any Station. As regards loss of or damage to Arqiva Equipment, Common Equipment, Accommodation (including Customer Accommodation) and any Equipment owned or controlled by MTS Providers, Customer's liability under this indemnity shall be limited to:

13.9.1 twenty-five million pounds sterling (£25,000,000) per Year in relation to the Station at Emley Moor; and

13.9.2 ten million pounds sterling (£10,000,000) per Year in relation to each other Station,

but shall otherwise be unlimited.

- 13.10 Without prejudice to Clause 13.9, Customer agrees during this Agreement and thereafter to indemnify and keep indemnified Arqiva from and against claims, actions, liabilities, losses, damages and expenses (including legal expenses) incurred by Arqiva resulting directly or indirectly from any claims by third parties that any Programme, or the transmission in accordance with the terms of this Agreement by Arqiva, or sub-contractors of Arqiva, of any Transmitted Service Signal relating to any Customer Output Signal:

13.10.1 is in breach of any duty of confidentiality or privacy;

13.10.2 infringes or prejudices any existing or future Intellectual Property Rights;

13.10.3 is defamatory or obscene; or

13.10.4 infringes any applicable Law or any voluntary codes of conduct in relation to the broadcasting of programmes,

save in respect of any such Transmitted Service Signal for which an effective instruction to cease transmission has been served by Customer pursuant to this Clause 13.10. For the avoidance of doubt, Customer's liability under this indemnity is unlimited.

Customer may instruct Arqiva to cease transmission of the Transmitted Service Signals relating to any Customer Output Signals on a temporary basis by contacting Arqiva's National Customer Service Centre (NCSC) at Emley Moor by fax (01924 508185) or email (NCSC.Supervisors@arqiva.com). Instructions may also be made by telephone (01924 508100) provided such instructions are promptly confirmed in writing by fax or email. Arqiva may update any or all of these contact details by notice to Customer at any time. Such instructions of Customer shall only be effective if issued by a director of Customer or by a person authorised in writing by a director of Customer for this purpose where such authorisation has been provided to Arqiva.

SUBJECT TO CONTRACT

For the avoidance of doubt, any cessation of provision of transmission by Arqiva pursuant to an instruction from Customer under this Clause 13.10 shall be without prejudice to Customer's obligation to pay the Charges, Pass-Through Costs and other amounts due hereunder.

- 13.11 The indemnity in Clause 13.10 shall be subject to Arqiva:
- 13.11.1 promptly notifying Customer in writing of such claim;
 - 13.11.2 not making any admission as to liability or agreeing to any settlement or compromise of the claim without Customer's prior written consent, not to be unreasonably withheld or delayed;
 - 13.11.3 at Customer's request and expense, giving Customer express authority to conduct all negotiations and litigation, and to settle all litigation, arising from such claim; and
 - 13.11.4 providing Customer at Customer's expense with all available information and assistance as Contractor may reasonably require. If within ninety (90) days after Arqiva's receipt of notice of any claim, Customer fails to take action to defend the same, Arqiva may at Customer's expense undertake the defence, compromise or settlement of the claim. Upon the assumption of the defence of the claim, Arqiva may defend, compromise or settle the claim as it sees fit provided that Arqiva shall take reasonable steps to monitor and mitigate the fees and costs associated with the same and shall keep Customer informed of any reasonable settlement proposals made by the claimant and shall not agree any settlement without Customer's prior written consent (not to be unreasonably withheld or delayed).

Insurance

- 13.12 Without prejudice to its obligations and liabilities under this Agreement (including under any indemnity), Customer agrees that during the Term it will maintain appropriate insurance policies in relation to the following types of cover with a reputable insurance company in respect of its liabilities under or relating to this Agreement, providing for the payment of a sum up to the amount stated for any claim or series of claims arising out of a single event:
- 13.12.1 public and products liability for all risks arising from this Agreement of not less than twenty-five million pounds Sterling (£25,000,000); and
 - 13.12.2 employers liability insurance to include a principals clause of not less than the statutory requirement.
- 13.13 Customer shall on request produce evidence satisfactory to Arqiva that it is complying with its obligations under Clause 13.12, and shall promptly notify Arqiva in writing in the event that the nature or coverage of the insurances described in Clause 13.12 is materially changed.
- 13.14 Where Customer engages any sub-contractor, Customer shall ensure that the relevant sub-contractor holds such insurance cover as is reasonable taking into account the extent of the services to be provided by that sub-contractor.

14. FORCE MAJEURE

- 14.1 After Station Switchover, Arqiva shall not be liable for its failure to provide Network Access in respect of that Station for any period or for any resulting loss, injury or damage to the extent only that such provision is prevented or directly adversely affected to a material degree by any Force Majeure Event, provided that Arqiva shall in any event continue to provide Network Access at that Station to the extent reasonably practical.
- 14.2 The period of excused non-provision shall be limited to the duration of such events provided that should any such suspension last for a period of more than one hundred and twenty (120) days, either party shall be entitled to terminate this Agreement forthwith upon written notice to

SUBJECT TO CONTRACT

the other party in respect of the Station or Stations affected, in which event the Charges shall be reduced by an amount equal to the aggregate of the Charges which would otherwise be payable in respect of the Station or Stations affected.

- 14.3 Arqiva shall give prompt notice to the Customer of any claim that the provision of Network Access is prevented or adversely affected by any Force Majeure Event giving details so far as practicable of the cause and consequence of the event, the Station(s) affected and the likely duration of the period of non-provision and shall give notice in like manner to Customer when the provision is no longer adversely affected.
- 14.4 In the event of the failure by Arqiva to provide Network Access at any Station by reason of a Force Majeure Event it shall use all reasonable endeavours to recommence provision as soon as is practicable. Arqiva shall also use all reasonable endeavours to mitigate and/or eliminate the consequences of any Force Majeure Event or Events and inform Customer of the steps which it is taking or proposing to take to do so.
- 14.5 During any period during which Arqiva is excused provision under Clause 14.1, Customer shall remain liable to pay:
- 14.5.1 in respect of the first sixty (60) days of such period, one hundred per cent (100%) of the Charges;
- 14.5.2 in respect of days sixty-one (61) to ninety (90) inclusive of such period, the Charges apportioned on a daily basis over a Year at seventy-five per cent (75%) of the rate which would otherwise have been payable in respect of the Station or Stations affected;
- 14.5.3 in respect of any days thereafter of such period, the Charges apportioned on a daily basis over a Year at fifty per cent (50%) of the rate which would otherwise have been payable in respect of the Station or Stations affected; and
- 14.5.4 all Pass-Through Costs (for the avoidance of doubt only to the extent actually incurred).

15. CONFIDENTIALITY

- 15.1 Each party undertakes to maintain and procure the maintenance of the confidentiality of Confidential Information at all times and to keep and procure the keeping of all Confidential Information secure and protected against theft, damage, loss or unauthorised access, and not at any time, whether during the term of this Agreement or at any time thereafter, without the prior written consent of the disclosing party, directly or indirectly, to use or authorise or permit the use of or disclose, exploit, copy or modify any Confidential Information, or authorise or permit any third party to do the same, other than for the sole purpose of the performance of its rights and obligations hereunder.
- 15.2 Each party undertakes to disclose Confidential Information only to those of its officers, employees, agents and contractors to whom, and to the extent to which, such disclosure is necessary for the purposes contemplated under this Agreement, and to procure that such officers, employees, agents and contractors are made aware of and observe the confidentiality obligations in this Clause 15.
- 15.3 Upon the earlier of a written request from the disclosing party, or the termination of this Agreement for any reason, the receiving party shall return any and all Confidential Information of the disclosing party then in its possession or control and will not retain any copies of the same.
- 15.4 The receiving party shall immediately upon becoming aware of the same give notice to the disclosing party of any unauthorised disclosure, misuse, theft or other loss of Confidential Information, whether inadvertent or otherwise.

SUBJECT TO CONTRACT

- 15.5 The terms of and obligations imposed by this Clause 15 shall survive the termination or expiry of this Agreement but shall not apply to any Confidential Information which:
- 15.5.1 at the time of receipt by the receiving party is in the public domain, or subsequently comes into the public domain through no fault of the receiving party, its officers, employees, agents or contractors; or
 - 15.5.2 is lawfully received by the receiving party from a third party on an unrestricted basis; or
 - 15.5.3 is already known to the receiving party before receipt hereunder; or
 - 15.5.4 is independently developed by the receiving party or its employees, agents or contractors.
- 15.6 The receiving party may disclose Confidential Information as may be required by law, regulation or order of a competent authority, provided that, to the extent practicable in the circumstances, the disclosing party is in each case given reasonable advance notice of the intended disclosure and a reasonable opportunity to challenge the same.

16. ASSIGNMENT

- 16.1 Subject to Clause 16.2, neither party may assign, sub-contract or sub-license this Agreement or any of its rights or obligations hereunder without the prior written consent of the other party.
- 16.2 Notwithstanding Clause 16.1, Arqiva may on written notice to Customer assign, sub-contract or sub-license all or any of its rights and/or obligations hereunder to any of its Associated Companies or to any entity acquiring all or substantially all of the assets of Arqiva.

17. GOVERNING LAW AND DISPUTE RESOLUTION

- 17.1 The construction, validity and performance of this Agreement shall be governed by English law and, subject to Clauses 17.2 and 17.3, the parties hereby submit irrevocably to the exclusive jurisdiction of the English courts to resolve any dispute between them. Any dispute which relates solely to a particular Station Access Licence shall be resolved in accordance with the dispute resolution provisions therein.
- 17.2 Neither party shall commence any action above until the escalation procedure set out in this Clause 17.2 has been exhausted, save that neither party shall be prevented from seeking emergency or injunctive relief from any court in relation to any damage or anticipated damage to property or proprietary rights. Without prejudice to the foregoing, any question or difference which may arise concerning the construction, meaning, effect or operation of this Agreement or any matter arising out of or in connection with this Agreement shall in the first instance be referred to the persons listed at Level 1 in the escalation table below, who shall have a period of five (5) Business Days to attempt to resolve the matter. If the matter is not resolved during such period, the matter shall be referred to the persons listed at Level 2 in the escalation table below who shall have a further period of five (5) Business Days or such other period as the parties may agree to attempt to resolve the matter. If the matter is not resolved during such period, the matter shall be referred to the persons listed at Level 3 in the escalation table below who shall have a further period of five (5) Business Days or such other period as the parties may agree to attempt to resolve the matter.

Customer	Arqiva
First Level:	First Level:
[]	DSO Programme Director
Second Level:	Second Level:
[]	MD Terrestrial Media Solutions and DSO

SUBJECT TO CONTRACT

Third Level:
Chief Executive Officer

Third Level:
Chief Executive Officer

If any of the above is unable to attend a meeting, a substitute may attend provided that such substitute has at least the same seniority or reasonably comparable managerial or directorial responsibility and is authorised to settle the unresolved matter.

17.3 Where expressly provided for in this Agreement either party may (and by agreement the parties may) refer any dispute to an independent expert (the "**Expert**") in accordance with the procedure set out in this Clause and in Clause 17.4. The Expert shall be appointed by agreement in writing between the parties or, if the parties are unable to agree on the identity of the Expert within seven (7) days after the date of the request (or joint request, as the case may be) that the dispute be determined by an Expert, or if the person appointed is unable or unwilling to act, shall be appointed by:

17.3.1 in relation to any dispute as to radio frequency, interference or other technical issues, the President of the Institute of Electrical Engineers; or

17.3.2 in relation to any dispute as to the calculation of any financial sum, the President for the time being of the Institute of Chartered Accountants in England and Wales;

on the application of either party.

17.4 The Expert appointed under Clause 17.3 shall act on the following basis:

17.4.1 the Expert shall act as an expert and not as an arbitrator;

17.4.2 each party may make representations to the Expert;

17.4.3 the Expert's determination shall (in the absence of manifest error) be final and binding on the parties;

17.4.4 the Expert shall decide the procedure to be followed in the determination and shall be requested to make its determination in writing within fifteen (15) Business Days after their appointment or as soon as is practicable thereafter;

17.4.5 any amount payable by one party to another as a result of the Expert's determination shall be due and payable within ten (10) Business Days after the Expert's determination being notified to the parties;

17.4.6 the Expert may, if it thinks fit, award interest at the rate of four per cent (4%) per annum above the UK base rate for the time being of the Bank of England on any amount which is determined to be payable by either party to the other from the date of the request that the dispute be determined by an Expert; and

17.4.7 the costs of the determination, including the fees and expenses of the Expert, shall be borne equally by the parties.

18. GENERAL

18.1 Notices sent under this Agreement shall be validly served if delivered by hand or sent by fax or registered post to the recipient party as follows:

to Customer:

[**address**]

Attention: [**contact, role**]

Fax no: []

SUBJECT TO CONTRACT

to Arqiva:

Crawley Court, Crawley, Winchester, Hants SO21 2QA
Attention: Company Secretary
Fax no: 01962 822818

Any notice shall be treated as having been served on delivery if delivered by hand, two (2) Business Days after despatch if sent by registered post and on confirmation of transmission if sent by facsimile.

