

SUBJECT TO CONTRACT

**Reference Offer for the provision of  
Transmission Services  
in respect of  
Ofcom's award of a licence for  
the Second National Commercial DAB  
Transmission Service**



**Version 1**

Publication Date: 5<sup>th</sup> September 2014

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## **SUBJECT TO CONTRACT**

This Reference Offer is issued by Arqiva Limited ("Arqiva") in accordance with a request from Ofcom in respect of the Second National Commercial DAB Transmission Service (the "Ofcom Direction").

The initial Reference Offer has used the Stations in the Provisional Specification in Schedule 24 as the basis for the various calculations and specifications contained within it. Accordingly, these are indicative and may be tailored and adjusted depending upon the bidder's specific requirements. The Target Service Start Dates are, for the same reasons, also indicative and have been provided to give an example geographic rollout.

This Reference Offer sets out the terms and conditions and charges on which Arqiva is willing to provide Transmission Services (as such term is defined in the Undertakings) as described in the Ofcom Direction.

This Reference Offer is subject to the Reference Offer Terms and Conditions set out herein, and the defined terms used in this Reference Offer can be found at Schedule 1 of the Reference Offer Terms and Conditions.

The specification and prices in this Reference Offer are current at 5<sup>th</sup> September 2014 and valid until 28<sup>th</sup> February 2015 after which time they will be revalidated by Arqiva. A copy of this Reference Offer, as updated from time to time, will be placed on Arqiva's website: [www.arqiva.com](http://www.arqiva.com) (or any replacement or successor website). A copy has been provided to the Adjudicator and to Ofcom.

Please note that prospective customers may request an alternative specification, including changes to the Stations and the Station Dates pursuant to paragraph 10.7 of the Undertakings subject to the process set out in that paragraph. Prospective customers may also request the provision of a Network Access only offer. Any such offer will be addressed in accordance with the provisions of paragraphs 11 and 12 of the Undertakings and the Guidance to external parties in communicating with Arqiva for the Second National Commercial DAB Multiplex Reference Offer on Arqiva's website: [www.arqiva.com](http://www.arqiva.com).

The Reference Offer Terms and Conditions are drafted on the following basis: that 70 Stations shall be the minimum commitment required from the Customer; Arqiva has spread the delivery of the Stations across a sixteen month period from September 2015 to December 2016; and the Target Service Start Date for all Stations shall be no later than December 2016.

**SUBJECT TO CONTRACT**

DATED \_\_\_\_\_ 2014

**ARQIVA LIMITED**

and

[ ]

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**SECOND NATIONAL COMMERCIAL DAB  
TRANSMISSION SERVICES AGREEMENT**

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**arqiva**

Legal Affairs  
Arqiva Limited  
Crawley Court  
Winchester  
Hampshire  
SO21 2QA

## SUBJECT TO CONTRACT

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**THIS AGREEMENT** dated

2014 ("**Effective Date**") is made between:

- (1) **ARQIVA LIMITED** of Crawley Court, Winchester, Hampshire, SO21 2QA with registered number 02487597 ("**Arqiva**"); and
- (2) [ ] of [ ] with registered number [ ] (the "**Customer**").

**WHEREAS:**

- (A) Pursuant to the assessment of applications for the licence to be used for the award of the Second National Commercial DAB Transmission Service licence held by Ofcom on [ *date to be inserted prior to contract execution* ], the Customer holds a Multiplex Licence.
- (B) The Reference Offer Terms and Conditions and the other documents comprising the Agreement (as defined herein) have been prepared by Arqiva in accordance with the Ofcom Direction.
- (C) The Customer requires, and Arqiva is willing to provide to the Customer, the Transmission Service on the terms and conditions set out in this Agreement.

**TERMS AGREED:**

**1. DEFINITIONS AND INTERPRETATION**

- 1.1 Capitalised terms shall have the meaning ascribed to them in Schedule 1 (Defined Terms).
- 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, and references to parts and paragraphs are to parts of and paragraphs of a Schedule to this Agreement.
- 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.
- 1.8 In the event of any inconsistency in this Agreement between any Clause and any term set out in any Schedule, the Clause shall prevail over the term in the Schedule to the extent of any inconsistency.

**2. CONDITIONS PRECEDENT**

- 2.1 This Clause 2 and Clauses 1, 21, 22, 23, 24, and 25 shall come into effect on the Execution Date.
- 2.2 Subject to Clause 2.1, the following are conditions precedent to the coming into full force and effect of this Agreement:

- (a) the Guarantor (which must be a party which is acceptable to Arqiva) entering into the Guarantee; and
  - (b) in relation to the Guarantee, Arqiva receiving a written legal opinion in the relevant jurisdiction for the benefit of Arqiva in terms which are satisfactory to Arqiva as to the validity and enforceability of the Guarantee.
- 2.3 These conditions precedent may be waived by Arqiva in whole or part at any time by written notice to the Customer.
- 2.4 As soon as reasonably practical following the satisfaction or waiver of the conditions precedent Arqiva shall give notice of the same to the Customer, and the date of such notice shall be the "Satisfaction Date".
- 2.5 This Agreement shall come into full force and effect on the Satisfaction Date.
- 2.6 If the conditions precedent have not been satisfied or waived by 2<sup>nd</sup> March 2015, Arqiva may: (i) extend the period for satisfaction of the relevant condition(s) precedent by giving written notice to the Customer; or (ii) terminate this Agreement by giving written notice to the Customer.
- 2.7 Subject to Clause 2.9, if this Agreement is terminated by Arqiva under Clause 2.6, neither party shall have any further obligations under this Agreement.
- 2.8 By [ *to be inserted prior to contract execution – date to be 2 months from Ofcom announcement of Multiplex Licence* ] (which may be prior to the Satisfaction Date), Arqiva will require the Customer to enter into:
- (a) an Advance Design Agreement to cover Arqiva's costs for design work; and
  - (b) an Advance Equipment Procurement Agreement to cover Arqiva's costs for equipment orders,

in each case in connection with the proposed N2 Transmission Programme. If the provisions of this Clause 2.8 (or equivalent) are not complied with by the Customer, this will constitute an Exceptional Risk and Arqiva shall be entitled to set reasonable revised Target Service Start Dates and to adjust the Charges under the Change Control Procedure.

- 2.9 For the avoidance of doubt, the termination of this Agreement by Arqiva under Clause 2.6 shall not affect the validity of any Advance Design Agreement or any Advance Equipment Procurement Agreement entered into pursuant to Clause 2.8.

### 3. NETWORK ACCESS

Subject to the remaining provisions of this Agreement, in order to provide the Transmission Service to the Customer, Arqiva shall procure the necessary and appropriate Network Access in accordance with the terms of this Agreement.

### 4. THE SYSTEM

#### 4.1 General

Subject to Clause 17.5, the System and Equipment will be owned by, and shall be and remain the exclusive property of, Arqiva throughout the Term and thereafter. So long as this Agreement remains in force, Arqiva shall ensure that the System is operated, installed and maintained for the provision of the Transmission Service in accordance with the terms of this Agreement. All Equipment shall be and remain Arqiva's insurable risk throughout the Term.

## 4.2 The Build Project

- (a) The Customer shall provide all of the information and submit all of the documents required and shall comply with all of its applicable obligations in Schedule 20.
- (b) Subject to Clause 4.2(i), Arqiva shall procure the performance of the System specified in Schedule 6 in accordance with the dates outlined in Schedule 3 and with all reasonable care and skill and to the standards expected of competent and experienced builders of broadcasting systems using at all times suitably skilled personnel in accordance with prevailing Laws and shall, subject to Clause 4.2(i), complete installation of the System at each of the Stations for each Station by the relevant Target Service Start Date.
- (c) Arqiva shall procure performance of all requisite tests in accordance with the Acceptance Testing Plan agreed by the parties pursuant to Schedule 15, to verify that installation of the System at each Station has been duly completed. Arqiva shall then confirm to the Customer in writing whether the System has satisfied the relevant tests at each Station. The Customer shall not take issue with any notice from Arqiva to the effect that installation of the System at the Station has been duly completed unless the installation of the System has not been duly completed in accordance with the Acceptance Testing Plan, in which event it shall identify its concerns by notice in writing to Arqiva. If the parties are unable to agree whether any final testing has been satisfactorily completed, the matter shall be referred for determination by an independent expert appointed in accordance with the procedure set out in Clause 24.3.
- (d) Installation of the System at any Station shall be treated as having been completed once the Station and relevant Equipment are capable of operating in accordance with the standards required under this Agreement, as demonstrated by the tests to be carried out in accordance with Clause 4.2(c), and Arqiva has notified the Customer accordingly.
- (e) To the extent that the Customer is required to give its approval of or agreement to any element of the Build Project, the Customer shall respond as soon as possible. For the avoidance of doubt, Clause 13.5 shall apply where the Customer does not comply with its obligations in this Clause 4.2(e). The Customer shall meet regularly with Arqiva and other parties as necessary at meetings convened by Arqiva to co-ordinate activities to allow the N2 Transmission Programme to progress as required.
- (f) Arqiva shall use reasonable endeavours to obtain all the Consents and the Customer shall give Arqiva such assistance in obtaining the Consents as Arqiva shall reasonably request.
- (g) The Customer acknowledges that international frequency clearances, including agreement to transitional restrictions, may be required for all or certain Stations. In the event that it appears likely that any such clearances will not be obtained in sufficient time to complete installation of the System at any Station by the applicable Target Service Start Date, the Customer shall inform Arqiva immediately and the parties will consult and agree alternative, later, Target Service Start Dates with respect to the applicable Stations (and any disagreement between the parties in this respect shall be referred to the expert in accordance with Clause 24.3). If international frequency clearance in respect of transmission from any Station is refused but there is a viable alternative transmitting station in the same geographical area which the parties agree to adopt as a Station in substitution for the original, then such substitution shall be effected, and any additional charges levied, pursuant to the Change Control Procedure. However, if no such substitution is made, while Arqiva shall divert to another Station any Equipment that it is



reasonably able to reuse, the Customer shall reimburse Arqiva the cost of any Equipment that cannot reasonably be put to such alternative use together with any other costs that Arqiva has incurred in connection with the Build Project in accordance with this Agreement at the Station in respect of which international clearance has been refused. In turn, the Charges shall be reduced proportionately and the application of this Agreement to the affected Station(s) shall be considered terminated.

- (h) Each party shall appoint an appropriate member of its staff as principal contact with respect to the Build Project. The parties' respective appointees shall meet on a regular basis, but not less than once in each calendar quarter, during the Term to monitor progress and Arqiva's representative shall provide to the Customer's representative at each such meeting an updated project plan detailing progress since the previous meeting. Each party may replace its appointee at any time on prior written notice to the other party.
- (i) Arqiva shall not be liable for any failure to complete installation of the System at any Station by the applicable Target Service Start Date to the extent that: (i) Clause 13.5 applies; or (ii) such failure results from an Exceptional Risk.

#### 4.3 Liquidated Damages

- (a) Subject to the remaining provisions of this Clause 4.3 and Schedule 16, if, in relation to any Station, Arqiva is unable to provide the Transmission Service on the relevant Target Service Start Date, it shall, from the relevant Target Service Start Date, incur a liability to pay Liquidated Damages to the Customer in respect of the period of delay and until the Actual Service Start Date in respect of such Station.
- (b) Where the Antenna System(s) for a Station can be used operationally but it is agreed that the Antenna pattern(s) require modification, Arqiva shall use reasonable endeavours to rectify the situation as soon as possible and shall not be liable to pay Liquidated Damages if it is not able to do so by the Target Service Start Date.
- (c) For the avoidance of doubt, Arqiva shall have no liability to pay Liquidated Damages pursuant to Clause 4.3(a) in the circumstances described in Clause 4.2(i).
- (d) The Customer acknowledges that any liability of Arqiva to pay Liquidated Damages under this Clause 4.3 that may arise shall represent the Customer's sole and exclusive financial remedy in respect of Arqiva's failure to provide the Transmission Service on the relevant Target Service Start Date for the applicable Station.
- (e) The parties agree and acknowledge that the Liquidated Damages payable pursuant to this Clause 4.3 represent a genuine pre-estimate of the loss likely to be incurred by the Customer as a direct consequence of any delay in achieving the Target Service Start Date for any Station.
- (f) Where Arqiva is not able to meet a Target Service Start Date as a result of any of the circumstances described in Clause 4.2(i), Arqiva shall be entitled to set a reasonable revised Target Service Start Date under the Change Control Procedure.

## 5. THE TRANSMISSION SERVICE

### 5.1 Authority to Provide the Transmission Service

- (a) Arqiva warrants that, in relation to each Station, from the Actual Service Start Date and for the remainder of the Term, it shall have the Licences and all other licences,

consents, authorities or dispensations which are necessary for it to provide the Transmission Service in respect of such Station and it shall during such period comply the terms of such licences, consents, authorities and dispensations in all respects.

- (b) Arqiva shall comply with the terms of any WTA Licence(s) from time to time issued to the Customer and applicable to Arqiva's provision of the Transmission Service and shall not by act or omission do anything which would place the Customer in breach of such WTA Licences, in each case to the extent that the Customer discloses (or procures the disclosure of) such WTA Licences to Arqiva. The Customer shall consult with Arqiva on any proposed changes to the terms of the WTA Licences and any Changes required as a result of such changes to the terms of the WTA Licences shall be implemented pursuant to the Change Control Procedure.

## 5.2 Transmission Service

Subject to the terms and conditions of this Agreement, on and from the Actual Service Start Date in respect of each Station, Arqiva shall provide the Transmission Service.

## 5.3 Total Time of Service Availability

- (a) From the Actual Service Start Date at each Station, Arqiva shall use reasonable endeavours to provide to the Customer the Transmission Service using the System, comprising the transmission of the fully multiplexed Customer Signals delivered by the Customer for 100% of Regular Hours albeit that Arqiva shall not be in breach of this Agreement if it fails to achieve such target, provided that the Transmission Service meets the Total Time of Service Availability. In this context, the Customer acknowledges that, subject to Clause 10.2, in the event of a failure by Arqiva to achieve the Total Time of Service Availability, Arqiva's liability to pay service credits to the Customer under Clause 10.1 shall represent the Customer's sole and exclusive financial remedy in respect of such failure.
- (b) In this context, the Customer acknowledges that 100% availability cannot be assured and accepts that Arqiva's investment in and provision of the System shall not be required to be greater than that which is reasonably needed to achieve transmission of the Customer Signals for the Total Time of Service Availability.
- (c) The parties acknowledge that, save for the Transmission Service to be provided by Arqiva, the Customer shall procure the provision of all elements of its overall transmission solution including (but not limited to) the delivery of Customer Signals in accordance with Clause 6.2(a). Without prejudice to Clause 13.5, Arqiva's obligations to provide the Transmission Service as provided in this Agreement shall apply only to the extent that the Customer complies with the first sentence of this Clause 5.3(c).

## 5.4 Service Standards

Arqiva warrants and undertakes that, on and from the Actual Service Start Date in respect of each Station, the Transmission Service will be provided in a competent and professional manner to the standards reasonably expected of a competent and experienced provider of transmission services in the United Kingdom and with all reasonable skill and care using at all times suitable skilled personnel and in accordance with the Licences and any other prevailing Laws. Without prejudice to the foregoing, Arqiva shall ensure that, on and from the Actual Service Start Date in respect of each Station, the System complies in all material respects with the System Specification. In the event of any conflict or inconsistency between the specifications in any WTA Licence and the System Specification, the specifications in the relevant WTA Licence shall prevail (to the extent that the Customer discloses (or procures the

disclosure of) such specifications to Arqiva) and Arqiva shall notify the Customer of any such conflict or inconsistency. Arqiva acknowledges that the aforesaid obligations continue throughout the Term.

#### 5.5 Substitution of Station/Equipment and Movement

- (a) Subject to Clause 4.2(g), Arqiva may substitute, on a permanent or otherwise basis, any Station (after consultation with the Customer) or any Equipment (without consultation with the Customer) (collectively "relevant item"). Arqiva shall ensure that taken as a whole the performance of any substitute relevant item shall be broadly equivalent to and in any event not result in a deterioration of service from the service that had been previously available or result in a reduction in the availability of the Customer Signals to the public, (save for any deteriorations or reductions of a *de minimis* nature), and, without prejudice to the generality of the foregoing, shall not cause any Station to transmit the Customer Signals at an ERP outside the parameters specified in the System Specification.
- (b) Arqiva may at any time move the Antenna or other technical Equipment (including the Exclusive Contracted Equipment) at the Station or structure located on it. Where practicable, Arqiva shall give reasonable prior notice to the Customer of any such movement. Arqiva shall ensure that, taken as a whole, the performance of the Antenna and/or the technical Equipment (as applicable), once moved, shall be broadly equivalent and in any event not result in a material deterioration of the Transmission Service.

#### 5.6 Loss of Network Access Licence

The Customer acknowledges that Arqiva is only a licensee or tenant of some Sites and that, if the owner of any Site wishes to dispose of it or in any other way terminate Arqiva's possession of it, Arqiva's licence or lease may be terminated. In these circumstances, Arqiva shall seek to procure the provision of a suitable substitute for any Station or Equipment used from or on the relevant Site and Arqiva shall be entitled to pass on to the Customer: (a) the costs of decommissioning the former Site; and (b) the costs of procuring and bringing into service the substitute Station subject to agreeing the same under the Change Control Procedure. If Arqiva has any Site licence or tenancy terminated as contemplated by this Clause 5.6, and is unable to locate a substitute Site before such termination becomes effective, this Agreement shall terminate insofar as it relates to the affected Station and the Charges shall be reduced on a pro rata costs basis.

#### 5.7 Technology Fit for Purpose

Arqiva shall ensure that the Equipment is provided and maintained so as to enable it to provide the Transmission Service in accordance with the Agreement.

### 6. CUSTOMER OBLIGATIONS AND RESTRICTIONS

6.1 The Customer shall not be permitted to visit any Site or to access any Station except with Arqiva's prior written consent and subject to Arqiva's supervision, which shall be chargeable pursuant to Clause 9.8. Such access shall be subject to the rules notified to the Customer's representative by Arqiva which the Customer shall procure are observed by the Customer's representative at all times. In any event the Customer shall indemnify and keep indemnified Arqiva from and against all claims, costs (including, without limitation, legal costs), damages and expenses awarded against Arqiva or agreed in any settlement resulting from the acts or omissions of any of the Customer's agents, employees or contractors on any Site.

6.2 The Customer shall be responsible for:

- (a) procuring that the Customer Signals are delivered, throughout the Term, to each of the MTS Insertion Points and in accordance with the technical standards contained in the Multiplex Licence and to the technical standards set forth in Schedule 8;
- (b) throughout the Term, obtaining, maintaining and complying with the Multiplex Licence and any other licences required to be held by the Customer that are relevant to this Agreement. The Customer shall also throughout the Term be responsible for procuring that the Content Providers obtain, maintain and comply with any licences required to be held by the Content Providers that are relevant to this Agreement;
- (c) procuring permission from Ofcom in respect of the transmission of the Customer Signals for test purposes prior to Target Service Start Dates as reasonably required by Arqiva;
- (d) providing Arqiva with all reasonable cooperation to facilitate Arqiva's efficient discharge of its obligations under this Agreement and, in particular, providing Arqiva with accurate information in relation to matters that Arqiva reasonably considers pertinent to its provision of the Transmission Service from time to time;
- (e) transmitting its Customer Signals on a 24/7 basis, unless otherwise agreed by the parties in writing; and
- (f) the Customer Responsibilities as set out in Schedule 20.

6.3 For the avoidance of doubt, the provisions of this Clause 6 are in addition to, and without prejudice to, the Customer's obligations under any other provisions of this Agreement and Clause 13.5 shall apply in the event that the Customer does not procure any of the matters set out in Clause 6.2(a) to (e).

## 7. MONITORING, MAINTENANCE AND PLANNED WORKS

### 7.1 Monitoring

Arqiva shall provide status monitoring, fault diagnosis and remote control of the Equipment and the Transmission Service, through the SMC, at each Station as more particularly described in Schedule 9. For the avoidance of doubt, Arqiva will not monitor the Customer Signals or any transmission characteristics of any Customer Signals.

### 7.2 Maintenance Services

Subject to the remainder of this Clause 7, Arqiva shall, in accordance with and subject to the terms and conditions set out in this Agreement:

- (a) ensure that on and from the Actual Service Start Date at each Station and during the period of this Agreement it has or it shall procure the provision of such facilities, spares and maintenance services as is necessary to enable Arqiva to provide the Transmission Service; and
- (b) plan and carry out maintenance necessary to provide the Transmission Service.

### 7.3 Urgent Maintenance

Without prejudice to Clause 7.4, Arqiva may at any time interrupt the Transmission Service to carry out maintenance of or other work (collectively "work") on any Equipment that it reasonably regards as urgent or essential PROVIDED THAT if there is no reasonable likelihood that the failure to carry out any such work will materially affect services provided to any third parties, such work will be only performed at times and for estimated durations

approved by the Customer and in any event so as to minimise any interruptions or disruption to the Transmission Service. If the Customer does not approve any Arqiva request to interrupt the Transmission Service to perform such work, Arqiva reserves the right to carry out and make additional reasonable charges for any corrective maintenance that subsequently becomes necessary and Arqiva accepts no liability whether by way of service credits or otherwise arising from the Customer failing to give or delaying in the giving of its approval in such circumstances.

#### 7.4 Routine Maintenance

To the extent that the Transmission Service is provided using Equipment or facilities which are also used for the benefit of third parties (whether by Arqiva or another person) Arqiva may interrupt, or permit the interruption of, the Transmission Service for such work to be performed as is required either to ensure that the said Equipment and facilities are maintained in reasonable repair and condition or to enable new or replacement equipment safely to be installed. Arqiva shall consult with and give the Customer reasonable advance notice of such maintenance (usually not less than seven (7) days), agree estimated timing and duration and perform the work during periods when the transmission priority is low, paying due regard to any equivalent obligations owed by Arqiva to other users of the equipment and facilities. Where seven (7) days' notice is not practicable, Arqiva shall give notice to the Customer as soon as practicable.

#### 7.5 Maintenance from a Site

The Customer acknowledges and accepts that Arqiva may be required to interrupt the Transmission Service provided at and from a Site forthwith in case of emergency, so that safe access may be gained to any Mast or the Equipment at such Site. That said, Arqiva may interrupt such Transmission Service only:

- (a) in the event of any life or property threatening emergency;
- (b) where any interference caused by the Equipment is creating significant degradation to the services of other users of the Site and the degradation still exists after Arqiva has taken all reasonable measures (to the extent possible without interrupting the Transmission Service) to remedy any such interference; or
- (c) where it is required to do so by a Government Authority;

and (wherever possible) Arqiva shall in any event ensure that interruptions occur at an estimated time and for a duration agreed with the Customer beforehand and during periods when transmission priority is low.

#### 7.6 Planned Works

The Customer acknowledges and accepts that Arqiva may interrupt the Transmission Service in order to carry out any planned works of the nature described in paragraph 3 of Schedule 11. Arqiva shall consult with and give the Customer reasonable advance notice of such planned works.

### 8. **BREAKDOWNS**

#### 8.1 Notification by Arqiva

Arqiva shall notify the Customer's relevant nominated representative of (i) a Breakdown, (ii) any planned transmission of a Customer Signal with a reduction in power by more than 3dB at a Station for a continuous period exceeding 4 hours as soon as the relevant information is available. Arqiva shall also issue to the Customer a Fault Notice giving details of (a) any Breakdown at a Station lasting for a period of more than 2 minutes and/or (b) the transmission

of a Customer Signal with a reduction in power by more than 3dB at a Station for a continuous period exceeding 4 hours (as applicable) in each case as soon as reasonably practicable after the occurrence of the relevant event. Within a reasonable time thereafter (not being more than five Business Days) Arqiva shall present a report to the Customer explaining the reasons for the Breakdown or planned interruption or transmission with reduced power levels.

## 8.2 Notification by Customer

The Customer shall and/or shall procure that the Content Providers shall (as applicable) notify the SMC by telephone of any Breakdown or other impairment of the System of which it becomes aware as soon as the information is available to the Customer and confirm this as soon as reasonably practicable by issuing a Fault Notice. Moreover, the Customer shall procure that the Multiplex Service Provider and/or the Distribution Service Provider (as applicable) immediately notifies the SMC by telephone or other agreed means of communication of any fault with the Multiplex Service or the Distribution Service (as the case may be) as soon as it becomes aware of the same.

## 8.3 Response Times

Arqiva shall ensure that any Breakdown or other impairment of the System is repaired as soon as practicable after the time from detection by the SMC or receipt by the SMC of notification of the Breakdown or other impairment of the System. In the case of a Breakdown or other impairment of the System which cannot be dealt with by remote control Arqiva shall use reasonable endeavours to ensure that the time from when the SMC detects or is notified of the Breakdown or other impairment of the System until the time an engineer attends at the site of the Breakdown or other impairment does not exceed the relevant Target Response Time.

## 8.4 Full Restoration

The restoration of the Customer Signals at a reduced level so as to bring a Breakdown to an end shall not relieve Arqiva of its obligation fully to restore the Customer Signals as soon as practicable thereafter.

## 8.5 Monthly Report

Arqiva shall provide to the Customer a monthly report on performance with details of any Breakdowns and other impairments and actual response times in relation thereto.

## 8.6 Breakdowns Caused by Customer Signals

Without prejudice to Clause 19, the Customer shall hold Arqiva harmless from any actual loss and/or expense incurred by Arqiva as a consequence of any time spent by Arqiva or its sub-contractors in investigating apparent Breakdowns or other faults arising from the failure of the Customer or the Multiplex Service Provider or the Distribution Service Provider to deliver the Customer Signals.

