



## Advertisement of National Radio Multiplex Licence

Date of advertisement:

1 July 2014

# About this document

This document invites applications for a licence to provide a national digital radio multiplex service. A radio multiplex service is the means by which digital radio stations are broadcast, and can provide around ten stereo radio stations.

This licence is for a national radio multiplex service, which means, potentially, the new digital radio stations will be available throughout the UK.

Radio multiplex licences are awarded by Ofcom in what is known as a 'beauty contest'. This means that applications are judged against specified criteria, and Ofcom awards the licence to the applicant which it considers best meets the criteria. The closing-date for applicants to apply for this national radio multiplex licence is 29 January 2015, and Ofcom hopes to award the licence as soon as practicable thereafter.

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## Section 1

# Introduction

- 1.1 Ofcom, in accordance with section 46 of the Broadcasting Act 1996 (“the 1996 Act”), invites applications for a licence to provide a national radio multiplex service.
- 1.2 The frequency available for this licence is a standard VHF DAB channel known internationally as ‘Frequency Block 11A (centre frequency of 216.928 MHz)’.
- 1.3 This licence is offered for a service designed potentially to cover the whole of the United Kingdom, the Channel Islands and the Isle of Man, subject to international frequency and transmitter siting constraints, and will be granted for a period of twelve years from the commencement of broadcasting.
- 1.4 No percentage of multiplex revenue will be payable by the holder of this licence in accordance with sections 46(1)(h) and 46(2) of the 1996 Act.
- 1.5 The closing-date for the receipt of completed applications will be **3.00pm on Thursday 29 January 2014**. A fee of £50,000 will be payable for each application submitted. This fee will not be refundable in any circumstances.
- 1.6 In conjunction with this Notice of Licence Advertisement, Ofcom is also publishing a revised *Digital Radio Technical Code* and *Technical Policy Guidance for DAB Multiplex Licensees*, together with an accompanying statement following our consultation on amending the two documents <http://stakeholders.ofcom.org.uk/consultations/digital-radio-tech-codes/>. These documents contain essential technical information relevant to all DAB radio multiplex services, including the subject of this licence advertisement.

## Alterations and disclaimer

- 1.7 Ofcom reserves the right to alter or correct any part of this Notice at any stage before the closing date for applications. Any additional documents referred to in this Notice may also be amended from time to time. Any such alterations, corrections or supplementary information will be made available on our website [www.ofcom.org.uk](http://www.ofcom.org.uk).
- 1.8 The information given in this Notice is not an exhaustive account of the statutory and licensing requirements and should not be regarded as a complete and authoritative statement of the law. Nor does any information we issue, whether in this Notice or elsewhere, imply any judgement by us as to commercial prospects for the applications, or that licensed services will be profitable.
- 1.9 Applicants must make their own independent assessment after taking their own professional advice and making such further investigations as they deem necessary on all relevant matters.
- 1.10 We make no representation or warranty, expressly or implied, with respect to information contained in this Notice (together with other documents referred to in this Notice as well as any other information we publish related to matters relevant to this Notice, including such information that we may publish in relation to applications received) or with respect to any written or oral information made or to be made available to any potential applicant or its professional advisors. Any liability therefore is expressly disclaimed and we do not therefore accept liability for any losses,

expenses or damage otherwise suffered or incurred as a result of preparing any applications based on or pursuant to this Notice or otherwise relying on information set out herein, whether or not applications are submitted, and whether or not they are successful.

## Contact details

- 1.11 Any queries on the contents of this Notice should be sent to Neil Stock, Head of Radio Policy at [neil.stock@ofcom.org.uk](mailto:neil.stock@ofcom.org.uk).

## Section 2

# Assessment of applications

## Assessment process

- 2.1 We will assess applications against the assessment criteria described in more detail below and our general duties, based upon the proposals presented in the completed application. It is the applicant's responsibility to ensure that submitted applications are complete and conform fully to those requirements. Once received, no material amendments to the application may be made by the applicant nor any new material introduced, without the agreement of Ofcom. Ofcom will not agree to any such amendment which it considers would prejudice the public consultation on the applicant's proposals or would be unfair to any other applicant for the licence.
- 2.2 However, in the course of assessing applications, Ofcom may seek clarification and/or amplification of proposals in any application and require any applicant to furnish such additional information in such form or verified in such manner as we may specify. This will usually be done through questioning by a single letter, which will be sent to the individual nominated in the application. Further questions, if appropriate, may be put by telephone, or by e-mail, as well as by letter.
- 2.3 All applications (save for confidential information) that we receive will be published on our website following the closing-date for applications. Non-confidential responses to any clarifications or amplifications will also be published on the Ofcom website, alongside the original application. The Committee may take into account any comments received from the public, which can be made to it with respect to the applications submitted.

## General statutory requirements

- 2.4 Ofcom's general statutory duties are set out in section 3 of the Communications Act 2003 ("the CA 2003"), and include, in particular, the principal duties to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition.
- 2.5 In carrying out these duties Ofcom is required to secure, among other things, "the availability throughout the United Kingdom of a wide range of television and radio services which (taken as a whole) are both of high quality and calculated to appeal to a variety of tastes and interests" (section 3(2)(c)).
- 2.6 We have a wide measure of discretion in balancing our statutory duties and objectives. We will have regard to Ofcom's general duties in making our award decision, in particular as regards the extent to which we consider that applicants' commercial incentives are likely to support competition in relation to terrestrial digital sound broadcasting.

## **Statutory requirements relating specifically to grant of national radio multiplex licences**

- 2.7 Section 46(1) of the 1996 Act sets out the information that must be included within a Notice of Advertisement of a national radio multiplex licence. This information is described in Section 1 of this Notice. Under section 46(4) of the 1996 Act, any application made in pursuance of a Notice of Advertisement must be in writing and accompanied by:
- a) the fee specified in the Notice,
  - b) a technical plan relating to the service which the applicant proposes to provide and indicating:
    - i) the parts of the licensed area which would be within the coverage area of the service,
    - ii) the timetable in accordance with which that coverage would be achieved, and
    - iii) the technical means by which it would be achieved,
  - c) the applicant's proposals as to the number of digital sound programme services to be broadcast and as to the characteristics of each of those services,
  - d) the applicant's proposals as to the timetable in accordance with which the broadcasting of each of those services would begin,
  - e) the applicant's proposals as to the broadcasting of television licensable content services,
  - f) the applicant's proposals as to the broadcasting of digital additional services,
  - g) the applicant's proposals for promoting or assisting the acquisition, by persons in the proposed coverage area of the service, of equipment capable of receiving the service,
  - h) such information as Ofcom may reasonably require as to the applicant's present financial position and his projected financial position during the period for which the licence would be in force, and
  - i) such other information as Ofcom may reasonably require for the purpose of considering the application.