- 18.2 The failure of either party to enforce or to exercise at any time or for any period of time any term of or any right pursuant to this Agreement does not constitute, and shall not be construed as, a waiver of such term or right and shall in no way affect that party's right later to enforce or to exercise it.
- 18.3 If any term of this Agreement is found to be illegal, invalid or unenforceable under any applicable law, such term shall, insofar as it is severable from the remaining terms, be deemed omitted from this Agreement and shall in no way affect the legality, validity or enforceability of the remaining terms.
- 18.4 Notwithstanding any other provision of this Agreement or any Station Access Licence, neither of the parties hereto shall be:
- 18.4.1 required to do anything in contravention of any Laws, Consents or other consents, approvals, licences, authorisations or permissions, or directions of any Government Authority; or
- 18.4.2 required to refrain from doing anything the party is required to do under such Laws, Consents or other consents, approvals, licences, authorisations or permissions, or directions of any Government Authority; or
- 18.4.3 liable to the other party for failing to do anything which if done would be in contravention of any such Laws, Consents or other consents, approvals, licences, authorisations or permissions, or directions of any Government Authority.
- 18.5 This Agreement contains all the terms agreed between the parties regarding its subject matter and supersedes any prior agreement, understanding or arrangement between the parties, whether oral or in writing. No representation, undertaking or promise shall be taken to have been given or be implied from anything said or written in negotiations between the parties prior to this Agreement except as expressly stated in this Agreement. Neither party shall have any remedy in respect of any untrue statement made by the other upon which that party relied in entering into this Agreement (unless such untrue statement was made fraudulently or was as to a fundamental matter including as to a matter fundamental to the other party's ability to perform its obligations under this Agreement) and that party's only remedies shall be for breach of contract as provided in this Agreement. Liability for misrepresentations as to fundamental matters shall be subject to the terms of Clause 13.3.
- 18.6 Provisions of this Agreement which either are expressed to survive its expiry or termination or from their nature or context it is contemplated that they are to survive such termination, shall remain in full force and effect notwithstanding such expiry or termination.
- 18.7 The relationship of the parties is that of independent contractors dealing at arm's length. Except as otherwise stated in this Agreement, nothing in this Agreement shall constitute the parties as partners, joint venturers or co-owners, or constitute either party as the agent, employee or representative of the other, or empower either party to act for, bind or otherwise create or assume any obligation on behalf of the other, and neither party shall hold itself out as having authority to do the same. Customer acknowledges that this Agreement is intended to provide only Network Access to Customer, and that no provisions in the Agreement are

SUBJECT TO CONTRACT

intended to create nor shall be treated or construed as creating the relationship of landlord and tenant between Arqiva and Customer.

- 18.8 The parties shall do and execute all such further acts and things as are reasonably required to give full effect to the rights given and the transactions contemplated by this Agreement.
- 18.9 Except as otherwise expressly agreed in writing between the parties, each party shall be responsible for its own costs incurred in performing its obligations under this Agreement.
- 18.10 No person who is not a party to this Agreement is granted or shall acquire any rights under it or be entitled to benefit from any of its terms, whether by virtue of the Contract (Rights of Third Parties) Act 1999 or otherwise.
- 18.11 Except as expressly provided in this Agreement, no alteration to or variation of this Agreement shall take effect unless and until the same is in writing and signed on behalf of each of the parties by a duly authorised representative.
- 18.12 This Agreement may be executed in several counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same document.

SUBJECT TO CONTRACT

SCHEDULE 1

Definitions

"Accommodation" means any land, building, structure, erection, installation, cabin, cabinet, kiosk or equipment housing structure (including any Mast) of Arqiva used to house or bear Equipment situated at or adjacent to and serving a Station (including private access ways, paths and private roads in or leading to a Station).

"ADS Required Authorisation Date" means, for each Station, the date specified in Table 1 of Section 4.2 of the Reference Offer.

"Agreement" means these Reference Offer Terms and Conditions, all Schedules hereto, the other Sections of the Reference Offer and any other documents which are referred to in any of the foregoing.

"Antenna" means any aerial, antenna, dish or other item of equipment, apparatus, appliance or instrument installed on or affixed to any Mast at any Station for the reception, transmission or relay of radio or electromagnetic waves and used in the provision of Digital Services.

"Antenna System" means the Equipment including Common Equipment comprising the entire radio frequency transmission and reception system at any Station, including any Antennas, feeders, U-link patch panels, combiner/filter systems and any interconnecting feeders from any combiner to the Interface Point.

"Antenna Characteristics Proposal" or "ACP" has the meaning given to it in Section 4.2 of the Reference Offer.

"Antenna Design Proposal" or "ADP" has the meaning given to it in Section 4.2 of the Reference Offer.

"Antenna Design Specification" or "ADS" has the meaning given to it in Section 4.2 of the Reference Offer.

"Antenna Selection Process" or "ASP" has the meaning given to it in Section 4.2 of the Reference Offer.

"Applicable WACC" has the meaning given to it in Section 3 of the Reference Offer.

"Approved Contractor" means a person or team of persons (including Customer and its employees) approved by Arqiva (pursuant to and subject to the terms of Clause 2.2 of the Station Access Licence) as being properly trained, qualified and experienced to carry out the kinds of activities permitted by the Station Access Licence.

"Arqiva Equipment" means Equipment (other than Customer Equipment and Common Equipment) used by Arqiva or any third party in relation to the provision of Digital Services, and any transmission equipment, combining equipment, antennas, transmitters, plant, machinery, Services Media, apparatus, appliances, instruments or any other equipment at any Station which are used by Arqiva or any third party for any purposes which do not relate to the provision of Digital Services.

"Arqiva Licence" means any radio spectrum licence granted to Arqiva under Part I of the Wireless Telegraphy Act 1949.

"Associated Company" means, in relation to either party, any subsidiary of that party, any holding company of that party, or any subsidiary of any holding company of that party. A company or other entity shall be a "holding company" for the purposes of this definition if it falls within either the meaning attributed to that term in Sections 736 and 736A of the Companies Act 1985 or the meaning attributed to the term "parent undertaking" in Section 258 of the Companies Act 1985, and a company or other entity shall be a "subsidiary" for the purposes of this definition if it falls within either the

SUBJECT TO CONTRACT

meaning attributed to that term in Sections 736 and 736A of the Companies Act 1985 or the meaning attributed to the term "subsidiary undertaking" in Section 258 of the Companies Act 1985.

"Business Day" means any day which is not a Saturday, Sunday or a public holiday in the relevant part of the United Kingdom.

"CCN" means a Change Control Note as provided in Schedule 8 (Change Control Procedure) to the Reference Offer Terms and Conditions.

"Change" has the meaning given in paragraph 1 of Schedule 8 (Change Control Procedure).

"Change Control Procedure" means the procedure set out at Schedule 8 (Change Control Procedure) to the Reference Offer Terms and Conditions.

"Change in Law" means any of the following (i) a change in the judicial interpretation or application by any Government Authority of any Law in the United Kingdom; (ii) the enactment or introduction of any new Law in the United Kingdom; (iii) the modification or repeal of any Law in the United Kingdom; (iv) the termination, amendment or revocation of any Consent; or (v) the introduction of new or amendment of existing non-binding guidelines, rules and guidances issued by any Government Authority.

"Change Register" has the meaning given in paragraph 3.1 of Schedule 8 (Change Control Procedure).

"Charges" means the amounts in respect of the Multiplex so described in Section 3 of the Reference Offer, as may be adjusted in accordance with this Agreement, including pursuant to the 2014 Review and/or the Change Control Procedure.

"Code of Practice" means the Arqiva code of practice entitled "Code of Practice for Site Sharers at Arqiva Sites - BOH325" dated January 2006, as the same may be updated by Arqiva from time to time by the publishing of an updated version at www.arqiva.com (or any successor or replacement website).

"COM" means a commercially operated Multiplex Service.

"Commitments" means orders to third party suppliers and any committed costs for the provision of internal resources for new network assets which will form part of the regulatory asset base.

"Common Accommodation" means Accommodation use (but not occupation) of which is shared or available for shared use by Arqiva, Customer, MTS Providers, and/or any other party authorised by Arqiva from time to time.

"Common Equipment" means any Equipment at any Station which is wholly or partly used to provide Network Access and which is shared or available for shared use by Arqiva, Customer, MTS Providers and/or any other party authorised by Arqiva from time to time.

"Confidential Information" means, in relation to either party, information (in any form) belonging or relating to the disclosing party, its Associated Companies, its or their business, clients, customers, business plans, affairs or activities, which information is confidential to the disclosing party, its Associated Companies, clients or customers (as the case may be), including trade secrets, information and data relating to existing or potential customers, technical and business information relating to the disclosing party's inventions or products, research and development, production, manufacturing and engineering processes, employees or officers, customer lists or requirements, price lists or pricing structures, marketing and sales information, business plans or dealings, financial information or plans, designs, product lines, any document marked "Confidential", or any information which the receiving party has been informed is confidential or which the receiving party might reasonably expect that the disclosing party would regard as confidential, and any confidential information of clients, customers, suppliers or other third parties.

SUBJECT TO CONTRACT

"Consensus Change" has the meaning given in paragraph 2.5(l) of Schedule 8 (Change Control Procedure).

"Consent" means any consent, approval, licence, authorisation or permission that Arqiva requires from any Government Authority, Landlord or other third party in order to provide Network Access, including any Arqiva Licence.

"Customer Accommodation" means any Accommodation used (but not occupied) exclusively by Customer at any Type 1 Station.

"Customer Equipment" means any Equipment used exclusively by Customer or otherwise under Customer's exclusive control as specified on the relevant Station Schedule from time to time.

"Customer Licence" means any radio spectrum licence required to be granted to Customer under Part I of the Wireless Telegraphy Act 1949 for the Permitted Use.

"Customer Output Signal" means the radio frequency signals produced by Customer Equipment.

"Digital Services" means high power DTT broadcasting transmission services in the United Kingdom to deliver content to end users by means of a Multiplex Service.

"DigitalUK" means Digital UK Limited (registered in England and Wales under number 5422613) whose registered office is at The Met Building, 22 Percy Street, London W1T 2BU.

"DSO" means Switchover for all Regions.

"DSO Cancellation" means the cancellation, or indefinite postponement or suspension, or postponement or suspension of more than eighteen (18) months, of Switchover in whole or in part by, or as a result of an announcement by, one of Her Majesty's Principal Secretaries of State.

"DTT" means digital terrestrial television.

"Due Date" means the date on or, as the case may be, by reference to which payment of any amount owed to Arqiva is to be made under any provision of this Agreement.

"Early Cancellation Fee" means an amount equal to:

- (i) the relevant portion of the actual cost (including capital investment, cost of capital and operating costs) incurred in building or operating the infrastructure for Network Access that will not be recovered because the termination of this Agreement pursuant to Clause 11.6 or 11.7 renders unusable or unnecessary certain parts of the infrastructure for Network Access; minus
- (ii) the relevant portion of the Charges paid by Customer up to the date of termination which related to the build or operation of such unusable or unnecessary parts of the infrastructure for Network Access.

"Engagement Process" means the engagement process set out at Section 4 of the Reference Offer.

"Equipment" means any transmission equipment, combining equipment, Antenna, other antenna, aerial, dish, transmitter, telemetry, plant, machinery, Services Media, apparatus, appliance, instrument or any other item of equipment which is used to provide Digital Services or any other services at any Station.

"Excluded Event" has the meaning given to it in paragraph 2 of Schedule 2 (Network Access Availability, Network Access Levels and Network Access Credits) to the Reference Offer Terms and Conditions.

"Exceptional Risk" means any of the risks listed in Part 2 of Schedule 7 (Risks) to the Reference Offer Terms and Conditions.

SUBJECT TO CONTRACT

"Execution Date" means the date this Agreement is executed by both parties.

"Expert" has the meaning given to it in Clause 17.3.

"Expert Procedure" means the expert determination procedure set out in Clauses 17.3 and 17.4.

"Expiry Date" has the meaning given to it in Clause 11.1.

"Expiry Fee" means an amount equal to the sum of: (i) the relevant portion of the depreciated replacement cost of all new assets used to provide Network Access in respect of the Multiplex as at the Expiry Date or, if earlier, the date of termination of this Agreement; (ii) the relevant portion of the actual and/or forecasted (as applicable) cost of decommissioning such assets; and (iii) Arqiva's other costs incurred which are directly attributable to the expiry or termination of this Agreement (including any redundancy costs or expenses incurred in amending any leases), reduced to reflect any mitigation in respect of (i), (ii) and (iii) above which Arqiva, using its reasonable endeavours, is able to secure. In this definition "relevant portion" means a pro rata share which reflects the number of multiplexes in respect of which Network Access is provided by Arqiva using such assets.

"Facilities" means shared use by Customer of such of the Equipment at any Station and shared or exclusive use (but not occupation) by Customer of such of the Accommodation as may be detailed on the applicable Station Schedule from time to time for the provision of Network Access at the relevant Station for the Permitted Use.

"Force Majeure Event" means any of the following events:

- (i) any act of God, insurrection or civil disorder, any act of terrorism or vandalism, war or military operations, national or local emergency, industrial disputes (official or unofficial) of third parties, fire, flood, a prolonged period of inclement weather, outbreak of disease or epidemic;
- (ii) any Change in Law;
- (iii) any act or omission of any Government Authority which is not a Change in Law;
- (iv) any act or omission of any utility provider; or
- (v) any other cause, whether similar or dissimilar, outside Arqiva's reasonable control.

"Future Capital Expenditure" means expenditure to third party suppliers, and expenditure for the provision of internal resources, for new network assets which form part of the regulatory asset base.

"Government Authority" means any supranational, state or local governmental entity or instrumentality (including any ministry, department, political subdivision, agency, corporation or other person exercising the delegated authority of any such person or entity) having jurisdiction (whether legislative, executive, regulatory, administrative, judicial or otherwise howsoever) over the subject matter of, or any matter pertaining to, this Agreement; either or both of the parties; and/or any persons employed, engaged or contracted by either of the parties.

"Intellectual Property Rights" means all rights to copyrights, inventions, registered or unregistered designs, trade marks, patents (and all applications for trade marks or patents), trade secrets, know-how, rights of confidence, moral rights and any other intellectual or industrial property rights of any nature, whether like those described above or otherwise, throughout the world.

"Interface Point" means, at any Station, the point where the Customer Equipment meets the Common Equipment, and being at such location as is specified by Arqiva on the applicable Station Schedule from time to time.

"JPP" means the Joint Frequency Planning Project established by Arqiva, NGW, the BBC and Ofcom.