## 9. CHARGES AND PAYMENT

### 9.1 Subject to the remainder of this Clause 9, as consideration for Arqiva's provision of the Transmission Service, the Customer shall pay to Arqiva:

- (a) the Charges, which are subject to adjustments under the mechanisms as set out in this Clause 9, Schedule 4 and where specified elsewhere in this Agreement;

- (b) the Pass-Through Costs, which shall be payable by way of payment of the Forecast Pass-Through Costs and then reconciled to Actual Pass-Through Costs in accordance with Clause 9.13 and Schedule 4;
- (c) any other charges or fees set out in this agreement, calculated as set out in Clause 9.8, and

the Charges, and Forecast Pass-Through Costs shall become payable in respect of each Station from the Actual Service Start Date applicable to such Station in accordance with the ramp-up which reflects the dates of the rollout of the Stations as set out in Schedule 3.

## 9.2 Indexation

- (a) Until the Actual Service Start Date for the last Station has occurred the Charges shall be adjusted by a percentage equal to the percentage increase in RPI.
- (b) Once the Actual Service Start Date has occurred for the last Station, the Charges shall be adjusted by a percentage equal to the percentage increase in RPI minus 1%.
- (c) The percentage increase shall be calculated by comparing the RPI published in the September preceding the Year for which the Charges are being reviewed, with the RPI published twelve months before the September 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 and (where applicable) then subtracting one percentage point. If any such number is a negative number, it shall be treated as zero for the purposes of the indexation mechanisms 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 commencing 1 November 2014, the relevant increase in RPI is obtained by comparing the RPI for September 2013 and the RPI for September 2014 and expressing the increase between these two values as a percentage increase of the RPI for September 2013 and (where applicable) then subtracting one percentage point.)

9.3 With respect to each Year after the first, Arqiva shall notify the Customer of the Charges for that Year as soon as reasonably practicable after it has been determined. As soon as it becomes aware that the Actual Service Start Date for any Station shall be later than the Target Service Start Date, Arqiva will inform the Customer and notify the Customer of the resulting changes to the Charges for that Year.

9.4 The Customer shall pay the Charges to Arqiva each Year in twelve monthly instalments in advance on the first Business Day of the month, which shall constitute the Due Date. Payment of the Charges shall be effected by banker's direct debit. 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:

- (a) 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
- (b) 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.

- 9.5 Except as otherwise provided for under this Agreement, all charges of Arqiva hereunder shall be payable within 28 days of the date of the relevant invoice, the invoice date being the Due Date for such charges.
- 9.6 **Adjustment of the Charges**
- (a) If a Standard Risk occurs, any costs, losses and expenses incurred by Arqiva shall be covered by the uplift for contingencies detailed in Schedule 4 and there shall be no adjustment to the Charges as a result of the impact of such Standard Risk on future capital expenditure other than in accordance with the provisions contained in Schedule 4.
- (b) Arqiva shall be entitled to adjust the Charges (including, for the avoidance of doubt, any capital expenditure or operating expenditure element of the same), in accordance with the Change Control Procedure, and the Pass-Through Costs may change, to take account of the occurrence of any of the following: (i) any change in the Baseline Specification or in the Station dates in Schedule 3; (ii) any change in the number of: DAB Multiplex Services, AM or FM radio platforms or services or other DAB services with Network Access at each Station (including, without limitation, changes resulting from the phased, partial or total cessation of the AM or FM radio platforms); and/or (iii) any Exceptional Risk.
- 9.7 All fees and charges referred to in this Agreement are exclusive of Value Added Tax and any other tax or duty which shall, if applicable, be payable by the Customer at the rate and in the manner from time to time prescribed by Law.
- 9.8 Arqiva's charges for any work to be performed under any provision of this Agreement which expressly cross-refers to this Clause, and its charges for any work outside the scope of the Transmission Service and the Build Project, shall be calculated by reference to Arqiva's prevailing rates of charge, as amended from time to time (unless agreed otherwise by the parties in writing).
- 9.9 The Customer shall promptly reimburse to Arqiva the annual cost of holding and renewing any WTA Licence or similar licences that Arqiva is required to hold in connection with this Agreement, where the same are required to be held by Arqiva pursuant to the terms of this Agreement.
- 9.10 If the Customer fails to pay any amount payable by it under this Agreement within twenty-eight (28) days from the Due Date, without prejudice to Arqiva's other remedies:
- (a) the Customer shall be liable for and, on Arqiva's demand from time to time, it shall pay interest on such overdue amount from the Due Date up to the date of actual payment in full whether before or after judgement at the rate of 4% per annum over the base rate of the Bank of England, such interest to accrue from day to day and to be computed on the basis of a year of 365 days for the number of days elapsed; and
- (b) Arqiva reserves the right to suspend the Transmission Service until the Customer has made payment in full of the outstanding amount (together with any accrued interest). The Customer shall not be relieved of any liability to pay the Charges in respect of any period during which the provision of the Transmission Service is suspended pursuant to this Clause 9.10(b).
- 9.11 Where any fee or charge is expressed to be payable in respect of a Year, unless otherwise indicated that means a full Year comprising twelve (12) months. Accordingly if this Agreement terminates, in whole or in part, other than at the end of a full twelve (12) month Year, the fee or charge in question shall be prorated on a daily basis to determine the actual amount due in that Year.



- 9.12 At any time during the Term, where Arqiva deems it appropriate in the circumstances, Arqiva may request that the Customer procure a parent company guarantee in favour of Arqiva or provide another form of financial security acceptable to Arqiva. The Customer shall promptly comply with any such request (and a failure to do so shall be deemed a material breach of this Agreement).
- 9.13 Commencing with the first Year in which the Customer is expected to be invoiced for the Charges, Arqiva shall forecast the Pass-Through Costs likely to be payable by the Customer during that Year ("**Forecast Pass-Through Costs**") on a Station by Station basis. Arqiva shall conduct such forecast and notify the Customer of the Forecast Pass-Through Costs by, at the latest, four (4) months prior to the start of the relevant Year.
- (a) The Forecast Pass-Through Costs shall be payable by the Customer in accordance with Clause 9.1.
  - (b) The Customer's share shall be calculated on a Station-by-Station basis, using the following methodology:
    - (i) Arqiva shall first calculate the total amount of Pass-Through Costs (except for any directly attributable Pass-Through Costs) incurred by Arqiva at each Station in respect of the provision of Network Access to all customers at that Arqiva Station;
    - (ii) Arqiva shall then determine each customer's share of the total Pass-Through Costs (including the Customer's share) at each Station on a fair and reasonable basis that is reflective of the attributes/criteria that incur/drive these Pass-Through Costs. The Customer's share shall be this amount, plus (i) any directly attributable Pass-Through Costs, and (ii) the total cost of electricity for its Customer Equipment in the relevant period.
- In procuring electricity required for the operation of the Equipment, Arqiva shall use reasonable endeavours to ensure best value for itself and in turn for the Customer.
- (c) As soon as reasonably practical and no later than four (4) months after the end of the relevant Year, the Customer's share of actual Pass-Through Costs for the relevant Year ("**Actual Pass-Through Costs**"), determined in accordance with Clause 9.13.(b) above, will be compared to the Forecast Pass-Through Costs for the relevant Year. Any overpayment or underpayment by the Customer shall be notified in writing by Arqiva. In the event of any overpayment by the Customer, Arqiva shall issue the Customer with a credit note to the value of any overpayment within thirty (30) days, save where no more Charges are due from the Customer to Arqiva, in which case Arqiva shall pay the amount within thirty (30) days. In the event of any underpayment, Arqiva shall issue an invoice to the Customer for this amount, such invoice being payable in accordance with the terms of this Agreement.
  - (d) Arqiva shall, on the Customer's written request and subject to payment by the Customer of Arqiva's reasonable incurred costs, provide copies of all documentation evidencing and/or supporting the calculation of the Actual Pass-Through Costs for any Year. Arqiva shall not however, be required to provide copies of such documentation to the Customer where by so doing Arqiva would be in breach of or otherwise contravene confidentiality or contractual commitments with other customers or users of Station Facilities. Under these circumstances Arqiva will ensure that a reputable third party independently validates that the Customer's Pass-Through Costs have been derived and/or calculated in accordance with the methodology agreed between Arqiva and the Customer, and provide confirmation of such independent validation to the Customer on request.

The Customer shall not be entitled to request this information more frequently than once per annum. Arqiva shall provide such information promptly and in any event within thirty (30) days, of the Customer's written request.

9.14 The Customer shall be liable to pay for the MTS Electrical Charge (which is a Pass-Through Cost) as further described in paragraph 6 of Schedule 4.

## 10. SERVICE CREDITS AND SUPER CREDITS

### 10.1 Service Credits

- (a) Subject always to Clause 10.1(b), if at the end of any calendar month after the applicable Actual Service Start Date, Arqiva has failed to achieve the Total Time of Service Availability applicable to any Station, Arqiva shall incur a liability to pay service credits to the Customer which shall be calculated by reference to Schedule 12 and payable in accordance with Clause 10.1(d).
- (b) Subject to Clause 10.2, Arqiva's aggregate liability to pay service credits to the Customer under Clause 10.1(a) shall not exceed, in respect of any Year, 10% of the Charges excluding Pass-Through Costs payable by the Customer to Arqiva under this Agreement in that Year.
- (c) Subject to Clause 10.2, the Customer acknowledges that any liability of Arqiva that may arise under this Clause 10.1 shall represent the Customer's sole and exclusive financial remedy in respect of Arqiva's failure to meet the Total Time of Service Availability.
- (d) At the end of each Year, the aggregate of any service credits arising during that Year shall be calculated by Arqiva. Any liability of Arqiva to pay service credits to the Customer shall be satisfied by means of an appropriate adjustment to the Customer's payments to Arqiva in the following Year or by means of a direct payment to the Customer in the case of the final Year. Any dispute as to the amount of any service credits due shall be resolved in accordance with Clause 24.3.

### 10.2 Super Credits

- (a) If Arqiva commits a Persistent Failure:
  - (i) the Customer may submit a Super Credit Notice to Arqiva; and
  - (ii) Arqiva shall have one (1) month following receipt of a valid Super Credit Notice within which to rectify its poor performance as set out in the Rectification Process to the Total Time of Service Availability.
- (b) Where Arqiva fails to rectify its poor performance as required under Clause 10.2(a)(ii) above then the Customer shall be entitled to claim a Super Credit by issuing a Super Credit Claim.
- (c) If the Customer issues a valid Super Credit Claim, Arqiva shall pay the applicable Super Credit within ninety (90) days of receipt of the Super Credit Claim.
- (d) Payment of the Super Credit to the Customer shall be conditional upon the Customer waiving its right to terminate in respect of the relevant Persistent Failure but shall be without prejudice to any right to terminate which may arise thereafter under this Agreement, provided that performance issues that have occurred prior to the date on which the liability to pay the Super Credit arose and which contributed

to that liability shall be disregarded for the purposes of measuring Arqiva's performance under the relevant contractual mechanisms after that date.

(e) Any liability of Arqiva to pay Super Credits will be in addition to any other liability of Arqiva for service credits under this Agreement.

(f) No more than one (1) Super Credit shall be payable by Arqiva in any Year.

## 11. **SUSPENSION**

11.1 The Customer shall have the right at any time to suspend broadcasting of the Licensed Service (in whole or in part) for any reason and upon receipt of written notification to that effect signed by a director or other nominated signatory of the Customer, Arqiva shall suspend the Transmission Service (in whole or in part) for the period notified by the Customer. Save where such suspension arises from Arqiva's breach of the Licences or any act or default of Arqiva or its employees, agents or subcontractors, the Customer shall remain liable to pay the full Charges and Pass-Through Costs during such period of suspension.

11.2 Arqiva shall have the right at any time to suspend provision of the Transmission Service (in whole or in part) where:

(a) the Customer is overdue with payment of any instalment of the Charges or Pass-Through Costs more than thirty (30) days after the Due Date, save that, in the event that Arqiva issues a notice in respect of terminating this Agreement under Clause 16.2(a), Arqiva shall not have the right to issue a concurrent suspension notice under this Clause 11.2(a);

(b) Arqiva receives directions from any competent authority or is ordered by a court of competent jurisdiction to suspend transmission of the Customer Signals, provided that Arqiva shall give the Customer as much advance notice as it is reasonably able of such suspension to the extent that it is practicable and lawful for it so to do and shall use all reasonable endeavours to minimise its duration and impact;

(c) the Customer ceases to hold the Multiplex Licence, WTA Licences or any other licences required to be held by the Customer that are relevant to this Agreement; or

(d) the Content Providers cease to hold any licences required to be held by the Content Providers that are relevant to this Agreement,

in each case until the Customer has rectified such matters or until Arqiva has received appropriate directions from a competent authority or court of competent jurisdiction in respect of recommencement of the provision of the Transmission Service (as the case may be), and Arqiva shall not by reason of such suspension of the Transmission Service be in breach of its obligations to the Customer and the Customer shall remain liable to pay the full Charges during such period of suspension.

11.3 The Customer shall indemnify and keep indemnified Arqiva from and against all claims, costs (including, without limitation, legal costs), damages and expenses awarded against Arqiva or agreed in any settlement resulting from any failure by: (i) the Customer to comply with the Multiplex Licence or any other licences required to be held by the Customer that are relevant to this Agreement; or (ii) the Content Providers to comply with any licences required to be held by the Content Providers that are relevant to this Agreement.

## 12. **CHANGE CONTROL PROCEDURE**

12.1 Except as otherwise expressly provided in this Agreement, if the Customer or Arqiva wishes to make any change to the terms and/or scope of the Transmission Service provided hereunder (including, for the avoidance of doubt, any change whatsoever related to

transmission) ("**Change**"), the parties shall follow the Change Control Procedure set out in Schedule 13, and the timing and manner of applying any such change shall be processed pursuant to and in accordance with such Change Control Procedure. Without limitation to the foregoing, any change to the Baseline Specification and any change resulting from the occurrence of an Exceptional Risk shall be dealt with through the Change Control Procedure.

- 12.2 Each of Arqiva and the Customer will nominate a representative who will be responsible for submitting requests for Changes to and receiving such requests from the other party. Approval of any such request by its representative in accordance with the procedure in Schedule 13 shall bind the relative party. The identity of either party's representative may be changed at any time by written notice to the other party.
- 12.3 Arqiva shall notify the Customer in advance of the impact of any such Changes through the Change Control Procedure. If the Customer does not accept the impact of any such Changes (including as to any adjustment to the Charges), the Customer shall have the right to have the matter referred to an expert pursuant to Clause 24.3.
- 12.4 The parties acknowledge that it may become appropriate for Changes to the technical requirements of the System to be made during the course of or after the Build Project and that requests for such Changes, all of which must be in writing, may be generated from several possible sources, including Arqiva, the Customer, Ofcom, DCMS or the Content Providers. All requests for such Changes initiated by the Content Providers must be channelled through and be endorsed by the Customer before being submitted to Arqiva pursuant to the Change Control Procedure.
- 12.5 There will be regular technical progress meetings which will be the forum at which requests for Changes to the technical requirements of the System are discussed and, if agreement is reached, jointly endorsed pursuant to the Change Control Procedure. For the avoidance of doubt, save where expressly stated otherwise in Schedule 13, the Customer must approve any changes to fees and timescale, as advised by Arqiva, before Arqiva begins implementation.
- 12.6 The target timescale for processing requests for a Change will be within the timescale specified in the Change Control Procedure (or as otherwise agreed from time to time). It is recognised that minor changes should be processed more quickly but that major changes will be subject to a longer agreed time scale.

### 13. **LIABILITY**

- 13.1 Arqiva accepts liability to the Customer only as expressly provided or contemplated in this Clause 13, Clause 10 and Clause 4.3, and otherwise shall have no liability to the Customer under or in connection with this Agreement whether arising in or for breach of contract, tort (including negligence), breach of statutory duty, indemnity or otherwise.
- 13.2 Without prejudice to Clause 13.4, Arqiva's maximum aggregate liability to the Customer arising under or in connection with this Agreement, 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 lesser of:
- (a) in respect of any individual Station, an amount equal to 125% (one hundred and twenty five percent) of the Charges excluding Pass-Through Costs payable by the Customer to Arqiva under this Agreement in respect of that Station and that Year; and
  - (b) £1,000,000 (one million pounds) in aggregate (i.e. this cap does not apply on a per Station basis, but is a single cap on all liability for the Year).

For the avoidance of doubt any amounts payable by Arqiva to the Customer by way of service credits or Super Credits under Clause 10 or Liquidated Damages under Clause 4.3 shall count towards the limits on liability set out in this Clause 13.2.

- 13.3 Arqiva shall not be liable to the Customer under or in connection with this Agreement, or any collateral contract, for any loss of income, loss of actual or anticipated profits, 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, and whether arising in or for breach of contract, tort (including negligence), breach of statutory duty, indemnity or otherwise. Without limitation to the generality of the foregoing, Arqiva hereby excludes all and any liability to compensate the Customer that Arqiva might otherwise incur in respect of: (i) any loss of advertising revenue, subscription fees or pay-per-view/listen fees; and (ii) any third party claims brought against the Customer (including claims brought against the Customer by any Content Provider or any other of its customers).
- 13.4 Nothing in this Clause 13 or otherwise in this Agreement shall exclude or in any way limit either party's liability: (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; (iv) under the indemnities set out in Clause 15.2 and Clause 15.7 respectively; or (v) to the extent the same may not be excluded or limited as a matter of Law.
- 13.5 Arqiva shall have no liability to the Customer, and the 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 this Agreement, to the extent that such delay or failure is attributable to any act, omission or delay of or by the Customer or any of its employees, agents or contractors (including any breach by the Customer of any obligation under this Agreement or of any licence required to be held by the Customer relevant to this Agreement and/or any failure by the Customer to comply with any of its obligations under Schedule 19).
- 13.6 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 and to any liability arising or incurred by reason of the invalidity or unenforceability, in whole or in part, of any term of this Agreement.
- 13.7 This Agreement sets forth the full extent of Arqiva's obligations and liabilities arising out of or in connection with this Agreement, and there are no conditions, warranties, representations or terms, express or implied, that are binding on Arqiva except as specifically stated in this Agreement. Any condition, warranty, representation or term which might otherwise be implied into or incorporated in this Agreement, whether by statute, common law or otherwise, is hereby expressly excluded.

#### 14. **FORCE MAJEURE**

- 14.1 Neither party shall be liable for its failure to perform or its delay in performing its obligations for any period or for resulting loss, injury or damage to the extent only that such performance is prevented or directly adversely affected by any of the following events: any act of god, insurrection or civil disorder, war or military operations, national or local emergency, acts or omissions of Government Authority, highway authority or other competent authority, industrial disputes of third parties (excluding the affected party's agents and subcontractors), fire, flood, severe inclement weather or national epidemic or any other cause whether similar or dissimilar outside the affected party's control (each a "**Force Majeure Event**"), all to the extent that these events are beyond the affected party's control and have not occurred as a result of any act or default of the affected party, its employees, agents or subcontractors and provided also that the occurrence of any such Force Majeure Event shall not have the effect of discharging or postponing the affected party's payment obligations or liabilities hereunder.

Any party seeking to rely on this Clause shall promptly notify the other in writing. The period of excused non-performance shall be limited to the duration of the applicable Force Majeure Event.

#### 14.2 Termination

- (a) In the event that a Force Majeure Event has prevented Arqiva from providing the Transmission Service in accordance with this Agreement for a period of one hundred and twenty (120) consecutive days at a Station and Arqiva has failed, during such period, to restore the Transmission Service the Customer shall be entitled to terminate this Agreement forthwith upon written notice to Arqiva in respect of such affected Station and the Charges shall be reduced proportionately (with a pro rata adjustment for the then current Year to reflect the number of days left in the Year).
- (b) In the event that a Force Majeure Event has prevented the Transmission Service from being provided at at least 50% of the Stations for a continuous period of 60 consecutive days the Customer shall be entitled to terminate this Agreement in its entirety on written notice to Arqiva.
- (c) If the Customer is prevented from performing its obligations under this Agreement for a continuous period exceeding one hundred and twenty (120) days, Arqiva may by notice in writing to the Customer, immediately terminate this Agreement.
- (d) In the event that a Force Majeure Event has prevented Arqiva from completing the Build Project in respect of any Station, within six (6) months of the relevant Target Service Start Date, either party shall be entitled to terminate this Agreement in respect of that Station.
- (e) In the event of any termination pursuant to this Clause 14.2, the provisions of Clause 17.4 shall apply.

### 15. **INTELLECTUAL PROPERTY**

#### 15.1 Licence of Customer Signal

The Customer hereby grants to Arqiva for the period of transmission of the relevant Customer Signal a non-exclusive royalty free licence (with the right to sub-license to sub-contractors) to transmit the Customer Signals in the United Kingdom for the sole purpose of providing the Transmission Service. The Customer hereby represents that it has or will have all requisite authority to enable it to grant such licence to Arqiva.

#### 15.2 Indemnity regarding Customer Signals

The Customer agrees during this Agreement and thereafter to indemnify and keep indemnified Arqiva from and against all 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 of the Content, the Customer Signals 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 Signals:

- (a) is in breach of any duty of confidentiality or privacy;
- (b) infringes any existing or future Intellectual Property Rights;
- (c) is defamatory or obscene;

- (d) infringes any applicable Law or any voluntary codes of conduct in relation to the broadcasting of programmes or provision of data services; or
- (e) causes damage to any listener's DAB receiver or other DAB reception device.

### 15.3 Notice and Conduct of Claim

- (a) Arqiva shall notify the Customer as soon as reasonably practicable of any claim from a third party as referred to in Clause 15.2 (a "**Claim**") and, subject to Clause 15.3(b), at the Customer's sole cost, shall provide reasonable assistance in connection with the Claim when requested. Subject to Clause 15.3(b), the Customer shall be entitled to resist, compromise or settle a Claim in the name of Arqiva at the Customer's own expense and to have the sole conduct and control of any appeal, dispute, compromise, settlement or defence of a Claim and of any incidental negotiations and Arqiva shall give the Customer, at the Customer's cost, all reasonable cooperation, access and assistance for the purposes of considering and resisting such Claim and shall not make any admissions or statements prejudicial to the Customer. The Customer shall keep Arqiva reasonably informed and consult with it as to the conduct of the Claim.
- (b) If within ninety (90) days after Arqiva's receipt of notice of any Claim, the Customer fails to take action to defend the same, Arqiva may at the 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 the Customer informed of any reasonable settlement proposals made by the claimant and shall not agree any settlement without the Customer's prior written consent (not to be unreasonably withheld or delayed).

### 15.4 Existing and Future Intellectual Property Rights

The Customer agrees that any original document, hardware or prototype produced by Arqiva in its performance of the Transmission Service and all Intellectual Property Rights developed or created by Arqiva in the performance of the Transmission Service or any other services hereunder shall vest in and be owned by Arqiva provided that Arqiva shall grant the Customer a licence of such Intellectual Property Rights solely as are required for the exercise of the Customer's rights under this Agreement.

### 15.5 Intellectual Property Rights in Customer Signals

Nothing in this Agreement shall operate to vest in or transfer to Arqiva any Intellectual Property Rights in the Content or Customer Signals transmitted by Arqiva pursuant to this Agreement and any such rights shall, as between Arqiva and the Customer, vest solely in the Customer.

### 15.6 Warranty re. Operation of Transmission Service

Arqiva warrants that the operation and provision of the Transmission Service per se:

- (a) will not infringe the Intellectual Property Rights of any third party; and
- (b) will not cause physical damage to any listener's DAB receiver or other DAB reception device, provided always that such receiver or other device has been designed and tested by the relevant manufacturer to meet the applicable DAB and other relevant standards; and

- (c) will not interfere or otherwise adversely affect the transmission or broadcast of any third party's signals.

#### 15.7 Indemnity regarding Operation of Transmission Service

Subject to the Customer's compliance in all respects with Clause 15.8, Arqiva shall indemnify the Customer against all claims, costs (including reasonable legal costs) damages and expenses incurred by or awarded against the Customer in respect of any breach of the warranty in Clause 15.6.

#### 15.8 Notice and Conduct of Third Party Claim

The Customer shall notify Arqiva in writing as soon as reasonably practicable of any claim from a third party as referred to in Clause 15.7 (a "**Third Party Claim**") and, at Arqiva's sole cost, shall provide all information and assistance in connection with any Third Party Claim as Arqiva may reasonably require. Arqiva shall be entitled to resist, compromise or settle a Third Party Claim in the name of the Customer at Arqiva's own expense and to have the sole conduct and control of any appeal, dispute, compromise, settlement or defence of a Third Party Claim and of any incidental negotiations and the Customer shall give Arqiva, at Arqiva's reasonable cost, all reasonable cooperation, access and assistance for the purposes of considering and resisting such Third Party Claim and shall not make any admissions or statements prejudicial to Arqiva. Arqiva shall keep the Customer fully informed and consult with it as to the conduct of any Third Party Claim.

### 16. DURATION AND EARLY TERMINATION

#### 16.1 Term

Subject to the remainder of this Clause 16, this Agreement shall come into force on the Execution Date and shall continue thereafter for a fixed term expiring at 24:00 hours on [*insert date to be based upon 12 years from commencement of broadcasting*] whereupon it shall automatically and immediately terminate unless renewed by mutual written agreement of the parties.