The questions set out in Section 6 of this Notice are derived from these statutory requirements.

- 2.8 Section 47(1) and (2) of the 1996 Act require Ofcom, in deciding the award of a national radio multiplex licence, to have regard to the extent to which applicants' proposals would be calculated to promote the development of digital sound broadcasting in the United Kingdom (otherwise than by satellite), taking into account any representations made in respect of the licence applications by third parties and the following matters, namely:
- a) the extent of the coverage area (within the area specified in Section 4 of this Notice in accordance with section 46(1)(c)) proposed to be achieved by the

applicant as indicated in the technical plan submitted by him under section 46(4)(b);

- b) the timetables proposed by the applicant under section 46(4)(b)(ii) and (d) for achieving the stated coverage (i.e. transmission roll-out) and for the commencement of broadcasting of the digital sound programme services proposed;
- c) the ability of the applicant to establish the proposed service and to maintain it throughout the period for which the licence would be in force;
- d) the capacity of the digital sound programme services proposed to be included in the service to appeal to a variety of tastes and interests;
- e) any proposals by the applicant for promoting or assisting the acquisition by persons in the proposed coverage area of the service, of equipment capable of receiving the service; and
- f) whether, in contracting or offering to contract with persons providing digital sound programme services, television licensable content services or digital additional services, the applicant has acted in a manner calculated to ensure fair and effective competition in the provision of such services.

2.9 We set out below some general guidance in relation to the assessment criteria so that applicants' attention may be drawn to certain matters that they are asked to demonstrate in their applications.

### **(a) Extent of proposed coverage area**

2.10 Ofcom expects applicants for this licence to recognise when making their coverage proposals that this licence is for a national radio multiplex service designed to cover as much of the UK (and its constituent nations) as is reasonably practicable (taking into account the coverage restrictions set out in Section 4 of this Notice), and also to bear in mind that Ofcom's primary consideration in making this licence award is the extent to which applicants' proposals would be calculated to promote the development of digital sound broadcasting in the UK as a whole. For the avoidance of doubt, we do not have in mind a specific percentage of minimum level of coverage which we would expect the holder of this national radio multiplex licence to achieve in terms of either population or geographical extent<sup>1</sup>.

2.11 When assessing applications for this national radio multiplex licence with regard to the extent of the proposed coverage, Ofcom will consider the proposed extent of coverage in terms of not only the percentages of households, roads and population covered (as appropriate), but also in terms of the geographical area(s) to be served.

2.12 We recognise that there is not necessarily a linear relationship between these different means of defining the extent of coverage, in that it is possible to achieve a significant degree of population/household and/or roads coverage without achieving

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<sup>1</sup> In particular, Ofcom does not expect applicants for this licence to seek to match the proposals and/or commitments made by past applicants for national radio multiplex licences. Ofcom would note in that regard, that the methods by which DAB coverage is both defined and measured have changed significantly since Ofcom last advertised a national radio multiplex licence, and the extent of coverage set out in those proposals and/or commitments would not be the same as if the new methodology for defining and measuring coverage were adopted in respect of those proposals.

a similar degree of geographical coverage, and vice versa. It is also worth noting that in the case of roads, contiguous coverage (where on a long journey the driver does not intermittently lose the service) may be more important than it is for household coverage, where populations tend to be clustered in large towns and cities. In addition, in considering the extent of coverage proposed by an applicant, Ofcom will take account of the financial implications of establishing the transmitter network required to deliver this coverage (which we recognise has implications for an applicant's ability to maintain the proposed service).

- 2.13 Applicants should therefore clearly and comprehensively set out how they have balanced these various factors in their proposals regarding the extent of the proposed coverage area in response to Q.4 of the application (see Section 6 of this Notice).
- 2.14 Ofcom recognises that different criteria can be used to define coverage, depending on the nature of reception which is being considered. Robust reception indoors, e.g. in buildings, generally requires a stronger signal than reception outdoors, e.g. in cars. Ofcom will consider the proposed coverage for each application by reference to both outdoor and indoor reception.
- 2.15 Commitments made by applicants in relation to this criterion will be incorporated into the licence as licence conditions.

## **(b) Timetables for coverage roll-out and commencement of services**

- 2.16 Ofcom must in assessing applications consider, in addition to the extent of the proposed coverage area (see above), the timetable for roll-out of coverage and commencement of services. Ofcom recognises that some applications may contain proposals for greater eventual coverage with a comparatively slow roll-out, while other applications may contain proposals for a quicker roll-out but ultimately to fewer people or to a smaller geographical area. Ofcom does not have a preference for either the former or the latter.
- 2.17 Ofcom welcomes proposals for the commencement of services as early as possible in the licence period.
- 2.18 Commitments made by applicants in relation to this criterion will be incorporated into the licence as licence conditions.

## **(c) Ability to establish and maintain the proposed service**

- 2.19 In applying its statutory obligations under section 47(2)(c) of the 1996 Act, Ofcom must satisfy itself that an applicant has access to sufficient financial resources, and appropriate human and technical resources, to establish and maintain the proposed service.
- 2.20 Ofcom will need to be assured that an applicant has made a well-reasoned calculation of the expected levels of costs and revenue, such that the service is capable of being maintained while delivering its licence commitments. The questions set out under this criterion in Section 6 of this Notice (in particular, Q.10) are designed to enable Ofcom to assess applications in relation to this legislative requirement.
- 2.21 In this regard, applicants should also give particular attention to paragraphs 3.24 to 3.25, which set out that Ofcom may consider revoking a licence for failure to begin to

provide the licensed service and that, in such circumstances, a financial penalty may result.