SUBJECT TO CONTRACT

"JPP Plan" means the plan published by the JPP having document number JPP 252, Version 1.0 dated 2 December 2005.

"Landlord" means any person or body corporate holding an interest in any Station or in any land over which access to any Station is required including a reversionary interest as Arqiva's landlord, licensor or grantor, or as Station owner where Arqiva is the nominated Station manager, or the beneficiary of any covenants or restrictions relating to or affecting Arqiva's rights of access to any Station.

"Laws" means all Legislation, statutes, regulations, decrees, ordinances and other laws, regulations, by-laws, regulatory requirements and codes of practice of or issued by any Government Authority.

"Legislation" means any Act of Parliament or subordinate legislation within the meaning of Section 21(1) of the Interpretation Act 1978, any exercise of Royal Prerogative, and any enforceable community right within the meaning of Section 2 of the European Communities Act 1972, in each case in the United Kingdom.

"Main Station" means any Type 1 Station.

"Managed Transmission Services" means the managed services provided by Customer or an MTS Provider to the Multiplex Operator or any Other Multiplex Operator in respect of the provision of Digital Services.

"Mast" means any radio mast, tower, pole, rooftop, stub-mast, building elevation face mounting, head-frame or other aerial support pole or structure.

"MTS Provider" means any provider of Managed Transmission Services other than Customer.

"Multiplex" means *[insert details of multiplex to which this Agreement relates]*.

"Multiplex Service" has the meaning given to it in Part I of the Broadcasting Act 1996.

"Multiplex Operator" means the holder of a licence granted under Part I of the Broadcasting Act 1996 to provide a Multiplex Service in respect of the Multiplex.

"Net Present Value" means the value derived by applying a technique whereby cash inflows expected in future years are discounted back to their present value using the Applicable WACC.

"Network Access" has the meaning given to it in Section 1 of the Reference Offer.

"Network Access Availability" means the availability of Network Access for the Multiplex calculated as per the formula referred to in paragraph 4 of Schedule 2 (Network Access Availability, Network Access Levels and Network Access Credits) to the Reference Offer Terms and Conditions.

"Network Access Credits" means the credits payable by Arqiva as referred to in paragraph 5 of Schedule 2 (Network Access Availability, Network Access Levels and Network Access Credits) to the Reference Offer Terms and Conditions.

"Network Access Levels" means the availability levels of Network Access for the Multiplex referred to in paragraph 5 of Schedule 2 (Network Access Availability, Network Access Levels and Network Access Credits) to the Reference Offer Terms and Conditions.

"NGW" means National Grid Wireless Limited, a company incorporated under the laws of England and Wales with registered number 03196207 and having its registered office at 1-3 Strand, London WC2N 5EH.

"Normal Load Capacity" means sufficient electrical supply capacity to permit the powering of all transmission equipment of Customer and all MTS Providers at a Station.

"Ofcom" means the Office of Communications or any successor.

SUBJECT TO CONTRACT

"Other Multiplex Operator" means any operator of any multiplex other than the Multiplex.

"Pass-Through Costs" means the amounts so described in Section 3 of the Reference Offer.

"Permitted Use" means use (in accordance with the terms of the applicable Station Access Licence) by Customer of Customer Equipment located at the relevant Station(s) in respect of the Multiplex for the provision of Digital Services only.

"Post-DSO Review" has the meaning given to it in Schedule 9 (Review Process).

"Programme" means any programme or other content produced by or for any Customer Multiplex Operator.

"PSB" means a public service Multiplex Service.

"Quarter" means a calendar quarter.

"RBL" means any rebroadcast link which receives the radio frequency signal from another Station and provides a radio frequency input signal to either a transposer or re-transmitter.

"Reference Offer" means the reference offer published by Arqiva on 29 September 2006 in respect of the provision of Network Access pursuant to Condition JA4 (Requirement to publish a reference offer) of the Notification issued by Ofcom under Sections 48(1) and 79(4) of the Communications Act 2003 set out in the statement entitled "Broadcasting Transmission Services: a review of the market, Final Statement" published by Ofcom on 28 April 2005.

"Region" means a region as defined in the Switchover Timetable.

"Relay Station" means any Type 2 Station or Type 3 Station that is dependent, directly or indirectly, upon the service output of another Station, whether a Main Station or another Relay Station, for its programme input.

"Risk" means any Standard Risk or any Exceptional Risk.

"RPI" means the all items Retail Prices Index published by the Office for National Statistics (or equivalent index published by any successor organisation).

"Services Media" means any communications, telecommunications, electricity and/or other services supply or feeder cable, pipe, wire, earthwire, waveguide, conduit, duct or other service conducting media.

"Specification" means the specification of Network Access as set out in Section 2 of the Reference Offer.

"Standard Risk" means any of the risks listed in Part 1 of Schedule 7 (Risks) to the Reference Offer Terms and Conditions.

"Standard Station Access Terms" means the standard terms for access to a Station set out at Schedule 5 (Standard Station Access Terms) to the Reference Offer Terms and Conditions.

"Station Access Licence" means the Station access licence agreed between Customer and Arqiva for each Station in respect of which Customer has been granted Network Access for the Multiplex, which shall in each case comprise the Standard Station Access Terms and the applicable Station Schedule.

"Station Readiness Date" shall mean, in respect of a Station, the date that is six months prior to the Station Target Switchover Date for that Station.

"Station Schedule" means the relevant Station schedule agreed between Customer and Arqiva for the Multiplex in respect of each Station, setting out any Special Terms and Conditions relating to the relevant Station and being substantially in the form of the template set out at Schedule 4 (Station

SUBJECT TO CONTRACT

Schedule Template) to the Reference Offer Terms and Conditions, as may be updated from time to time pursuant to Clause 4.11 of the Station Access Licence.

"Station Switchover" means Switchover in respect of a Station.

"Station Switchover Date" means the date on which Station Switchover occurs.

"Station Target Switchover Date" means in respect of any Station the Target Switchover Date for the Sub-Region within which that Station is located.

"Stations" means: where the Multiplex is a PSB, the 560 stations listed in Appendix 5 (Station Details) to the Reference Offer; or, where the Multiplex is a COM, the 32 stations identified with the word "yes" in the column headed "COM Mux" in that Appendix; and "Station" means any or all of them.

"Sub-Region" means, within a Region, any Main Station and its associated Relay Stations.

"Sub-Region Charge" means the allocation of the Charges for a particular Sub-Region.

"Switchover" means the replacement of all analogue and low power DTT transmissions by high power DTT transmissions in respect of the relevant Multiplex Service.

"Switchover Completion" means the completion of Switchover for the last Region.

"Switchover Date" means in respect of each Sub-Region the date on which Switchover is completed in respect of that Sub-Region.

"Switchover Timetable" means version B11 of the regional roll-out timetable for Switchover, as published by DigitalUK, a copy of which is set out in Schedule 6 (Switchover Timetable) to the Reference Offer Terms and Conditions.

"Target Switchover Date" means, in respect of each Sub-Region, the date upon which, according to the Switchover Timetable, Switchover is due to be completed in respect of that Sub-Region.

"Term" means the term of this Agreement as set out in Clause 11.1.

"Transition Arrangements" means the arrangements for transitioning from existing analogue and/or low power digital services to Digital Services and the arrangements for dealing with all parties whose services may be impacted in connection with the same. A summary of such arrangements as currently proposed is set out in Appendix 1 (Description of Network Access: Principles and Proposed Methodology) to the Reference Offer.

"Transmitted Service Signal" means the radio frequency signals transmitted from the Antenna System at any Station.

"Type 1 Station", "Type 2 Station" and "Type 3 Station" means a station identified as being type 1, type 2 and type 3 respectively in Appendix 5 (Station Details) to the Reference Offer.

"Unavoidable Pass-Through Costs" means Pass-Through Costs which Arqiva, using its reasonable endeavours, is unable to avoid or mitigate.

"WTA Licence" means any radio spectrum licence granted under Part I of the Wireless Telegraphy Act 1949.

"Year" means the period from the date of execution of this Agreement until the next following 30 June and any subsequent period of twelve (12) consecutive months, or part thereof where the context requires.

SUBJECT TO CONTRACT

SCHEDULE 2

Network Access Availability, Network Access Levels and Network Access Credits

References in this Schedule to paragraphs are to paragraphs of this Schedule.

1. GENERAL

- 1.1 Arqiva will measure the Network Access Availability of each Station against the relevant Network Access Level on an annual basis. If in respect of any year Arqiva fails to achieve the Network Access Level as calculated using the formula set out in paragraph 4.1, Arqiva shall incur a liability to pay Network Access Credits to Customer which shall be calculated in accordance with the provisions of paragraph 5.
- 1.2 For the purposes of calculating Network Access Availability, minutes lost shall be accumulated from the time of notification of the relevant Network Access fault to the Arqiva National Customer Service Centre.
- 1.3 At the end of each Year, Arqiva shall provide Customer with a copy of its calculations of any Network Access Credits payable in respect of that Year. Network Access Credits shall be payable in accordance with Clause 9.7 of the Agreement.

2. EXCLUDED EVENTS

- 2.1 For the purpose of calculating Network Access Availability, the period of any interruption in provision of Network Access due to any of the following events shall not count as Minutes Lost:
- (a) a failure or interruption resulting from the Customer's refusal to grant or delay in granting permission for Arqiva to carry out planned or emergency essential maintenance;
 - (b) a failure or interruption resulting in a reduction in ERP (Effective Radiated Power) capability of:
 - (i) where a reserve antenna capable of radiating at the same ERP as the main antenna is provided: less than 1dB; or
 - (ii) in all other cases: less than 3dB;
 - (c) Arqiva's due compliance with safe working practices stipulated by the Health Protection Agency or any applicable Law or any generally recognised protocol or standard (whether or not having the force of law);
 - (d) any Force Majeure Event;
 - (e) a lightning strike directly on the Station or very close to it;
 - (f) inclement weather conditions affecting travelling to any Station;
 - (g) a delay of no more than 30 seconds in re-establishing Network Access when switching to standby equipment;
 - (h) a delay of no more than 30 seconds in re-establishing Network Access when switching to alternative power supplies;
 - (i) any fault requiring Mast ascent during the hours of darkness or inclement weather where, in the reasonable judgement of Arqiva, a potential safety hazard exists;
 - (j) any breach of this Agreement by Customer;

SUBJECT TO CONTRACT

- (k) any interruption as a result of Arqiva complying with directions issued to it by a Government Authority (including Ofcom);
- (l) any interruption as a result of an engineering test transmission made at the request of Customer;
- (m) where the parties agree that invasive tests are required, provided the work is agreed in advance;
- (n) Customer's failure to deliver the Customer Output Signal to Arqiva in accordance with and as contemplated by the terms of this Agreement;
- (o) any interruption resulting from defects or failures in the equipment or services provided or operated by or on behalf of Customer (other than equipment which Arqiva is required to operate and maintain);
- (p) damage or interruption to the use of any third party supplied Station facilities (e.g. a Station where the Antenna support structure is owned by a third party and where response to any damage to that structure and responsibility for any interruption to the use of that structure is controlled by that third party proprietor);
- (q) any interruption resulting from loss of mains electricity supply for any reason, except where permanent alternative electricity supply facilities, independent of the mains, are required to be provided by Arqiva under the Agreement;
- (r) any fault requiring attendance at a Station during any period where such attendance is not permitted or is otherwise prevented as a consequence of any Force Majeure Event;
- (s) any interruption due to causes listed in this Schedule at paragraph 3 as "Planned Works", provided that the time and duration of such works has been notified to and agreed by Customer in advance in accordance with the procedures notified by Arqiva to Customer from time to time;
- (t) any failure or interruption or reduction resulting from the Customer's failure or inability to adjust the power level of the transmitter output to that required to transmit the normal ERP via the particular antenna or antenna configuration selected by Arqiva at any time in order to provide Network Access (such configurations and associated gain calculations as per Appendix 3 (List of Main Stations and Gain Calculations) and Appendix 4 (List of Relay Stations and Gain Calculations) to the Reference Offer);
- (u) any compliance with any request or instruction of Customer, where the interruption would not have occurred but for such compliance;
- (v) additional time spent waiting for or travelling via ferries or flights required for access to island Stations;
- (w) any other occurrence that the parties mutually agree not to treat as Minutes Lost.

3. PLANNED WORKS

3.1 For the purpose of calculating Network Access Availability, the period of any interruption in provision of Network Access due to causes including any of the following events shall be counted as planned works and accordingly shall not count as Minutes Lost pursuant to paragraph 2.1(t) above:

- (a) maintenance or replacement of aircraft warning lights;
- (b) painting of the Antenna support structure;

SUBJECT TO CONTRACT

- (c) replacement, strengthening or maintenance of the Antenna support structure, including greasing of stays;
- (d) periodic inspections of the Antenna support structure, statutory or otherwise;
- (e) overhauls and periodic maintenance or replacement of Antenna Systems carrying the Transmitted Service Signal;
- (f) periodic inspections or maintenance of Antenna Systems carrying the Transmitted Service Signal;
- (g) periodic inspections of equipment related to the permanent electricity supply, statutory or otherwise; and
- (h) electricity meter changes.

4. NETWORK ACCESS AVAILABILITY

- 4.1 Network Access Availability shall be calculated annually in respect of each Station as a percentage for the immediately preceding 12 months by applying the following formula:

$$\text{Network Access Availability (Station)} = \frac{A - B}{A} \times 100\%$$

Where:

A = Total Minutes: Total number of minutes in the relevant 12 month period.

B = Minutes Lost: Total number of minutes in the relevant 12 month period during which Network Access was not available at the relevant Station, other than where such non-availability is attributable to an Excluded Event.

- 4.2 If the Network Access Availability for any Station as calculated in paragraph 4.1 above for the relevant 12 month period is less than the Network Access Level specified in Table 1 in paragraph 5 below for the corresponding Station Category, Network Access Credits shall be payable calculated in accordance with the formula in paragraph 5 below.