#### 16.2 Termination by Arqiva

Arqiva shall be entitled forthwith on serving a written notice on the Customer to terminate this Agreement immediately (unless otherwise stated below) in whole on any of the following events occurring:

- (a) if the Customer has not paid any amount due within thirty (30) days of the Due Date, provided that, in the event that Arqiva issues a suspension notice under Clause 11.2(a), Arqiva shall not have the right to issue a concurrent termination notice under this Clause 16.2(a);
- (b) if the Customer commits any other material breach of any provision of this Agreement and, where remediable, does not remedy the breach within sixty (60) days of Arqiva notifying the Customer in writing of the breach in question;
- (c) if:
  - (i) the Customer ceases or threatens to cease to trade (either in whole, or as to any part or division involved in the performance of this Agreement);
  - (ii) the Customer is unable or admits inability to pay its debts as they fall due, suspends making payments on any of its debts or, by reason of actual or anticipated financial difficulties, commences negotiations with one or more of its creditors with a view to rescheduling any of its indebtedness or the value



of the assets of the Customer is less than its liabilities (taking into account contingent and prospective liabilities) or a moratorium is declared in respect of any indebtedness of the Customer; or

- (iii) any corporate action, legal proceedings or other procedure or step is taken in relation to:
  - (A) the suspension of payments, a moratorium of any indebtedness, winding-up, dissolution, administration or reorganisation (by way of voluntary arrangement, scheme of arrangement or otherwise) of the Customer other than a solvent liquidation or reorganisation;
  - (B) a composition, compromise, assignment or arrangement with any creditor of the Customer;
  - (C) the appointment of a liquidator (other than in respect of a solvent liquidation), receiver, administrative receiver, administrator, compulsory manager or other similar officer in respect of the Customer or any of its assets; or
  - (D) enforcement of any security over any assets of the Customer, or any expropriation, attachment, sequestration, distress or execution affects any asset of the Customer having an aggregate value of £10 million and is not discharged within thirty (30) days,
- (iv) or any analogous procedure or step is taken in any jurisdiction; or
- (d) if the Multiplex Licence or any other licences required to be held by the Customer that are relevant to this Agreement are: (i) revoked for any reason except in the context of the grant to the Customer of a replacement licence, or (ii) surrendered by the Customer; or (iii) breached by the Customer.

### 16.3 Termination by Customer for Cause

The Customer shall, without prejudice to its other remedies, be entitled forthwith on serving a written notice on Arqiva to terminate this Agreement immediately in whole on any of the following events occurring:

- (a) if Arqiva commits a material breach of any provision of this Agreement and, where remediable, does not remedy the breach or otherwise satisfactorily compensate the Customer in respect of such breach within sixty (60) days of the Customer notifying Arqiva in writing of the breach in question;
- (b) if:
  - (i) Arqiva ceases or threatens to cease to trade (either in whole, or as to any part or division involved in the performance of this Agreement);
  - (ii) Arqiva is unable or admits inability to pay its debts as they fall due, suspends making payments on any of its debts or, by reason of actual or anticipated financial difficulties, commences negotiations with one or more of its creditors with a view to rescheduling any of its indebtedness or the value of the assets of Arqiva is less than its liabilities (taking into account contingent and prospective liabilities) or a moratorium is declared in respect of any indebtedness of Arqiva; or
  - (iii) any corporate action, legal proceedings or other procedure or step is taken in relation to:

- (A) the suspension of payments, a moratorium of any indebtedness, winding-up, dissolution, administration or reorganisation (by way of voluntary arrangement, scheme of arrangement or otherwise) of Arqiva other than a solvent liquidation or reorganisation;
  - (B) a composition, compromise, assignment or arrangement with any creditor of Arqiva;
  - (C) the appointment of a liquidator (other than in respect of a solvent liquidation), receiver, administrative receiver, administrator, compulsory manager or other similar officer in respect of Arqiva or any of its assets; or
  - (D) enforcement of any security over any assets of Arqiva, or any expropriation, attachment, sequestration, distress or execution affects any asset of Arqiva having an aggregate value of £10 million and is not discharged within thirty (30) days,
- (iv) or any analogous procedure or step is taken in any jurisdiction; or
- (c) if Arqiva ceases to hold any of the Licences.

## 17. CONSEQUENCES OF TERMINATION

### 17.1 Return of Property

Upon termination of this Agreement for whatever reason the Customer shall, at Arqiva's request, as soon as reasonably practicable, make available for collection by Arqiva, all of Arqiva's or its agents' or sub-contractors' documents or equipment as are in the Customer's possession or under its control and vice versa.

### 17.2 Accrued Rights

Any termination or expiry of this Agreement shall be without prejudice to either party's right to recover any sums due to be paid or to any other rights accrued to one party in accordance with this Agreement on or prior to the effective date of such termination.

### 17.3 Transition Assistance

If this Agreement expires or is terminated by the Customer under Clause 16.3(a) or 16.3(c) Arqiva shall provide reasonable transition assistance to the Customer upon the Customer's request as set out in Schedule 19 and subject to payment of Arqiva's applicable fees (applying Clause 9.8) at any time prior to or within six (6) months after the expiry or termination of this Agreement.

### 17.4 Termination Payments

If this Agreement is terminated pursuant to any of Clauses 16.2(a), (b), (c) or (d) or Clause 14.2, the Customer shall pay to Arqiva the termination payment set out in Schedule 22 in accordance with the provisions of that Schedule. The Customer's only liability to Arqiva following a termination of this Agreement pursuant to such Clauses shall be to pay the applicable termination payments pursuant to this Clause 17.4 and Schedule 21 but any such termination shall otherwise be without prejudice to the accrued rights and liabilities of the parties as at the effective date of termination including, without limitation, the Customer's obligation to pay, and Arqiva's right to recover, any sums due by the Customer under Clause 9 (and otherwise under this Agreement) up to and including the effective date of termination.

### 17.5 Purchase of Exclusive Contracted Equipment

- (a) The Customer may at any time between six (6) months and eighteen (18) months prior to the date of expiry of this Agreement submit a written request to Arqiva to provide:
  - (i) a detailed inventory of all Exclusive Contracted Equipment, including an indication of the cost of such Exclusive Contracted Equipment (calculated in accordance with the Undertakings) (the "inventory"); and
  - (ii) a plan to facilitate transfer of ownership and control of such Exclusive Contracted Equipment to the Customer or its nominee upon expiry of this Agreement which will include the information set out in Schedule 19 (the "transition plan").
- (b) Arqiva shall consult with the Customer in generating the transition plan and shall provide both the inventory and the transition plan referred to in Clause 17.5(a) to the Customer within three (3) months following receipt of the Customer's written request.
- (c) Following receipt of the information referred to in Clause 17.5(a) by the Customer and, in any event, at least two (2) months prior to the expiry of this Agreement, the Customer may submit to Arqiva a written request to: (i) implement the transition plan; and (ii) transfer all of the Exclusive Contracted Equipment to the Customer (or its nominee).
- (d) Arqiva shall implement this request upon expiry of the Agreement, subject to payment by the Customer of the cost of the Exclusive Contracted Equipment (as notified to the Customer pursuant to Clause 17.5(b)).
- (e) The Customer may also exercise the rights set out in Clauses 17.5(a) to (d) in circumstances where the Customer terminates the Agreement pursuant to Clause 16.3(a) or 16.3(c), subject to the following amendments:
  - (i) within five (5) Business Days following the date of the Customer's notice to terminate, the Customer shall submit a written request to Arqiva to provide the inventory of Exclusive Contracted Equipment referred to in Clause 17.5(a)(i) above and the transition plan referred to in Clause 17.5(a)(ii), receipt of which shall be acknowledged by Arqiva;
  - (ii) Arqiva shall provide the inventory and the transition plan to the Customer within one (1) month following receipt of the Customer's written request pursuant to Clause 17.5(e)(i);
  - (iii) the Customer shall submit a written request to Arqiva to: (i) implement the transition plan; and (ii) transfer all of the Exclusive Contracted Equipment to the Customer (or its nominee) no later than six (6) months following receipt of the information pursuant to Clause 17.5(e)(ii);
  - (iv) Arqiva shall have one (1) month following receipt of this request in which to implement the request subject to the conditions set out in Clause 17.5(d);
  - (v) Until such time as the transition plan is implemented and all of the Exclusive Contracted Equipment is transferred, this Agreement shall continue in full force and effect (save that no liability to pay Super Credits shall accrue following the notice to terminate) and Arqiva shall continue to provide the Transmission Service and the Customer shall continue to pay the Charges and Pass-Through Costs in accordance with the terms of this Agreement.

- (f) In the event that the Customer does not comply within the timescales set out in this Clause 17.5, then the Customer's right to purchase the Exclusive Contracted Equipment shall lapse (and, for the avoidance of doubt, the provisions of Clause 17.5(e)(v) shall not apply).

**18. SUB-CONTRACTING OF WORK**

Arqiva may sub-contract any of its obligations under this Agreement but shall remain fully liable to the Customer for the failure of any such sub-contractor to perform satisfactorily any obligation of this Agreement which may be sub-contracted to it.

**19. EXTRA WORK**

If Arqiva incurs costs at the Customer's request and no defect is found or the costs were otherwise needlessly incurred, Arqiva is entitled to full reimbursement from the Customer. Moreover, Arqiva may make separate additional charges for work (to be calculated in accordance with Clause 9.8) carried out by Arqiva as a result of incorrect or inadequate information provided by the Customer or any breach of this Agreement by the Customer requiring Arqiva to operate to different technical criteria.

**20. RELIANCE ON INSTRUCTIONS**

20.1 For communications other than those covered by Clause 23, each party shall be bound by and shall be entitled to rely on any communication whether in writing or by telephone which that party has reasonable cause for believing has been given or made for or on behalf of the other. Each party shall adopt and ratify all such communications notwithstanding any lack of actual authority and will indemnify the other from and against all liabilities, obligations, claims, actions and expenses of any kind imposed on or incurred as a result of reliance on any such communication.

20.2 Notwithstanding Clause 20.1, Arqiva shall not act on the instruction or request of the Customer to suspend the Transmission Service or any material element thereof unless confirmed in writing by a director or other nominated signatory of the Customer.

**21. CONFIDENTIALITY**

21.1 Each party undertakes to maintain and procure the maintenance of the confidentiality of Confidential Information of the other party at all times and to keep and procure the keeping of all Confidential Information of the other party secure and protected against theft, damage, loss or unauthorised access, and not at any time, whether during the Term 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 of the other party, 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.

21.2 Each party undertakes to disclose Confidential Information of the other party only to those of its officers, employees, agents, contractors, financiers and advisers 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, contractors financiers and advisers are made aware of and observe the confidentiality obligations in this Clause 21.

21.3 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 other party then in its possession or control and will not retain any copies of the same.

21.4 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 of the other party, whether inadvertent or otherwise.

- 21.5 The terms of and obligations imposed by this Clause 21 shall survive the termination or expiry of this Agreement but shall not apply to any Confidential Information which:
- (a) 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;
  - (b) is lawfully received by the receiving party from a third party on an unrestricted basis;
  - (c) is already known to the receiving party before receipt hereunder; or
  - (d) is independently developed by the receiving party or its employees, agents or contractors.
- 21.6 The receiving party may disclose Confidential Information of the other party as may be required by Law, 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.
- 21.7 The specific terms of this Agreement shall constitute confidential information of both parties for the purposes of this Clause 21.

## 22. **ASSIGNMENT**

- 22.1 Subject to Clause 22.2 and except where expressly stated otherwise in this Agreement, neither party may transfer, novate, assign or sub-license this Agreement or their respective rights or obligations under it in whole or in part without the prior written consent of the other, such consent not to be unreasonably withheld or delayed.
- 22.2 Notwithstanding Clause 22.1, Arqiva may on written notice to the Customer transfer, novate, assign or sub-license this Agreement or its respective rights or obligations under it in whole or in part to any of its Associated Companies, or to any person acquiring all or substantially all of the assets of Arqiva (and the Customer hereby consents to the same). Further Arqiva may assign its rights to payments, revenues and any similar rights, pursuant to any fixed or floating charge or other security arrangement required under any funding arrangements applicable to its business.

## 23. **NOTICES**

- 23.1 Any notice, consent, request or other communication required to be given under any provision of this Agreement shall, unless otherwise indicated in that provision, be in writing and be served under this Agreement by being hand delivered or sent by first class recorded delivery post or answer back facsimile process to the party to be served at its address appearing in this Agreement or at such other address as it may have notified to the other party in accordance with this Clause 23.
- 23.2 Any notice or document shall be deemed to have been served:
- (a) if hand delivered, at the time of delivery; or
  - (b) if posted, at 10.00 a.m. on the second Business Day after it was put into the post; or
  - (c) if sent by facsimile and acknowledged by the correct answer back facsimile process, at the expiration of 2 hours after the time of despatch, if despatched before 3.00 p.m. on any Business Day, and in any other case at 10.00 a.m. on the Business Day following the date of despatch.

23.3 In proving service of a notice or document it shall be sufficient to prove that delivery was made or that the envelope containing the notice or document was properly addressed and posted as a prepaid first class recorded delivery letter or that the answer back facsimile message was properly addressed and despatched as the case may be.

## 24. GOVERNING LAW AND DISPUTE RESOLUTION

### 24.1 Governing Law

The construction, validity and performance of this Agreement, and all non-contractual obligations arising from or connected with this Agreement, shall be governed by English Law and, subject to Clauses 24.2 to 24.4, the parties hereby submit irrevocably to the exclusive jurisdiction of the English courts to resolve any dispute between them.

### 24.2 Dispute Procedure

Without prejudice to Clause 24.3 and 24.4, any unresolved 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 meet to discuss the matter within 5 Business Days. If the matter is not resolved at such meeting, the matter shall be referred to the persons listed at Level 2 in the escalation table below who must meet within a further ten (10) Business Days or such other period as the parties may agree to attempt to resolve the matter. If the matter is not resolved at such meeting, the matter shall be referred to the persons listed at Level 3 in the escalation table below who must meet within a further fifteen (15) Business Days or such other period as the parties may agree to attempt to resolve the matter. If the unresolved matter is having a serious effect on the performance of this Agreement, the parties shall use all reasonable endeavours to reduce the elapsed time in completing the process. Nothing in this Clause 24.2 shall prevent either party from seeking emergency or injunctive relief from any court of competent jurisdiction in relation to any damage or anticipated damage to property or proprietary rights.

Customer	Arqiva
First Level:	First Level:
<i>[to be inserted prior to execution]</i>	Customer Account Director
Second Level:	Second Level:
<i>[to be inserted prior to execution]</i>	Director, Terrestrial Broadcast
Third Level:	Third Level:
<i>[to be inserted prior to execution]</i>	Company Secretary

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. Any matter which remains unresolved following exhaustion of the escalation procedure set out in this Clause 24.2 shall be dealt with in accordance with Clause 24.1.

### 24.3 Expert Determination

If a dispute arises in relation to any factual or financial matter under any provision of this Agreement which cross refers to this Clause 24.3, then either party shall be entitled, by notice in writing to the other, to refer the matter to an independent expert. In the absence of agreement between the parties as to the identity of the expert within 30 days of either party's aforesaid notice, the expert shall be appointed by a nominee of President of the Institute of Chartered Accountants in England and Wales. Arqiva and the Customer shall cooperate in providing to the expert such information as the expert reasonably requests to assist in his deliberations. Where relevant, pending the expert's decision the direct debit for the Charges shall not be changed. Arqiva and the Customer shall (in the absence of manifest error) accept as final and binding the decision of the expert. Where the expert finds in favour of one party, such sum as the expert determines shall be paid by the other party within 28 days of such decision, plus interest from the Due Date in respect of the sum. Following the expert's decision, the direct debit for the Charges and/or Pass-Through Costs shall be changed as necessary to reflect such decision. Any fees, costs and/or expenses payable to any expert appointed under this Clause 24.3 shall be shared as determined by the expert.

#### 24.4 Undertakings

The Customer may refer any dispute to the Adjudicator in accordance with the Adjudicator Scheme and Adjudicator Rules (as such terms are defined in the Undertakings).

#### 25. GENERAL

25.1 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.

25.2 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.

25.3 If any term of this Agreement is found to be illegal, invalid or unenforceable under any 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.

25.4 Notwithstanding any other provision of this Agreement, 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
- (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.

25.5 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) and that party's only remedies shall be for breach of contract as provided in this Agreement.

- 25.6 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 expiry or termination, shall remain in full force and effect notwithstanding such expiry or termination.
- 25.7 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. The Customer acknowledges that no provisions in this Agreement are intended to create nor shall be treated or construed as creating the relationship of landlord and tenant between Arqiva and the Customer, which relationship shall be merely that of the provider and recipient of services and the Customer makes no claim and shall not make any claim in this respect.
- 25.8 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.
- 25.9 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.
- 25.10 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 in accordance with the Change Control Procedure.
- 25.11 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.



## SCHEDULE 1

### Defined Terms

In this Agreement the following expressions shall have the meanings ascribed to them:

**"Acceptance Testing Plan"** means the acceptance testing plan agreed by the parties pursuant to Schedule 15 of this Agreement;

**"Act"** means the Broadcasting Act 1996;

**"Actual Pass-Through Costs"** has the meaning given to it in clause 9.13(c);

**"Actual Service Start Date"** means in relation to each Station, the date on which Arqiva's provision of the Transmission Service commences pursuant to Clause 5.2;

**"ACI Filler"** means Adjacent Channel Interference Filler

**"Adjacent Channel Filler"** means a transmission service required to overcome the impact of Adjacent Channel Interference;

**"Adjacent Channel Interference" or "ACI"** means 'hole punching' in the coverage of other multiplexes on adjacent-channel frequencies serving the same area.

**"Adjudicator"** means the adjudicator appointed under the Undertakings;

Adjudication Rules" and "Adjudication Scheme" have the meanings given to them in the Undertakings;

**"Advance Design Agreement"** means the agreement referred to in Clause 2.8(a) to allow Arqiva to commence the design process in [*date to be inserted prior to execution*] prior to the signature of this Agreement;

**"Advance Equipment Procurement Agreement"** means the agreement referred to in Clause 2.8(b) to allow orders to be placed for Equipment prior to the signature of this Agreement;

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

**"Antenna"** means any antenna, dish or other item of equipment, apparatus, appliance or instrument installed on or affixed to any structure or building for the reception, transmission or relay of radio or electromagnetic waves and used in the provision of the DAB Service.

**"Antenna ADS Approval Date"** means any date so specified in Schedule 3 (Station Dates);

**"Antenna Design Proposal"** means a document prepared by Arqiva which will set out the Antenna options available to the Customer;

**"Antenna Design Specification" or "ADS"** means the specification for the Antenna System which shall include the selected Antenna physical configuration, computer modelled HRPs, the computer modelled VRPs, provisional system gain calculations and provisional implementation plans;

**"Antenna System"** means the assembly of Antenna(s) and the supporting fixtures and feeders for that assembly;

**"Arqiva Licence"** means (i) any radio spectrum licence granted to Arqiva under Part I of the Wireless Telegraphy Act 1949; and/or (ii) any conditions imposed on Arqiva under the General Authorisation as applicable;

**"Associated Company"** means in relation to any company: any subsidiary of that company, that company's holding company or any subsidiary of such holding company from time to time. A company or other entity shall be a "holding company" for the purpose of this definition if it falls within either the meaning attributed to that term in Section 1159 of the Companies Act 2006 or the meaning attributed to the term "parent undertaking" in Section 1162 of the Companies Act 2006, and a company or other entity shall be a "subsidiary" for the purposes of this definition if it falls within either the meaning attributed to that term in Section 1159 of the Companies Act 2006 or the meaning attributed to the term "subsidiary undertaking" in Section 1162 of the Companies Act 2006;

**"Baseline Specification"** means the configuration and description of the System which is current as at the Execution Date, as set out in Schedule 6;

**"Breakdown"** means a fault in the System or Equipment or other event which causes either: (i) a Loss of Transmission; or (ii) a Quality Impairment;

**"Build Project"** means the project to construct and install all elements of the System as set forth in Clause 4.2 and in accordance with the programme set forth in Schedule 3;

**"Business Day"** means any day which is not a Saturday, Sunday or a public holiday in the United Kingdom;

**"Change"** has the meaning given to it in Clause 12.1;

**"Change Control Procedure"** means the procedure set out at Schedule 13;

**"Change in Broadcasting Law"** means any of the following:

(i) any change to the Wireless Telegraphy Acts 1949, 1967, 1998 and 2006, the Telecommunications Act 1984, the Broadcasting Act 1990, the Broadcasting Act 1996, the Communications Act 2003 and any other statutes or regulations relating to broadcasting, wireless telegraphy or telecommunications as are from time to time in force during the term of this Agreement (the "Statutes");

(ii) any extension, enactment or re-enactment of any of the Statutes;

(iii) any change to any licences required to be held by Arqiva pursuant to any of the Statutes which requires Arqiva to carry out further work in order to be in compliance in all material respects therewith; or

(iv) any relevant technical standards notified by any Competent Authority to Arqiva from time to time;

**"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 guidance issued by any Government Authority or (vi) any Change in Broadcasting Law;

**"Change Log"** has the meaning given to it in Paragraph 5.1 of Schedule 13;

**"Change Proposal"** has the meaning given to it in Paragraph 1.4 of Schedule 13;

**"Change Request"** has the meaning given to it in Paragraph 1.2 of Schedule 13;

**"Charges"** means the Managed Transmission Fee and the Network Access Fee payable by the Customer to Arqiva for the provision of the Transmission Service under Clause 9;

**"Charging Year"** means the period of 12 months from the Actual Service Start Date for the last Station and any subsequent period of 12 months starting on an anniversary of the Actual Service Start Date for the last Station or, where the context requires, part thereof while this Agreement remains in force;

**"Common Equipment"** means the Equipment which is wholly or partly used to provide Network Access and which is shared or available for shared use by Arqiva, the Customer, and/or any other party authorised by Arqiva from time to time;

**"Combiner Unit"** means the equipment required to bring together multiple customer output signals into a shared Antenna.

**"Competent Authority"** means Ofcom or H.M. Government and for the avoidance of doubt shall include DCMS.

**"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;

**"Consents"** means any consent, approval, licence (including the Licences), authorisation or permission that Arqiva requires from any Competent Authority, Government Authority, landlord or other third party in order to provide the Service.

**"Content"** means any programming, advertisements, data or other material, free to air or otherwise which the Customer wishes to have broadcast as part of the Licensed Service;

**"Content Provider"** means any provider of Content;

**"Content Signals"** means signals comprising Content to be delivered by the relevant Content Provider to the Standard Interface;

**"Customer Equipment"** means any Equipment agreed in advance with Arqiva and used exclusively by the Customer or otherwise under the Customer's exclusive control;

**"Customer Licences"** means the Multiplex Licence and the WTA Licences;

**"Customer Signals"** means signals comprising Content to be delivered by the Customer to Arqiva under Clause 5.3(a) and Schedule 8;

**"CRO"** or **"Change Request Order"** has the meaning given to it in Paragraph 1.6 of Schedule 13;

**"DAB"** means digital audio broadcasting;

**"DAB Multiplex Licensee"** means the holder of a DAB Multiplex licence for either national or local services;

"**DCMS**" means the Department of Culture, Media and Sport and any successor body;

"**Distribution Service**" means the distribution service using the Distribution System comprising the conveyance of the Customer Signals to the MTS Insertion Points;

"**Distribution Service Provider**" means the entity or entities that the Customer shall advise Arqiva from time to time as being responsible throughout the term of this Agreement for conveying the Customer Signals by means of the Distribution System to the MTS Insertion Points;

"**Distribution System**" means the system used by the Distribution Service Provider to convey the Customer Signals to the MTS Insertion Points;

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

"**Equipment**" means any equipment used by Arqiva in the provision of the Transmission Service;

"**ERP**" means Effective Radiated Power;

"**ETI**" means an Ensemble Transport Interface;

"**Exceptional Risk**" means any risk so identified in Schedule 18;

"**Exclusive Contracted Equipment**" means such Equipment as is used by Arqiva solely in the provision of the Transmission Service and comprised in the Managed Transmission Elements but not including any Equipment which is used to provide Network Access;

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

"**Fault Notice**" means a written notice (including by email) of a Breakdown and/or other impairment of the System (as applicable);

"**Fault**" means an impairment or loss of redundancy of any of the Services (or any part of them);

"**Force Majeure Event**" has the meaning given to it in Clause 14.1;

"**Forecast Pass-Through Costs**" has the meaning given to it in Clause 9.13;

"**Good Practice**" exercising, in accordance with any and all applicable industry standards, the same skill, expertise and judgement and using personnel and other resources of a similar or superior quality as would be expected from a person who (a) is highly skilled and experienced in providing the services in question and (b) takes all proper and necessary care and is diligent in performing his obligations;

"**Government Authority**" means any supranational, state or local governmental entity or instrumentality (including any ministry, department, regulatory body, political subdivision, agency, corporation or other person exercising the delegated authority of any such person or entity, including (but not limited to) Ofcom, and any successor) 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;

"**Group Company**" in relation to any company, any subsidiary undertaking of that company, that company's ultimate parent undertaking or any subsidiary undertaking of such ultimate parent undertaking from time to time (the terms "subsidiary undertaking" and "parent

undertaking" being construed in accordance with S1162 of the Companies Act 2006) and in relation to any other person, any company who with respect to that person (a) holds a majority of the voting rights in it or its parent undertaking; or (b) is a member of it or its parent undertaking and has the right to approve or remove a majority of the board of directors; or (c) is a member of it or its parent undertaking and controls alone a majority of the voting rights in it or its parent undertaking;

**"Guarantor"** means the guarantor or other provider of security as set out in Schedule 23;

**"Guarantee"** means the guarantee or other form of security in the form set out in Schedule 23;

**"Guidance"** the document published by Ofcom entitled "Technical Policy Guidelines for DAB Multiplex Licensees" (including such replacement, updated or otherwise amended version of such document from time to time). A copy of the current document is available at:

[http://stakeholders.ofcom.org.uk/binaries/broadcast/guidance/tech-guidance/policy\\_guidance.pdf](http://stakeholders.ofcom.org.uk/binaries/broadcast/guidance/tech-guidance/policy_guidance.pdf)

**"HRP"** means horizontal radiation pattern;

**"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 for the full permitted duration of such rights and all renewals and extensions to the same;

**"Laws"** means all legislation, statutes, regulations, degrees, ordinances, and other laws, regulations, by-laws, regulatory requirements and codes of practice of or issued by any Government Authority and **"Law"** means any of them;

**"Licences"** means the licences required to be held by Arqiva (if any) under the Telecommunications Act 1984 or the Communications Act 2003 and any other licences which may at any time be required to be held by Arqiva after the Start Date under the Statutes (or otherwise) in relation to the Services;

**"Licensed Service"** the radio multiplex service (as defined in Section 40(1) of the Act) which the Customer will have the right and duty to provide pursuant to the Multiplex Licence;

**"Liquidated Damages"** means the liquidated damages payable by Arqiva under Clause 4.3, as set out in Schedule 15;

**"Location"** means the relevant Stations and other relevant locations where Equipment is to be located for the Multiplex;

**"Loss of Transmission"** means the cessation by a Station of the transmission of Customer Signals, or a Material Degradation, for a continuous period exceeding 60 seconds;

**"Managed Transmission Elements"** means the System elements as specified in the System Specification required to provide the Transmission Service from the MTS Insertion Points to the input of the combiner unit or Antenna System where no combiner unit is required at each Site;

**"Managed Transmission Fee"** that part of the Charges that does not comprise the Network Access Fees or Pass-Through Costs and which is described in Schedule 4;

**"Managed Transmission Service" or "MTS"** means the service provision and operation of the Managed Transmission Elements;

**"Mast"** means any radio mast, tower, pole, rooftop, stub-mast, building elevation face mounting, head-frame or other aerial support pole or structure (located at height or at ground level);

**"Material Degradation"** means any degradation of the Customer Signals identified in Table 2 of Schedule 12, other than a Quality Impairment;

**"MTS Electrical Charge"** means the amount payable by the Customer in respect of electricity required to provide the Transmission Service as referred to in Clause 9.14 and set out in paragraphs 5.1 and 6 of Schedule 4;

**"MTS Insertion Points"** means the interface between the Distribution System and the Transmission System at each of the Stations, as more particularly described in Schedule 7;

**"Multi-Party Change"** has the meaning set out in paragraph 1.4.8 of Schedule 13;

**"Multiplex Equipment"** the Equipment used to provide the Multiplex Service;

**"Multiplex Licence"** means the second national commercial DAB multiplex licence granted by Ofcom to the Customer pursuant to Part 1 of the Act (as amended and reviewed from time to time);

**"Multiplex Service"** means the DAB encoding and multiplex service applied to the Customer Signals;

**"Multiplex Service Provider"** means the entity or entities that the Customer shall advise Arqiva from time to time as being responsible for providing the Multiplex Service during the Term of this Agreement;

**"N2 Network Access Programme"** means the implementation programme set out in the relevant Network Access agreement;

**"N2 Transmission Programme"** means the implementation programme set out in Schedule 3;

**"Network Access" or "NA"** means access to the mast and site network and shared or shareable antenna systems acquired, constructed or installed by Arqiva, as required for the purpose of providing the Transmission Service;

**"Network Access Fee"** means that part of the Charges that does not comprise the Managed Transmission Fee or Pass-Through Costs as each are described in Schedule 4;

**"Ofcom"** means the Office of Communications, its predecessor(s) and any successor body;

**"Ofcom Requirements"** means the provisions and stipulations of, and contained within, each of the Multiplex Licence, the Technical Code and the Guidance;

**"Pass-Through Costs"** has the meaning set out in paragraph 2.2.1 of Schedule 4 (Charges);

**"Persistent Failure"** means a service performance failure by Arqiva in respect of the Transmission Service which gives rise to either of the following:

- (a) a right for the Customer to terminate for material breach pursuant to Clause 16.3(a); or
- (b) where, in any Year, Arqiva is (or would be but for the cap on service credits set out in Clause 10.1(b)) liable to pay service credits to the Customer pursuant to Clause 10.1(a) in an amount equal to or greater than 10% (ten percent) of the Charges for that Year;

**"Provisional Specification"** means the provisional specification described in Schedule 24 to this Agreement as agreed between Arqiva and Ofcom.