#### **(d) Appeal to a variety of tastes and interests**

- 2.22 This criterion relates only to digital sound programme services – digital additional services, television licensable content services and any services provided by the BBC are excluded. In order to enable Ofcom to consider applications against this criterion, applicants are required to specify the nature of the programme services proposed to be provided, and to outline their characteristics (see paragraph 2.25 below). An applicant does not necessarily need to identify the providers of its proposed programme services, but such information will assist Ofcom in assessing the application against other criteria – in particular, it will help to establish the likelihood of an applicant's plans being realised (ability to establish and maintain the service) according to the timetable outlined in its application (timetable for commencement of services).
- 2.23 Ofcom considers that its duties under section 47 of the 1996 Act should be carried out in light of its general duties in section 3 of the CA 2003, which require Ofcom, among other things, to secure the availability throughout the United Kingdom of a wide range of television and radio services which (taken as a whole) are both of high quality and calculated to appeal to a variety of tastes and interests" (section 3(2)(c)). Therefore, in applying the criteria included within section 47, Ofcom will have regard to the capacity of the digital sound programme services proposed by an applicant to appeal to a variety of tastes and interests. Ofcom will in doing so consider whether applicants' proposals for digital sound programme services appeal to tastes and interests that are distinct from those catered for by the digital sound programme services available by way of the existing national radio multiplex service. Ofcom will consider applicants' proposals against the existing digital sound programme services available on the existing national radio multiplex service as set out in Annex 1.
- 2.24 Ofcom will take account of applicants' proposed bouquets of digital sound programme services as a whole when considering whether such services appeal to tastes and interests that are distinct from those catered for by the services available on the existing national radio multiplex service. For the avoidance of doubt, this would not necessarily preclude applicants from including in their bouquets programme services which are of the same or a similar genre and and/or appeal to the same or a similar demographic group as the current services included in the bouquet provided on the existing national radio multiplex service.
- 2.25 Applicants are required to set out, for each proposed digital sound programme service, the format descriptions under which they intend to operate. The style and typical content of such format descriptions can be seen in Annex 1. Submission of a particular format description will be taken as evidence of willingness to accept a licence, if offered, on the terms indicated. Applicants are strongly advised to pay particular attention to the wording of their draft format descriptions since changes to the draft will not normally be permitted. (Ofcom will make exceptions to this rule only where there is clear evidence that the proposed correction is consistent with the original application. Changes that, if made, would materially alter the draft format description, will not be permitted under any circumstances). Ofcom does not intend to enter into any negotiation or discussion regarding the contents of format descriptions subsequent to a licence award.
- 2.26 In accordance with section 54(1)(b) of the 1996 Act, the successful applicant's format descriptions will be included in the national radio multiplex licence when granted.

- 2.27 In order to demonstrate how its proposed services would appeal to a variety of tastes and interests, an applicant may wish to cite findings from its own research, as well as pre-existing data such as RAJAR figures, as evidence.
- 2.28 Ofcom considers that an applicant's proposals for digital additional services and/or television licensable content services, while expressly excluded from being taken into account in respect of this specific statutory criterion, properly should be taken into account in relation to how the provision of any such services on a national radio multiplex service would promote or assist the take-up of receivers (see next paragraph), and also in relation to Ofcom's duty to have regard to the extent to which the award of a national radio multiplex licence would be calculated to promote the development of terrestrial digital sound broadcasting in the United Kingdom.

### **(e) Promotion of digital take-up**

- 2.29 In determining the extent to which an applicant would promote or assist the acquisition of digital radio receivers, Ofcom will take account of any proposals suggested by the applicant and any supporting evidence for such proposals. These may include both on-air and off-air activities such as, *inter alia*, activities involving retailers and equipment manufacturers, advertising and editorial coverage in other media, and the nature of the digital sound programme services, digital additional services and television licensable content services proposed (e.g. the type of music and/or speech content they broadcast, the composition of the target audience, etc.). Proposals for promoting or assisting the acquisition of equipment capable of receiving the service will form part of the radio multiplex licence conditions.

### **(f) Fair and effective competition**

- 2.30 Section 47(2)(f) requires Ofcom to assess whether, in contracting or offering to contract with providers of digital sound programme services, digital additional services and television licensable content services, an applicant has acted in a manner calculated to ensure fair and effective competition in the provision of such services. We consider that this requirement seeks to support competition and to ensure that prospective service providers are treated fairly and have an opportunity to contract with a prospective multiplex licensee.
- 2.31 To this end, applicants should formulate fair and transparent policies for negotiations with potential providers of digital sound programme services, digital additional services and television licensable content services, and maintain full records of any contacts and discussions which take place prior to and during the application process. Ofcom recognises that the form and nature of these negotiations and therefore the records of them will vary, and thus there will be no standard documentation that applicants will be expected to submit (see Q.15-17 of the application in Section 6 of this Notice). It is for applicants to decide what documentation should be submitted as part of their responses to these questions.
- 2.32 Ofcom will wish to consider whether negotiations with potential service providers (including the selection criteria for such providers) are fair and the terms of any contract for service provision are fair and non-discriminatory.
- 2.33 A number of conditions will be included in the licence which will assist in supporting competition once the licence has been granted – see paragraphs 3.5 to 3.7.

## Section 3

# Other relevant regulatory requirements

## Radio multiplex licence conditions

- 3.1 This section provides an overview of some of the licensing requirements and some of the key conditions to which the national multiplex licensee will be subject. It does not purport to be an exhaustive account of the licence conditions or relevant legislation and applicants should take their own legal advice.
- 3.2 Under section 54(1) of the 1996 Act, Ofcom is required to include in a radio multiplex licence such conditions as it considers appropriate for securing various matters, as set out below.

### Commitments regarding extent of coverage, timetable for roll-out and format

- 3.3 In accordance with section 54(1)(a) and (b) of the 1996 Act, the licence will incorporate conditions which will ensure that the following commitments made by applicants are met:
- that the coverage is implemented across the area concerned according to the timetable outlined in the application;
  - that the digital sound programme services, digital additional services and television licensable content services are provided in line with the proposals in the application; and
  - in the case of the digital sound programme services, the implementation of the timetable for their commencement which was proposed in the application.

### Licensed services

- 3.4 In accordance with section 54(1)(c), (ca) and (d) of the 1996 Act, the licence will require the licensee to ensure:
- that all digital sound programme services broadcast under the licence are provided by the holder of a national digital sound programme licence under section 60 of the 1996 Act (see paragraphs 3.32-3.39);
  - that all digital additional services broadcast under the licence are provided by the holder of a digital additional services licence under section 64 of the 1996 Act (see paragraphs 3.45-3.51); and
  - that all television licensable content services broadcast under the licence are provided by the holder of a licence under Part I of the Broadcasting Act 1990 ("the 1990 Act") to provide such a service or by an EEA broadcaster (within the meaning given by section 12(3A) of the 1996 Act) (see paragraphs 3.40-3.44).