5. NETWORK ACCESS CREDITS

- 5.1 For each Station in respect of which Network Access Availability does not meet the relevant Network Access Level, the Network Access Credit shall be calculated according to the following formula:

$$\text{Network Access Credit (Station)} = SW \times (NAL - NAA) \times \text{£}3,000$$

Where:

SW = Station Weighting for the relevant Station.

NAL = Network Access Level for the relevant Station Category, expressed as a percentage.

NAA = Network Access Availability for the relevant Station, expressed as a percentage.

- 5.2 Station Categories, corresponding configurations and Network Access Levels shall be as shown in Table 1, below:

SUBJECT TO CONTRACT

Table 1

Category	Antenna Configuration	Mains Electricity Supply Configuration	Structure Height	Network Access Level
Alpha	Main and Reserve	Duplicated	>50m	99.95%
Beta	Split	Single	>50m	99.90%
Gamma	Single	Single	<50m*	99.50%

* A very small number of Stations included in this Station Category have structure heights in excess of 50m.

5.3 The Station Weighting applicable to each Station shall be as shown in Table 2, below.

Table 2

Station Name	Weighting
ANGUS	10
BEACON HILL (TORBAY)	15
BELMONT	58
BLACK HILL SC/CSC	154
CALDBECK SC	23
CARADON HILL SC	18
CHATTON	2
CHESTERFIELD	5
CRAIGKELLY	20
DARVEL	26
DOVER SC	22
DURRIS SC	22
EMLEY MOOR CSC/SC	73
FREMONT POINT	4
HUNTSHAW CROSS	6
IDLE	3
KEIGHLEY	8
KNOCKMORE	2
LANCASTER	6
MOEL-Y-PARC SC	4
NOTTINGHAM	3
PENDLE FOREST	5
PLYMPTON	1
PRESELI	6
RIDGE HILL	23
ROSNEATH	3
RUMSTER FOREST	3
SADDLEWORTH	2
SANDY HEATH	77

SUBJECT TO CONTRACT

Station Name	Weighting
SELKIRK	2
STOCKLAND HILL SC	13
WINTER HILL SC	234
ABERGAVENNY	5
BARSKEOCH HILL	2
BERWICK-UPON-TWEED	2
BLACK MOUNTAIN MC	3
CALNE	2
CAMBRET HILL	4
CATHCART	2
CEFN MAWR	2
DARWEN	3
DERBY - LITTLEOVER DFS	2
EYEMOUTH	2
GARTLY MOOR	2
GLASGOW (WEST CENTRAL)	3
HALIFAX	2
HASLINGDEN	4
HATCH BOTTOM	2
HAWICK	2
HUTTON	3
LEAMINGTON SPA	2
LES TOUILLETS	6
MORPETH	2
NEWCASTLE	2
NEWRY NORTH	3
PENICUIK	3
PERTH	7
PONTARDAWE	2
ROSEHEARTY	3
ROTHESAY	3
SKIPTON	8
ST THOMAS (EXETER)	3
STRABANE	6
STRANRAER	2
STROUD	4
TAY BRIDGE	7
TIVERTON	2
TODMORDEN	2
TREHARRIS	2
WHARFDALE	7
WHITEHAVEN	8
WREXHAM RHOS	13
YSTALYFERA	3
All other Stations	1

- 5.4 The total Network Access Credits payable in respect of any 12 month period shall be the aggregate of Network Access Credits payable in respect of each Station for the relevant 12 month period.
- 5.5 The total Network Access Credits payable in respect of any 12 month period shall not exceed one per cent (1%) of the aggregate Charges payable by the Customer to Arqiva under this Agreement in respect of that 12 month period inclusive of the uplift for contingencies but excluding Pass-Through Costs.

SUBJECT TO CONTRACT

SCHEDULE 3

Fault Handling and Support Services

Support services available to Customer include the following:

1 CALL HANDLING

Service calls will be answered 24 hours a day, 365 days a year by a suitably trained and competent operator, who will deal with the call directly or redirect it to an appropriate Arqiva specialist. Calls relating to faults will be dealt with and progressed on an immediate basis, 24 hours a day, 365 days a year.

Customer shall ensure that all calls concerning faults are made to the telephone number(s) notified to Customer by Arqiva from time to time in writing.

2 FAULT HANDLING

Customer will be responsible for providing an initial response to all faults, and using its reasonable endeavours to correct the fault where practicable (and where authorised to do so), and subsequently to pass any faults that it is unable to correct to Arqiva's fault handling unit using the contact details notified to Customer by Arqiva from time to time in writing. Arqiva's fault handling unit will provide advice by telephone to aid fault mitigation and assist Customer to minimise service impact, informed by alarms and indications from Arqiva's telemetry system. Arqiva will thereafter initiate a physical visit to the Station, 24 hours a day, 365 days a year, should Arqiva consider this to be required.

Where any fault handling procedures undertaken by Arqiva reveal that the fault relates to Customer Equipment, Arqiva reserves the right to levy an additional charge for such activities.

3 REPAIR

Where Arqiva needs to physically attend any Station for repairs, it will arrange for this as soon as is reasonably practicable, normally within the same Business Day or within the next Business Day if the fault is reported outside office hours (being 8am to 5pm on Business Days), and depending upon the particular specialisation required. Arqiva will provide a permanent repair, or temporary repair, or temporary replacement infrastructure, or best practical mitigation of service impact, depending upon the nature of the fault. Whilst Station visits will from time to time (where considered appropriate by Arqiva) be made outside office hours, repair works that require structural ascent will normally only be safe and practical in good light and suitable weather, and a final decision as to whether it is safe to climb will be made by Arqiva staff.

SUBJECT TO CONTRACT

SCHEDULE 4

Station Schedule Template

<p>1. Arqiva Name: Arqiva Limited Registered Office: Crawley Court, Winchester, Hampshire SO21 2QA</p> <p>Customer Name: Registered Office:</p> <p>Customer Address for correspondence and notices (if different from above):</p> <p>E-mail address:</p> <p>Customer Telephone No: Fax No: Contact Name:</p>	<p>2. Station Name: Grid Reference: Arqiva reference no: Customer reference: Multiplex:</p>
<p>Customer Address for correspondence and notices (if different from above):</p> <p>E-mail address:</p> <p>Customer Telephone No: Fax No: Contact Name:</p>	<p>3. First Access Date</p>
<p>5. Customer Accommodation In accordance with attached drawing no [●]</p>	<p>4. Licence Expiry Date 31 December 2032 (subject to the terms of the Licence)</p>
<p>6. Interface Point (including split Antenna facilities where available, interface connector type and transmitter isolation method)</p>	
<p>7. Cross Patch U-link Patch Panel Available?</p>	
<p>8. Power Supply Capacity</p>	
<p>9. Customer Equipment</p>	
<p>10. CCU Stopband Attenuation Code</p>	
<p>11. Customer Output Signal Parameters</p> <p>Frequency: _____ Power: _____</p>	
<p>12. Special Terms and Conditions (including any special access conditions)</p>	
<p>IT IS AGREED: Arqiva shall provide, and Customer shall enjoy, the Facilities at the Station for the Licence Term subject to and in accordance with the Standard Terms and Conditions hereunder and the Special Terms and Conditions above (if any). (Where there is any conflict between the Standard Terms and Conditions and the Special Terms and Conditions, the Special Terms and Conditions shall prevail.)</p> <p>Signed for Customer: Countersigned for Arqiva:</p> <p>PRINT NAME: PRINT NAME:</p> <p>Date of Customer Signature: Date of Arqiva countersignature:</p>	

SUBJECT TO CONTRACT

SCHEDULE 5

Standard Station Access Terms

STANDARD TERMS AND CONDITIONS

The following rights and conditions shall be observed by the parties to the Licence (as defined herein). All of these standard terms will be incorporated in the Licence unless expressly excluded by any of the Special Terms and Conditions.

Capitalised terms in the Licence shall have the meaning set out below, save where the context requires otherwise:

"Accommodation"	means any land, building, structure, erection, installation, cabin, cabinet, kiosk or equipment housing structure (including any Mast) of Arqiva used to house or bear Equipment situated at or adjacent to and serving the Station (including private access ways, paths and private roads in or leading to the Station).
"Agreed Exposure Density"	means the Exposure Density of any Customer Equipment that Arqiva has confirmed to Customer does not (on the date such confirmation is made), when taken in conjunction with existing communications apparatus (including that of other users) located at the Station at that date, result in that Customer Equipment causing the Station's aggregate exposure density to exceed the ICNIRP Public Guidelines.
"Antenna"	means any aerial, antenna, dish or other item of equipment, apparatus, appliance or instrument installed on or affixed to any Mast at the Station for the reception, transmission or relay of radio or electromagnetic waves and used in the provision of Digital Services.
"Antenna System"	means the Equipment including Common Equipment comprising the entire radio frequency transmission and reception system at any Station, including any Antennas, feeders, U-link patch panels, combiner/filter systems and any interconnecting feeders from any combiner to the Interface Point.
"Approved Contractor"	means a person or team of persons (including Customer and its employees) approved by Arqiva (pursuant to and subject to the terms of Clause 2.2 of the Licence) as being properly trained, qualified and experienced to carry out the kinds of activities permitted by the Licence.
"Arqiva Licence"	means any radio spectrum licence granted to Arqiva under Part I of the Wireless Telegraphy Act 1949.
"Business Day"	means any day which is not a Saturday, Sunday or a public holiday in the relevant part of the United Kingdom.
"Change in Law"	means any of the following (i) a change in the judicial interpretation or application by any Government Authority of any Law in the United Kingdom; (ii) the enactment or introduction of any new Law in the United Kingdom; (iii) the modification or repeal of any Law in the United Kingdom; (iv) the termination, amendment or revocation of any Consent; or (v) the introduction of new or amendment of existing non-binding guidelines, rules and guidances issued by any Government Authority.
"Charges"	means the charges payable under the Network Access Agreement.
"Code of Practice"	means the Arqiva code of practice entitled "Code of Practice for Site Sharers at Arqiva Sites - BOH325" dated January 2006, as the same may be updated by Arqiva from time to time by the publishing of an updated version at www.arqiva.com (or any successor or replacement

SUBJECT TO CONTRACT

	website).
"Common Accommodation"	means Accommodation use (but not occupation) of which is shared or available for shared use by Arqiva, Customer, MTS Providers, and/or any other party authorised by Arqiva from time to time.
"Common Equipment"	means any Equipment at the Station which is wholly or partly used to provide Network Access and which is shared or available for shared use by Arqiva, Customer, MTS Providers, and/or any other party authorised by Arqiva from time to time.
"Consent"	means any consent, approval, licence, authorisation or permission that Arqiva requires from any Government Authority, Landlord or other third party in order to provide Network Access, including any Arqiva Licence.
"Customer Accommodation"	means any Accommodation used (but not occupied) exclusively by Customer at any Type 1 Station.
"Customer Equipment"	means any Equipment used exclusively by Customer or otherwise under Customer's exclusive control as specified on the relevant Station Schedule from time to time.
"Customer Output Signal"	means the radio frequency signals produced by Customer Equipment.
"Digital Services"	means high power DTT broadcasting transmission services in the United Kingdom to deliver content to end users by means of a Multiplex Service.
"DTT"	means digital terrestrial television.
"Equipment"	means any transmission equipment, combining equipment, Antenna, other antenna, aerial, dish, transmitter, telemetry, plant, machinery, Services Media, apparatus, appliance, instrument or any other item of equipment which is used to provide Digital Services or any other services at the Station.
"Exposure Density"	means the maximum electric field strength values in dB microvolts per meter converted to power density in watts per square metre for operational electronic communications apparatus as set out in the manufacturer's equipment specification for the relevant apparatus.
"Facilities"	means shared use by Customer of such of the Equipment at the Station and shared or exclusive use (but not occupation) by Customer of such of the Accommodation as may be detailed on the relevant Station Schedule from time to time for the provision of Network Access at the Station for the Permitted Use.
"First Access Date"	means the first access date specified on the relevant Station Schedule from time to time.
"Government Authority"	means any supranational, state or local governmental entity or instrumentality (including any ministry, department, political subdivision, agency, corporation or other person exercising the delegated authority of any such person or entity) having jurisdiction (whether legislative, executive, regulatory, administrative, judicial or otherwise howsoever) over the subject matter of, or any matter pertaining to, the Licence; either or both of the parties; and/or any persons employed, engaged or contracted by either of the parties.
"HPA"	means the Health Protection Agency or any replacement or successor body, being the body responsible for setting UK industry accepted guidelines for maximum permitted power density of non-ionising radiation for public exposure, and which at the date of the Licence established such guidelines by reference to guidelines published by ICNIRP.