**"Quality Impairment"** shall occur where the Customer Signal is either not consistently decoded, or when decoded exhibits audio blocking or intermittent loss of sound to a perceptible and disturbing extent when, after transmission by Arqiva, it is received by a fully operational DAB receiver, at a level within the DAB receiver's input range, and free from significant interference, always provided that it has been delivered to the MTS Insertion Point with sufficient bit rate for the Transmission Service, in a state such that it is consistently decoded by a fully operational DAB receiver such that it is free of intermittent or total loss of sound;

**"Rectification Process"** means that, when measured over the one (1) month period specified in the Super Credit Notice, and when calculated by reference to all the Stations within the Customer's network, Arqiva is able to achieve a network availability level equal to or better than the relevant Total Time of Service Availability. The steps to measure this will be as follows:

- (a) For each Station, the number of actual minutes of weighted accountable non-availability (as per the Agreement) over the one (1) month period will be divided by the number of permitted minutes of non-availability at the Station (the latter being calculated by reference to the relevant Total Time of Service Availability).
- (b) Each of the Stations within the Customer's network will be given a Station weighting, reflecting the relative importance to the Customer of the Stations. The sum of the weightings for all Stations will equal 1. The Station weightings will be calculated by reference to the respective percentage weightings set out in Schedule 12, Table 2. Each percentage weighting will be converted into a decimal figure such that the sum of the decimal figures totals 1 (for example, for Emley Moor the percentage weighting of 7.63 per cent will be converted into a decimal figure of 0.0763). The decimal figure will be the Station weighting for each Station.
- (c) For each Station, the availability ratio derived as set out in paragraph (a) above will be multiplied by the relevant Station weighting as described above. The scores for each Station will be aggregated. If the aggregate score is greater than 1, Arqiva will be liable to pay the Super Credit. If the aggregate score is 1 or less, Arqiva will have rectified its poor performance.
- (d) Where any network failure is caused by a service failure outside Arqiva's control, a distribution or multiplexing (where applicable) failure or a failure of electricity supply at a Station for which there is no permanent back-up generator on site, any resulting non-availability shall not form part of the calculation set out above;

**"Reference Offer"** means the Arqiva reference offer entitled "Reference Offer for the provision of Transmission Services in respect of Ofcom's award of a licence for the Second National Commercial DAB Transmission Service";

**"Regular Hours"** means 24 hours a day, 365 days a Year or, in the case of a Year which is a leap year, 366 days a Year (unless otherwise agreed by the Customer and Arqiva in writing);

**"RPI"** means the Retail Prices Index (All Items) published by the Office for National Statistics (or equivalent index published by any successor organisation);

**"Satisfaction Date"** has the meaning given to it in Clause 2.4;

**"Second National Commercial DAB Transmission Service" or "N2"** means the national commercial DAB transmission services as referred to in the Provisional Specification (i.e. the second national commercial DAB multiplex offering National Services);

**"Service Start Date"** means the date on which the Customer commences operational broadcasting use from the relevant Station;

**"Service Credits"** means service credits (which do not include, and are separate and distinct from, any Super Credit(s)) payable as a direct result of failure to transmit the Content Signals from the Stations, free from Breakdowns, for the Total Time of Service Availability, which shall be calculated by reference to Schedule 12 and payable in accordance with Clause 10.1;

**"Service Linking"** means the required feature of the same name as referred to in the Technical Code;

**"Services"** means the Transmission Service, the Distribution Service and the Multiplex Service;

**"Single Frequency Network"** means a network of DAB Stations carrying the same content where all Stations transmit on the same radio channel;

**"Site"** means the site of any Station as listed in Schedule 5;

**"Site Owner"** means any person (other than a party to this Contract) who is occupier of and/or who has a freehold or leasehold interest superior to that of Arqiva in a Site and with whom Arqiva has a contract or arrangement so as to enable Arqiva to provide transmission services from the Site, and all such Sites (if any) are identified in Schedule 2;

**"SMC"** means Arqiva's national service management centre at Emley Moor or such other customer service centre as Arqiva shall notify to the Customer in writing from time to time;

**"Standard Risk"** means any risk so identified in Schedule 18;

**"Start Date"** means the date that Arqiva commences provision of the Services at the relevant Station, as described in Clause 5.2;

**"Station"** means any station listed in Schedule 5;

**"Statutes"** the WTA, the Telecommunications Act 1984, the Communications Act 2003, the Act and any other statutes or regulations relating to broadcasting, wireless telegraphy or telecommunications as are for the time being in force;

**"Super Credit"** means an amount equal to 10% (ten percent) of the Charges excluding Pass-Through Costs, payable by the Customer (excluding, for the avoidance of doubt, (i) any amounts payable for electricity and (ii) any amounts payable by the Customer pursuant to Clause 9.9 for WTA licence fees) for all Stations in the Customer's network in the twelve (12) months preceding the date of expiry of the one (1) month period following the Super Credit Notice. For the purpose of calculating the Super Credit any reductions in the Charges which have occurred to reflect any service credits or Liquidated Damages shall be disregarded;

**"Super Credit Claim"** means a written notice from the Customer to Arqiva which notifies Arqiva that:

- (e) Arqiva has failed to rectify its performance as measured under the Rectification Process;
- (f) the Customer is claiming a Super Credit; and



- (g) on receipt of the Super Credit, the Customer waives its right to terminate in respect of the relevant Persistent Failure;

**"Super Credit Notice"** means a written notice from the Customer to Arqiva which notifies Arqiva that:

- (i) a Persistent Failure has occurred;
- (ii) the Customer requests Arqiva to submit a service improvement plan; and
- (iii) the Customer intends to claim a Super Credit if Arqiva does not rectify its poor performance to the Total Time of Service Availability within one (1) month as assessed under the Rectification Process;

**"System"** means the system, more particularly described in the System Specification, to be used by Arqiva in its provision of the Transmission Service;

**"System Specification"** means the Baseline Specification, as the same may be amended by the parties via the Change Control Procedure from time to time;

**"System Test Date"** means any date so specified in Schedule 3 (Station Dates);

**"Target Response Time"** shall have the meaning set out in Schedule 10;

**"Target Service Start Date"** means in relation to any Station, the target in-service date on which Arqiva is due to commence provision of the Transmission Service pursuant to Clause 5.2, as set out in Schedule 3;

**"Technical Code"** means the document published by Ofcom entitled "Digital Technical Code" (including such replacement, updated or otherwise amended version of such document from time to time). A copy of the current document is available at:

[http://stakeholders.ofcom.org.uk/binaries/broadcast/guidance/tech-guidance/policy\\_guidance.pdf](http://stakeholders.ofcom.org.uk/binaries/broadcast/guidance/tech-guidance/policy_guidance.pdf)

**"Term"** means the duration of this Agreement, as determined in accordance with Clause 16;

**"Total Time of Service Availability"** means the time for which Arqiva is contracted to transmit the Customer Signals to and from the Stations, free from Breakdowns, calculated as specified in Schedule 11;

**"Technical Performance Specification"** means the technical details set out in Schedules 2 and 3 inclusive together with the technical parts of the Eureka 147 Guidelines and the Ofcom Requirements as current from time to time and the Technical Switchover Plan and the Switchover Implementation Plan. The Schedules to this Contract shall take precedence over the Eureka 147 Guidelines and the Ofcom Requirements in the event of any inconsistency except to the extent that, if at all, the Schedules contradict any prescriptive requirement of, or set a minimum specification below that required by the Eureka 147 Guidelines or the Ofcom Requirements in which circumstances the terms of the Eureka 147 Guidelines or the Ofcom Requirements shall to such extent prevail;

**"Transmission Service"** means a fully managed and monitored transmission service using the Transmission System and comprising the transmission of the multiplexed Customer Signals during the Regular Hours;

**"Transmitter System"** means the transmitter used by Arqiva to transmit the Customer Signals from the Stations;

**"Transmitter System Specification Date"** means any date so specified in Schedule 3 (Station Dates);

**"Undertakings"** means the undertakings accepted by the Competition Commission on 1 September 2008 from Macquarie UK Broadcast Holdings Limited, Macquarie MCG International Limited, Macquarie European Infrastructure Fund II, Macquarie European Infrastructure Fund III and Macquarie Capital Funds (Europe) Limited in respect of the completed acquisition by Macquarie UK Broadcast Ventures Limited, a subsidiary of Macquarie UK Broadcast Holdings Limited, of National Grid Telecoms Investment Limited, Lattice Telecommunications Asset Development Company Limited and National Grid Wireless No. 2 Limited. A copy of the Undertakings is available at <http://www.competition-commission.org.uk>;

**"VRP"** means vertical radiation pattern;

**"WTA"** means the Wireless Telegraphy Acts 1949 and 1967, 1998 and 2006;

**"WTA Licence"** means such licence(s) as are from time to time issued to the Customer under the WTA as are relevant to this Agreement; and

**Year"** means the period of 12 months from the Execution Date and any subsequent period of 12 months or, where the context requires, part thereof while this Agreement remains in force.

## **SCHEDULE 2**

### **Scope of System and Transmission Service**

#### **1. Introduction**

Arqiva will provide the Transmission Service at all of the Stations listed in Schedule 5. The provision of the Transmission Service will include the following (subject to the terms of this Agreement):

##### Network Access

- a. Structures;
- b. Antenna Systems including feeders and combining and filter units where required;
- c. Site access, security and accommodation;
- d. Power systems (back-up generators may be provided at some Stations where they are already available but Arqiva shall not be obliged to provide such systems under the terms of this Reference Offer);

##### Managed Transmission Elements

- a. Transmitter Systems;
- b. Programme input equipment;
- c. Telemetry systems for both Network Access and Managed Transmission Elements.

The scope set out in this Schedule 2 is based on a desktop study and Site visits have not been undertaken. Changes to this scope may be required in order to allow for implementation. Any such changes will be subject to the Change Control Procedure.

The provision of the distribution of Content Signals to the Stations (and any other facilities which are not listed specifically herein) are outside the scope of this Agreement.

The 70 Stations are listed in Schedule 5.

The Customer shall be responsible for providing their Distribution Service at an agreed location within the MTS accommodation.

This Schedule provides details of the scope of the Transmission Service offered by Arqiva under this Agreement. This Agreement relates to the transmission of a DAB multiplex as defined by the Site parameters stated in Schedule 6.

#### **2. The Baseline Specification**

The provision of the Transmission Service will include Network Access at the Stations, the provision of Managed Transmission Elements, and on-going operational, control and maintenance services. The Transmitter Systems will be sized to provide the nominal operational ERPs (+0/-1dB) as limited by the capabilities of the Antenna Systems. The nominal operational ERPs are shown on a Station by Station basis in Schedule 6. The Network Access facilities provided under the terms of this Agreement are based directly upon the performance of the Antenna Systems.

#### **3. Spectrum Planning Issues**

##### 3.1 Future Development of the Plan:

No spectrum planning activities have been carried out in the preparation of this Reference Offer. The Baseline Specification is for the Stations that were provided in the Provisional Specification. ERPs have been selected to match the existing commercial national DAB service for the purpose of providing representative MTS charges. The maximum ERP achievable by the Antenna System under

certain system configurations is defined in Schedule 6. A higher ERP may be chosen by the Customer to meet their coverage plan, but this will require a variation to this Reference Offer.

Population coverage and UK/International coordination compliance cannot be implied or construed from the selection of Stations, antenna solutions or ERPs in this Reference Offer and it shall be the Customer's responsibility to prepare a network solution compliant with Ofcom Requirements.

Any alteration that necessitates a change to the Baseline Specification or the terms of this Agreement is not included for and will be subject to a further variation agreed between Arqiva and the Customer. Modifications to characteristics of the Stations such as ERP and Antenna HRP that will have a direct effect on the Antennas and Transmitter Systems could also potentially impact the requirements for structures, other works and will need explicit agreement with all parties sharing the Equipment. This is not included for in this Agreement and is subject to a variation agreed between the Parties.

### 3.2 International Co-ordination:

The Customer's network plan may need to be changed as a result of the international co-ordination process. Arqiva cannot determine the outcome of this process. The following issues will need to be considered:

- coverage may be reduced in some areas because the terms of an agreement lead to modified transmitter characteristics and/or increased interference; the Antenna HRPs (and thus the Antenna design) may be required to be altered;
- the Antenna pattern template (and thus the Antenna design) may need alteration as part of the terms of a co-ordination agreement; and
- other characteristics such as ERP may be altered.

The resolution of any international co-ordination issues may lead to modification of the Customer's network plan which may require modification to the Baseline Specification. Any such modifications shall be managed under the Change Control Procedure.

## 4. Antenna Systems

Schedule 6 details the Antenna configurations at each Station. Arqiva shall provide an Antenna System to support the service at each Station. The ERP to be provided under normal conditions is set out in Schedule 6.

Where appropriate Antenna Systems exist on a Site, then Arqiva will provide the Transmission Service via existing Antenna Systems which have been installed for radio requirements with other customers.

Where Antenna System modifications are required (relative to the Baseline Specification), due to a change in the Customer's network plan this shall be subject to the Change Control Procedure. Any such modifications shall be chargeable to the Customer and Arqiva will confirm any changes to the Target Service Start Dates as provided in Schedule 3.

All Antenna designs are subject to securing Ofcom and Customer approval prior to final procurement and implementation. Further details of this approval process are provided in Schedule 20. Arqiva has endeavoured to ensure that new Antenna Systems will, where feasible, be designed to match as closely as possible the Arqiva Antenna HRPs provided in Schedule 6.

Where the Customer's service is connecting into an existing Antenna System, a combining unit will be installed. Where the Customer's service is connecting into a new Antenna System, a filter unit will be installed.

During periods of an Antenna System fault or planned Antenna maintenance, there will be a requirement to shut the whole Antenna down to allow safe access and to allow maintenance work to proceed. Any interruption in the provision of Network Access due to an Antenna System fault will not

count as minutes lost for the purposes of calculating Service Credits due in accordance with the provisions of Schedule 12.

Desktop studies indicate the anticipated RF safety implications of the addition of the new service to each structure. Pre-installation and post-installation site RF surveys are included for in the Baseline Specification. If additional precautions such as reduced power working or screening are recommended to allow safe access to the structure, these shall be notified to the Customer. Where modifications to structure safe access arrangements are required (relative to the Baseline Specification), as identified at the site RF survey, this shall be subject to a further variation agreed between the Customer and Arqiva. Any such modifications shall be chargeable to the Customer and Arqiva will confirm any changes to the Target Start Dates as provided in Schedule 3.

During the Antenna construction period, existing services for other customers may be disrupted whilst the Antennas are being installed. Arqiva will aim to keep any such disruption to a minimum as included in Schedule 23.

#### 4.1 Antenna Selection Process

Assumptions have been made in respect of performance and system gain in order to meet the requirements of the Arqiva Antenna HRP as shown in Schedule 6. As part of the design process, Arqiva shall liaise with potential suppliers and provide the Customer with a technical Antenna Design Proposal related to the performance of a proposed new Antenna.

Arqiva shall use reasonable endeavours to ensure that the Antenna patterns are compliant with those Arqiva Antenna HRP as specified in Schedule 6. The Antenna System performance (i.e. system gain information) used to determine the transmitter powers in Schedule 6 will be subject to variation. Any refined Antenna patterns and associated gain information shall be provided for acceptance by the Customer to allow Arqiva to produce a detailed Antenna Design Specification which the Customer must approve in writing by the Antenna ADS Approval Date. Finalisation of the Antenna design and patterns may lead to variations in system gain which in turn may lead to changes in transmitter requirements to achieve the nominal operational ERP and lead to variations in transmitter size. Any changes from the Antenna System performance and the transmitters shown in Schedule 6 shall be managed under the Change Control Procedure and lead to changes in the Charges and Target Service Start Dates.

Where the Antenna System at a Station can be used operationally but it is agreed that the Antenna pattern requires modification, the Transmission Service shall commence and Arqiva shall use reasonable endeavours to rectify the situation as soon as possible and shall not be liable to pay Liquidated Damages if it is not able to do so by the Target Service Start Date.

The Antenna selection process shall allow the Customer the opportunity to influence the final specification of an Antenna. It shall be the responsibility of the Customer to act in good faith to agree an Antenna solution at each Station by the required Antenna ADS Approval Date shown in Schedule 3. Failure to agree the ADS by the required Antenna ADS Approval Date may lead to a delay in the provision of Network Access facilities and the Transmission Service.

For any antenna design change the transmitters required to achieve the nominal ERP may be subject to change. Any implications for other facilities (as a result of the selection of an Antenna) shall be managed under the Change Control Procedure.

### 5. Transmitter Systems

All proposed transmitter systems will be Arqiva standard build and be based around the following standard principles:

#### Transmitters above 300W

Multiple amplifier and PSU architecture

Dual Drive (COFDM)

Transmitters below 300W

Single amplifier and Dual PSU architecture

Dual Drive (COFDM)

Independent access to a GPS receive system shall be provided for each COFDM for all transmitter systems.

Arqiva reserves the right to modify the power breaks and configurations shown above subject to review of the available transmitter powers and configurations.

The Transmitter selection process shall allow the Customer the opportunity to influence the final specification of Transmitters. It shall be the responsibility of the Customer to act in good faith to agree a Transmitter solution at each Station by the required Transmitter Specification Approval Date shown in Schedule 3. Failure to agree the Specification by the required Approval Date may lead to a delay in the provision of the Transmission Service

**6. Telemetry**

Telemetry of transmitters, associated equipment and NA infrastructure monitored from the Arqiva SMC is included.

**7. Power**

A metered single LV power supply will be provided to the transmission equipment. A generator socket will be provided, but there is no provision for the use of a generator at times of REC power outage.

**8. ACI Filler**

No provision has been made in the Transmission Service for ACI fillers.

**9. Distribution**

Distribution solutions are outside the scope of this Agreement and, in the event that the Customer requires a distribution solution, any such request shall be subject to the Change Control Procedure.

**10. Exclusions**

For the avoidance of doubt the following facilities are not within the scope of this Agreement.

- Playout facilities;
- Programme distribution;
- Compression systems;
- Multiplexing systems;
- Spectrum planning study;
- ACI fillers; and
- Customer responsibilities.

## SCHEDULE 3

### Station Dates

Table 1 below shows the key milestone dates and activities related to the deployment of seventy (70) Stations. The Antenna ADS Approval Dates, Transmitter Specification Approval Dates, System Test Dates and Target Service Start Dates shall be as proposed in Table 1 below.

To meet these rollout plans, Transmitter System and Antenna System designs shall have to commence in April 2015 and any delay in the start of the design programme will lead to a similar delay of the Target Service Start Date at Sites. Any delay in the start of design works for new Antenna Systems may lead to a disproportionate delay in the Target Service Start Date due to the preference to conduct Antenna System implementation during the months of March to October (to minimise the impact of inclement weather).

The Customer shall be required to agree Antenna System designs and transmitter configurations by the Antenna ADS Approval Dates and Transmitter Specification Approval Dates respectively specified below to allow the Transmission Service to be provided by the Target Service Start Date.

#### Table 1- Station Dates

For the purpose of this Agreement the dates below are subject to change within the month stated.

The dates below have been chosen to give an example geographic roll-out on the basis of building 5 sites per month.

Accurate predicted Target Service Start Dates in respect of Alexandra Palace, Liverpool St John's Beacon and Zouches farm, as part of the geographic groups, cannot be given as part of the Reference Offer but will, instead, need to be agreed between the parties prior to execution of the Agreement. This is because these sites are subject to timescales dictated by the need to obtain landlord agreement and/or planning permission and, accordingly, are unlikely to be completed to a timetable to match the example geographic rollout.

Accurate predicted Target Service Start Dates in respect of Bluebell Hill, Crystal Palace, Guildford Hog's Back and Nine Barrow Down, as part of the geographic groups, cannot be given as part of the Reference Offer but will, instead, need to be agreed between the parties prior to execution of the Agreement. This is because these sites are subject to timescales dictated by the need to obtain early procurement decisions and, accordingly, are unlikely to be completed to a timetable to match the example geographic rollout.