### Fair and effective competition

- 3.5 In accordance with section 54(1)(e) of the 1996 Act, the licence will also include conditions to secure that in terms on which the licensee contracts or offer to contract

for digital sound programme services, digital additional services or television licensable content services, there is no undue discrimination either against, or in favour of, a particular person. Accordingly, a licensee will be expected to formulate fair policies and maintain records of all negotiations conducted throughout the licence term. Such records must be kept for a minimum of one year following the negotiations, and may be examined by Ofcom in the event of a complaint.

- 3.6 In accordance with section 54(1)(f) of the 1996 Act, the licence will also include conditions to ensure that a radio multiplex licensee does not prevent those digital sound programme service licensees, digital additional services licensees or television licensable content service licensees which are contracted to transmit on the multiplex from 'sub-letting' the capacity to which the relevant agreement relates, except to the extent that the restriction is reasonably required for ensuring technical quality of the broadcasts and to secure compliance with any other condition of the licence. This means that, *inter alia*, the radio multiplex licensee may impose conditions to ensure that any changes to the services provided to a radio multiplex licensee are in keeping with the latter's obligations as regards the nature and characteristics of the digital sound programme services, digital additional services and television licensable content services to be broadcast, as varied where appropriate. Furthermore, arrangements should not breach the quantity of multiplex capacity which may be used for digital additional services and television licensable content services.
- 3.7 The licence will also include the standard broadcasting licence condition under section 316 of the CA 2003, which requires the licensee not to enter into or maintain any arrangements, or engage in any practice, which is prejudicial to fair and effective competition in the provision of licensed services or of connected services (as defined in section 316(4) of the CA 2003), and to comply with any code or guidance for the time being approved by Ofcom for the purpose of ensuring fair and effective competition in the provision of licensed services or connected services. Section 316 also gives Ofcom the power to insert specific conditions into licences, where appropriate, to ensure fair and effective competition in the provision of licensed services.

### Technical quality

- 3.8 In accordance with section 54(1)(g) of the 1996 Act, a radio multiplex licence will include conditions as Ofcom considers appropriate to secure "that the signals carrying the radio multiplex service attain high standards in terms of technical quality and reliability throughout so much of the area or locality for which the services is provided as is for the time being reasonably practicable". Ofcom regards the basic quality of audio as originated and supplied to the multiplex operator as being a matter for the sound programme service licensee to control and agree with the multiplex operator. Audio quality should generally be of a standard consistent with reasonable expectations for the majority of listeners, taking into account the nature of the content and the sound programme service concerned. Factors relevant to expectations may include the target audience, and the quality with which the service concerned may be delivered on other platforms.
- 3.9 The licensee shall broadcast digital sound programme services featuring audio characteristics as proposed in its application and recorded in a technical annex to the radio multiplex licence. In this context, audio characteristics means the parameters 'stereo' or 'mono' and 'full-rate coding' or 'half-rate coding'. Applicants are required to provide details of the audio characteristics of each of the digital sound programme services they propose to provide, as well as an overview (supported by examples) of the strategy the applicant proposes to adopt in dividing the available multiplex

capacity between the number of digital sound programme services (including any simulcast radio services) and the audio quality of each of those services, any programme-related data services (ancillary services), any additional services, any television licensable content services, and the provision of encryption (technical services). This strategy should be consistent with the description of services proposed elsewhere in the application, and their quantified relevance to the applicant's business plan.

- 3.10 In accordance with section 54(1)(h) of the 1996 Act, the radio multiplex licence will include a condition as appropriate to secure that at least 70% of the multiplex capacity is used, or is left available to be used, for the broadcasting of digital sound programme services, simulcast radio services, programme-related services and relevant technical services. "Programme-related service" means any digital additional service consisting in the provision of services (apart from advertising) which are ancillary to the programmes included in one or more digital sound programme services, simulcast radio services or local or national services and are directly related to the contents of those programmes, or relate to the promotion or listing of such programmes, and "relevant technical service" means any technical service which relates to one or more digital sound programme services (see also paragraph 3.37).

#### Other general licence conditions

- 3.11 The radio multiplex licence will contain provisions requiring the licensee to furnish Ofcom with such information as it may require for the purpose of exercising the functions assigned to it under the 1990 and 1996 Acts and CA 2003.
- 3.12 Other general licence conditions are summarised in section 43 of the 1996 Act. They will include conditions enabling Ofcom to supervise and enforce technical standards in connection with the provision of the licensed multiplex service, and conditions requiring the payment of appropriate fees in accordance with the current tariff.

### **Ownership and control**

- 3.13 Ofcom will need to be satisfied that applicants fully comply with statutory provisions regarding ownership and control of radio multiplexes and the provision of digital sound programme services. In addition, Ofcom is required to satisfy itself that applicants are "fit and proper persons" before it may grant a licence. The application includes questions designed to enable Ofcom to achieve these objectives – see further Q9, Section 6.
- 3.14 The statutory provisions on ownership are in Schedule 2 to the Broadcasting Act 1990 (as amended by the Broadcasting Act 1996 and the Communications Act 2003). Copies of this legislation are available from <http://www.legislation.gov.uk/ukpga/1990/42/schedule/2>.
- 3.15 The ownership rules applicable to national radio multiplex services disqualify certain categories of persons from holding a licence or participating in a licensee above a prescribed level.
- 3.16 Applicants should ensure that they would comply with all relevant ownership rules should their application be successful.

## Subsequent changes in composition

- 3.17 In accordance with section 44 of the 1996 Act, Ofcom may withdraw or revoke a licence after it has been awarded or granted if changes take place which affect the nature or characteristics of the licensee, or in the persons having control over or interest in the licensee, such that Ofcom would not have granted the licence in the first place had this been so. Notification to Ofcom of any change in control will be required (see further Ofcom's published *Ofcom's guidance on the definition of control of media companies* available at <http://stakeholders.ofcom.org.uk/consultations/media2/statement/>).

## Radio multiplex licence renewal

- 3.18 Under the terms of section 58 of the 1996 Act, this national radio multiplex licence is not eligible to be renewed.