SUBJECT TO CONTRACT

"ICNIRP"	means the International Commission for Non-Ionising Radiation Protection or any replacement or successor body.
"ICNIRP Public Guidelines"	means the frequency dependent public guidelines established by ICNIRP that set out a maximum permitted power density of non-ionising radiation for public exposure.
"Interface Point"	means, at the Station, the point where the Customer Equipment meets the Common Equipment, and being at such location as is specified by Arqiva on the relevant Station Schedule from time to time.
"Landlord"	means any person or body corporate holding an interest in the Station or in any land over which access to the Station is required including a reversionary interest as Arqiva's landlord, licensor or grantor, or as Station owner where Arqiva is the nominated Station manager, or the beneficiary of any covenants or restrictions relating to or affecting Arqiva's rights of access to the Station.
"Laws"	means all Legislation, statutes, regulations, decrees, ordinances and other laws, regulations, by-laws, regulatory requirements and codes of practice of or issued by any Government Authority.
"Legislation"	means any Act of Parliament or subordinate legislation within the meaning of Section 21(1) of the Interpretation Act 1978, any exercise of Royal Prerogative, and any enforceable community right within the meaning of Section 2 of the European Communities Act 1972, in each case in the United Kingdom.
"Licence"	means the Station access licence agreed between Customer and Arqiva for the Station, which shall comprise the Standard Station Access Terms and the relevant Station Schedule from time to time.
"Licence Expiry Date"	means the licence expiry date specified on the relevant Station Schedule from time to time.
"Licence Term"	means the period from the First Access Date to the Licence Expiry Date, unless determined sooner in accordance with the terms of the Licence or the Network Access Agreement.
"Managed Transmission Services"	means the managed services provided by Customer or an MTS Provider to any Multiplex Operator in respect of the provision of Digital Services.
"Mast"	means any radio mast, tower, pole, rooftop, stub-mast, building elevation face mounting, head-frame or other aerial support pole or structure.
"MTS Provider"	means any provider of Managed Transmission Services, other than Customer, authorised by Arqiva.
"Multiplex"	means <i>[insert details of multiplex to which this Licence relates]</i> .
"Multiplex Service"	has the meaning given to it in Part I of the Broadcasting Act 1996;
"Multiplex Operator"	means the holder of a licence granted under Part I of the Broadcasting Act 1996 to provide a Multiplex Service in respect of the Multiplex.
"Network Access"	has the meaning given to it in Section 1 of the Reference Offer.
"Network Access Agreement"	means the agreement entered into between Customer and Arqiva for the provision by Arqiva to Customer of Network Access.
"Ofcom"	means the Office of Communications.
"Other Multiplex Operator"	means any operator of any multiplex other than the Multiplex.
"Pass-Through Costs"	means the amounts so described in Section 3 of the Reference Offer.
"Permitted Use"	means use (in accordance with the terms of the Licence) by Customer of Customer Equipment located at the Station for the provision of

SUBJECT TO CONTRACT

	Digital Services only.
"Reference Offer"	means the reference offer published by Arqiva on 29 September 2006 in respect of the provision of Network Access pursuant to Condition JA4 (Requirement to publish a reference offer) of the Notification issued by Ofcom under Sections 48(1) and 79(4) of the Communications Act 2003 set out in the statement entitled "Broadcasting Transmission Services: a review of the market, Final Statement" published by Ofcom on 28 April 2005.
"Rights"	means rights granted to Customer by Arqiva under the Licence.
"Services Media"	means any communications, telecommunications, electricity and/or other services supply or feeder cable, pipe, wire, earthwire, waveguide, conduit, duct or other service conducting media.
"Standard Station Access Terms"	means the standard terms for access to a Station as set out herein.
"Station"	means, for the purposes of the Licence, the station to which the Licence relates as specified on the relevant Station Schedule from time to time, including all the Accommodation and Equipment installed or located at it.
"Station Schedule"	means the relevant Station schedule agreed between Customer and Arqiva in respect of the Station, setting out any Special Terms and Conditions relating to the Station and being substantially in the form of the template set out at Schedule 4 (Station Schedule Template) to the Reference Offer Terms and Conditions, as may be updated from time to time pursuant to Clause 4.11 of the Licence.
"Transmitted Service Signal"	means the radio frequency signals transmitted from the Antenna System at any Station.
"Type 1 Station", "Type 2 Station" and "Type 3 Station"	means the Stations identified as being type 1, type 2 and type 3 respectively in Appendix 5 (Station Details) to the Reference Offer.

Any references in the Licence to "Clauses" are to clauses of the Licence unless otherwise stated. Where the context so admits or requires words denoting the singular include the plural and vice versa and words denoting any gender include all genders. Clause headings are purely for ease of reference and do not form part of or affect the interpretation of the Licence. References to each party herein include references to its successors in title, permitted assigns and novatees. All references to "include" and "including" shall be construed to mean "include without limitation" and "including without limitation" respectively. All references to a statute or statutory provision include any consolidation or re-enactment, modification or replacement of the same, any statute or statutory provision of which it is a consolidation, re-enactment, modification or replacement and any subordinate legislation in force under any of the same from time to time. Any provisions in the Licence regarding indemnities from Customer in favour of Arqiva are without prejudice to the indemnities set out in Clauses 13.9 and 13.10 of the Network Access Agreement.

1. RIGHTS GRANTED BY ARQIVA TO CUSTOMER

Arqiva shall grant Customer:

- 1.1 The right for Customer to share (in common with others, including Arqiva, as Arqiva may in its discretion from time to time approve) such of the Common Accommodation and such of the Common Equipment at the Station in order to obtain Network Access.
- 1.2 The right for any Approved Contractor to install, inspect, service, maintain, repair, renew, replace, dismantle and remove as necessary Customer Equipment at Customer's own expense in such locations on the Station as Arqiva shall from time to time approve in writing.

SUBJECT TO CONTRACT

- 1.3 The right to house Customer Equipment in Common Accommodation in common with others permitted by Arqiva at Type 2 Stations and Type 3 Stations.
- 1.4 The right to house Customer Equipment in Customer Accommodation at Type 1 Stations. Customer Accommodation shall be provided by Arqiva.
- 1.5 Subject as herein provided, the right to use Customer Equipment for the Permitted Use for the duration of the Licence Term.
- 1.6 Without prejudice to Clause 1.7 below, subject to the reasonable regulations and instructions from time to time imposed by Arqiva for the better security, safety and management of the Station the right, subject to giving prior notice to Arqiva, for Approved Contractors to obtain admittance to the Station over and along any private way leading to the Station boundary which is under the control of Arqiva (either with or without motor vehicles as Arqiva shall decide) at all reasonable times and as often as Customer shall reasonably require to exercise the Rights.
- 1.7 The right, subject to giving prior notice to Arqiva, with effect from the First Access Date for Approved Contractors to have access to and egress from the Station as necessary for Customer to exercise the Rights, to the extent that Arqiva is able to grant the same (but otherwise subject to and in accordance with the provisions of Clauses 2.4, 2.5 and 2.7).
- 1.8 The right (subject to obtaining Arqiva's prior consent, such consent not to be unreasonably withheld or delayed) on an ad hoc basis to permit third parties (including Customer Multiplex Operators, telecommunications operators or utilities) to access the Station from time to time, provided:
 - (a) such access shall be requested and granted only when reasonably required and only for the purposes of the Permitted Use;
 - (b) Customer shall ensure such access is in accordance with the terms and conditions of the Licence and the Network Access Agreement (including with respect to Arqiva's rights to require that any Station access is supervised); and
 - (c) Customer shall ensure that such third party does not reside at the Station or remain at the Station for an undue period.

2. COVENANTS BY CUSTOMER IN FAVOUR OF ARQIVA

Customer agrees that:

- 2.1 It shall pay any amounts due under the Licence which are not covered by the Charges and Pass-Through Costs payable under the Network Access Agreement within thirty (30) days of receipt of Arqiva's invoice or other written demand for the same.
- 2.2 It shall not carry out any installation, inspection, servicing, maintenance, repair, renewal, replacement, dismantling or removal of any Customer Equipment otherwise than by an Approved Contractor. No person shall become an Approved Contractor until such time as Customer has notified Arqiva in writing that it wishes to appoint a person(s) as an Approved Contractor, has provided all such information regarding such person(s) as Arqiva may reasonably require, and has received written confirmation from Arqiva that such person is to be treated as an Approved Contractor. Arqiva may at any time notify Customer in writing that any person is no longer considered to be an Approved Contractor, following which such person shall immediately cease to be treated as an Approved Contractor. Customer acknowledges and agrees that Customer and its employees shall not qualify as Approved Contractors unless and until approved by Arqiva pursuant to the procedure set out in this Clause 2.2.
- 2.3 It shall not exercise any of the Rights until:
 - (a) on or after the First Access Date;

SUBJECT TO CONTRACT

- (b) Arqiva's prior approval in writing to provide the Facilities required by Customer has been given; and
 - (c) Arqiva has confirmed that any planning consents, statutory local authority or regulatory clearances and any other licence, consent, permission or approval of any Landlord or other third party whose licence, consent, permission or approval shall be required to facilitate or accommodate:
 - (i) the installation, use and operation of Customer Equipment, and/or
 - (ii) Customer's use and/or sharing of the Accommodation and/or the Common Equipment, and/or
 - (iii) the exercise of the Rights granted by the Licence,have been obtained.
- 2.4 Where entry to the Station is not via a public highway but via an access way owned or controlled by a third party and Customer has been notified that Arqiva cannot grant rights of access over such access way, Customer agrees that it shall not seek to negotiate such rights for Approved Contractors directly with such third party, and shall, if it requires such rights, request that Arqiva negotiates such rights on Customer's behalf (Customer bearing any costs incurred by Arqiva in negotiating and maintaining such rights) prior to exercising any Rights hereunder, but otherwise access to the Station boundary shall be at no extra charge (save only as herein provided) and Customer shall procure that such rights are exercised by Approved Contractors strictly in accordance with the terms of such rights and otherwise as reasonably directed from time to time by Arqiva. Arqiva may in its discretion accept or reject any request under this Clause 2.4.
- 2.5 Where Arqiva permits access to or egress from the Station involving the use of any road, path or other land which is not a highway maintainable at public expense Customer accepts that it shall be required to:
- (a) observe or cause to be observed all regulations relating to the weight, type and specification of vehicles to be used on such road path or other land as Arqiva shall reasonably direct; and
 - (b) pay to Arqiva in addition to any other charges herein a due and proper proportion of any cost, charges and expenses incurred by Arqiva in and towards maintenance, repair, resurfacing and renewal of any such road, path, barrier, boundary or other land and the whole cost of making good any damage (fair wear and tear excepted) caused by Customer or any Approved Contractor to such road, path, barrier, boundary or other land to Arqiva's reasonable satisfaction.
- 2.6 Where any Customer Equipment is to be placed on, above or below ground outside the Station boundary and where Arqiva is not otherwise able to grant any such rights of installation and/or use over the same, Customer shall obtain, at its sole expense, the agreement of any other party or parties having an interest in such area(s) prior to installation or use and shall indemnify Arqiva fully in this respect.
- 2.7 Save to the extent that Arqiva notifies Customer in writing that it is willing to waive (in whole or in part) its rights under this Clause 2.7 in respect of any Approved Contractor(s), Customer agrees that Approved Contractor(s) shall only visit and obtain admittance to the Station on not less than five (5) Business Days' prior notice in writing (except in case of emergency when as much notice as possible shall be given to Arqiva) and in all cases in the presence of a duly authorised representative of Arqiva (if Arqiva so requires) at the same time specifying details of the purpose of or reason for the admittance, together with advance notice in writing of any proposed works. Any waiver of its rights pursuant to this Clause 2.7 may be withdrawn by Arqiva at any time forthwith on written notice to Customer. Customer further agrees that it shall exercise the Rights subject to all reasonable regulations and instructions made from time to time by Arqiva to protect the Station and any users thereof, to avoid or minimise any

SUBJECT TO CONTRACT

damage, disturbance, interference or inconvenience to Arqiva or any third party and/or the use or operation of any Equipment, and to control as necessary the number, supervision and times of such visits for the orderly management of the Station.

- 2.8 Other than as expressly permitted by Clauses 1.6, 1.7, 1.8 and 2.7 above, Customer shall not permit or allow any other persons to visit the Station or operate the Customer Equipment.
- 2.9 It shall ensure that, whilst at the Station, Approved Contractors shall behave in a responsible manner and comply with all Arqiva's reasonable security and/or safety requirements, so as to cause no damage, disturbance, interference or inconvenience to Arqiva, any MTS Provider or any other third party and/or the installation, use or operation of any Equipment, and in the event of any damage being caused to the Station, the Accommodation or to any property or items of Equipment thereon whether in consequence of the exercise by any Approved Contractor of the Rights granted to them under the Licence or otherwise (but not as the result of any negligent act or omission of Arqiva or its employees, agents or sub-contractors) forthwith to reinstate the same to Arqiva's reasonable satisfaction (or, where Arqiva requires, reimbursement to Arqiva of the full costs and expenses properly incurred by it in carrying out such reinstatement on Customer's behalf).
- 2.10 In exercising the Rights, Customer shall procure that the Station is kept secure and shall provide Arqiva with a set of keys or code access to the Customer Accommodation in accordance with such operating procedures as are notified by Arqiva to Customer in writing from time to time.
- 2.11 It shall comply with directions of Arqiva from time to time (which may include requiring Customer to comply with specified sections of the Code of Practice) and any operating procedures as are notified by Arqiva to Customer in writing from time to time.
- 2.12 It shall use all reasonable endeavours not at any time electrically or physically to impede, degrade, impair, disrupt, interfere with or interrupt the reception, transmission or relay of any Digital Services or any other services, signals or transmissions to or from the Station, and forthwith will use all reasonable endeavours to ensure the repair of any defects or faults in any Customer Equipment and/or in the use or operation of it which causes or may cause any such interference, and to otherwise terminate, cease or prevent such interference, and shall indemnify Arqiva against any costs properly incurred by Arqiva or any third party in remedying any such defects or faults and against any claims brought against Arqiva by any third party arising from any such interference.
- 2.13 It shall keep Customer Equipment properly maintained in good safe working order, repair and condition to Arqiva's satisfaction (which shall include the carrying out by Customer of regular and prudent safety inspections not less than annually, and provide Arqiva with evidence that such inspections have been carried out on request). In respect of all Customer Equipment, Customer shall in addition:
- (a) procure that Customer Equipment is labelled and identifiable as Customer's, and identifies the frequencies used by the Customer Equipment;
 - (b) ensure that Customer Output Signals from such Customer Equipment comply with the requirements set out in the following standard published by the European Telecommunications Standard Institute (or such other equivalent, replacement or successor standard as Arqiva may from time to time approve in writing): ETSI EN 302 296 (Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Transmitting Equipment for the Digital Television Broadcast Service, Terrestrial (DVB-T); Harmonized EN under Article 3.2 of the R&TTE Directive), and Customer acknowledges that Arqiva shall have no obligation to carry over the Common Equipment any Customer Output Signals which do not so comply;
 - (c) ensure that Customer Output Signals from the Customer Equipment at the Interface Point are within the parameters set out on the relevant Station Schedule from time to time;