Station Reference	Station Name	Antenna (ADS) Approval Date	Transmitter Specification Approval Date	Power Test Date	Target Service Start Date
141872	ZOUCHES FARM	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution
140107	BOW BRICKHILL	03/06/2015	17/06/2015	08/10/2015	15/10/2015
140827	HEMEL HEMPSTEAD	10/06/2015	17/06/2015	08/10/2015	15/10/2015
141308	OXFORD	03/06/2015	17/06/2015	08/10/2015	15/10/2015
9414	SANDY HEATH SC	03/06/2015	17/06/2015	08/10/2015	15/10/2015
141504	SUTTON COLDFIELD	03/06/2015	17/06/2015	08/10/2015	15/10/2015

Station Reference	Station Name	Antenna (ADS) Approval Date	Transmitter Specification Approval Date	Power Test Date	Target Service Start Date
140056	ALEXANDRA PALACE	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution
140038	ALSAGERS BANK	26/06/2015	10/07/2015	02/11/2015	16/11/2015
20008	MANCHESTER CITY TOWER	26/06/2015	10/07/2015	02/11/2015	16/11/2015
141690	TURNERS HILL (BT)	03/07/2015	17/07/2015	09/11/2015	16/11/2015
9303	WINTER HILL SC	26/06/2015	10/07/2015	02/11/2015	16/11/2015
12000	BELMONT	23/06/2015	07/07/2015	28/10/2015	16/12/2015
140161	BILSDALE	23/06/2015	07/07/2015	28/10/2015	16/12/2015
9304	EMLEY MOOR SC	23/06/2015	07/07/2015	28/10/2015	16/12/2015
80533	LIVERPOOL ST JOHNS BEACON	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution
52120	NINE BARROW DOWN	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution
141384	PONTOPI PIKE	23/06/2015	07/07/2015	28/10/2015	16/12/2015
141523	SHEFFIELD	23/06/2015	07/07/2015	28/10/2015	16/12/2015
140802	HANNINGTON	24/08/2015	07/09/2015	29/12/2015	16/02/2016
82523	LONDON BT TOWER	29/06/2015	13/07/2015	02/02/2016	16/02/2016
141389	PETERBOROUGH	24/08/2015	07/09/2015	29/12/2015	16/02/2016
141440	REIGATE	24/08/2015	07/09/2015	29/12/2015	16/02/2016
141838	WROTHAM	24/08/2015	07/09/2015	29/12/2015	16/02/2016
14700	CRAIGKELLY	23/09/2015	07/10/2015	28/01/2016	17/03/2016
140552	DIVIS	23/09/2015	07/10/2015	28/01/2016	17/03/2016
240363	GLASGOW WILLIAM STREET	24/06/2015	08/07/2015	28/01/2016	17/03/2016
140977	KIRK O'SHOTTIS	23/09/2015	07/10/2015	28/01/2016	17/03/2016
10302	PENDLE FOREST	23/09/2015	07/10/2015	28/01/2016	17/03/2016
56710	BLUNSDON MF	23/10/2015	06/11/2015	29/02/2016	18/04/2016
141006	LONDONDERRY	23/10/2015	06/11/2015	29/02/2016	18/04/2016
141162	MENDIP	23/10/2015	06/11/2015	29/02/2016	18/04/2016
20012	PURDOWN	23/10/2015	06/11/2015	29/02/2016	18/04/2016
141857	WENVOE	23/10/2015	06/11/2015	29/02/2016	18/04/2016
140320	BASINGSTOKE	18/08/2015	01/09/2015	30/03/2016	18/05/2016
9308	CHILLERTON DOWN SC (IOW)	24/11/2015	08/12/2015	30/03/2016	18/05/2016
140488	CHURCHDOWN HILL	24/11/2015	08/12/2015	30/03/2016	18/05/2016
140469	CRYSTAL PALACE	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution
141808	WHITEHAWK HILL	24/11/2015	08/12/2015	30/03/2016	18/05/2016
140830	HIGH HUNSLEY	24/12/2015	07/01/2016	29/04/2016	17/06/2016
92587	HOUGHTON ON THE HILL	10/12/2015	24/12/2015	29/04/2016	17/06/2016



Station Reference	Station Name	Antenna (ADS) Approval Date	Transmitter Specification Approval Date	Power Test Date	Target Service Start Date
140985	KILVEY HILL	24/12/2015	07/01/2016	29/04/2016	17/06/2016
36212	MAPPERLEY (S)	24/12/2015	07/01/2016	29/04/2016	17/06/2016
141763	WALTHAM	24/12/2015	07/01/2016	29/04/2016	17/06/2016
11806	ARFON	25/01/2016	08/02/2016	31/05/2016	19/07/2016
140108	BLUEBELL HILL	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution
140482	CARMEL	25/01/2016	08/02/2016	31/05/2016	19/07/2016
140602	DAVENTRY	25/01/2016	08/02/2016	31/05/2016	19/07/2016
9345	MOEL-Y-PARC SC	25/01/2016	08/02/2016	31/05/2016	19/07/2016
9329	PRESELI SC	25/01/2016	08/02/2016	31/05/2016	19/07/2016
140148	BROMSGROVE	24/02/2016	09/03/2016	30/06/2016	18/08/2016
10405	CHESTERFIELD	24/02/2016	09/03/2016	30/06/2016	18/08/2016
140846	HOLME MOSS	24/02/2016	09/03/2016	30/06/2016	18/08/2016
14900	RIDGE HILL	24/02/2016	09/03/2016	30/06/2016	18/08/2016
141835	THE WREKIN	24/02/2016	09/03/2016	30/06/2016	18/08/2016
140216	BEACON HILL (NORTH)	19/06/2015	03/07/2015	08/08/2016	19/09/2016
9331	CARADON HILL SC	25/03/2016	08/04/2016	01/08/2016	19/09/2016
140683	FENHAM	25/03/2016	08/04/2016	01/08/2016	19/09/2016
140729	GUILDFORD HOGS BACK	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution	To be agreed prior to execution
13201	ST THOMAS (EXETER)	25/12/2015	08/01/2016	01/08/2016	19/09/2016
9332	STOCKLAND HILL SC	25/03/2016	08/04/2016	01/08/2016	19/09/2016
141186	MADINGLEY	26/04/2016	10/05/2016	31/08/2016	19/10/2016
9314	MENDLESHAM SC	26/04/2016	10/05/2016	31/08/2016	19/10/2016
13105	PLYMPTON	26/04/2016	10/05/2016	31/08/2016	19/10/2016
141477	REDRUTH	26/04/2016	10/05/2016	31/08/2016	19/10/2016
141648	TACOLNESTON	26/04/2016	10/05/2016	31/08/2016	19/10/2016
9313	DOVER SC	26/05/2016	09/06/2016	30/09/2016	18/11/2016
140877	HASTINGS	26/05/2016	09/06/2016	30/09/2016	18/11/2016
140834	HEATHFIELD	26/05/2016	09/06/2016	30/09/2016	18/11/2016
141173	MIDHURST	26/05/2016	09/06/2016	30/09/2016	18/11/2016
141491	SALISBURY	26/05/2016	09/06/2016	30/09/2016	18/11/2016

## SCHEDULE 4

### Charges and Pass-Through Costs

**Drafting note** (to be removed prior to execution of this Agreement): the Charges and Pass-Through Costs set out in the version of this Schedule 4 provided in the Reference Offer are calculated based upon the Provisional Specification as set out in Schedule 24 for 70 Stations. This Schedule 4 is therefore indicative only and will be revised (based on the same principles as applied to prepare this indicative schedule) prior to execution of the Agreement in order to accurately reflect the specific Transmission Services agreed with the holder of the Multiplex Licence.

#### 1. Introduction

This Schedule sets out the Charges and Pass-Through Costs in respect of the Transmission Services as follows:

- 1.1 the Network Access Fee in respect of Network Access;
- 1.2 the Pass-Through Costs in respect of Network Access;
- 1.3 the Managed Transmission Fee in respect of Managed Transmission Service,

and is without prejudice to any other fees or charges which Arqiva is entitled to charge pursuant to Clause 9.8 of this Agreement.

#### 2. Network Access Fee and indicative Pass-Through Costs

2.1 The Network Access Fee and indicative Pass-Through Costs (but excluding MTS Electrical Charge) are as follows in Table 1, subject to paragraph 2.1.2:

##### 2.1.1

**Table 1: Summary and Breakdown of N2 Network Access Fee and indicative Pass-Through Costs (excluding MTS Electrical Charge)**

Line Item

		£k
1	Charges for return on existing assets	493
2	Charges for depreciation on existing assets	247
3	Charges for non Pass-through Operating Costs	462
4	-	-
5	<b>Charges for existing assets</b>	<b>1,202</b>
6	Charges for return on Capital Expenditure	237
7	Charges for Depreciation on Capital Expenditure	397
8	-	-
9	<b>Charges for Capital Expenditure</b>	<b>634</b>
10	<b>Charges excluding uplift for Contingencies and Decommissioning</b>	<b>1,836</b>
11	Charges for Uplift for Contingencies	207
12	Charges for Decommissioning	31
13	<b>Total Charges</b>	<b>2,074</b>
14	Pass-Through Costs (indicative, excluding MTS Electrical Charge)	144
15	<b>Total Charges plus indicative Pass-Through Costs</b>	<b>2,218</b>

Note 1: The breakdown above reflects the first full year following the N2 Network Access Programme - see paragraph 2.3.13 below regarding the calculation of Adjustments.

Note 2: An 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 paragraph 3 of this Schedule (Network Access Gainshare Mechanisms).

2.1.2 For the purposes of this Schedule 4, the reference to "Charges" shown in Table 1 above is a reference to the "Network Access Fee", not the entirety of the Charges. Accordingly, the figure set out in line item 13 entitled "Total Charges" in Table 1 at paragraph 2.1.1 above, is the Network Access Fee. The Network Access Fee (and, therefore, the Charges) accordingly include the charges for uplift for contingencies and decommissioning and exclude Pass-Through Costs.

2.1.3 "Pass-Through Costs" has the meaning given to it in paragraph 2.2 below.

2.1.4 The Network Access Fee and indicative Pass-Through Costs outlined above in Table 1 are on a per annum basis for post completion of the N2 Network Access Programme (i.e. first full year following completion of the N2 Network Access Programme). The Network Access Fee and Pass-Through Costs shall become payable on a Station by Station basis over the N2 Network Access Programme as detailed in Schedule 5, increasing annually as set out in Table 2 below, subject to Clause 9.2 and paragraph 2.1.2. For the avoidance of doubt, these Charges do not take account of the price for the service credits payable under this Agreement.

Table 2 (subject to paragraph 2.1.2): Summary of Network Access Fee and indicative Pass-Through Costs (excluding MTS Electrical Charge) during the N2 Network Access Programme.

<b>Financial Years</b> <b>(July-June)</b>	<b>Total Charges</b> <b>(£'000)</b>	<b>Indicative Pass Through Costs (Excluding MTS Electrical Charge)</b> <b>(£'000)</b>	<b>Total Charges plus indicative Pass-Through Costs (Excluding MTS Electrical Charge)</b> <b>(£'000)</b>
2015/16	514	43	557
2016/17	1,917	133	2,050
2017/18	2,074	144	2,218

**Note:** All figures are stated in September 2014 prices and the caveat regarding use of "Charges", where it is in fact referencing Network Access Fee, as set out in paragraph 2.1.2 applies to Table 2.

Basis of Network Access Fee and indicative Pass-Through Costs in Table 1 and Table 2

2.1.5 The Network Access Fee and indicative Pass-Through Costs (excluding the MTS Electrical Charge):

- (a) set out in Table 1 at paragraph 2.1 are stated on a per annum basis for Network Access based on the Provisional Specification as detailed in the specifications set out in the Baseline Specification Schedule 6 and subject to the terms of this Agreement;

- (b) included in Table 2 at paragraph 2.1.4 above are the charges for Network Access based on the Provisional Specification and the details in the Baseline Specification and subject to the terms of this Agreement for the relevant 12 month period.
  - (c) set out in Table 1 at paragraph 2.1.1 and included in Table 2 at paragraph 2.1.4 above are stated:
    - (i) in real terms at September 2014 prices and are subject to indexation (see paragraph 2.3.8 below); and
    - (ii) exclusive of VAT.
- 2.1.6 Table 1 at paragraph 2.1.1 above sets out, and the amounts in Table 2 at paragraph 2.1.4 above include, an indicative estimate of Pass-Through Costs. Paragraph 2.2 below sets out the terms applicable to Pass-Through Costs.
- 2.1.7 The Network Access Fee and indicative Pass-Through Costs excluding the MTS Electrical Charge included in Table 2 at paragraph 2.1.4 above represent the total Network Access charge for the relevant financial year, covering the period of the N2 Network Access Programme to the first full steady state financial year (expected to be 2017/18). The payment profile for the total charge for a financial year depends upon the N2 Network Access Programme through that financial year, so the monthly charge cannot be derived by dividing the relevant annual charge in Table 2 by twelve.

## 2.2 Pass-Through Costs

### Categories of cost included in Pass-Through Costs

- 2.2.1 In addition to the Charges, the Customer shall pay a share (as further detailed below) of the following categories of costs on a pass-through basis:
- (i) rent and similar recurring and non-recurring licence fees or other ancillary payments made to site and site access providers;
  - (ii) rates, assessments and outgoings and any taxes or environmental levies whether similar or of a wholly new or novel nature;
  - (iii) MTS Electrical Charges;
  - (iv) charges payable under any Arqiva Licence for spectrum required to be held by Arqiva in order to provide any Common Equipment for Network Access and where the relevant spectrum is not otherwise licensed to the Customer;
  - (v) 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 the Customer at a particular Station;
  - (vi) any Ofcom fees incurred by Arqiva in relation to regulated activity; and
  - (vii) reasonable administration costs incurred by Arqiva in arranging for the provision of any Pass-Through Cost item,
- (together, the "**Pass-Through Costs**"). The Customer's share shall be calculated on a Station-by-Station basis, using the following methodology:
- (viii) Arqiva shall first calculate the total amount of Pass-Through Costs (except MTS Electrical Charges and except for any directly attributable Pass-Through

costs) incurred by Arqiva at each Station in respect of the provision of Network Access to all DAB Multiplex Services and in the provision of Station facilities to all other customers at that Station;

- (ix) Arqiva shall then determine each customer's share of the total Pass-Through Costs (including the Customer's share) at each Station on a fair and reasonable basis that is reflective of the attributes/criteria that incur/drive these Pass-Through Costs. The parties shall use all reasonable endeavours to agree such basis within 6 months of the Execution Date. The Customer's share shall be this amount, plus (i) any directly attributable Pass-Through Costs, and (ii) the total cost of MTS Electrical Charges in the relevant period;
- (x) In procuring electricity required for the operation of the Equipment, Arqiva shall use reasonable endeavours to ensure best value for itself and in turn for the Customer.

2.2.2 Table 1 at paragraph 2.1.1 above sets out an indicative estimate of Pass-Through Costs. The amounts set out in Table 2 at paragraph 2.1.4 above also include an indicative estimate of Pass-Through Costs excluding MTS Electrical Charges, which are instead included in Tables 4 and 5. These indicative estimates of Pass-Through Costs:

- (i) include indicative estimates of rent and rates; and
- (ii) exclude MTS Electrical Charges as this cost is not yet known and will be determined by the specifications and characteristics including the dimensions of the Customer Equipment.

Where any leased Station as at the date of this Agreement changes to freehold, the Pass-Through Costs will for the duration of this Agreement include the last full year rental on this Site increased annually by RPI. Where a freehold Station as at the date of this Agreement becomes a leasehold site no rent from this Station will be included in the Pass-Through Costs.

#### Charging and reconciling the Pass-Through Costs

2.2.3 Commencing with the first Year in which the Customer is expected to be invoiced for the Charges and Pass-Through Costs, Arqiva shall forecast the Pass-Through Costs likely to be payable by the Customer during that Year ("**Forecast Pass-Through Costs**") on a Station by Station basis. Arqiva shall conduct such forecast and notify the Customer of the Forecast Pass-Through Costs by, at the latest, the end of April prior to the start of the relevant Year.

2.2.4 The Forecast Pass-Through Costs shall be divided by 12 to provide a monthly amount applicable for the relevant Year, and this amount shall be payable by the Customer in accordance with Clause 9. For the first Year in which the Forecast Pass-Through Costs are expected to be payable, the Forecast Pass-Through Costs shall be divided by the number of months from the Target Service Start Date for the first Station to the following June.

2.2.5 As soon as reasonably practical and no later than 4 months after the end of the relevant Year, or as soon as possible following the end of the Term, the Customer's share of actual Pass-Through Costs for the relevant Year ("**Actual Pass-Through Costs**"), determined in accordance with paragraph 2.2.1 above, will be compared to the Forecast Pass-Through Costs for the relevant Year. Any overpayment or underpayment by the Customer shall be notified in writing by Arqiva. In the event of any overpayment by the Customer, Arqiva shall issue the Customer with a credit note to the value of any overpayment within thirty (30) days, save where no more Charges are due from the Customer to Arqiva, in which case Arqiva shall pay the amount within thirty (30) days. In the event of any underpayment, Arqiva shall

issue an invoice to the Customer for this amount, such invoice being payable in accordance with the terms of this Agreement.

- 2.2.6 Arqiva shall, on the Customer's written request and subject to payment by the Customer of Arqiva's reasonably incurred costs, provide copies of all documentation evidencing and/or supporting the calculation of the Actual Pass-Through Costs for any Year. Arqiva shall not however, be required to provide copies of such documentation to the Customer where by so doing Arqiva would be in breach of or otherwise contravene confidentiality or contractual commitments with other customers or users of Station facilities. Under these circumstances Arqiva will ensure that a reputable third party independently validates that the Customer's Pass-Through Costs have been derived and/or calculated in accordance with the methodology agreed between Arqiva and the Customer, as anticipated in paragraph 2.2.1 of this Schedule and provide confirmation of such independent validation to the Customer on request. The Customer shall not be entitled to request this information more frequently than once per annum. Arqiva shall provide such information promptly and in any event within thirty (30) days, of the Customer's written request.

### 2.3 Explanation of Network Access Fee and Pass-Through Costs

- 2.3.1 This paragraph 2.3 details the key parameters that underpin the calculation of the Network Access Fee. Changes in the assumptions or parameters set out in this paragraph 2.3 (except those set out in paragraphs 2.3.8 to 2.3.13) may also have an impact on the level of Pass-Through Costs, but any changes in such level shall be governed by paragraph 2.2 of this Schedule.
- 2.3.2 The Network Access Fee and Pass-Through Costs are based on the specifications set out in Schedule 6 and are subject to the terms of this Agreement.
- 2.3.3 The Baseline Specification is based on the assumption that Network Access will be provided as at the date of this Agreement for this additional DAB Multiplex Service at the Stations. In the event that there is a further DAB Multiplex Service, this would affect the Network Access Fee and it is likely that the Network Access Fee would decrease, while a reduction in the number of DAB Multiplex Services may result in an increase in certain elements of the Network Access Fee. For the avoidance of doubt, a decrease in the number of DAB Multiplex Services would not result in an increase in the elements of the Charges relating to return or depreciation on capital expenditure, or charges for uplift for contingencies (line items 6, 7, 8, 9 and 11 of Table 1 in this Schedule 4, as Arqiva is able to recover any relevant costs through the termination payments under the relevant Network Access agreements. Operating costs to be recovered through the Network Access Fee are calculated based on an appropriate allocation of costs to the provision of Network Access. If the number of DAB Multiplex Services changes, the Network Access Fee may need to be amended to reflect a revised allocation of operating costs across the remaining DAB Multiplex Services (including the Customer's DAB Multiplex Service) in respect of which Arqiva continues to provide Network Access. The level of Pass-Through Costs may also vary if the number of DAB Multiplex Services or other users of station facilities at the Station should change.
- 2.3.4 Arqiva may vary the Network Access Fee to the extent there is an appropriate change in the allocation of common costs to DAB Network Access as a result of the cessation of the provision of Network Access to the AM and/or FM radio platforms or other DAB Services. Any such reallocation shall take into account the introduction or expected introduction of new services. The cessation of Network Access provision to the existing AM and/or FM radio platforms other DAB or DTT Multiplex Services is likely to result in an increase in Network Access Fee. The introduction of new services is likely to offset any such increase in the Network Access Fee and may result in a decrease in Network Access Fee.
- 2.3.5 The Network Access Fee and Pass-Through Costs are based on the assumption that the Customer requires Network Access at all the Stations listed in Schedule 6. In the event that the Customer requires access to more Stations, this would affect the Network Access Fee and Pass-Through Costs and it is likely that the Network Access Fee and Pass-Through

Costs would increase. Any change to the Network Access Fee for this reason will reflect a revised allocation across all N2 Multiplex Services (or relevant Stations, as applicable) on the basis of the costing and calculation methodologies set out in this Schedule 4 and which have been agreed between Arqiva and Ofcom as part of Ofcom's guidance process.

- 2.3.6 The Network Access Fee and Pass-Through Costs are based on Network Access being provided in accordance with the N2 Network Access Programme and the Provisional Specification.
- 2.3.7 The Network Access Fee and Pass-Through Costs are based upon the provision of Network Access through to *[to be inserted prior to execution]*.
- 2.3.8 The Charges are subject to indexation as further detailed in Clause 9.2.
- 2.3.9 The Charges reflect costing and calculation methodologies that have been agreed between Arqiva and Ofcom as part of Ofcom's guidance process.
- 2.3.10 In the calculation of the Network Access Fee the return on existing assets and the return on capital expenditure is calculated using the real pre-tax applicable WACC which at the date of this Agreement is calculated at 7.71% ("**Applicable WACC**").
- 2.3.11 The values of existing assets and Capital Expenditure over the Term are calculated using a depreciated replacement cost methodology with asset lives reflecting the useful economic lives of these assets.
- 2.3.12 Depreciation is calculated in line with a depreciated replacement cost methodology on a straight line basis using asset lives that reflect the useful economic lives of these assets.
- 2.3.13 Adjustments are applied to smooth the N2 Network Access Programme Charges over the Term and to allow for the delay between rollout capital expenditure and the initiation of invoicing for the Network Access Fee pursuant to Clause 9. To make both of these adjustments the un-adjusted Network Access Fees are changed to the required adjusted profile whilst ensuring that the net present value of the Network Access Fee (using the Applicable WACC as a discount rate) is equal both before and after the adjustments.
- 2.3.14 The Network Access Fee assumes that 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 radio broadcasting purposes.

### **3. Network Access Gainshare Mechanisms**

The Network Access Fees shall be subject to the gainshare mechanism set out below. The Network Access Fees shall be based on the actual levels of capital costs incurred by Arqiva in the N2 Network Access Programme and Pass-Through Costs incurred by Arqiva on an on-going basis in the provision of Network Access in connection with this Agreement.

Within twelve (12) months of the completion of the N2 Network Access Programme, Arqiva shall carry out a review to establish the actual level of capital expenditure incurred which will then, subject to the remainder of this Paragraph 3 of Schedule 4 be used to establish the Network Access Fees. For the avoidance of doubt, nothing in this Schedule is intended to, or shall operate so as to, limit or cap in any way Arqiva's expenditure in relation to the N2 Network Access Programme.

- 3.1 Arqiva shall undertake a review of the capital expenditure and uplift for contingencies elements of the Network Access Fee in accordance with the provisions of this paragraph 3 of Schedule 4 in order to compare:

3.1.1 the level of actual capital expenditure employed in carrying out the N2 Network Access Programme up to the date of completion of the same in respect of the Customer ("**Actual Capex**"); with

3.1.2 the sum of:

(i) the capital expenditure as adjusted for RPI indexation ("**Revised Base Capex**"); plus

(ii) the uplift for contingencies as adjusted for RPI indexation ("**Revised Uplift for Contingencies**"),

such sum known as the "**Revised Forecast Capex**" for the purposes of this Schedule.

3.2 In the event that there have been any changes made pursuant to the Change Control Procedure prior to the review which have either increased or decreased the Actual Capex, the net sum of any such increases or decreases shall be added onto both the Revised Base Capex and the Revised Forecast Capex figure prior to Arqiva conducting the comparative calculation set out in this paragraph 3.1.

3.3 Following performance of the review (pursuant to paragraphs 3.1 and 3.2 respectively of this Schedule 4 above):

3.4 If Actual Capex is more than the Revised Forecast Capex, the Network Access Fee shall be amended such that, from completion of the N2 Network Access Programme or such other date as the parties agree is appropriate in light of the timing of the review, they are based on a level of capital expenditure which is equal to:

3.4.1 Actual Capex; less

3.4.2 Fifty percent (50%) of the differential between Actual Capex and Revised Forecast Capex

which will replace the charges (set out in Table 1 above, line items 9 and 11) in respect of capital expenditure and the charges for uplift for contingencies.

3.5 If Actual Capex is less than the Revised Forecast Capex, the Network Access Fee shall be amended such that, from completion of the N2 Network Access Programme or such other date as the parties agree is appropriate in light of the timing of the review, they are based on a level of capital expenditure which is equal to:

3.5.1 Revised Forecast Capex; less

3.5.2 Fifty percent (50%) of the differential between Revised Forecast Capex and Actual Capex

which will replace the Network Access Fee (set out in Table 1 above, line items 9 and 11) in respect of capital expenditure and the charges for uplift for contingencies.

3.6 Any amendments to the Network Access Fee effected under this Schedule 4 shall reflect changes in N2 Network Access Programme capital expenditure only. No other factors shall be taken into consideration when Arqiva undertakes the calculations set out in paragraph 3.1 above, other than any differences between forecast and actual timing of cash flow. Where the review is completed after the completion of N2 Network Access Programme (or such other date as the parties agree the Charges should be amended from as determined above) an appropriate adjustment to the Network Access Fee shall be made to reflect any difference between: (i) actual Network Access Fee invoiced between completion of the N2 Network Access Programme (or such other date as referred to above) and the date of completion of the Review; and (ii) the amended Network Access Fee as determined under paragraph 3.4 or 3.5 above.



#### 4 Managed Transmission

- 4.1 The Managed Transmission Fee is set out in Table 5 entitled “Managed Transmission Fee”. It is based upon a project return of 12.5% pre-tax, real calculated as an IRR on the capital expenditure in relation to the Managed Transmission Elements over the term of this Agreement and labour costs relating to the Managed Transmission Elements of the N2 Transmission Programme.
- 4.2 Arqiva's third party capital expenditure for building the Managed Transmission Elements in accordance with the Baseline Specification is capped and will not exceed £3.57 million.
- 4.3 In the event that Arqiva's aggregate third party capital expenditure is less than £3.57 million then the saving thus achieved shall be shared between Arqiva and the Customer in the following proportions:

Table 3 - MTS capex gain share

Total MTS Capital Costs		Customer	Arqiva
All figures stated in £,000			
More than	Less than		
3,570	-	0%	100%
3,497	3,569	75%	25%
3,461	3,496	65%	35%
3,388	3,460	55%	45%
-	3,387	50%	50%

- 4.4 The above bands shall be applied sequentially. So, for example, if Arqiva's aggregate capital expenditure for building the Managed Transmission Elements is £3.40 million then: (a) £73k will be shared between the Customer and Arqiva in the proportions of 75% and 25% (respectively); (b) £37k will be shared between the Customer and Arqiva in the proportions of 65% and 35% (respectively); and (c) £60k will be shared between the Customer and Arqiva in the proportions of 55% and 45% (respectively).
- 4.5 Arqiva shall, prior to the commencement of the N2 Transmission Programme, provide to the Customer a revised forecast of overall capital expenditure for building the Managed Transmission Elements and if applicable a calculation of the likely reduction in the Managed Transmission Fee. Upon completion of the N2 Transmission Programme, the parties shall carry out a reconciliation between Arqiva's actual and forecasted capital expenditure in building the Managed Transmission Elements. In the event that Arqiva's actual capital expenditure is less than the capital expenditure cap as detailed in Paragraph 4.2 above (adjusted through any Change Control), the saving thus achieved shall be shared between Arqiva and the Customer as set out above. The parties agree that Arqiva's share of the savings shall not be due as a one-off fee and instead shall be recovered over the Term through the pricing methodology outlined in Paragraph 4.1 above. To this end Arqiva's share of the savings shall be added to the actual capital expenditure of the Managed Transmission Elements to produce a post incentive Managed Transmission Element capital expenditure figure and this figure shall be used in generating the Managed Transmission Fee using the 12.5% IRR methodology as described in Paragraph 4.1. For the avoidance of doubt, in generating the Managed Transmission Fee using the methodology described in Paragraph 4.1, the calculation will take account of the actual Charges paid by the Customer up until that point so that the future Charges will be set so that Arqiva achieves that project return over the whole of the Term.