## Licence variations

- 3.19 As previously noted in paragraph 3.3 of this Notice, under section 54(1)(b) of the 1996 Act Ofcom is required to include conditions in each national radio multiplex licence that are appropriate for securing that, *inter alia*, the applicant's proposals as to the number of digital sound programme services to be broadcast and as to the characteristics of each of those services, the timetable in accordance with which the broadcasting of each of those services would begin, and the broadcasting of digital additional services and television licensable content services, are implemented.
- 3.20 The holder of a national radio multiplex licence is entitled to apply to Ofcom for a variation of any condition relating to the characteristics of any digital sound programme service. In accordance with section 54(6A) of the 1996 Act, Ofcom will vary the condition unless it appears that, by doing so, the capacity of the digital sound programme services broadcast under the licence to appeal to a variety of tastes and interests would be unacceptably diminished.
- 3.21 Ofcom will consider any request for a licence variation on its merits, against the full range of criteria provided for in statute. Therefore, any proposal for a variation to the line-up of programme services on the second national radio multiplex licence will be considered in a manner which is consistent with the basis on which the original licence award will have been made. This approach reflects Ofcom's intention to maintain the integrity of the licence award process and, in particular, to ensure as far as possible that the digital sound programme services carried on (all) national radio multiplex licences continue to appeal to a variety of tastes and interests throughout the period for which the radio multiplex licences are in force. Accordingly, in applying the criterion in section 54(6A), Ofcom will have regard to the capacity of the proposed digital sound programme services to appeal to a variety of tastes and interests. This will be taken to mean that a variation is unlikely to be approved unless the digital sound programme services on the national radio multiplex licence in question continue to appeal to tastes and interests that are distinct from those catered for by the digital sound programme services on any other national radio multiplex service.
- 3.22 Ofcom also believes that whether a digital sound programme service is broadcast in stereo or mono is an important characteristic of that service, and as such any variations to these characteristics must be considered in accordance with the requirements of section 54(6A) of the Broadcasting Act 1996. Applicants should note that the *Technical Policy Guidance for DAB Multiplex Licensees* sets out guidance

about Ofcom's general approach to requests to change the audio characteristics of digital sound programme services (see paragraphs 2.3 and 2.4 of the Guidance). As a matter of general policy, Ofcom is likely to refuse a request for a change in audio characteristics only in cases where the capacity freed-up by the change is to be allocated to services which, in Ofcom's view, would not be in the best interests of citizens and consumers. Such an example may be where a multiplex licensee using its full capacity for stereo radio services proposes to reduce these radio services to mono, in order to allocate the permitted 30% data capacity to provide, for example, a closed user group service, and where we judge this would not be in the public interest. We believe that such a move would generally unacceptably diminish the capacity of the programme services provided under a national radio multiplex licence to appeal to a variety of tastes and interests, and the policy is therefore designed to ensure that the multiplex as a whole – not an individual service – continues to cater for the overall tastes and interests of listeners.

- 3.23 Other than when imposing a sanction, Ofcom may vary the period for which the licence is to continue in force only with the consent of the licensee. Conditions imposed in connection with:
- i) the timetable and other proposals indicated in the technical plan submitted under section 46(4)(b); or
  - ii) the implementation of any proposals made by the licensee in connection with the number of digital sound programme services to be broadcast and their characteristics, the timetable in accordance with which the broadcasting of each of those services would begin, the broadcasting of digital additional services and/or television licensable content services, or the promotion or assistance in the acquisition of digital radio receivers,

may only be varied with the licensee's consent. In the case of any other variation, Ofcom may vary the licence by notice served on the licensee once the licensee has been given a reasonable opportunity of making representations to Ofcom about the variation.

## Revocation of licence for failure to begin providing licensed service

- 3.24 Before the commencement of the service, if the successful applicant indicates to Ofcom that it does not intend to provide the service, or Ofcom has reasonable grounds to believe that the applicant will not provide it, Ofcom will serve notice immediately revoking the licence. Unless the successful applicant has itself indicated its intention not to provide the service, Ofcom will serve a prior notice stating the grounds for revocation and will offer the applicant a reasonable opportunity to make representations to Ofcom about the matters concerned.
- 3.25 Revocation of a licence by Ofcom will result in the imposition of a financial penalty not exceeding whichever is the greater of £250,000 or 7% of the amount which Ofcom estimates would have been the multiplex revenue for that accounting period (section 53(5) of the 1996 Act).

## Other sanctions

- 3.26 Ofcom is empowered to apply specific penalties in respect of breaches of licence conditions or directions by Ofcom. These sanctions include: (i) the power to require the payment of a specified financial penalty not exceeding the greater of £250,000 or 5% of the aggregate amount of the share of multiplex revenue attributable to the

licensee for the last complete accounting period (see section 59(2A) of the 1996 Act); (ii) a reduction in the licence period by a specific period not greater than two years; and (iii) revocation. The licensee will be afforded an opportunity to make representations to Ofcom about the matters concerned prior to such sanctions being imposed. The licensee may also be required to reimburse Ofcom any costs reasonably incurred by Ofcom in connection with the breach.

## Licence fees

- 3.27 Each licensee is required to pay an annual fee for its radio multiplex licence. Under the current tariff (2014/15), this is £10,000 for a national radio multiplex licence. Ofcom reserves the right to revise the fee charged during the course of the licence period. The licence fee is payable from the beginning of the licence period, which will be the date of the commencement of broadcasting of one or more services on the multiplex.
- 3.28 No fee is currently payable for the Wireless Telegraphy Act licence that each radio multiplex licensee must also hold.

## Additional payments and other fees

- 3.29 Under section 46 of the 1996 Act, when advertising a national radio multiplex licence Ofcom is required to state, with the consent of the Secretary of State for Culture, Media and Sport, whether any percentage of multiplex revenue will be payable by the licensee and to specify that percentage. The Secretary of State may provide by order that no percentage should be specified, however, currently no such order is in force. Multiplex revenue is defined in sections 56 and 57 of the 1996 Act.
- 3.30 Ofcom has determined that no percentage of multiplex revenue shall be payable by the holder of this licence, and has received the consent of the Secretary of State to this decision<sup>2</sup>.

## Other licences and requirements

- 3.31 Radio multiplex licensees must comply with the requirements to hold a licence under Section 8 of the Wireless Telegraphy Act 2006. Licensees must also comply with Ofcom's *Digital Technical Code*.