SUBJECT TO CONTRACT

- (d) comply with all applicable Laws regarding health and safety relating to the installation, use and operation of the Customer Equipment including all guidelines from time to time issued by the HPA applicable to the use and operation of the Customer Equipment;
 - (e) provide Arqiva on request (but normally not more often than once a year unless Customer proposes to make a significant change to the Customer Equipment, its size or weight, in which case a report will be required detailing the change prior to such change taking place) with a compliance report relating to the Agreed Exposure Density of the Customer Equipment in relation to the ICNIRP Public Guidelines or other HPA guidelines in so far as they affect adjoining areas to which the public have legitimate access and in the event that the radio-frequency radiation levels from the Customer Equipment fail to meet such guidelines in so far as they affect adjoining areas to which the public have legitimate access, Customer shall pay for any applicable testing and other associated costs, charges and expenses incurred by Arqiva, and Arqiva may additionally require Customer to switch off the Customer Equipment (without liability or compensation to Customer) until remedial action has been undertaken so that the HPA guidelines are met in relation to the said adjoining areas; and
 - (f) provide Arqiva forthwith on request from time to time with current details of power output of the Customer Equipment to enable Arqiva to undertake periodic Station power output audits in order to demonstrate Station compliance with the ICNIRP Public Guidelines and any other HPA guidelines or regulatory or UK industry best practice audit requirements.
- 2.14 In the event that Arqiva has reasonable grounds to believe that the Customer Equipment or its use or operation is the source or cause of any interference or degradation to the reception, transmission or relay of any Digital Services or any other services, signals or transmissions to or from the Station, Customer shall forthwith either eliminate the interference or degradation or, where there is significant interference or degradation which cannot be remedied in such time as Arqiva shall reasonably require, switch off Customer Equipment until such time as the interference or degradation has been eliminated, the cost of such measures to be borne by Customer in any event (subject also to the provisions of Clause 2.16).
- 2.15 Where requested by Arqiva on reasonable prior notice (or forthwith in the case of an emergency), temporarily reduce power or switch off Customer Equipment where Arqiva considers the radiation level of the Customer Equipment is unsafe for access to the Mast or to any Equipment or Accommodation by Arqiva, its employees, agents, sub-contractors or other persons authorised by Arqiva. In such circumstances Customer will be required to keep the relevant Customer Equipment on reduced power or switched off until all such persons and their equipment have completed the relevant tasks and left the Mast, Equipment or Accommodation. Arqiva will use reasonable endeavours to minimise the disruption to Customer when making such requests.
- 2.16 It shall provide a switch on all Customer Equipment to enable it to be switched off by Arqiva and shall provide Arqiva with an agreed method of switching off Customer Equipment provided that it is agreed that Arqiva shall only switch off Customer Equipment:
- (a) in the event of any life or property threatening emergency;
 - (b) where Arqiva has reasonable grounds to believe that the source or cause of any interference or degradation to the reception, transmission or relay of any Digital Services or other services, signals or transmissions to or from the Station is the Customer Equipment or its operation or use and after taking all reasonable measures to contact and inform Customer that such interference or degradation exists and where practicable to do so Arqiva has allowed Customer a reasonable period forthwith to remedy any such interference or degradation caused by Customer Equipment but the interference or degradation still exists;

SUBJECT TO CONTRACT

- (c) if required to do so by any Government Authority, provided that Arqiva shall (where reasonably practicable) use its reasonable endeavours to inform Customer of such requirement before the Customer Equipment is switched off;
- (d) with the agreement and at the request of Customer;
- (e) where Customer's entitlement to Network Access at the Station has expired or been terminated pursuant to the Network Access Agreement or the Licence but Customer has failed to switch-off the Customer Equipment;
- (f) where Customer is in material breach of any of the terms of the Licence and/or the Network Access Agreement, including Customer's obligation to pay the Charges, Pass-Through Costs or any other amounts due thereunder or hereunder;
- (g) where Arqiva reasonably considers that, if it were to permit or allow to continue the transmission of certain Transmitted Service Signals from the Station, it would cause Arqiva to be in breach of any obligation in any contract with a third party (such as for example but without limitation any covenant or restriction in any relevant lease, licence or other document affecting the use of the Station or access rights to it);
- (h) in order for Arqiva to conduct any maintenance or other works or for other purposes as contemplated by Clause 2.15;
- (i) otherwise in accordance with the specific provisions herein contained or (if applicable) as contained in any Arqiva operating procedures notified from time to time; or
- (j) where Arqiva reasonably considers it necessary in the event of any unauthorised access, use or occupation of the Station, any Accommodation or any Equipment,

and in the event that any Customer Equipment is switched off or disconnected pursuant to this Clause 2.16, Arqiva shall notify Customer of this as soon as reasonably practicable.

- 2.17 It shall not, without Arqiva's prior written consent, carry out any activity within or outside the Station that may result in any change to:
- (a) the Permitted Use;
 - (b) the size or weight of Customer Equipment;
 - (c) the Agreed Exposure Density of Customer Equipment; or
 - (d) the agreed technical operating specifications of Customer Equipment and other details, as set out on the relevant Station Schedule from time to time.
- 2.18 It shall keep any Common Accommodation used by Customer and all Customer Accommodation clean and tidy and free from its own rubbish and shall not obstruct or cause to be obstructed any passages, paths, access ways and fire escapes (and in respect of fire doors, not keep or block any such doors open) on or serving the Station. Customer shall be responsible for keeping the interior of Customer Accommodation in reasonable repair and condition. Customer shall also prepare and maintain an up-to-date map of each Customer Accommodation showing the location of all Customer Equipment at each Customer Accommodation, and promptly make the same available to Arqiva on request.
- 2.19 Arqiva shall own all Customer Accommodation.
- 2.20 It shall not tamper with or otherwise cause any damage to the Station, any Accommodation (including any Mast) or any Equipment (including any Antenna) which is located at the Station, provided that Customer shall be entitled to exercise the rights expressly permitted herein in respect of the Customer Equipment and Customer Accommodation.

SUBJECT TO CONTRACT

- 2.21 It shall not erect or cause to be erected any building or structure or other erection at the Station, save as may be expressly specified on the relevant Station Schedule from time to time. None of Customer or any Approved Contractor shall make any alterations or additions to any part of the Station, any Equipment (other than Customer Equipment to the extent expressly permitted herein), or to any Accommodation (other than Customer Accommodation to the extent expressly permitted herein) unless expressly permitted to do so by Arqiva in writing. None of Customer or its Approved Contractors shall make any alterations or additions to Customer Accommodation or to Customer Equipment without the prior written consent of Arqiva (such consent not to be unreasonably withheld or delayed, but which may be made subject to conditions including as to costs and a requirement that any such alterations or additions be subject to supervision by Arqiva, its employees, agents, sub-contractors or other persons authorised by Arqiva). Such consents aforesaid shall also be subject (if necessary) to Arqiva obtaining any Consent (the costs of which shall be met by Customer).
- 2.22 It shall not make any application for or appeal regarding planning permission (including any full planning permission, applications under general development orders, or by licence notification) in relation to any part of the Station, any Equipment (including the Customer Equipment) or any Accommodation (including the Customer Accommodation).
- 2.23 It shall not erect or permit or suffer or allow to be erected any sign notice or advertisement on the Station (save as herein expressly provided).
- 2.24 It shall satisfy Arqiva prior to installing Customer Equipment as herein permitted that all proper precautions will be taken to prevent fire damage and that the provisions of the Health and Safety at Work Act 1974 and any regulations made thereunder and all other applicable Laws and any reasonable additional precautions laid down by Arqiva for the protection of the Station and the Facilities and the safety of personnel and equipment will be complied with regardless of whether or not such installation shall be supervised by Arqiva. This will include, without prejudice to the generality of the foregoing, a requirement for Customer to provide at its own cost all necessary fire fighting equipment and safety clothing for use in respect of Customer Accommodation (if any) and Customer Equipment.
- 2.25 It shall not light or permit or suffer or allow to be lit any fire on the Station or on any access thereto nor block or obstruct nor permit or suffer or allow to be blocked or obstructed any fire exits or access for fire fighting equipment thereon.
- 2.26 It shall under no circumstances permit any of its employees or its Approved Contractors or any third party to reside at the Station.
- 2.27 It shall in exercising the Rights comply and procure that all Approved Contractors comply with the terms and conditions of the Licence and do not cause any nuisance or annoyance or undue noise to Arqiva or any neighbouring owners or occupiers and do not drive or walk over any private land or property adjoining the Station over which rights have not been granted under the Licence, or otherwise, and that they shall secure any doors and gates after use.
- 2.28 Arqiva may:
- (a) refuse entry to the Station to any person who does not produce suitable documentary identification and authorisation to Arqiva's representative at the Station; and
 - (b) refuse admittance to or require removal from the Station of any person whose presence is considered undesirable.
- 2.29 Arqiva has the right to install meters, sub-meters and other equipment in any Customer Accommodation to permit Arqiva to measure Customer's consumption of electricity.
- 2.30 Arqiva is the sole and exclusive supplier of electricity to the Station.

SUBJECT TO CONTRACT

- 2.31 It shall not install nor suffer the installation of any alternative facilities for the supply of electricity, or any other facilities including communication links, other than with Arqiva's prior written consent which may be made subject to conditions.
- 2.32 Subject to Clause 2.31 above, Customer agrees that if it requires any third party services at the Station (including telephony services), including any services which may need to pass in, on, over or under the Station and any adjacent land or premises in which Arqiva has a relevant proprietary interest, Customer shall not seek to negotiate such services directly with any such third party, and shall, if it requires such services, request that Arqiva negotiates the provision of such services on Customer's behalf (Customer bearing any costs incurred by Arqiva in negotiating and providing such services). Arqiva may in its discretion accept or reject any request under this Clause 2.32.
- 2.33 Any Approved Contractors shall install, inspect, maintain, repair, renew and remove as necessary Customer Equipment at Customer's sole risk.
- 2.34 It shall bear the properly incurred expenses of Arqiva in making good any damage, loss or injury to the Accommodation and/or the Equipment in consequence of the exercise of or failure to exercise any of the Rights granted under the Licence by Customer or any Approved Contractor, other than in consequence of any negligent act or omission on the part of Arqiva.
- 2.35 It shall not grant any assignment, sub-letting or sub-licence of all or any parts of the Rights granted under the Licence. Without prejudice to the foregoing, and for the avoidance of doubt, where the Customer is utilising space inside the Customer Accommodation for Customer Equipment provided or owned by a Customer Multiplex Operator such use shall not be deemed a breach of this Clause 2.35.
- 2.36 Upon termination or expiry of the Licence, it shall:
- (a) immediately terminate the use of the Customer Accommodation, the Common Accommodation, the Customer Equipment and the Common Equipment; and
 - (b) by not later than:
 - (i) the date that is thirty (30) days after the effective date of termination or expiry of the Licence where the Licence is terminated pursuant to Clause 4.2(a) or Clause 4.2(d); or
 - (ii) the effective date of termination or expiry where the Licence is terminated pursuant to any other provision,
- procure the removal from the Station by an Approved Contractor (at such times as are agreed with Arqiva acting reasonably) of all Customer Equipment and any other equipment brought on to the Station by Customer or any Approved Contractor causing as little damage, disturbance, interference and inconvenience as reasonably practicable and making good any damage caused by such removal to Arqiva's reasonable satisfaction or, in default of Customer's compliance with this Clause, pay to Arqiva on demand the costs, charges and expenses properly incurred by Arqiva in so removing and reinstating (and Arqiva shall be permitted to dispose of any Customer Equipment or other equipment brought on to the Station by Customer or its Approved Contractors in such manner as it sees fit and without liability to Customer, its Approved Contractors or any other party).
- 2.37 Where it has any rights of enlargement of its interest under the Licence or otherwise by virtue of code powers under the Telecommunications Act 1984 and/or the Communications Act 2003, it shall not exercise such code power rights (insofar as it is able to contract out of the same hereunder or otherwise) so as to cause financial loss or liability to Arqiva, any Landlord or any other third party, and without prejudice to the generality of the foregoing Customer also agrees that if it exercises any such powers of enlargement or otherwise in relation to the Station and as a result remains in situ at the Station it shall also accept and shall be responsible for and indemnify Arqiva and any Landlord or third party against any damages or

SUBJECT TO CONTRACT

loss and all costs charges and expenses incurred by or claimed against Arqiva and any Landlord or third party in relation to the Station, provided that Arqiva will not (and will use its reasonable endeavours to procure its Landlord does not) settle or compromise any such claim without prior notice to and the consent of Customer (such consent not to be unreasonably withheld or delayed).

- 2.38 It shall during the term of the Licence obtain, maintain and comply with all applicable Laws, and any consent, approval, licence, authorisation or permission that Customer requires from any Government Authority, national or international regulatory agency or other third party and, to the extent the same are applicable to Arqiva, shall not do or permit anything to be done which might cause or otherwise result in a breach by Arqiva of the same or of any Arqiva Licence.
- 2.39 The Licence permits Customer to use the Facilities in accordance with the terms set out herein and that no provision within the Network Access Agreement or the Licence is intended to create nor shall be treated or construed as creating the relationship of landlord and tenant but merely that of the provider and recipient of services and Customer makes no claim and shall not make any claim in this respect.
- 2.40 Arqiva shall be entitled to use the Station and permit others to do so as it may in its absolute discretion permit but shall use reasonable endeavours not to cause any damage or significant interference to Customer Equipment, Customer Accommodation or the Digital Services of Customer and/or its Customer Multiplex Operators. For the avoidance of doubt, Arqiva shall be entitled and Customer shall not seek to restrain Arqiva from using the Station or any Accommodation or Equipment (other than Customer Accommodation and Customer Equipment) for the purpose of granting Network Access to any MTS Provider, or from otherwise granting access to the Station and any Accommodation or Equipment (other than Customer Accommodation and Customer Equipment) to any party for the provision of such other services or facilities as Arqiva may in its discretion decide to provide from time to time.