- 4.6 The parties acknowledge that the provisions in this paragraph 4 are without prejudice to the fact that Arqiva's capital expenditure levels may be varied to reflect Changes to the N2 Transmission Programme through the Change Control Procedure and that the Change Control Procedure is the exclusive means of implementing Changes which would result in the cap referred to in Paragraph 4.2 being increased. Any Changes agreed under the Change Control Procedure will protect gain shares and pain-shares on a like-for-like (quantum, not percentage) basis and caps may be reset accordingly if additional capex or labour is required to deliver the Change.
- 4.7 The Managed Transmission Fee shall increase annually as set out in table 4 below:

Table 4: Summary of Managed Transmission Fee and Indicative MTS Electrical Charge.

<b>Financial Years (July-June)</b>	<b>MTS Transmission Fee (£'000)</b>	<b>Indicative MTS Electrical Charge (£'000)</b>	<b>MTS Transmission Fee plus indicative MTS Electrical Charge (£'000)</b>
2015/16	312	51	363
2016/17	1,139	171	1,310
2017/18	1,239	183	1,422

#### Foreign Exchange Risk

- 4.8 To the extent that Equipment (or related services) required for the Managed Transmission Elements are sourced from suppliers which are based overseas, Arqiva shall bear the risk of any foreign exchange fluctuations.

#### **5. Charges**

- 5.1 The Charges are a combined fee comprising Network Access Fees and Managed Transmission Fees, to which are added the Pass-Through Costs, as described below in Table 5:

Table 5

	<b>Charges (£'000)</b>
Network Access Fee	2,074
Managed Transmission Fee	1,239
<b>Charges</b>	<b>3,314</b>
Network Access Pass- Through (indicative, excluding MTS Electrical Charge)	144
MTS Electrical Charge (indicative)	183
<b>Total Fee (indicative)</b>	<b>3,640</b>

- 5.2 The Charges ramp up over the N2 Transmission Programme based on the rollout of sites in line with the Station Dates in Schedule 3.
- 5.3 During the N2 Transmission Programme, the Charges will be subject to annual indexation in accordance with Clause 9.2.
- 5.4 The annualised pricing of the Charges will be calculated in accordance with paragraphs 2 and 4 of this Schedule and is dependent on the Term.
- 5.5 For the avoidance of doubt the Charges do not include Pass-Through Costs or other charges or fees calculated pursuant to Clause 9.8, which shall be payable in addition by the Customer.
- 5.6 Indicative individual Station specific charges are provided as an indication of the allocation of charges for the 70 Stations nominally proposed by Arqiva in Schedule 5. See separate document, N2 Reference Offer - Per Station breakdown of indicative total fee v1, as appended to this Reference Offer as Appendix 2 for the N2 per Station breakdown of the indicative total fee.

## **6. Electricity**

- 6.1 The MTS Electrical Charge is chargeable to the Customer at cost plus a reasonable allocation of Arqiva's costs for management and administration. As a Pass-Through Cost, it is calculated, reconciled, invoiced and payable in accordance with Clause 9.13 and paragraph 2.1.2 of this Schedule 4.
- 6.3 An example illustrating how electricity charges are calculated is set out at Schedule 17. Arqiva will use its reasonable endeavours to seek to obtain the best value possible from its electricity supply providers and will seek to establish fixed price arrangements as regards the energy charge element of electricity costs for a set duration so as to give financial stability for the longest practical period, taking into account all relevant factors including the requirements of Arqiva's other customers and Arqiva itself as a consumer of electricity. Arqiva will keep the Customer informed as regards its electricity purchasing strategy.

## SCHEDULE 5

### Stations

Station Reference	Station Name	Station Height AOD (m)	Station NGR
140056	ALEXANDRA PALACE	93	TQ 29700 90101
140038	ALSAGERS BANK	220	SJ 81270 47814
140320	BASINGSTOKE	169	SU 64330 47990
12000	BELMONT	125	TF 21800 83600
140161	BILSDALE	381	SE 55327 96226
140108	BLUEBELL HILL	196	TQ 75728 61367
56710	BLUNSDON MF	148	SU 14301 90000
140107	BOW BRICKHILL	168	SP 91390 34230
9308	CHILLERTON DOWN SC (IOW)	166	SZ 47500 83500
140488	CHURCHDOWN HILL	147	SO 88010 18850
14700	CRAIGKELLY	180	NT 23301 87200
140469	CRYSTAL PALACE	110	TQ 33910 71250
140552	DIVIS	301	IJ 28690 75070
9304	EMLEY MOOR SC	256	SE 22268 13013
240363	GLASGOW WILLIAM STREET	15	NS 58093 65463
140729	GUILDFORD HOGS BACK	137	SU 97471 48596
140802	HANNINGTON	220	SU 52740 56820
140827	HEMEL HEMPSTEAD	137	TL 08801 04500
140830	HIGH HUNSLEY	164	SE 94585 35041
92587	HOUGHTON ON THE HILL	153	SK 67580 04400
140985	KILVEY HILL	93	SS 67180 94020
140977	KIRK O'SHOTTS	278	NS 85770 63707
80533	LIVERPOOL ST JOHNS BEACON	10	SJ 34812 90394
82523	LONDON BT TOWER	27	TQ 29200 81901
141006	LONDONDERRY	175	IC 40430 17609
20008	MANCHESTER CITY TOWER	44	SJ 84400 98301
36212	MAPPERLEY (S)	122	SK 58301 42400
141162	MENDIP	302	ST 56440 48850
52120	NINE BARROW DOWN	201	SZ 00900 81100
141308	OXFORD	130	SP 56740 10510
10302	PENDLE FOREST	273	SD 82518 38404
141389	PETERBOROUGH	56	TL 12547 91290
141384	PONTOPIKE	305	NZ 14760 52750
20012	PURDOWN	91	ST 61000 76400
141440	REIGATE	226	TQ 25652 52140
9414	SANDY HEATH SC	55	TL 20400 49401

Station Reference	Station Name	Station Height AOD (m)	Station NGR
141523	SHEFFIELD	250	SK 32450 87070
141504	SUTTON COLDFIELD	169	SK 11346 00246
141690	TURNERS HILL (BT)	265	SO 96800 88700
141763	WALTHAM	133	SK 80920 23340
141857	WENVOE	129	ST 11000 74200
141808	WHITEHAWK HILL	121	TQ 32960 04500
9303	WINTER HILL SC	438	SD 66001 14400
141838	WROTHAM	219	TQ 59440 60440
141872	ZOUCHES FARM	207	TL 04501 21001
11806	ARFON	290	SH 47600 49300
140216	BEACON HILL (NORTH)	195	SX 85700 62001
140148	BROMSGROVE	148	SO 94760 73010
9331	CARADON HILL SC	369	SX 27327 70798
140482	CARMEL	259	SN 57680 15360
10405	CHESTERFIELD	180	SK 38301 76401
140602	DAVENTRY	204	SP 58810 61970
9313	DOVER SC	135	TR 27401 39700
140683	FENHAM	120	NZ 21640 64890
140877	HASTINGS	76	TQ 80706 10045
140834	HEATHFIELD	165	TQ 56710 22090
140846	HOLME MOSS	524	SE 09620 03990
141186	MADINGLEY	64	TL 39240 59420
9314	MENDLESHAM SC	64	TM 12200 64100
141173	MIDHURST	189	SU 91200 25000
9345	MOEL-Y-PARC SC	340	SJ 12300 70100
13105	PLYMPTON	114	SX 53100 55501
9329	PRESELI SC	324	SN 17200 30600
141477	REDRUTH	243	SW 69040 39450
14900	RIDGE HILL	204	SO 63001 33300
141491	SALISBURY	115	SU 13645 28520
13201	ST THOMAS (EXETER)	99	SX 89827 92222
9332	STOCKLAND HILL SC	229	ST 22201 01400
141648	TACOLNESTON	65	TM 13050 95721
141835	THE WREKIN	400	SJ 62870 08270

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**SCHEDULE 6**

**Baseline Specification**

All antenna systems listed in the table below have two separate 'half' antennas, each comprising one or more antenna elements. Each 'half' antenna has its own feeder and these are connected to a power splitter at ground level. The transmitters are sized for the nominal operational ERP and may not be capable of providing the maximum full antenna ERP.

<b>Station Ref</b>	<b>Station Name</b>	<b>Antenna Proposal</b>	<b>Nominal Antenna Height AGL (m)</b>	<b>Nominal operational ERP (kW)</b>	<b>Maximum full-antenna ERP capability (kW)</b>	<b>Maximum half-antenna ERP (kW)</b>	<b>Nominal operational Tx power (kW)</b>
140056	ALEXANDRA PALACE	Modified	75.0	2.00	3.20	1.60	0.46
140038	ALSAGERS BANK	Shared	48.8	2.00	2.00	1.00	0.58
11806	ARFON	Shared	238.0	1.90	5.00	1.25	0.51
140320	BASINGSTOKE	Shared	26.0	1.00	1.00	0.25	0.45
140216	BEACON HILL (NORTH)	Shared	71.2	2.00	5.00	2.50	0.80
12000	BELMONT	Shared	291.0	5.00	5.00	2.50	1.24
140161	BILSDALE	Shared	244.0	4.74	5.00	2.50	1.58
140108	BLUEBELL HILL	Shared	41.0	6.30	6.30	3.15	0.87
56710	BLUNSDON MF	Shared	36.7	2.51	4.00	2.00	0.71
140107	BOW BRICKHILL	Shared	55.0	2.00	2.00	1.00	0.54
140148	BROMSGROVE	Shared	39.0	1.50	2.00	0.50	0.69
9331	CARADON HILL SC	Shared	203.0	2.00	2.50	1.25	1.10
140482	CARMEL	Shared	118.2	1.00	3.00	1.50	0.60
10405	CHESTERFIELD	Shared	36.0	1.00	1.00	0.25	0.53
9308	CHILLERTON DOWN SC (IOW)	Shared	214.4	5.00	5.00	2.50	1.12
140488	CHURCHDOWN HILL	Shared	20.3	2.00	2.00	1.00	1.11
14700	CRAIGKELLY	Shared	119.0	6.75	5.00	2.50	2.51

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<b>Station Ref</b>	<b>Station Name</b>	<b>Antenna Proposal</b>	<b>Nominal Antenna Height AGL (m)</b>	<b>Nominal operational ERP (kW)</b>	<b>Maximum full-antenna ERP capability (kW)</b>	<b>Maximum half-antenna ERP (kW)</b>	<b>Nominal operational Tx power (kW)</b>
140469	CRYSTAL PALACE	Shared	172.4	6.45	9.00	4.50	2.29
140602	DAVENTRY	Shared	106.0	8.00	8.00	4.00	1.54
140552	DIVIS	Shared	115.0	10.00	10.00	5.00	2.24
9313	DOVER SC	Shared	181.3	1.00	2.00	1.00	0.16
9304	EMLEY MOOR SC	Shared	285.0	8.50	10.00	5.00	1.95
140683	FENHAM	Shared	35.1	1.00	1.40	0.70	0.13
240363	GLASGOW WILLIAM STREET	Shared	76.0	0.30	0.30	0.15	0.15
140729	GUILDFORD HOGS BACK	Shared	38.8	5.00	5.00	1.25	0.65
140802	HANNINGTON	Shared	81.2	4.60	4.60	2.30	1.10
140877	HASTINGS	Shared	44.6	0.50	0.50	0.25	0.14
140834	HEATHFIELD	Shared	77.5	1.00	5.00	2.50	0.27
140827	HEMEL HEMPSTEAD	Shared	69.0	3.20	4.00	2.00	1.57
140830	HIGH HUNSLEY	Shared	70.0	2.00	2.00	1.00	0.65
140846	HOLME MOSS	Shared	160.0	4.68	10.00	5.00	1.06
92587	HOUGHTON ON THE HILL	Shared	32.6	1.20	1.20	0.60	0.42
140985	KILVEY HILL	Shared	45.0	1.00	3.00	1.50	0.25
140977	KIRK O'SHOTTS	Shared	183.9	4.60	10.00	5.00	0.82
80533	LIVERPOOL ST JOHNS BEACON	Shared	140.4	0.50	0.50	0.25	0.45
82523	LONDON BT TOWER	Shared	189.0	0.80	0.80	0.20	0.27
141006	LONDONDERRY	Shared	98.7	6.20	6.30	3.15	1.20
141186	MADINGLEY	Shared	60.0	1.00	1.40	0.70	0.26
20008	MANCHESTER CITY TOWER	Shared	123.8	0.50	0.50	0.13	0.37
36212	MAPPERLEY (S)	Shared	46.1	1.00	1.00	0.50	0.28

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<b>Station Ref</b>	<b>Station Name</b>	<b>Antenna Proposal</b>	<b>Nominal Antenna Height AGL (m)</b>	<b>Nominal operational ERP (kW)</b>	<b>Maximum full-antenna ERP capability (kW)</b>	<b>Maximum half-antenna ERP (kW)</b>	<b>Nominal operational Tx power (kW)</b>
141162	MENDIP	Shared	238.0	5.00	5.00	2.50	1.69
9314	MENDLESHAM SC	Shared	219.7	1.00	4.30	2.15	0.36
141173	MIDHURST	Shared	93.0	1.00	6.30	3.15	0.39
9345	MOEL-Y-PARC SC	Shared	188.8	9.50	10.00	2.50	1.17
52120	NINE BARROW DOWN	Shared	12.5	1.00	1.30	0.65	0.20
141308	OXFORD	Shared	131.0	7.75	10.00	5.00	0.76
10302	PENDLE FOREST	Shared	37.0	2.03	5.00	2.50	0.36
141389	PETERBOROUGH	Shared	133.0	5.00	5.00	2.50	1.23
13105	PLYMPTON	Shared	35.0	2.00	3.00	1.50	0.61
141384	PONTOP PIKE	Shared	122.8	6.30	8.20	4.10	1.79
9329	PRESELI SC	Shared	205.0	1.00	5.00	1.25	0.28
20012	PURDOWN	Shared	55.0	1.00	1.00	0.50	0.62
141477	REDRUTH	Shared	139.0	1.32	2.00	0.20	0.78
141440	REIGATE	Shared	52.1	1.00	1.00	0.25	0.23
14900	RIDGE HILL	Shared	126.8	5.00	8.00	2.00	1.44
141491	SALISBURY	Shared	43.5	1.00	2.00	0.50	0.39
9414	SANDY HEATH SC	Shared	165.4	4.70	5.00	2.50	1.29
141523	SHEFFIELD	Shared	39.1	2.00	2.00	1.00	0.58
13201	ST THOMAS (EXETER)	New	38.0	3.75	5.00	2.50	1.24
9332	STOCKLAND HILL SC	Shared	176.0	2.00	5.00	2.50	0.94
141504	SUTTON COLDFIELD	Shared	200.0	8.73	8.80	4.40	2.14
141648	TACOLNESTON	Shared	131.0	4.00	5.00	2.50	1.26
141835	THE WREKIN	Shared	48.0	8.00	8.00	2.00	1.69



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<b>Station Ref</b>	<b>Station Name</b>	<b>Antenna Proposal</b>	<b>Nominal Antenna Height AGL (m)</b>	<b>Nominal operational ERP (kW)</b>	<b>Maximum full-antenna ERP capability (kW)</b>	<b>Maximum half-antenna ERP (kW)</b>	<b>Nominal operational Tx power (kW)</b>
141690	TURNERS HILL (BT)	Modified	65.0	10.00	10.00	5.00	2.02
141763	WALTHAM	Shared	235.0	8.80	10.00	5.00	2.00
141857	WENVOE	Shared	200.0	4.00	9.00	4.50	0.47
141808	WHITEHAWK HILL	Shared	38.5	0.50	2.00	1.00	0.17
9303	WINTER HILL SC	Shared	207.0	10.00	10.00	5.00	1.38
141838	WROTHAM	Shared	157.3	4.50	4.50	2.25	0.33
141872	ZOUCHES FARM	Shared	59.8	3.20	5.00	1.25	0.63

**Appendix 1: National DAB RO HRP Prediction**

See separate document "Predicted Horizontal Radiation Patterns for National 2 DAB Reference Offer"

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### SCHEDULE 7

#### Interfaces To The Transmission System

##### 1 Introduction

This Schedule describes the interface between the Customer's Distribution System and the Transmission System. The Transmission System has been designed to accept one or two feeds carrying the same information. It shall be the responsibility of the Customer to provide the Customer's Distribution System.

##### 2 Customer Signal Interface Attributes

The Reference Offer assumes that all Transmission Systems are operating within a Single Frequency Network, ("SFN"). The interface for the Customer Signal to the Transmission System shall comply with the definition of Ensemble Transport Interface – Network Adapted, ("ETI (NA)"), as detailed in ETSI standard ETS 300 799.

##### 3 Specific Requirements

- 1) The Customer Signal shall be made available by the Customer at the MTS Insertion Point on each Station. The Customer shall present to the MTS Insertion Point either one or two Physical Interfaces, (the number to be agreed with Arqiva for each Customer Signal).
- 2) The Customer shall procure services for distributing the Customer Signal from an Arqiva approved Distribution Service provider.
- 3) The MTS Insertion Point shall be at the location of the Transmission System at each Station. It is the Customer's responsibility to provide the Physical Interface to deliver the Customer Signal to the MTS Insertion Point specified by Arqiva in respect of each Station.
- 4) The Physical Interface shall be a copper co-axial cable:
  - a. The physical characteristics of the ETI (NA) Customer Signal at the MTS Insertion Point shall conform to ITU-T Recommendation G.703 for a 2,048kbit/s interface.
  - b. The interfacing connector carrying the Customer Signal at the MTS Insertion Point shall be 75Ω BNC, fixed female.

For the purpose of this Schedule 7, Physical Interface is the connection between the Customer's Distribution Service and the Transmission System which passes the Customer Signal from the Customer to Arqiva.

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### **SCHEDULE 8**

#### **Customer Signals**

##### **1 Introduction**

This Schedule describes the required format of Customer Signals which shall be presented to Arqiva by the Customer at the MTS Insertion Points via the Distribution System.

##### **2 Customer Signal Attributes**

The Reference Offer assumes all Transmission Systems are operating within a Single Frequency Network. The Customer Signal shall be a DAB Ensemble as defined in ETSI standard EN 300 401 and carried to the Transmission System as Ensemble Transport Interface – Network Adapted as defined in ETSI standard ETS 300 799.

##### **3 Specific Requirements**

- 1) All Customer Signals feeding the Stations within the network shall be the output of a single DAB multiplexer, such that ETI frames carrying the same Time Stamp, ("TIST"), shall have identical data content.
- 2) Where two physical Customer Signals are provided at any designated transmitter site, the Customer Signals shall be the output of a single DAB multiplexer, such that ETI frames carrying the same TIST shall have identical data content.
- 3) The data format for the ETI - Network Adapted signal shall be the frame structure defined in ITU-T Recommendation G.704, and as detailed in ETS 300 799 for network adaptation in general use.

##### **4 Notes on Timing for the Customer Signal**

The Time Stamps (TISTs) applied to the Customer Signal must ensure that the same transmission frames can be broadcast by all target transmitters in a Single Frequency Network within the same GPS second.

It is expected that the Customer and Arqiva will work together to optimise the configuration and timing of the Customer Signal across the Distribution System to ensure proper co-timing of transmitters within any Single Frequency Network.

##### **Some General Guidelines**

- All Customer Signals feeding transmitters within an SFN, whether they are duplicate feeds to the same Station, or feeds to different Stations within the network, must arrive at all transmitters within 800ms of one another; the propagation delay between the single DAB multiplex output and the MTS Insertion Points must not vary between any two sites in the SFN by more than 800ms.
- This range is only available if the time stamping of the source ETI – Network Adapted frames is configured and inserted in accordance with these guidelines and taking into account the maximum propagation delay of the Customer Distribution Network.

For a worse case example:

Transport feed A arriving 800ms before transport feed B.

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The timestamp must be set at the common source such that the signal on feed A will be stored by the transmitter for at least 800ms so that the transmitter using feed B can still provide a synchronised signal.

If these guidelines are broken then the storage delay designed into the transmitters (based on a one second time reference) cannot ensure that the transmissions will be synchronised. It is likely that one or more transmitter output signals will be in the wrong second (called 'one second roll-over').

Further notes:

It must be confirmed which transport layer the time stamps are inserted into and what is inserted into the unused layers. For example: ETI – Network Adapted TIST, ETI – Network Independent TIST and EDI time stamps, as different transmitter types can be configured to read the incoming timestamp from different layers.

Defined limits on accuracy, drift and precision (TIST level) of inserted timestamps and feed data rates must be agreed.

If the Customer Signal source cannot guarantee a consistent and deterministic timestamp that is not altered by the complete system (main, redundancy and disaster recovery sites if used) restarting then an agreement needs to be reached on how network retiming events will be handled and how these will affect any SFN monitoring services (see Schedule 21).

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### **SCHEDULE 9**

#### **Monitoring and Control**

##### **1 Introduction**

This Schedule describes the systems used by Arqiva to provide monitoring and control for the designated Transmission Systems.

##### **2 Overview**

Arqiva shall provide continuous monitoring and telemetry systems incorporating appropriate forward control at all Stations.

##### **3 Connectivity**

Arqiva shall procure suitable IP-based connectivity to each Site. The individual elements comprising the Transmission System and its ancillary components shall be polled directly using a Simple Network Management Protocol, ("SNMP"). Additional conditions that are monitored which are not available directly from an SNMP-capable device shall be collated and translated into SNMP by a Site telemetry device for carriage over the IP connection.

Additional "reach-through" capability is utilized to allow direct access to various parameters and forward configuration of equipment, where a Web-based Graphical User Interface is available on certain devices. It is anticipated that this will be used for primarily 2<sup>nd</sup> and 3<sup>rd</sup> line maintenance activity.

##### **4 Service Management Centre**

At the Arqiva SMC, operational staff shall monitor and report against the status of the Transmission Service provided from the Stations, and will initiate controls and remote configuration as required to optimise the availability and performance of the Transmission Service.

##### **5 Customer Signal Monitoring and Control**

The Transmission System shall allow continuous monitoring of the Customer Signal at the MTS Insertion Point. Parameters measured shall include, but not be limited to;

- ETI (Network Adapted) input signal status and control
- ETI (Network Adapted) input signal Bit Error Rate
- Customer Signal Time Reference validity

##### **6 Transmission System Monitoring and Control**

The Transmission System shall allow continuous monitoring of various parameters associated with the Transmission Service. Parameters measured shall include, but not be limited to;

- Output forward power
- Output Bit Error Rate
- Drive Status and Control
- Timing Alignment – SFN
- System Temperature

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### **7 Site Infrastructure Alarms**

Arqiva shall collate and report various Site parameters to provide continuous monitoring of the Station infrastructure. Parameters measured shall include, but not be limited to;

- On site mains supply
- Backup power (if available)
- Site Security Alarm

### **8 DAB Synchronisation Monitoring**

Transmitting Stations within a SFN must be suitably co-timed. Arqiva shall use its DAB synchronisation monitoring system to provide rapid diagnosis of SFN timing faults. This system centrally pools absolute time measurements from all of the Transmission Systems within a SFN based on Arqiva's own Transmission frame and ETI frame monitoring techniques. Comparative analysis of values within an SFN allows the SMC to identify problems at individual Sites, and to differentiate them from issues affecting the whole network.

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### SCHEDULE 10

#### Maintenance Objectives

##### 1. Preventive Maintenance

Preventive maintenance will be undertaken as determined from time to time at all Sites and will include such transmitter performance checks and general condition checks as are designed to optimise System availability and meet statutory or licence requirements. Such checks will be non-intrusive and/or non-service affecting so far as is reasonably practicable.

##### 2. Target Response Times

2.2 For the purposes of this Agreement, a "Target Response Time" shall mean the time between Arqiva first becoming aware of a Breakdown at a Station either through its own monitoring or by a confirmed report from the Customer or an audience contact and the arrival at the Station of suitably trained and skilled personnel to investigate and seek to remedy such Breakdown.

2.3 On becoming aware of a Breakdown, Arqiva shall attempt, as soon as possible, to resolve the Breakdown by such remote control facilities as are available.

2.4 In the event that Arqiva is able to establish and confirm with the relevant Regional Electricity Company that a Breakdown is due to a loss of the incoming public mains electricity supply at the relevant Station and that Station does not have stand-by power facilities, then paragraph 2.2 of this Schedule 10 shall not apply in respect of such Station until the relevant Regional Electricity Company has confirmed with Arqiva that the public mains electricity supply has been restored.

2.5 In the event that any Breakdown is not resolved by remote control, the Target Response Time during which Arqiva shall endeavour to respond in relation to such Breakdown shall be as shown in the table in paragraph 2.5 of this Schedule 10 only where Arqiva's monitoring of the Transmission Services indicates that such Breakdown is occurring in equipment as is located at such Station.

2.6 Target Response Times according to the time of commencement of Breakdowns shall be as shown in the table below:

Target Response Time (hours) for Breakdowns commencing between 0800 and 1700, excluding weekends and bank holidays	Target Response Time (hours) for Breakdowns commencing at other times
2	4

2.7 Notwithstanding anything to the contrary contained in this Schedule 10, Arqiva shall in any event:

- 2.6.1 attend to Breakdowns as soon as reasonably practicable;
- 2.6.2 preserve any data indicating the cause of any Breakdown;
- 2.6.3 take reasonable steps so as to remedy any Breakdown as soon as reasonably practicable and until such time as such Breakdown is remedied, so as to minimise the impact of such Breakdown on the provision of the Transmission Service; and
- 2.6.4 take reasonable, appropriate and necessary steps so as to prevent such Breakdown from recurring anywhere on the network.