## Digital sound programme services

- 3.32 As noted in paragraph 3.3, a radio multiplex licence will also include conditions as Ofcom considers appropriate to ensure that all digital sound programme services broadcast under the licence are provided by the holder of a national digital sound programme licence. A radio multiplex licensee itself may also be licensed to provide a digital sound programme service, subject to, amongst other things, compliance with the ownership provisions referred to in paragraphs 3.13-3.16.
- 3.33 A national digital sound programme licence allows its holder to provide any number of national digital sound programme services, together with related ancillary services and technical services. Subject to Ofcom being satisfied that an applicant is "fit and proper", in accordance with section 42 of the 1996 Act, and is in compliance with

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<sup>2</sup> No percentage of multiplex revenue is payable under the licence for the existing national radio multiplex service.

relevant licence provisions and statutory provisions on ownership, the licence effectively will be available on demand. A prospective digital sound programme licensee is not required to make any proposals about the type of service to be provided, at the time of applying for such a licence. However, at the time of entering into a contract with a multiplex licensee, a digital sound programme licensee must notify Ofcom that it is doing so, providing at that time a description of the characteristics of the programme service, the identity of the multiplex on which it will be transmitted, and the period during which it will be provided. The description of the licensed service will then be referred to in the annex to the digital sound programme licence, with amendment from time to time as the programme service provided and notified to Ofcom changes. Where a digital sound programme licensee intends to cease providing a digital sound programme service to a multiplex licensee, it must notify Ofcom. A national digital sound programme licence is of indefinite duration.

- 3.34 'Downloaded' audio channels, providing digital files of audio programme material, are permitted. This would allow for audio to be sent to a storage and retrieval device at a rate different from 'real time', for replay by a listener at a later time. All such audio should be licensed as digital sound programme services, unless it is synthesised at the point of reception, in which case it should be licensed as a digital additional service.
- 3.35 Where particular prospective digital sound programme service providers are identified in a radio multiplex licence application, the applicant should do all it can to establish that there is no reason why those persons should not be issued with a digital sound programme licence, if these providers are not already so licensed.
- 3.36 Each digital sound programme licensee may provide ancillary data services directly related to its individual programme stream without requiring a separate licence. (Other parties may provide such information but would require a digital additional services licence; see paragraphs 3.45-3.51) This might include, for example, text and graphics relating to sound broadcasts on the channel concerned, such as weather maps, travel information, photographs of the artists whose music is being played, or details of programmes or music played. Ancillary material must be broadly concurrent with the audio from the digital sound programme service and, as a whole, should represent the breadth of material available on the latter. Ancillary services may not comprise advertising, although visual sponsorship messages on the digital sound programme service are permitted within the terms of the Ofcom Broadcasting Code. Ancillary services may cross-refer to the visual content of additional services, and the two may be displayed on-screen at the same time.
- 3.37 Each digital sound programme licensee may also carry 'technical services', which relate to the encryption/decryption of digital sound programme services, without a separate licence. This could permit 'pay radio' for particular programme services or programmes, under the terms of the Ofcom Broadcasting Code. Where such encryption is planned, applicants should make clear to which digital sound programme services it will apply, and how listeners will subscribe. If it is intended to use an encryption system, all reasonable endeavours must be made to facilitate reception on open-standard digital receivers, without discriminating against any person, or a class of such persons, purchasing such a receiver.
- 3.38 There is no requirement to carry any existing or planned analogue local commercial radio services on a national radio multiplex. This is, however, permitted on the proviso that the local analogue services continue to comply with the terms of their own licences, and that they have also been licensed as national digital sound programme services.

- 3.39 Full details of how to apply for a digital sound programme licence can be found at <http://licensing.ofcom.org.uk/radio-broadcast-licensing/digital-radio/dsp/>.

## Television licensable content services

- 3.40 Under section 54(1)(ca) of the 1996 Act, a radio multiplex licensee must ensure that all television licensable content services broadcast under the licence are provided by the holder of a television licensable content service licence or by an EEA broadcaster (within the meaning given by section 12(3A)).
- 3.41 A television licensable content service (TLCS) licence authorises the licensee to provide television programmes for reception by members of the public by means of satellite, electronic communications network, or a radio multiplex.
- 3.42 TLCS licences are granted in respect of a particular licensable service (put simply, a TV channel), rather than in relation to a particular service provider. A broadcaster providing three separate services will therefore need three licences.
- 3.43 If a broadcaster already has a licence for a TV channel which is being provided, for example, on satellite, it does not need an additional licence for that same service to be carried on a radio multiplex or an electronic communications network like cable<sup>3</sup>. The TLCS licensee is, however, required to notify Ofcom of any agreement with a radio multiplex licensee for carriage of the service.
- 3.44 Applications for TLCS licences are considered as and when they are received. Ofcom will grant a TLCS licence provided the applicant and the proposed service meets the licensing criteria. Ofcom can refuse to issue a licence if the applicant is not “fit and proper” to hold a licence, is disqualified from holding a licence or does not comply with any relevant ownership restrictions. More information about how to apply for a TLCS licence, and the conditions that TLCS licensees are subject to, is available in the Guidance Notes for Applicants for TLCS licences on the Ofcom website at <http://licensing.ofcom.org.uk/tv-broadcast-licences/tlcs/>.

## Digital additional services

- 3.45 Under section 54(1)(d) of the 1996 Act, a radio multiplex licensee must ensure that all digital additional services broadcast under the licence are provided by the holder of a digital additional services licence.
- 3.46 A digital additional services licence is, like a digital sound programme licence, effectively granted on demand, subject to compliance with sections 42(2)(a) and 44(1) of the 1996 Act. It is of indefinite duration and authorises its holder to provide services which are not digital sound programme services, simulcast radio services, ancillary services or technical services on national and/or local radio multiplexes or general multiplexes.
- 3.47 Additional services might, for example, be text or data services such as videotext, slow moving graphics, electronic publishing or road transport information. It is anticipated that visual advertising to accompany the audio of digital sound programme services may account for a substantial proportion of the data provided under additional services licences. Additional services may or may not be for general public consumption, and may or may not be encrypted. The services may include or comprise sounds, provided the sounds are received through the use of coded

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<sup>3</sup> A TLCS licence does not authorise provision of the service on a digital terrestrial television multiplex.

reference to pre-defined phonetic elements of sound. This would permit, for example, the broadcasting of control data to generate synthesised music or speech.