3. COVENANTS BY ARQIVA IN FAVOUR OF CUSTOMER

Arqiva shall:

- 3.1 Subject to obtaining all necessary Consents to facilitate or accommodate the installation, use and operation of Customer Equipment and/or the sharing of the use and/or occupation of the Station and/or to allow Customer to use and/or share the Station and/or the Customer Equipment and/or the Common Equipment for the Permitted Use and/or the exercise of the Rights granted under the Licence, provide the Facilities.
- 3.2 Provide Customer with an electricity supply to Customer Accommodation or (where there is no Customer Accommodation) to a point reasonably proximate to the agreed location of Customer Equipment, in each case in accordance with the details set out on the relevant Station Schedule from time to time.
- 3.3 Maintain:
- (a) the Common Accommodation and Common Equipment; and
 - (b) the exterior and structure of any Customer Accommodation,
- during the Licence Term in reasonable repair and condition.

4. GENERAL

It is agreed by Arqiva and Customer that:

- 4.1 The consideration of the Rights granted in the Licence is included within the Charges and Pass-Through Costs payable by Customer pursuant to the Network Access Agreement.
- 4.2 The Licence

SUBJECT TO CONTRACT

- (a) may be terminated pursuant to any of the provisions of Clause 4.4;
 - (b) may be terminated by Arqiva by giving to Customer not less than five (5) months' prior written notice provided that:
 - (i) if Arqiva has served such notice because its rights to continue to grant the Rights are determined by reasons beyond its reasonable control (such as for example but without limitation where Arqiva is unable to renew its rights to occupy any land or buildings comprised in the Station and/or where renewal is only available on unreasonable terms), Arqiva shall use its reasonable endeavours to secure an alternative site which is as close (geographically) as reasonably practicable to the Station, and if Arqiva successfully secures such a site Customer shall relocate to such site in accordance with Clause 7.5 of the Network Access Agreement, and all costs, charges and expenses incurred by Customer in relation to or in connection with such relocation shall be borne by Customer; and
 - (ii) if Arqiva has served such notice for reasons other than those specified in Clause 4.2(b)(i), Arqiva shall use its reasonable endeavours to secure an alternative site which is as close (geographically) as reasonably practicable to the Station, and if Arqiva successfully secures such a site Customer shall relocate to such site in accordance with Clause 7.5 of the Network Access Agreement, and all Customer costs, charges and expenses properly, reasonably and directly incurred by or on behalf of Customer in relation to or in connection with such relocation shall be borne by Arqiva;
 - (c) shall expire at the end of the Licence Term;
 - (d) may be terminated by a party forthwith by notice in writing to the other if the other shall commit a material breach of any of the obligations on its part to be performed or observed hereunder and, in the case of a breach capable of rectification, shall fail to initiate steps to rectify the same within thirty (30) days after notice is given to it by the party not in breach requiring such rectification, or shall fail to continue thereafter with all reasonable speed to complete such rectification; and
 - (e) shall terminate forthwith on termination or expiry of the Network Access Agreement for whatever reason (or the relevant part of the Network Access Agreement if such agreement is terminated in part).
- 4.3 If any payments under the Licence are not made on the due date then without prejudice to any other rights which Arqiva may have Customer shall pay interest on the outstanding amount from the date when that amount became due until payment at the rate of four per cent (4%) above the base rate of the Bank of England applicable during the time of non-payment.
- 4.4 Arqiva may notwithstanding and without prejudice to its rights under Clause 4.2 above, switch off Customer Equipment and determine the Licence forthwith without incurring any liability to Customer or any other party for the results of such an act if any of the following events should occur in respect of Customer:
- (a) Customer fails to make any payment to be made under the Licence which is in arrears and unpaid following the due date within fourteen (14) days of receiving notice from Arqiva, that Customer Equipment will be switched off unless Arqiva receives the outstanding payment together with the interest due thereon (such notice to be served not earlier than the due date);
 - (b) Customer fails or neglects to initiate steps to remedy within thirty (30) days after notice is given by Arqiva requiring such remedy or if Customer fails to continue thereafter with all reasonable speed to complete such remedying of a material breach of any of the covenants, agreements or conditions in the Licence and on the part of Customer to be performed and observed;

SUBJECT TO CONTRACT

- (c) a petition is presented or resolution passed for its winding up, provided that this Clause 4.4(c) shall not apply to a bona fide re-organisation or re-construction of it whilst solvent;
 - (d) Customer enters into any composition with its creditors generally, or suffers any similar action in consequence of default by it in its obligations in respect of any indebtedness provided that this Clause 4.4(d) shall not apply to a bona fide re-organisation or re-construction of that party whilst solvent;
 - (e) an administration application is made in respect of Customer or Customer suffers a notice of appointment of administrator or a notice of intention to appoint an administrator to be filed at court in respect of it;
 - (f) Customer has stopped or threatens to stop generally payment of its debts or if it ceases or threatens to cease to carry on its business or any substantial part of it provided that this Clause 4.4(f) shall not apply to a bona fide re-organisation or re-construction of that party whilst solvent;
 - (g) Customer has a receiver, administrative receiver or other similar official appointed over all or any substantial part of its property, undertakings or assets;
 - (h) Customer suffers a creditor taking possession of all or any part of its business or assets or suffers any execution or other legal process being enforced against its business or any of its substantial assets, which execution or legal process is not discharged within fourteen (14) days;
 - (i) Customer is deemed for the purpose of Section 123 of the Insolvency Act 1986 to be unable to pay its debts; or
 - (j) an event or circumstances analogous to any of those referred to in (c) to (i) above occurs in any jurisdiction outside England and Wales under the laws of any competent jurisdiction.
- 4.5 Any termination of the Licence pursuant to Clause 4.2 or Clause 4.4 shall be without prejudice to any antecedent claims arising under the Licence prior to the date of termination.
- 4.6 Customer shall where requested by Arqiva in writing temporarily relocate any Customer Equipment, and in default of Customer's compliance with such request after a reasonable period (where practicable) Arqiva may relocate any Customer Equipment and where applicable enter any Customer Accommodation in order to relocate any Customer Equipment (and in such scenario Customer shall pay to Arqiva on demand the costs, charges and expenses properly incurred by Arqiva in so entering and relocating) where it has become necessary to temporarily move some or all of the Customer Equipment at the Station (for example but without limitation for the purposes of essential maintenance or in an emergency), which may involve moving the affected Customer Equipment to another area of the Station (in respect of which Customer may or may not have exclusive access), to another area adjacent to the Station or to a different site, and in this scenario Arqiva shall use its reasonable endeavours to ensure that the terms of Customer's access to and use of such Customer Equipment are equivalent to the terms set out in the Licence during such temporary periods, although Arqiva cannot guarantee that any Antenna coverage patterns will be the same.
- 4.7 Arqiva shall not be liable for any failure or delay in performing any obligation pursuant to the Licence where such failure or delay is attributable to any Customer failure or delay in performing any Customer obligation hereunder.
- 4.8 Arqiva shall not be liable for any loss or damage suffered or incurred by Customer arising from Arqiva's delay in performing or failure to perform its obligations hereunder to the extent that and for so long as such delay or failure results from any cause or circumstance whatsoever beyond Arqiva's reasonable control.

SUBJECT TO CONTRACT

- 4.9 Except as otherwise expressly agreed in writing between the parties, each party shall be responsible for its own costs incurred in performing its obligations under the Licence.
- 4.10 The relationship of the parties is that of independent contractors dealing at arm's length. Except as otherwise stated in the Licence, nothing in the Licence shall constitute the parties as partners, joint venturers or co-owners, or constitute either party as the agent, employee or representative of the other, or empower either party to act for, bind or otherwise create or assume any obligation on behalf of the other, and neither party shall hold itself out as having authority to do the same.
- 4.11 The relevant Station Schedule may be updated and reissued by Arqiva from time to time:
- (a) to account for any Change in Law or any other mandatory requirements imposed on Arqiva, Customer or any third party by any Government Authority, in which event Arqiva shall be entitled to update and reissue the Station Schedule unilaterally; and otherwise
 - (b) where agreed between the parties in writing;
- provided that, where the Station Schedule is updated and reissued to reflect different or additional Customer Equipment and Arqiva later identifies any cost implications of such change which were not apparent at the time the revised Station Schedule was agreed (for example but without limitation, that alternative air conditioning facilities are required), Arqiva shall be entitled to charge Customer for the additional costs incurred and Customer shall pay such additional charges.
- 4.12 Notices sent under the Licence shall be validly served if delivered by hand or sent by fax or registered post to the recipient party as follows:
- to Customer: using the address, contact details and fax number set out on the relevant Station Schedule from time to time;
- to Arqiva:
- Crawley Court, Crawley, Winchester, Hants SO21 2QA
Attention: Company Secretary
Fax no: 01962 822818
- Any notice shall be treated as having been served on delivery if delivered by hand, two (2) Business Days after despatch if sent by registered post and on confirmation of transmission if sent by facsimile.
- 4.13 The failure of either party to enforce or to exercise at any time or for any period of time any term of or any right pursuant to the Licence does not constitute, and shall not be construed as, a waiver of such term or right and shall in no way affect that party's right later to enforce or to exercise it.
- 4.14 If any term of the Licence is found to be illegal, invalid or unenforceable under any applicable law, such term shall, insofar as it is severable from the remaining terms, be deemed omitted from the Licence and shall in no way affect the legality, validity or enforceability of the remaining terms.
- 4.15 Notwithstanding any other provision of the Licence, neither of the parties hereto shall be:
- (a) required to do anything in contravention of any Laws, Consents or other consents, approvals, licences, authorisations or permissions, or directions of any Government Authority; or
 - (b) required to refrain from doing anything the party is required to do under such Laws, Consents or other consents, approvals, licences, authorisations or permissions, or directions of any Government Authority; or

SUBJECT TO CONTRACT

- (c) liable to the other party for failing to do anything which if done would be in contravention of any such Laws, Consents or other consents, approvals, licences, authorisations or permissions, or directions of any Government Authority.
- 4.16 Provisions of the Licence which either are expressed to survive its expiry or termination or from their nature or context it is contemplated that they are to survive such termination, shall remain in full force and effect notwithstanding such expiry or termination.
- 4.17 The parties shall do and execute all such further acts and things as are reasonably required to give full effect to the rights given and the transactions contemplated by the Licence.
- 4.18 No person who is not a party to the Licence is granted or shall acquire any rights under it or be entitled to benefit from any of its terms, whether by virtue of the Contract (Rights of Third Parties) Act 1999 or otherwise.
- 4.19 Save as expressly provided in Clause 4.11, no alteration to or variation of the Licence shall take effect unless and until the same is in writing and signed on behalf of each of the parties by a duly authorised representative.
- 4.20 The Licence may be executed in several counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same document.
- 4.21 If there arises between the parties any dispute or disagreement regarding any technical issue of fact in connection with the Licence, either party may refer the matter to an independent expert for a decision. In the absence of agreement in writing between the parties as to the identity of the expert within thirty (30) days of either party's aforesaid notice, the expert shall be appointed by a nominee of the President of the Institution of Electrical Engineers. Arqiva and Customer shall co-operate in providing to the expert such information as the expert reasonably requests to assist in his deliberations. Arqiva and Customer shall (in the absence of manifest error) accept as final and binding the decision of the expert. The costs of appointing the expert shall be borne equally by the parties unless the expert shall otherwise determine.
- 4.22 Any dispute or disagreement between the parties in connection with the Licence which is not covered under Clause 4.21 shall be referred to the English courts (insofar as the Licence relates to a Station which is located in England and Wales) the Scottish Courts (insofar as the Licence relates to a Station which is located in Scotland), or the courts of Northern Ireland (insofar as the Licence relates to a Station which is located in Northern Ireland), and the parties hereby submit to the jurisdiction of such courts.
- 4.23 The Licence shall be governed by and construed in accordance with English law (insofar as the Licence relates to a Station which is located in England and Wales), the law of Scotland (insofar as the Licence relates to a Station which is located in Scotland) and the law of Northern Ireland (insofar as the Licence relates to a Station which is located in Northern Ireland).