**SCHEDULE 11**

**Total Time of Service Availability**

2. The Total Time of Service Availability ("**TTSA**") calculated as a moving average over the preceding twelve calendar months (if there are less than 12 months since the Actual Service Start Date, the TTSA for the balance of the 12-month measurement period prior to the Actual Service Start Date shall be taken to be 100%) shall be no less than **99.8%**.
  
3. For the purpose of calculating whether the Total Time of Service Availability has been achieved at any Station, failures, interruptions or defects in transmission shall not count as a Breakdown to the extent that they result from any of the following:
  - (i) a failure or interruption resulting from the Customer's refusal to permit work proposed by Arqiva under Clause 7 or the carrying out of any work contemplated by and provided for in Clause 7;
  - (ii) where resulting from Arqiva's due compliance with safe working practices stipulated by the National Radiological Protection Board or any other health safety environmental or other law or generally recognised protocol or standard (whether or not having the force of law);
  - (iii) impairment of the quality of the Customer Signal due to abnormal propagation conditions;
  - (iv) any loss of transmission or impairment in the quality of the transmitted Customer Signal resulting directly from any of the matters for which the Customer has responsibility;
  - (v) where transmission is restored to a level greater than nominally -1dB with respect to normal ERP;
  - (vi) any fault requiring attendance at a Site during any period where such attendance is not permitted or is otherwise prevented as a consequence of a security alert or any other Force Majeure Event;
  - (vii) any failure or deficient provision of any element of the Transmission Service for which Arqiva has ceased to be responsible following termination in accordance with Clause 16;
  - (viii) unplanned interruptions to public mains supply at any Station which are beyond Arqiva's reasonable control and where there is no back-up generator;
  - (ix) exceptional or unforeseeable weather including without limitation lightning, icing and high winds;
  - (x) a specific direction to Arqiva by Ofcom or the Customer;
  - (xi) the failure or continued unavailability of the Global Positioning System (GPS) to the extent relied upon for the Transmission Service;
  - (xii) reductions in power of less than 3dB as a result of a Transmitter System fault;
  - (xiii) reductions in power of less than that shown in Schedule 6 when operating in half Antenna condition;



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- (xiv) any fault requiring mast ascent during the hours of darkness or severe inclement weather where, in the reasonable judgement of Arqiva, a potential safety hazard exists;
- (xv) any breach of this Agreement by the Customer;
- (xvi) any interruption as a result of Arqiva complying with directions under Clause 11.1 or Clause 11.2;
- (xvii) any interruption as a result of an engineering test transmission made at the request of the Customer;
- (xviii) any failure of the Customer, its agents, contractors or their subcontractors (not including Arqiva) to deliver the Customer Signals to Arqiva at the relevant MTS Insertion Points (including, for the avoidance of doubt, any failure of the Distribution Service Provider) in accordance with the requirements of this Agreement;
- (xix) any interruption resulting from defects or failures in the equipment or services provided or operated by or on behalf of the Customer (other than Equipment which Arqiva is required to operate and maintain) PROVIDED that any such interruption resulting from loss of mains electricity supply for any reason shall count for the purposes of calculating Total Time of Service Availability unless the Customer has failed to discharge its responsibilities under this Agreement (including, without limitation, its obligations under Schedule 20);
- (xx) any breakdown or other fault in the Customer Signal caused by the Multiplex Service;
- (xxi) planned interruptions to the public mains supply at any Station where notification has been made by Arqiva to the Customer and approval has been obtained from the Customer in accordance with Clause 7;
- (xxii) planned interruptions, where notification has been made to the Customer representative and approval given by the Customer pursuant to Clause 7;
- (xxiii) a Force Majeure event to the extent not already covered by paragraphs (i) to (xxii) above;
- (xxiv) any interruption due to causes listed in this Schedule 11 at paragraph 3 as "Planned Works", provided that the time and duration of such works has been notified to and agreed by the Customer in advance in accordance with the procedures notified by Arqiva to the Customer from time to time;
- (xxv) any other occurrence that the parties mutually agree not to treat as minutes lost;
- (xxvi) additional time spent waiting for or travelling via ferries or flights required for access to island Stations; and/or
- (xxvii) failure of transmission equipment to an extent that exceeds the capability of existing Arqiva stocks of suitable spare modules, devices, and/or reserve equipment to mitigate.

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4. Planned Works
- 3.1 For the purpose of calculating Total Time of Service Availability, the period of any interruption in provision of Transmission Services due to causes including any of the following events shall be counted as planned works and accordingly shall not count as a Breakdown pursuant to paragraph 2(xxiv) above:
  - 4.1.1 maintenance or replacement of Antenna Systems and/or Transmitter System;
  - 4.1.2 maintenance or replacement of aircraft warning lights;
  - 4.1.3 painting of the Antenna support structure;
  - 4.1.4 replacement, strengthening or maintenance of the Antenna support structure, including (without limitation) greasing of stays;
  - 4.1.5 periodic inspections of the Antenna support structure, statutory or otherwise;
  - 4.1.6 periodic inspections of Antenna Systems carrying the transmitted service signal and/or Transmitter System;
  - 4.1.7 maintenance or replacement of Common Equipment;
  - 4.1.8 periodic inspections of equipment related to the permanent electricity supply, statutory or otherwise;
  - 4.1.9 electricity meter changes; and
  - 4.1.10 installation of infrastructure for third parties.

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### SCHEDULE 12

#### Service Credits

1. At the end of each calendar month commencing from the Actual Service Start Date, the parties shall calculate the Total Time of Service Availability at each Station in accordance with Schedule 11, over the preceding 12 calendar months, inclusive of the month just ended (or if less than 12 months from the Actual Service Start Date, the Total Time of Service Availability shall be assumed to be 100% for the months required to make up the 12-month measurement period).
2. If the Total Time of Service Availability over the relevant period is below the applicable Total Time of Service Availability target set out in Table 1 of Schedule 11 with respect to any individual Station, Arqiva shall incur a liability to pay service credits to the Customer in respect of each such Station in accordance with Paragraph 3 below. If the said 12-month period straddles two Total Time of Service Availability targets set out in Table 1 of Schedule 11 for the Station in question, the Total Time of Service Availability target for the purposes of the calculation shall be averaged over the period of the calculation e.g. where one Total Time of Service Availability target applies for 5 months and another for 7 months, the average Total Time of Service Availability target will be calculated as follows:  $((5 \times \text{TTSA1}) + (7 \times \text{TTSA2}))/12$ .
3. The method for calculating service credits with respect to each Station on a monthly basis is as follows:
  - 3.1 If no Breakdown has occurred in the month no service credits are due.
  - 3.2 If a Breakdown has occurred in the month then:-

For the relevant Station calculate the actual total period of Breakdowns over the previous 12-month period, including the current month of calculation.

- 3.2.1 If the actual total period of Breakdowns over the last 12 months is less than or equal to the permitted period of Breakdown for 12 months, then no service credits are due.
  - 3.2.2 If the actual total period of Breakdowns over the last 12 months is greater than the permitted period of Breakdowns for 12 months, then service credits shall be due and calculated in accordance with Paragraph 4 below.
  - 3.2.3 For these purposes, the permitted period of Breakdown is the difference between the applicable Total Time of Service Availability target set out in Table 1 of Schedule 11 and 100%.
4. For any Breakdown that occurs during the month which causes the actual total period of Breakdowns over the last 12 months to exceed the permitted period of Breakdowns the following formula shall be applied to calculate the relevant service credits:

Service credits =  $M \times D \times W \times T \times C \times 10$

where:-

M = the period of Breakdown in the relevant month in which a Breakdown has occurred expressed in minutes and increments of 10 seconds minus any balance of permitted Breakdowns over the preceding 12 calendar months;

D = the relevant degradation weighting factor to be determined by reference to the nature of the Breakdown as set forth in Table 1 (if there is loss of more than one Material Degradation the aggregate value of which exceeds 1, the value to be attributed shall be 1);

W = the relevant Station weighting as set forth in Table 2, expressed as a percentage;

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T = the Time of Day Weighting Factor set forth in Table 3 (if the relevant minute spans different hours, the factor to be applied shall be that current at the start of the relevant minute);

C = the Transmission Annual Charge (excluding Pass-Through Costs), divided by 525,960 (= 365.25 x 24 x 60), i.e. the charge per minute for all Stations excluding Pass-Through Costs.

5. Subject to Paragraph 7, Arqiva's aggregate liability to pay service credits in respect of the relevant calendar month equals the sum of the figures calculated for each Breakdown to which the formula set forth in Paragraph 4 is to be applied.
6. Arqiva shall notify the Customer of the period, nature and timing of all Breakdowns at each Station.
7. Arqiva shall have no obligation to pay service credits with respect to any Station until the Actual Service Start Date in respect of such Station.

**Table 1 - Degradation Weighting Factors**

Degradation	Weighting Factor
Total loss of transmission	1
Station ERP degraded by greater than 3dB and up to 6dB relative to that shown in Schedule 6 as a result of a Transmitter System fault	0.5
Station ERP degraded by greater than 6dB relative to that shown in Schedule 6 as a result of a Transmitter System fault	1
Any material impairment not covered by any of the foregoing	0.1

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**Table 2 - Station Weightings**

The weightings shown in this Table 2 are based on a percentage of the total population coverage for all Stations.

Note: This Table 2 assumes that all 70 Stations offered are implemented. If a different number of Stations, or antenna solutions that provide different predicted population coverage, are implemented then this table and the respective Station Weightings shall be recalculated accordingly.

<b>Station Reference</b>	<b>Station Name</b>	<b>Weighting</b>
140056	ALEXANDRA PALACE	tba
140038	ALSAGERS BANK	tba
11806	ARFON	tba
140320	BASINGSTOKE	tba
140216	BEACON HILL (NORTH)	tba
12000	BELMONT	tba
140161	BILSDALE	tba
140108	BLUEBELL HILL	tba
56710	BLUNSDON MF	tba
140107	BOW BRICKHILL	tba
140148	BROMSGROVE	tba
9331	CARADON HILL SC	tba
140482	CARMEL	tba
10405	CHESTERFIELD	tba
9308	CHILLERTON DOWN SC (IOW)	tba
140488	CHURCHDOWN HILL	tba
14700	CRAIGKELLY	tba
140469	CRYSTAL PALACE	tba
140602	DAVENTRY	tba
140552	DIVIS	tba
9313	DOVER SC	tba
9304	EMLEY MOOR SC	tba
140683	FENHAM	tba
240363	GLASGOW WILLIAM STREET	tba
140729	GUILDFORD HOGS BACK	tba
140802	HANNINGTON	tba
140877	HASTINGS	tba
140834	HEATHFIELD	tba
140827	HEMEL HEMPSTEAD	tba
140830	HIGH HUNSLEY	tba
140846	HOLME MOSS	tba
92587	HOUGHTON ON THE HILL	tba
140985	KILVEY HILL	tba
140977	KIRK O'SHOTTS	tba

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80533	LIVERPOOL ST JOHNS BEACON	tba
82523	LONDON BT TOWER	tba
141006	LONDONDERRY	tba
141186	MADINGLEY	tba
20008	MANCHESTER CITY TOWER	tba
36212	MAPPERLEY (S)	tba
141162	MENDIP	tba
9314	MENDLESHAM SC	tba
141173	MIDHURST	tba
9345	MOEL-Y-PARC SC	tba
52120	NINE BARROW DOWN	tba
141308	OXFORD	tba
10302	PENDLE FOREST	tba
141389	PETERBOROUGH	tba
13105	PLYMPTON	tba
141384	PONTOPIKE	tba
9329	PRESELI SC	tba
20012	PURDOWN	tba
141477	REDRUTH	tba
141440	REIGATE	tba
14900	RIDGE HILL	tba
141491	SALISBURY	tba
9414	SANDY HEATH SC	tba
141523	SHEFFIELD	tba
13201	ST THOMAS (EXETER)	tba
9332	STOCKLAND HILL SC	tba
141504	SUTTON COLDFIELD	tba
141648	TACOLNESTON	tba
141835	THE WREKIN	tba
141690	TURNERS HILL (BT)	tba
141763	WALTHAM	tba
141857	WENVOE	tba
141808	WHITEHAWK HILL	tba
9303	WINTER HILL SC	tba
141838	WROTHAM	tba
141872	ZOUCHES FARM	tba

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**Table 3 – Time of Day Weighting Factor**

Time of day (local clock time)	Sat	Sun	Mon	Tue	Wed	Thu	Fri
00:00	0.50	0.50	0.50	0.50	0.50	0.50	0.50
01:00	0.30	0.30	0.30	0.30	0.30	0.30	0.30
02:00	0.30	0.30	0.30	0.30	0.30	0.30	0.30
03:00	0.30	0.30	0.30	0.30	0.30	0.30	0.30
04:00	0.30	0.30	0.30	0.30	0.30	0.30	0.30
05:00	0.80	0.80	0.80	0.80	0.80	0.80	0.80
06:00	0.80	0.80	1.00	1.00	1.00	1.00	1.00
07:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
08:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
09:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
10:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
11:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
12:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
13:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
14:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
15:00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
16:00	0.80	0.80	1.00	1.00	1.00	1.00	1.00
17:00	0.80	0.80	1.00	1.00	1.00	1.00	1.00
18:00	0.80	0.80	1.00	1.00	1.00	1.00	1.00
19:00	0.80	0.80	0.80	0.80	0.80	0.80	0.80
20:00	0.60	0.60	0.80	0.80	0.80	0.80	0.80
21:00	0.60	0.60	0.60	0.60	0.60	0.60	0.60
22:00	0.60	0.60	0.60	0.60	0.60	0.60	0.60
23:00	0.50	0.50	0.50	0.50	0.50	0.50	0.50

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### SCHEDULE 13

#### Change Control Procedure

1. Changes Requested by the Customer
  - 1.1 The Customer may request a Change at any time during the Term.
  - 1.2 If the Customer wishes to request a Change, it shall serve on Arqiva, via their appointed Customer Account Director (as set out in Clause 24.2 of the Agreement), a notice (a "**Change Request**") specifying the nature of the Change it wishes to introduce in accordance with the Change Control Procedure. Until such time as a Change is made in accordance with the Change Control Procedure, both parties shall, unless otherwise agreed in writing, continue to perform their obligations as if the Change Request had not been made.
  - 1.3 The Change Request shall set out the Change being proposed in sufficient detail to enable Arqiva to evaluate the matters specified in Paragraph 1.4 of this Schedule 13 and, without limitation, shall include:
    - 1.3.1 full details of the Change, including any specifications;
    - 1.3.2 reason(s) and supporting information for the requested Change (including issues and risks which will arise if the Change is not made);
    - 1.3.3 the requested date with effect from which the Change will be implemented;
    - 1.3.4 full names, titles and contact details of the individual(s) who will be responsible for managing the Change on behalf of the Customer;
    - 1.3.5 provision for signature by both the Customer and Arqiva; and
    - 1.3.6 a requirement for Arqiva to provide the Customer with the information specified in Paragraph 1.4 of this Schedule 13. In submitting the Change Request the Customer agrees to pay any additional charges in respect of investigating the Change Request.
  - 1.4 As soon as practicable, Arqiva shall in good faith evaluate the Customer's proposed Change and shall serve on the Customer a notice (a "**Change Proposal**"). Each Change Proposal shall specify the following information:
    - 1.4.1 whether any temporary relief from compliance with any of Arqiva's obligations under this Agreement is necessary in order to enable Arqiva to implement the Change, and confirmation at what point the parties agree that full reinstatement of the Total Time of Service Availability and service credit regime applies (which shall in any event be no later than the date upon which the product of such Change is working satisfactorily);
    - 1.4.2 a detailed risk assessment in respect of the Change;
    - 1.4.3 any regulatory consents, approvals or authorisations which are required in connection with the Change;
    - 1.4.4 an implementation plan for the Change, including, a timetable, test plan and acceptance criteria (as applicable);
    - 1.4.5 any variation required to be made to the Agreement in connection with the Change;
    - 1.4.6 details of any additional resources expected to be required in developing, testing and implementing the Change;
    - 1.4.7 the costs of developing, testing and implementing the Change and the details of any adjustment to be made to the Charges as a result of introducing the Change;



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whether or not the Change Request is one which will require the agreement of other affected parties (including other DAB Multiplex Licensees) because for example it relates to shared infrastructure (a "**Multi-Party Change**").

- 1.5 The Customer may:
  - 1.5.1 request Arqiva to provide any further information reasonably necessary for the evaluation of the Change Proposal; or
  - 1.5.2 request Arqiva to amend any details contained in the Change Proposal, and Arqiva shall respond to such request within a reasonable time.
- 1.6 The parties shall, using all reasonable endeavours and acting in good faith, try to agree the contents of the Change Proposal as soon as reasonably practicable after its receipt by the Customer. Failing agreement, the matter shall, at either party's request, be determined by an expert pursuant to Clause 24.3. Where such contents are so agreed or determined (as appropriate) Arqiva shall jointly prepare a Change Request Order in accordance with the template set out at the end of this Schedule ("**Change Request Order**" or "**CRO**") setting out full details of the Change for approval by the Customer, such approval not to be unreasonably withheld.
- 1.7 As soon as practicable after the contents of a CRO have been agreed or determined under Paragraph 1.6, the Customer shall either:
  - 1.7.1 accept the Change (and arrange for two (2) copies of the approved CRO to be signed by or on behalf of the Customer and Arqiva); or
  - 1.7.2 notify Arqiva of the rejection of the CRO (stating the reason(s) for such rejection and providing Arqiva with any further information as it may reasonably request in respect of the same).
- 1.8 If the Customer does not accept the Change in accordance with Paragraph 1.7.1 within ten (10) Business Days after the contents of the CRO have been agreed or determined, the Change Proposal shall be deemed to have been rejected by the Customer.
- 1.9 If the Customer and Arqiva agree a Change pursuant to Paragraph 1.7, then subject to Paragraph 3:
  - 1.9.1 the signed CRO shall constitute a valid variation of this Agreement under Clause 25.10 and, accordingly, this Agreement shall immediately be deemed amended to incorporate the changes specified in the CRO, including (for the avoidance of doubt) any adjustment to the Charges specified under Paragraph 1.4.7; and
  - 1.9.2 Arqiva shall immediately commence the implementation of the Change in accordance with the programme specified in the CRO as referred to in Paragraph 1.4.
2. Changes Requested by Arqiva
  - 2.1 If Arqiva wishes to request a Change, it shall serve on the Customer a Change Request specifying the nature of the required Change. Arqiva's Change Request shall attach a Change Proposal and draft CRO containing the information set out in Paragraph 1.4.
  - 2.2 The Customer may:
    - 2.2.1 request Arqiva to provide any further information reasonably necessary for the evaluation of the Change Proposal and draft CRO; or
    - 2.2.2 request Arqiva to amend any details contained in the Change Proposal and/or draft CRO,

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and Arqiva shall respond to any such request within a reasonable time.

2.3 If the Customer accepts Arqiva's Change Request (with or without modification), it shall arrange for two (2) copies of the approved CRO to be signed by or on behalf of the Customer and Arqiva, and subject to Paragraph 3:

2.3.1 the signed CRO shall constitute a valid variation of this Agreement under Clause 25.10 and, accordingly, this Agreement shall immediately be deemed amended to incorporate the changes specified in the Change Proposal, including (for the avoidance of doubt) any adjustment to the Charges specified under Paragraph 1.4.7; and

2.3.2 Arqiva shall immediately commence the implementation of the Change in accordance with the programme specified in the Change Proposal as referred to in Paragraph 1.4.

Subject to the remaining provisions of this Schedule 13, if the Customer does not accept the Change within ten (10) Business Days after the contents of the CRO have been agreed or determined, the Change Proposal shall be deemed to have been rejected by the Customer.

### 3. Multi-Party Changes

In the event of a multi-party Change, the parties shall approve the CRO in the same manner as set out in this Schedule, but such CRO shall not be effective until Arqiva notifies the Customer in writing that all relevant parties have approved the multi-party Change.

Without prejudice to the above, Arqiva shall notify the Customer of the impact of any such Changes, and consult with the Customer in respect of the implementation of such Changes, through the Change Control Procedure. If the Customer objects to any of the proposed Changes mandated by Ofcom and/or any other competent authority, Arqiva shall provide assistance to the Customer during any consultation process in respect of such proposed Changes. If the Customer does not accept the impact of any such Changes (including as to any adjustment to the Charges), the matter shall be referred to an expert pursuant to Clause 24.3.

### 4. Changes Required by Arqiva

Any change which Arqiva believes is necessary in order to meet the Target Service Start Date or as a result of any of the events described in Clause 9.6 shall be treated in accordance with the procedure set out in this Schedule 13, except that Arqiva shall be entitled to implement the relevant change even if a Change Request has not been signed by both parties. For the avoidance of doubt, any change so implemented shall constitute a valid amendment to this Agreement. Arqiva shall in any event, provide a Change Request to the Customer in respect of such change in accordance with this Schedule 13. Where the occurrence of any such event means that it is not possible to achieve the Target Service Start Date within the current charges, but it would be possible to achieve the Target Service Start Date with the investment of additional charges, Arqiva shall notify the Customer of this as soon as possible (specifying the amount of such additional charges) and it shall be the Customer's decision in its discretion whether to pay the additional charges or to extend the Target Service Start Date. If the Customer does not accept the impact of any such Change in respect of the Charges, the matter may be referred by either party to an expert pursuant to Clause 24.3.

### 5. Administration of Change Control Procedure

5.1 Arqiva shall, for each Change Request submitted, allocate a sequential number to the Change Request and maintain during the Term a consolidated record of all Changes agreed in accordance with the Change Control Procedure since the Execution Date (the "**Change Log**"); and

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Arqiva shall deliver the Change Log to the Customer on the Customer's reasonable request. Arqiva shall make such amendments to the Change Log (if any) as the parties agree following the Customer's review of the Change Log.

### **6. Labour Costs**

Labour costs involved in effecting a Change shall be at Arqiva's then current rates.

### Template Change Request Order

<b>(1) Change Request Information:</b> (to be completed as soon as the CRO is raised)			
<b>CRO Unique ID:</b>	<b>[Date of submission;]</b>		
<b>Version Number:</b>			
<b>Customer originator and contact details:</b>	<b>Arqiva contact and contact details:</b>		
<b>(2) Change Details:</b> (to be completed prior to approval)			
Description of Change: (including whether or not a Multi-Party Change- Y/N)			
Reason(s) for Change (please attach any relevant supporting information)			
Details of risk assessment			
Implementation plan (including timetable, test plan and acceptance criteria)			
Impact assessment			
Details of agreed variations to the Agreement [amendments to the Agreement must be agreed prior to acceptance of this CRO]			
Details of additional resources required			
Details of adjustment to Charges			
Details of any regulatory approvals, consent and/or authorisations required (if any);		Details of temporary relief from contractual obligations required (if any) and for how long:	
Effective date of Change:	Service(s) affected:	Station(s) affected:	
Approved by Arqiva Limited	Signed for and on behalf of Arqiva Limited	Approved by [            ]	Signed for and on behalf of [            ]
Name	Name	Name	Name
Date	Date	Date	Date
Title [Project Manager]	Title	Title [Project Manager]	Title

## SCHEDULE 14

### Sites with Difficult Access

ID	Station	NGR
None	None	N/A

## SCHEDULE 15

### Acceptance Testing

1. Following the date of this Agreement, Arqiva shall prepare and append to this Agreement at this Schedule 15 an Acceptance Testing Plan which will be designed to demonstrate that the System meets the requirements of the Baseline Specification set out in Schedule 6 of this Agreement.
2. The Acceptance Testing Plan will set out the test criteria for the following categories:
  - 2.1 Network Access:
    - 2.1.1 Gain Calculation; and
    - 2.1.2 Antenna Return Loss.
  - 2.2 Exclusive Contracted Equipment:
    - 2.2.1 Station Power Output;
    - 2.2.2 Centre Frequency;
    - 2.2.3 Frequency Response to include COFDM shoulder height;
    - 2.2.4 Out of Band and In-Band Intermodulation Products
    - 2.2.5 Quality Impairment; and
    - 2.2.6 Configuration of correct TII code
  - 2.3 Single Frequency Networks:
    - 2.3.1 That the Static Delay at relevant Stations is in accordance with the SFN Timing Schedule (as provided by the Customer).
  - 2.4 OFCOM Compliance

Further to the above, the Acceptance Testing Plan will include all the measurements necessary to confirm compliance with OFCOM's published standards as detailed in their Digital Radio Technical Code:

[http://stakeholders.ofcom.org.uk/binaries/broadcast/guidance/tech-guidance/digi\\_tech\\_code.pdf](http://stakeholders.ofcom.org.uk/binaries/broadcast/guidance/tech-guidance/digi_tech_code.pdf)

## **SCHEDULE 16**

### **Liquidated Damages**

1. Subject to Paragraph 2 of this Schedule 16, the Liquidated Damages payable by Arqiva pursuant to Clause 4.3 shall be £473 per completed week of delay after the Target Service Start Date for the relevant Location.
2. Arqiva's liability to pay Liquidated Damages shall be subject to the following limits:
  - £4,730 per Station;
  - £4,730 in aggregate per week; and
  - £331,400 in aggregate.

## SCHEDULE 17

### Electricity calculation (illustrative)

The electricity cost values shown below are indicative only and are not binding. The actual charge payable by the Customer in respect of electricity will be determined by actual electricity usage for the Transmission Service and will be determined from the MTS system sub-metering. It will then be payable by the Customer as a pass-through charge.