- 3.48 Each digital additional services licensee will be required to notify Ofcom when entering into or changing a contract with a multiplex service licensee, giving details of the identity of the multiplex service, the period during which the service will be provided and, where the additional services licensee is entitled to use a specified amount of digital capacity, the amount of capacity concerned.
- 3.49 Where particular digital additional services providers are known, applicants should do all they can to establish that there is no reason why those persons should not be licensed, if such licences have not already been granted.
- 3.50 Programme-related data provided by a digital sound programme licensee about its own services is categorised as an ancillary service, not as an additional service (see paragraph 3.36). Any data which is provided by a third party, distinct from the relevant digital sound programme licensee, should be carried as an additional service and must be licensed as such. The definition of programme-related material under digital additional services licences is as for ancillary services (see paragraph 3.36).
- 3.51 Full details of how to apply for a digital additional services licence can be found at <http://licensing.ofcom.org.uk/radio-broadcast-licensing/digital-radio/dsp/>.

## Use of digital capacity

- 3.52 As noted in paragraph 3.10, Ofcom is required to include conditions as appropriate in radio multiplex licences such that at least 70% of the total multiplex capacity is made available for the provision of digital sound programme services, simulcast radio services, ancillary services and technical services. Consequently, no more than 30% of the total capacity of a radio multiplex may be devoted to non-programme related digital additional services and/or television licensable content services.
- 3.53 A radio multiplex licensee must comply with these requirements. The proportion of multiplex capacity allocated to non-programme related digital additional services and/or television licensable content services may be aggregated over a 24-hour period, such that the 30% limit may be exceeded at particular times of day provided that the amount of capacity allocated is correspondingly lower at other times. Whatever the proportion of capacity allocated to non-programme related digital additional services and/or television licensable content services at any one time, however, all digital sound programme services, simulcast radio services, ancillary services and technical services must still be provided in accordance with the conditions of the radio multiplex licence, to the required technical standards.
- 3.54 Ofcom also has a duty under section 48 of the 1996 Act to ensure that the conditions included in national radio multiplex licences (taken together) secure that an amount of digital capacity on the multiplex frequencies is reserved for every independent national broadcaster for the broadcasting of a simulcast radio service provided by that broadcaster. Capacity is already reserved for independent national broadcasters on the existing national radio multiplex service. In light of this, we do not consider it will be necessary to reserve capacity on this national radio multiplex service for the broadcasting of simulcast radio services.

## Coding standards

- 3.55 The digital radio system to which this licence pertains is terrestrial digital audio broadcasting (T-DAB). The system is specified by the European Telecommunications Standards Institute (ETSI), as its standard of EN 300 401. Copies may be obtained from: <http://www.etsi.org/>.
- 3.56 Subject to paragraph 3.57, all non-encrypted digital sound programme services (including any provided by the BBC) must be in conformance with the MPEG Layer II audio coding standard as described in ISO/IEC 11172-3, ISO/IEC 13818-3 and EN 300 401. This is set out in Ofcom's *Digital Radio Technical Code* with which multiplex licensees must comply by virtue of their licence.
- 3.57 A maximum of 30% of the total capacity of the multiplex may be occupied by non-encrypted digital sound programme services conforming with the subset of the MPEG-4 High Efficiency Advanced Audio Coding v2 (HE AAC v2) Layer 2 profile described in ISO/IEC 14496-3 and TS 102 563. This is also known as DAB+.
- 3.58 The use of other audio coding standards is acceptable for the provision of audio content not delivered in real time, but for storage and use at a time after transmission (e.g. 'podcasts' – see paragraph 3.34), and for any technical services (see paragraph 3.37).

## Programming compliance

- 3.59 All programme output provided by digital sound programme licensees and simulcast radio service providers, including sponsorship, must conform to The Ofcom Broadcasting Code, available at: <http://stakeholders.ofcom.org.uk/broadcasting/broadcast-codes/broadcast-code/>.

## Advertising compliance

- 3.60 Similarly, all advertising output must conform to the UK Code of Broadcast Advertising, which is available at: <http://www.cap.org.uk/Advertising-Codes/Broadcast-HTML.aspx>.
- 3.61 Subject to the requirements of this Code, each digital sound programme and digital additional services licensee is free to decide the amount, frequency and distribution of advertising airtime. This is not the case in respect of television licensable content services, which are subject to the Code on the Scheduling of Television Advertising (COSTA), which is available at: <http://stakeholders.ofcom.org.uk/broadcasting/broadcast-codes/advert-code/>.

## Reference Offers

- 3.62 In order to be able to broadcast its services, the national radio multiplex licensee will need to arrange for the national radio multiplex service to be transmitted.
- 3.63 As a major provider of transmission services and owner of many transmission sites, Arqiva is under an obligation to produce Reference Offers in relation to certain aspects of broadcast transmission as a result of Undertakings<sup>4</sup> given to the Competition Commission in 2008 following the acquisition of National Grid Wireless

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<sup>4</sup> <http://adjudicator-bts.org.uk/undertakings.htm>

by Arqiva's parent company, Macquarie UK Broadcast Holdings Ltd. Arqiva's compliance with the terms of the Undertakings is monitored by the Office of the Adjudicator, Broadcast Transmission Services<sup>5</sup>.