SUBJECT TO CONTRACT

SCHEDULE 6

Switchover Timetable

(Version B11)

Region	Station	Dependent Relay Stations	Transition Month
Border	Selkirk	12	Nov-08
	Caldbeck	23	Jun-09
	Caldbeck SW Scotland	15	Jun-09
	Kendal	8	Jun-09
	Douglas	6	Jun-09
West Country	Beacon Hill	23	Apr-09
	Stockland Hill	21	May-09
	Huntshaw Cross	10	Jul-09
	Redruth	13	Jul-09
	Caradon Hill	38	Jul-09
HTV Wales	Presely	25	Aug-09
	Carmel	20	Sep-09
	Blaenplwyf	19	Feb-10
	Long Mountain	7	Feb-10
	Llanddona	23	Nov-09
	Moel-Y-Parc	23	Feb-10
	Wenvoe	85	Mar-10
Granada	Winter Hill	74	Nov-09
HTV West	Mendip	60	Apr-10
	Bristol Kings Weston	0	Mar-10
Grampian	Keelylang Hill	12	May-10
	Bressay	9	May-10
	Rumster Forest	4	Jun-10
	Eitshal	7	Jul-10
	Skriaig	15	Jul-10
	Angus	21	Aug-10
	Durris	13	Sep-10
	Knockmore	8	Sep-10
	Rosemarkie	12	Oct-10
STV	Craigkelly	8	Oct-10
	Darvel	35	Nov-10
	Rosneath	2	Nov-10
	Torosay	21	Feb-11
	Black Hill	34	Mar-11

SUBJECT TO CONTRACT

Central	Oxford Waltham The Wrekin Ridge Hill Sutton Coldfield Malvern	2 14 5 17 43	Mar-11 May-11 Aug-11 Aug-11 Sep-11 Sep-11
Yorkshire	Sheffield Olivers Mount Belmont Emley Moor	5 1 5 49	May-11 May-11 Jul-11 Sep-11
Anglia	Sandy Heath Sudbury Tacolneston	4 5 13	Apr-11 Jun-11 Jun-11
Meridian	Midhurst Hannington Rowridge Whitehawk Hill Heathfield and Tunbridge Wells Hastings Bluebell Hill Dover	1 10 30 6 15 1 2 14	Feb-12 Feb-12 Mar-12 May-12 Jun-12 Jun-12 Jul-12 Jul-12
Carlton/LWT	Guildford Crystal Palace	0 53	Feb-12 Apr-12
Tyne Tees	Chatton Bilsdale Pontop Pike	2 15 25	Aug-12 Sep-12 Oct-12
Ulster	Limavady Brougher Mountain Divis	13 4 26	Sep-12 Oct-12 Nov-12
Channel	Fremont Point	7	Mar-13

SUBJECT TO CONTRACT

SCHEDULE 7

Risks

Part 1: Standard Risks

- a. Any increase in core team hours driven by internal or external risk factors including such risks as:
 - Imperfect information and assumptions relating to site structure, building conditions, hazardous materials or design parameters;
 - Delays in securing third party design acceptance and approvals;
 - Additional design requirements for contingency items: Re-use of buildings, building structural works, design of new facilities, etc;
 - Delays, or additional design requirements resulting from planning conditions or environmental impact assessment requirements;
 - Supplier related issues resulting from complexity / technology, impact of specialist supplier resource constraints or supplier performance; and
 - Industrial action by own workforce or suppliers' workforces.
- b. Any changes in wages or labour rates that are not covered by RPI.
- c. Any changes due to commodity price movements for raw materials and demand driven price changes for the following materials:
 - Major Electrical Equipment, LV & HV Switchgear, Diesel Generators, HVAC Equipment;
 - Cable, Antennas & other RF manufactured items; and
 - Civil and Structural Materials and Consumables.
- d. Any delays and additional costs associated with protracted planning processes, planning conditions and appeals, environmental impact assessments, landscaping and access conditions.
- e. Any high winds restricting work at height or rain restricting Station access or building works (any inability to access site due to weather or natural disasters for a prolonged period shall be treated as a Force Majeure Event).
- f. Any unanticipated soil stabilisation, slope stabilisation or reclamation works.
- g. Any unacceptable static and dynamic loading characteristics requiring antenna re-design, mast replacement or mast strengthening works that are not anticipated.
- h. Any hazardous materials encountered during the project which will require specialist removal and disposal including contaminated soil, in-building asbestos, asbestos in antenna shrouds, PCBs, oil, beryllium, etc.
- i. Any permanent or temporary access roads and drainage works that may be required at Stations.
- j. Any unanticipated additional work to existing buildings or construction of new buildings to ensure suitability for re-use.
- k. Any additional costs due to a compression of the work schedule resulting from one of the following events:
 - Supplier and contractor performance;
 - Union and workforce issues;
 - Specialist resource and equipment constraints;
 - Incident / accident; or
 - Informal change of existing working practices driven by outside influence or change of attitudes.

SUBJECT TO CONTRACT

- l. Any changes required to existing infrastructure that no longer meets technical, maintenance or performance requirements.
- m. Any measured EMF levels at site requiring changes to the work sequence, schedule, execution methodology or exposure periods.
- n. Any failure of existing infrastructure eg antenna fire, structural collapse that requires changes to the execution sequence, timing or method.

Part 2: Exceptional Risks

- a. Any Change in Law.
- b. Any act or omission of any Government Authority which is not a Change in Law.
- c. Any other Force Majeure Event.
- d. Any failure to obtain any Consent (Arqiva having used reasonable endeavours to obtain such Consent, but this shall not imply any obligation on Arqiva's part to exercise any code powers under the Telecommunications Act 1984 (as amended by the Communications Act 2003)).
- e. Any change to the JPP Plan or failure to agree a revised JPP Plan in a timely manner.
- f. Any change to the Switchover Timetable (apart from changes arising as a result of a breach of contract or a failure to exercise reasonable care and skill by Arqiva).
- g. Any failure to agree in a timely manner Transition Arrangements with any affected party or any change to any Transition Arrangements.
- h. Any failure to agree any ADS by the relevant ADS Required Authorisation Date specified in Section 4.2, Table 1 of the Reference Offer.
- i. Any failure by all affected parties to agree any Consensus Change in accordance with the Change Control Procedure.
- j. Any delay, impediment or other act or omission of Customer (or any contractor employed by Customer) but only if and to the extent that such delay, impediment or other act or omission prevents or impedes the proper performance by Arqiva of its obligations under this Agreement.
- k. A loss or addition of a DTT multiplex.
- l. Any change to the current RBL solution.
- m. Any cost or schedule change as a result of disruption to existing services, including any cost or schedule changes required by third party Station users in order to give their consent to relocation or reduced power working.

SUBJECT TO CONTRACT

SCHEDULE 8

Change Control Procedure

1. PRINCIPLES

- 1.1 Where Customer or Arqiva wish to make any change to the provision of Network Access under this Agreement ("**Change**"), Customer may at any time request, and Arqiva may at any time recommend, such Change in accordance with the Change Control Procedure as set out at paragraph 2 below.
- 1.2 Until such time as a Change is made in accordance with the Change Control Procedure, Arqiva shall, unless otherwise agreed in writing or otherwise provided under this Agreement, continue to provide Network Access as if the request or recommendation had not been made.
- 1.3 Any discussions which may take place between Customer and Arqiva in connection with a request or recommendation before the authorisation of a resultant Change shall be without prejudice to the rights of either party.
- 1.4 Both parties will:
- (a) act reasonably in putting forward Change proposals/requests, responding to Change proposals/requests and generally in relation to the Change Control Procedure;
 - (b) not unreasonably withhold or delay approval of Change proposals/requests;
 - (c) use reasonable endeavours to minimise costs and to operate best industry practice in proposing changes to the Charges in connection with Change proposals/requests; and
 - (d) comply with best industry practice in documenting and operating the Change Control Procedure.

2. CHANGE CONTROL PROCEDURE

- 2.1 Discussion between Customer and Arqiva concerning a change shall result in any one of the following:
- (a) no further action being taken;
 - (b) a request for a Change by Customer; or
 - (c) a recommendation for a Change by Arqiva.
- 2.2 Where a written request for a Change is received from Customer, Arqiva shall submit a Change Control Note ("**CCN**") to Customer as soon as reasonably practical.
- 2.3 Any request for a Change from Customer shall include the reason(s) and supporting information for the Change.
- 2.4 A recommendation for a Change by Arqiva shall be submitted as a CCN direct to Customer at the time of such recommendation.
- 2.5 Each CCN shall contain:
- (a) the title of the Change;
 - (b) the originator and date of the request or recommendation for the Change;
 - (c) the reason for the Change;

SUBJECT TO CONTRACT

- (d) full details of the Change;
- (e) a proposed timetable for implementation of the Change;
- (f) the impact on the Charges or any other amounts payable under this Agreement, if any, of the change;
- (g) any impact of the Change to the Switchover Timetable or the Specification;
- (h) whether relief from compliance with any of Arqiva's obligations under the Agreement is necessary in order to enable Arqiva to implement the Change;
- (i) a detailed risk assessment in respect of the Change;
- (j) any regulatory consents, approvals or authorisations which are required in connection with the Change;
- (k) any variation required to be made to the Agreement in connection with the Change;
- (l) whether or not the Change is one which will require the agreement of other affected parties because it relates to shared infrastructure or for any other reason (a "**Consensus Change**");
- (m) in the case of a Consensus Change, the other parties affected by the proposed Change.
- (n) the date of expiry of validity of the CCN; and
- (o) provision for signature by Customer and by Arqiva.

2.6 For each CCN submitted, within the period of the validity of the CCN:

- (a) Arqiva shall allocate a sequential number to the CCN; and
- (b) Customer shall evaluate the CCN and, as appropriate;
 - (i) request further information;
 - (ii) notify Arqiva of its approval of the CCN; or
 - (iii) notify Arqiva of the rejection of the CCN.

2.7 If Customer approves a CCN (and the CCN does not relate to a Consensus Change) Customer shall arrange promptly for two copies of the approved CCN to be signed by or on behalf of Customer and Arqiva.

2.8 If Customer approves a CCN which relates to a Consensus Change, the parties may sign the CCN but such CCN shall not be effective until Arqiva notifies Customer in writing that the relevant parties have approved the Consensus Change in question (such notification not to be unreasonably withheld or delayed) or unless Arqiva implements the relevant Change under Clause 10.2.

2.9 Subject to paragraph 2.8 above, a CCN signed by both parties in accordance with this procedure shall constitute a valid amendment to this Agreement for the purposes of Clause 18.11.

3. CHANGE REGISTER

3.1 Arqiva shall maintain during the Term a consolidated record of all Changes agreed in accordance with the Change Control Procedure (the "**Change Register**").

SUBJECT TO CONTRACT

3.2 Arqiva shall provide a copy of the Change Register to Customer on Customer's request.

SUBJECT TO CONTRACT

SCHEDULE 9

Review Process

1. PROJECT INITIATION / KICK-OFF MEETING

- 1.1 Within three months of the Execution Date, Arqiva will provide Customer with details of the project tracking, forecasting and reporting approach that it will employ to enable it to provide the forecasts and reconciliations set out in paragraph 2 below to Customer at each Review. Arqiva and Customer will seek to agree the financial reporting approach to be employed in the period prior to the first Review, but in the absence of agreement Arqiva shall specify the reporting to be employed, acting reasonably.
- 1.2 Within three months of the Execution Date, Arqiva will hold a project initiation/kick-off meeting with Customer. The purpose of this meeting will be to present to and share with Customer Arqiva's proposed plans, timescales, methodology, choice of technology, proposed major vendors, and other relevant elements of the DSO network roll-out project and also to take relevant input/responses from Customer on the proposed plans. Customer, acting reasonably, shall have the opportunity to recommend alternative approaches to those initially proposed by Arqiva if they are likely to minimise risk to the project, result in superior performance, or reduce costs. Arqiva shall act reasonably and give due consideration to such recommendations. An output from this project initiation meeting will be an agreed baseline definition of the overall project deliverables, budgets and timescales, against which performance will be evaluated in the Reviews.

2. REVIEWS

- 2.1 At least Quarterly, Arqiva shall provide (by such times as may be agreed between the parties) to Customer the following:
- (a) An update on the progress of the DSO programme, in terms of milestones achieved and any risks or issues that may impact the programme timescales; and
 - (b) A review of performance against the project baseline established in the project initiation meeting.
- Each Quarter, Arqiva shall also notify Customer of any new material trends, issues or risks regarding Switchover.
- 2.2 At least biannually, Arqiva shall provide (by such times as may be agreed between the parties) to Customer the following:
- (a) A high level review of financial expenditure;
 - (b) A forecast of predicted Future Capital Expenditure and Commitments for the next 12 months;
 - (c) A report of the amount of Future Capital Expenditure and Commitments allowed for in the uplift for contingencies utilised to date; and
 - (d) A forecast of predicted Future Capital Expenditure through to Switchover Completion and the forecast Charges following Switchover Completion.
- 2.3 Arqiva shall provide such reasonable supporting information and explanation for the forecasts and reports set out in paragraphs 2.1 and 2.2 above.

SUBJECT TO CONTRACT

- 2.4 When a project issue is raised (in terms of impact on any milestone, performance or cost) Customer and Arqiva, both acting reasonably, shall discuss alternative approaches to those agreed in the baseline definition so as to minimise risk to the programme or improve performance or reduce costs. Arqiva shall act reasonably and give due consideration to such alternatives.

3. POST-DSO REVIEW

- 3.1 Arqiva and Customer shall participate in a final review of the DSO programme after a reasonable period following Switchover Completion or DSO Cancellation. It is anticipated that the Post-DSO Review shall take place during the first Quarter of 2014. The Post-DSO Review will take place at such location and on such date(s) as may be agreed between the parties or, in absence of agreement at such location and on such dates as may be reasonably specified by Arqiva.
- 3.2 The outcome of the Post-DSO Review will be to set the level of Future Capital Expenditure to be reflected in the Charges to apply after the Post-DSO Review. The Post-DSO Review will, therefore, result in changes to the Charges to apply after the Post-DSO Review as compared to the Charges set out in Section 3 of the Reference Offer if the level and/or timing of Future Capital Expenditure differs from the level and/or timing forecast in the table in Section 3.2 of the Reference Offer (and if the level and timing of Future Capital Expenditure is the same as the level and timing forecast in the table in Section 3.2 of the Reference Offer, the Charges to apply after the Post-DSO Review will be the same as those set out in Section 3 of the Reference Offer).
- 3.3 As part of the Post-DSO Review, Arqiva will submit to Customer details of the Future Capital Expenditure and details of any change proposed to the Charges to apply from Switchover Completion or DSO Cancellation as compared to the Charges set out in Section 3 of the Reference Offer.
- 3.4 Arqiva shall provide reasonable supporting information and explanation for the Future Capital Expenditure and any proposed change put forward by Arqiva under paragraph 3.3 above.
- 3.5 If Customer does not agree with any proposed change to the Charges put forward by Arqiva under paragraph 3.3 above, it may refer the matter to the Expert Procedure.

4. GAIN-SHARE MECHANISM

- 4.1 The parties shall use reasonable endeavours to agree an appropriate gain-share mechanism during commercial contract negotiations.