The estimates below (which are not binding) have been calculated according to the following formula:

$$\text{Electricity cost in } \pounds \text{ per annum} = (P_A + (P_T / \eta)) \times 24 \times 365 \times U$$

Where:

$P_T$  = Transmitter Power in kW

$P_A$  = Nominal power consumption of ancillary equipment in kW = 0.25kW

$\eta$  = Typical transmitter efficiency expressed as a fraction

$U$  = electricity unit rate in  $\pounds$  per kWh =  $\pounds 0.1113$

No allowance has been made for equipment Power Factor.

Station Reference	Station Name	Nominal operational Transmitter power (kW)	Electricity cost estimate (per annum)
140056	ALEXANDRA PALACE	0.46	£1,514
140038	ALSAGERS BANK	0.58	£1,851
11806	ARFON	0.51	£1,662
140320	BASINGSTOKE	0.45	£1,510
140216	BEACON HILL (NORTH)	0.80	£2,462
12000	BELMONT	1.24	£3,521
140161	BILSDALE	1.58	£4,409
140108	BLUEBELL HILL	0.87	£2,666
56710	BLUNSDON MF	0.71	£2,226
140107	BOW BRICKHILL	0.54	£1,752
140148	BROMSGROVE	0.69	£2,176
9331	CARADON HILL SC	1.10	£3,133
140482	CARMEL	0.60	£1,922
10405	CHESTERFIELD	0.53	£1,726
9308	CHILLERTON DOWN SC (IOW)	1.12	£3,201
140488	CHURCHDOWN HILL	1.11	£3,160
14700	CRAIGKELLY	2.51	£6,678
140469	CRYSTAL PALACE	2.29	£6,116
140602	DAVENTRY	1.54	£4,307
140552	DIVIS	2.24	£5,988
9313	DOVER SC	0.16	£701



<b>Station Reference</b>	<b>Station Name</b>	<b>Nominal operational Transmitter power (kW)</b>	<b>Electricity cost estimate (per annum)</b>
9304	EMLEY MOOR SC	1.95	£5,240
140683	FENHAM	0.13	£631
240363	GLASGOW WILLIAM STREET	0.15	£665
140729	GUILDFORD HOGS BACK	0.65	£2,051
140802	HANNINGTON	1.10	£3,151
140877	HASTINGS	0.14	£645
140834	HEATHFIELD	0.27	£1,025
140827	HEMEL HEMPSTEAD	1.57	£4,374
140830	HIGH HUNSLEY	0.65	£2,067
140846	HOLME MOSS	1.06	£3,049
92587	HOUGHTON ON THE HILL	0.42	£1,403
140985	KILVEY HILL	0.25	£948
140977	KIRK O'SHOTTS	0.82	£2,517
80533	LIVERPOOL ST JOHNS BEACON	0.45	£1,485
82523	LONDON BT TOWER	0.27	£1,021
141006	LONDONDERRY	1.20	£3,393
141186	MADINGLEY	0.26	£981
20008	MANCHESTER CITY TOWER	0.37	£1,281
36212	MAPPERLEY (S)	0.28	£1,052
141162	MENDIP	1.69	£4,708
9314	MENDLESHAM SC	0.36	£1,253
141173	MIDHURST	0.39	£1,323
9345	MOEL-Y-PARC SC	1.17	£3,338
52120	NINE BARROW DOWN	0.20	£815
141308	OXFORD	0.76	£2,373
10302	PENDLE FOREST	0.36	£1,260
141389	PETERBOROUGH	1.23	£3,478
13105	PLYMPTON	0.61	£1,934
141384	PONTOPIKE	1.79	£4,955
9329	PRESELI SC	0.28	£1,059
20012	PURDOWN	0.62	£1,961
141477	REDRUTH	0.78	£2,414
141440	REIGATE	0.23	£911
14900	RIDGE HILL	1.44	£4,026
141491	SALISBURY	0.39	£1,335
9414	SANDY HEATH SC	1.29	£3,655
141523	SHEFFIELD	0.58	£1,851
13201	ST THOMAS (EXETER)	1.24	£3,516
9332	STOCKLAND HILL SC	0.94	£2,874
141504	SUTTON COLDFIELD	2.14	£5,742

<b>Station Reference</b>	<b>Station Name</b>	<b>Nominal operational Transmitter power (kW)</b>	<b>Electricity cost estimate (per annum)</b>
141648	TACOLNESTON	1.26	£3,577
141835	THE WREKIN	1.69	£4,689
141690	TURNERS HILL (BT)	2.02	£5,422
141763	WALTHAM	2.00	£5,369
141857	WENVOE	0.47	£1,553
141808	WHITEHAWK HILL	0.17	£719
9303	WINTER HILL SC	1.38	£3,881
141838	WROTHAM	0.33	£1,200
141872	ZOUCHES FARM	0.63	£1,990

## SCHEDULE 18

### Risks

#### Part 1 - Standard Risks

1. Any increase in the number of labour hours allocated to the Build Project driven by internal or external risk factors including such risks as the following (but not, for the avoidance of doubt, including any risk factors which are Exceptional Risks):
  - (i) Imperfect information and assumptions relating to site structure, building conditions, hazardous materials or design parameters;
  - (ii) Additional design requirements for contingency items: Re-use of buildings, building structural works, design of new facilities;
  - (iii) Delays, or additional design requirements resulting from planning conditions or environmental impact assessment requirements;
  - (iv) Arqiva supplier related issues resulting from complexity/technology, impact of specialist supplier resource constraints or supplier performance; or
  - (v) Industrial action by Arqiva's own workforce or Arqiva's suppliers' workforces.
2. Any changes in wages or labour rates that are not covered by RPI.
3. Any changes due to commodity price movements for raw materials and demand driven price changes for the following materials:
  - (i) Major electrical equipment, LV and HV switchgear, HVAC Equipment;
  - (ii) Cable, Antennas and other RF manufactured items;
  - (iii) Civil and structural materials and consumables.
4. Any delays and additional costs associated with protracted planning processes, planning conditions and appeals, environmental impact assessments, landscaping and access conditions.
5. Any high winds restricting work at height or rain restricting Station access or building works, except where same comprise a Force Majeure Event, in which case the provisions of this Agreement applicable to Force Majeure Events shall apply. Without limitation to the definition of Force Majeure Event, any inability to access a Site due to weather or natural disasters for a prolonged period shall be treated as a Force Majeure Event.
6. Any unanticipated soil stabilisation, slope stabilisation or reclamation works.
7. Any unacceptable static and dynamic loading characteristics requiring Antenna re-design, Mast replacement or Mast strengthening works that are not anticipated.
8. 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.
9. Any permanent or temporary access roads and drainage works that may be required at Stations.
10. Any unanticipated additional work to existing buildings or construction of new buildings to ensure suitability for re-use.
11. Any additional costs due to a compression of the work schedule resulting from one of the following events:
  - (i) Arqiva's supplier and contractor performance;
  - (ii) Arqiva's union and workforce issues;

- (iii) Arqiva's specialist resource and equipment constraints;
  - (iv) Incident/accident; or
  - (v) Informal change of existing working practices driven by outside influence or change of attitudes.
12. Any changes required to existing infrastructure that no longer meets technical, maintenance or performance requirements.
  13. Any measured EMF levels at site requiring changes to the work sequence, schedule, execution methodology or exposure periods.
  14. Any failure of existing infrastructure e.g. Antenna fire, structural collapse that requires changes to the execution sequence, timing or method.
  15. Foreign exchange fluctuations.
  16. Any changes other than RPI annually to Arqiva's estimated hourly or daily labour rates used for the N2 Transmission Programme.

## Part 2 - Exceptional Risks

1. Any Change in Law.
2. Any act or omission of any Government Authority which is not a Change in Law.
3. Any other Force Majeure Event.
4. 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)).
5. Any change to the Second National Commercial DAB Transmission Services Programme timetable (but not including changes to the timetable (i) arising as a direct result of a material breach of this Agreement by Arqiva or (ii) requested by Arqiva as a result of its failure to exercise reasonable care and skill).
6. Any change to the Baseline Specification or failure to agree a revised Baseline Specification in a timely manner.
7. Any failure to agree in a timely manner Service Continuity with any affected party or any change to any Service Continuity arrangements (as defined and further described in Schedule 23).
8. Any failure to agree any Antenna Design Specification by the relevant Antenna ADS Approval Date.
9. The cessation or partial cessation of the Arqiva AM radio platform.
10. The cessation or partial cessation of the Arqiva FM radio platform.
11. 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.
12. Any cost or schedule change to the Second National Commercial DAB Transmission Services Programme as a result of disruption to existing services (except for disruption arising as a direct result of a material breach of this Agreement by Arqiva or by the failure of Arqiva to exercise reasonable care and skill), including any cost or schedule changes required by third party Station users in order to give their consent to relocation or reduced power working and also including where Service Start Dates do not occur on the Target Service Start Dates.
13. A prolonged and material deviation in long-term interest rates from levels pertaining in August 2014 which results in a need for Arqiva to increase the WACC.
14. Loss or cessation of Station licences or leases.
15. Any health and/or safety related issues that restrict or halt works on site (except to the extent caused by Arqiva's negligence or breach of statutory duty).
16. Failure by the Customer to enter into an Advance Design Agreement and an Advance Equipment Procurement Agreement within two (2) months of the award by Ofcom of the Multiplex Licence.
17. Any requirement, by the Customer to vary the number of sites, specification or deployment timetable as defined herein.
18. Any other risk which is not a Standard Risk.

## SCHEDULE 19

### Transition Assistance

Where Clause 17.3 applies, Arqiva shall develop an appropriate transition plan designed to allow the transition of the Transmission Service to a competent service provider appointed by the Customer. The transition plan shall include the following information (subject to any confidentiality obligations or other obligations in any third party agreements):

- 1 A description of the Transmission Service provided to the Customer including:
  - The location and technical characteristics of all interfaces relevant to the provision of the Transmission Service;
  - A system overview relating to the provision of the Transmission Service;
  - Any manufacturer's manuals and operating procedures and any training materials provided by suppliers which are relevant to the Transmission Service;
  - Key support contact details for relevant manufacturer's Exclusive Contracted Equipment used to provide the Transmission Service;
  - A summary of maintenance procedures for the Exclusive Contracted Equipment; and
  - Details of any licences used solely or mainly in the provision of the Transmission Service.
2. The specific processes to be implemented for the transfer of Exclusive Contracted Equipment and for the handover of the Transmission Service generally at each Station and any new station.

## **SCHEDULE 20**

### **Customer Responsibilities**

#### **General**

The Customer is responsible for compliance with its obligations and responsibilities as set out elsewhere in this Agreement including, but not limited to, Clause 6.

#### **Permissions and Licenses**

The following are beyond the scope of this Agreement and the responsibility of the Customer:

1. International co-ordination.
2. WTA Licences.
3. OFCOM consents.
4. Public communications.
5. Public assistance (notification of new service availability).
6. Obtaining the consents and agreements of other multiplex operators related to DAB service issues.

In addition, the Customer shall be responsible for procuring permission from Ofcom in respect of the transmission of the Customer Signals for test purposes prior to the Target Service Start Date as reasonably required by Arqiva.

#### **Use of Existing Antennas**

As detailed in Schedule 6, at the majority of Stations the use of an existing Antenna System is proposed. Antenna pattern data for existing Antenna Systems is presented as an appendix to Schedule 6 - Baseline Specification. It is the Customer's responsibility to ensure the Antenna pattern data meets their requirements. If it does not, then the Customer is responsible for providing a revised requirement. Any revision to an existing antenna pattern will require agreement with all existing customers using the antenna system. If this is not forthcoming the Customer will need to consider a solution using a new antenna system and any resulting change in the Baseline Specification and Charges will need to be agreed prior to execution of this Agreement or via the Change Control Procedure,

#### **Use of New Antennas**

Where new Antennas are required, Arqiva shall provide to the Customer an Antenna Design Proposal, showing anticipated Antenna performance, for each Station. The Customer shall be required to confirm acceptance of this Antenna design to allow Arqiva to produce a detailed Antenna Design Specification which the Customer must approve in writing by the Antenna ADS Approval Date.

The Antenna selection process shall allow the Customer the opportunity to influence the final specification of an Antenna. Failure to agree the Advance Design Specification by the required Antenna ADS Approval Date may lead to a delay in the provision of the Target Service Start Date.

Since there will be an inter-dependence between coverage and system gain the Customer should be aware that the transmitter required to achieve the nominal ERP may be subject to change by Arqiva.

#### **Specification of Transmitter System Power**

Schedule 11 shows the Transmitter System powers to be provided by Arqiva at each Site. The Customer shall confirm by the Transmitter System Specification Date that this meets its requirements.

### **Provision of Distribution**

The Customer shall be responsible for the provision of a Distribution System to the Stations. The systems shall be required to be in place at least three months prior to the relevant Target Service Start Date shown in Schedule 3.

### **Provision of SFN Timing Information**

Arqiva shall provide to the Customer Antenna patterns for each Station in the network under all normal operating conditions (e.g. when working half antenna and full antenna). A network design shall be required from the Customer for all of the Stations which take the Antenna patterns into account

The Customer shall be responsible for a network timing schedule for each Station in the SFN. For the avoidance of doubt this shall include any static offsets which may be required. Arqiva shall set up each Station in accordance with the Network Timing Schedule provided by the Customer. Absolute timestamps shall be required by Arqiva from the Customer as part of the Customer Signal. The SFN timing information shall be required to be available at least three months prior to the relevant Target Service Start Date shown in Schedule 3.



## SCHEDULE 21

### Single Frequency Network

#### 1 Overview

A Single Frequency Network will be required to deliver the proposed service.

In accordance with Schedules 8 and 20, and in accordance with ETSI specifications detailed in EN 300 401 and ETS 300 799, the Customer Signal to each of the Stations shall carry the appropriate time stamping to permit single frequency broadcasting, and the Distribution Service propagation delay to each Station shall be such as to allow co-timing of the DAB transmission.

#### 2 Static Delay Network Timing Adjustment

The TIST is read by the Transmission Equipment and used to synchronise the broadcast from all Stations within a SFN based on a common GPS 1PPS signal. The relative timing between Stations in each SFN can be altered by way of Static Delay configuration within the COFDM exciter. This Static Delay setting shall be in accordance with the Network Timing Schedule provided by the Customer in accordance with Schedule 20.

The Static Delay parameter is adjustable by up to 1 second in steps of 1 microsecond, (us). It must be noted that the guard interval for DAB Transmission Mode I is 246us; the Static Delay will be configured in accordance with the Network Timing Schedule.

The Arqiva SMC have the ability to alter this parameter remotely, without attending site, however it is expected that this parameter is not normally altered and any request to do so will be subject to formal Change Control and the Network Timing Schedule will be re-issued to Arqiva by the Customer.

#### 3 Global Positioning System, (GPS)

Any network will rely on nationwide coverage of the GPS 1PPS signal for successful co-timing of Stations within the SFN. The transmitters also rely on the 10MHz carrier embedded in the GPS signal for the generation of the modulated RF output.

Arqiva is not held responsible for any loss of transmission or timing failure which results from the failure or unavailability of the Global Positioning System.

#### 4

As detailed in Schedule 9, Arqiva will provide its DAB synchronisation monitoring system to check for accurate co-timing of the Stations.

## SCHEDULE 22

### Termination Payments

1. In the event of this Agreement being terminated by Arqiva pursuant to Clause 16.2 or by either party pursuant to Clause 14.2 Arqiva shall have a duty to take reasonable steps to mitigate its present and future losses arising from such termination ("**Mitigation**"), with the result that Arqiva shall be unable to claim or recover from the Customer any part of its losses that could have been avoided by taking such reasonable steps. Mitigation shall include using reasonable endeavours to secure, on the best available commercial terms:
  - 1.1 alternative customers and/or contracts for a service the same as or similar to the Transmission Service;
  - 1.2 alternative utilisation or exploitation of the System;
  - 1.3 alternative utilisation of labour.
2. The Customer acknowledges that Network Access infrastructure is shared across a number of customers and, accordingly, Arqiva's ability to mitigate costs in respect of such shared infrastructure will be limited.
3. For the avoidance of doubt, nothing in this Agreement shall be construed as reducing or limiting a party's common law duty to mitigate its losses arising from a breach of contract.
4. The Customer shall pay to Arqiva any amounts due under Clause 17.4 as follows:
  - 4.1 Where this Agreement has been terminated pursuant to Clause 16.2(a), (b) or (c) or pursuant to Clause 14.2, Arqiva in consultation with the Customer will promptly calculate the amount payable by the Customer under Clause 17.4 in accordance with the provisions set out in the table at Paragraph 5 below.
  - 4.2 Where this Agreement has been terminated pursuant to Clause 16.2(d), Arqiva in consultation with the Customer, will over a period of three months from the effective date of termination or until Ofcom completes the relicensing of the relevant spectrum, whichever is earlier, calculate the amount payable by the Customer under Clause 17.4 during which time the Customer shall continue to pay the full Charges due under this Agreement.
  - 4.3 Once the amount of the termination payment has been calculated by Arqiva pursuant to Paragraph 4.1 or 4.2 of this Schedule 22, Arqiva will notify the Customer in writing of the applicable amount and provide copies of all supporting information. In the event that there is a dispute regarding the amount of the termination payment, the matter will be determined pursuant to Clause 24 and the Customer will continue to pay to Arqiva the full Charges due under this Agreement until such time as the dispute is resolved.
  - 4.4 Once the amount of the termination payment has been agreed by the parties or determined pursuant to Clause 24, the Customer will be required to pay the applicable amount to Arqiva as follows:
    - 4.4.1 where the applicable amount has been calculated pursuant to Paragraph 4.1 of this Schedule 22, the Customer shall pay the termination payment within 30 days of the date of notification by Arqiva under Paragraph 4.3 above; or
    - 4.4.2 where the applicable amount has been calculated pursuant to Paragraph 4.2 of this Schedule 22, the Customer shall pay the termination payment in 24 monthly instalments, such amount to be adjusted to take into account any Charges paid by the Customer in the time taken to agree or determine the termination payment amount (following the effective date of termination). In the event that the amount of Charges paid by the Customer in the time taken to agree or determine the termination

payment amount is greater than the amount due, Arqiva will pay to the Customer the difference between these two amounts (including any applicable interest) within 30 days of the applicable amount being agreed or determined.

4.5 If during the twelve months after the effective date of termination after Arqiva has received the termination payment due from the Customer, Arqiva is able to procure any further Mitigation, Arqiva will refund to the Customer such amounts as it is able to mitigate up to the amount of the termination payment.

5. Table

The amount of the termination payment will be the amount calculated as applicable to the termination circumstances (as set out in the column headed "Termination Event") set out in the relevant column headed "Termination Payment" in the table below.

As set out in Clause 17.4, payment of the termination payment is without prejudice to the accrued rights and liabilities of the parties as at the effective date of termination including, without limitation, the Customer's obligation to pay, and Arqiva's right to recover, any sums due by the Customer under Clause 9 (and otherwise under this Agreement) up to and including the effective date of termination.

Termination Event (Clause ref.)	Termination Payment
<p>16.2(a) (breach of payment obligations)</p> <p>16.2(b) (other material breach)</p> <p>16.2(c) (insolvency event)</p> <p>16.2(d) (revocation or surrender or breach of Multiplex Licence, except where the revocation or surrender or breach of the Multiplex Licence is due to a breach by Arqiva of its obligations under the Agreement)</p>	<p>The Net Present Value, applying a discount rate of 7.71% (real), of the amount of the Charges that would but for termination have been payable to Arqiva by the Customer over the remainder of the Term (as at the effective date of termination).</p> <p style="text-align: center;"><b>MINUS</b></p> <p>Subject to Paragraphs 1 and 2 of this Schedule 22, an amount equal to any expenditure avoided by Arqiva and any fees paid to Arqiva for the relevant period by third parties under Mitigation arrangements.</p>
Termination Event (Clause ref.)	Termination Payment
<p>14.2 Force Majeure</p>	<p>A sum which, following the subtraction of an amount equal to any expenditure avoided by Arqiva and any fees paid to Arqiva by third parties under Mitigation arrangements (in accordance with paragraphs 1, 2 of this Schedule 22), is:</p> <p>(i) 75% of the total costs incurred by Arqiva (including capital investment, cost of capital and operating costs) in carrying out the Build Project as at the effective date of termination less the relevant portion of such costs already recovered through the Charges paid to Arqiva by the Customer up to the date of termination; and</p> <p>(ii) 75% of any decommissioning costs and redundancy costs incurred by Arqiva relating to the dismissal of employees as a result of, or in connection with, the Agreement being terminated pursuant</p>

Termination Event (Clause ref.)	Termination Payment
	<p>to Clause 14.2 less the relevant portion of such costs already recovered through the Charges paid to Arqiva by the Customer up to the date of termination. In this paragraph "relevant portion" shall refer to expenditure committed in relation to Network Access only and means a pro rata share (attributable to the Customer and the number of Stations used to provide the Transmission Service) of any costs which are shared between other users of the service which reflects the number and type of multiplexes in respect of which Network Access is provided by Arqiva.</p>

## **SCHEDULE 23**

### **Service Continuity**

The Customer agrees and acknowledges that implementation of the Transmission Services will have an impact on current broadcast services and other services transmitted from the affected Stations and that, similarly, should it become necessary in future to implement transmission services for either the Customer or other Arqiva customers, then there will be an impact upon broadcast services at that time as well.

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:

#### **1.1 Impact on existing services during any Antenna construction**

Arqiva shall schedule Antenna construction to take place during the “build season”. The “build season” is the time of the year when it can be reasonably expected that there will be prevailing good weather, generally between March and September (although this will depend on the geographic location of the Station). The Customer acknowledges that during an Antenna construction period, existing services (either for the Customer or other customers of Arqiva) may be disrupted whilst a new Antenna is being installed. The Customer agrees and acknowledges that to allow the Antenna construction it may be necessary for existing services to operate in certain abnormal configurations. Arqiva will need to obtain the agreement of its customers for these existing services to any abnormal configurations. Such customers may restrict the timings of these abnormal restrictions such that Arqiva cannot achieve completion of Antenna construction in accordance with the Station Dates in Schedule 3. Any delay caused by such timing restrictions shall be deemed to be an Exceptional Risk.

#### **1.2 Impact on existing services during any Combiner Unit installation or modification**

Combiner Unit installation or modifications to existing Combiner Unit(s) may be required at the Stations. At Stations where existing Antenna are being utilised, existing broadcast services (either for the Customer or other customers of Arqiva) may be disrupted whilst a new Combiner Unit installation or modifications to existing Combiner Unit(s) are being undertaken. The Customer agrees and acknowledges that to allow the works it may be necessary for existing broadcast services to operate in certain abnormal configurations. Arqiva will need to obtain the agreement of its customers for these existing services to any abnormal configurations. Such customers may restrict the timings of these abnormal restrictions such that Arqiva cannot achieve completion of Combiner Unit installation or modifications in accordance with the Station Dates in Schedule 3. Any delay caused by such timing restrictions shall be deemed to be an Exceptional Risk.

## SCHEDULE 24

### Provisional Specification

To enable the provision of a Reference Offer, a notional network consisting of 70 Stations that could provide the Second National Commercial DAB Transmission Service has been suggested. The site list is provided below.

These Stations are provided in the initial Reference Offer to allow bidders to respond to the Second National Commercial DAB Licence advertisement published by Ofcom on 1st July 2014. Bidders are free to propose their own list of sites to Ofcom and are not obliged to use all or any of these Stations to deliver their service.

The Stations to be provided under this Agreement will be those defined in Schedule 5.

Station Reference	Station Name
140056	Alexandra Palace
140038	Alsagers Bank
11806	ARFON
140320	Basingstoke
140216	BEACON HILL (NORTH)
12000	Belmont
140161	Bilsdale
140108	Bluebell Hill
56710	Blunsdon MF
140107	Bow Brickhill
140148	BROMSGROVE
9331	CARADON HILL SC
140482	CARMEL
10405	CHESTERFIELD
9308	CHILLERTON DOWN SC (IOW)
140488	Churchdown Hill
14700	Craigkelly
140469	Crystal Palace
140602	DAVENTRY
140552	Divis
9313	DOVER SC
9304	Emley Moor SC
140683	FENHAM
240363	GLASGOW WILLIAM STREET
140729	GUILDFORD HOGS BACK
140802	Hannington
140877	HASTINGS
140834	HEATHFIELD
140827	Hemel Hempstead
140830	High Hunsley
140846	HOLME MOSS
92587	Houghton on the Hill
140985	Kilvey Hill
140977	Kirk O'Shotts
80533	LIVERPOOL ST JOHNS BEACON
82523	LONDON BT TOWER

<b>Station Reference</b>	<b>Station Name</b>
141006	Londonderry
141186	MADINGLEY
20008	MANCHESTER CITY TOWER
36212	MAPPERLEY (S)
141162	Mendip
9314	MENDLESHAM SC
141173	MIDHURST
9345	MOEL-Y-PARC SC
52120	Nine Barrow Down
141308	Oxford
10302	Pendle Forest
141389	Peterborough
13105	PLYMPTON
141384	Pontop Pike
9329	PRESELI SC
20012	PURDOWN
141477	REDRUTH
141440	Reigate
14900	RIDGE HILL
141491	SALISBURY
9414	Sandy Heath SC
141523	Sheffield
13201	ST THOMAS (EXETER)
9332	STOCKLAND HILL SC
141504	Sutton Coldfield
141648	TACOLNESTON
141835	THE WREKIN
141690	TURNERS HILL (BT)
141763	Waltham
141857	Wenvoe
141808	Whitehawk Hill
9303	Winter Hill SC
141838	Wrotham
141872	Zouches Farm

**SCHEDULE 25**

**[Form of Guarantee or Other Security]**



SIGNED BY

) .....

for and on behalf of **ARQIVA LIMITED**

) Director or Authorised

) Signatory

SIGNED BY

) .....

for and on behalf of **ARQIVA LIMITED**

) Director or Authorised

) Signatory

SIGNED BY

) .....

for and on behalf of

) Director or Authorised

[       ]

) Signatory