- 3.64 Arqiva will produce a Reference Offer for Transmission Services in relation to this national radio multiplex licence. This Reference Offer will be based on a notional technical specification which will include approximately 60-70 candidate sites used by the existing national commercial radio multiplex service. The sites included in the Reference Offer should not be taken to be an indication of the areas of coverage or the size of the network that Ofcom expects the successful applicant to build. As set out in paragraph 2.10, it is for applicants to propose the coverage they would provide.
- 3.65 Transmission Services comprises 'Network Access' (NA) components, plus Managed Transmission Services (MTS) which includes customer-specific equipment such as dedicated transmitters which together enable the national radio multiplex service to be broadcast. The NA scope covers the price for access to common facilities such as structures, antenna systems, buildings and power.
- 3.66 The Reference Offer will provide prices for each of the NA and MTS elements, and will be published by Arqiva during the week commencing 1 September. It will set out indicative site-specific prices for potential customers of Transmission Services, along with indicative commercial terms. It will also set out details of how an applicant can obtain separate NA-only prices from Arqiva.
- 3.67 Ofcom is providing in this notice of advertisement some high-level guidance to applicants who may be unfamiliar with Reference Offers, with a view to helping them to understand some of the information which will be contained in it when it is published.
- 3.68 Any applicant who intends to rely upon information contained in the Reference Offer should seek independent legal and commercial advice, and engage with Arqiva to discuss specific terms. There are many situations under which actual prices for providing the services could vary from those quoted.
- 3.69 Reference Offers provide benchmark prices for the services offered against a notional specification. Applicants are not obliged to accept the arrangements set out in the Reference Offer, and are free to negotiate alternative technical and commercial arrangements.
- 3.70 Alternatively, applicants can deal with other providers of transmission services who may offer many of the services that Arqiva will set out in the Reference Offer. Arqiva is obliged to provide access to its transmission sites on fair, reasonable and non-discriminatory terms that are reflective of the cost involved in providing that access.
- 3.71 Applicants may be considering use of non-Arqiva transmission sites for which they are able to secure favourable terms, or perhaps to serve a location that it is not possible to reach from one of the Arqiva transmission sites. Ofcom is willing to consider proposals for the use of alternative or additional transmitter sites, but will need to be satisfied that the location of the transmitter will not result in reception difficulties for any nearby households as a result of adjacent channel interference (see also Section 4 of this Notice).

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<sup>5</sup> <http://adjudicator-bts.org.uk/index.htm>

- 3.72 Arqiva is required to maintain strict procedures concerning the flow of information between certain of its business units, to ensure that it does not gain any unfair commercial advantage and that customer confidentiality is respected. Therefore, applicants wishing to contact Arqiva in relation to this national radio multiplex licence should ensure that they contact only people in the appropriate part of the company. Arqiva will publish the contact details of the appropriate recipient of enquiries within Arqiva at [www.arqiva.com/documentation/reference-offers](http://www.arqiva.com/documentation/reference-offers).

## Section 4

# The licensed area and coverage

4.1 This licence is offered for a national radio multiplex service designed to cover the whole of the United Kingdom, the Channel Islands<sup>6</sup> and the Isle of Man (the "licensed area"). In designing their transmitter networks, applicants need, however, to take account of two constraints which are likely to affect the coverage of the licensed area that practicably can be achieved. These constraints are the international framework for frequency use (paragraphs 4.2 to 4.5), and transmitter siting (paragraphs 4.6 to 4.10):

## International constraints

4.2 International constraints on the use of the frequency allocated to this licence will make it impracticable to secure effective contiguous coverage in some parts of the country. These constraints accrue from the governing international agreement and associated plan for the frequency range used by DAB digital radio<sup>7</sup>, which:

- a) limits the extent of the interference which the licence's transmitters may cause to neighbouring countries' services; and, correspondingly,
- b) confers rights to neighbouring countries to implement transmitter networks which can cause a certain extent of interference to this licence, effectively reducing in places the coverage which would otherwise be achieved.

4.3 The frequency allocated to this national radio multiplex service is also used for DAB digital radio by countries neighbouring the UK, which will directly affect the achievable coverage of this licence.

4.4 The parts of the UK most affected by these constraints are: the coastal areas of East Anglia, almost all of Kent, significant parts of Sussex and much of the south coast to the west of Sussex.

4.5 Full details of the international constraints are given in Annex 3.

## Transmitter siting

4.6 The other constraint to network development of this licence is internal to the UK. It is necessary to apply a system of regulatory approval to transmitter siting in order to control the impact of 'adjacent channel interference' ('ACI')<sup>8</sup>. This interference mechanism arises from the technical characteristics of consumer receivers, and potentially affects all DAB services which cover the area around a transmitter site, not just the services on the immediately adjacent channel.

<sup>6</sup> In the event that suitable spectrum becomes available.

<sup>7</sup> The Regional Radiocommunications Conference of the International Telecommunications Union signed in Geneva in June 2006, referred to as "Ge06", see: <http://www.itu.int/pub/R-ACT-RRC.14-2006/en>

<sup>8</sup> ACI - where households and radios in cars travelling on roads close to the transmitter of one broadcaster are unable to receive services from another, because their radio sets are affected by the much stronger signals from the transmitter near them.

- 4.7 The system of regulatory approval is given effect through the requirement for Ofcom to agree all changes to the transmitter plan included in the Wireless Telegraphy Act licence held by the person to whom this licence is to be awarded. Ofcom's policy for approval is described and explained in *Technical Policy Guidance for DAB Multiplex Licensees*.
- 4.8 The main elements of this policy are as follows:
- Multiplex operators should have the freedom to coordinate their roll-out plans and manage the impact of ACI that might arise from new transmitter sites through liaison amongst themselves.
  - Ofcom will consider proposals, taking into account the potential impact upon listeners where ACI is predicted to occur. If the DAB multiplex operators are unable to come to agreement on a proposed site, the final decision will be made by Ofcom.
  - The DAB transmitters currently in use are included in a list of Reference Sites, which is available on the Ofcom website at [http://stakeholders.ofcom.org.uk/broadcasting/guidance/tech-guidance/tech\\_parameters/](http://stakeholders.ofcom.org.uk/broadcasting/guidance/tech-guidance/tech_parameters/) and is regularly updated. There is also a list of transmitters (with outline parameters) that are planned to be implemented as part of the expansion of local and national DAB coverage during 2014-2016. This will be available on the Ofcom website shortly. The two lists need to be considered together.
- 4.9 Examples of the factors that Ofcom would take into account when considering the possible impact of ACI upon listeners would include (but not be limited to) the following:
- the quality and reliability of both indoor and mobile reception of other multiplexes in the area;
  - the increase in the coverage of the proposing multiplex compared with the loss suffered by other multiplexes;
  - the number of multiplexes predicted to be affected;
  - the duration of any impact; and
  - the degree to which reception of the victim multiplexes is degraded.
- 4.10 Applicants will need to consider these provisions when assembling their technical plan, both in terms of their own choice of transmitter sites, and as a factor which (when applied by other licensees) may affect their coverage adversely. It should be noted that the policies described in *Technical Policy Guidance for DAB Multiplex Licensees* are subject to periodic review by an industry group chaired by Ofcom (the Technical Group of the Joint Planning for Radio Group (JPRG)). This group develops on an on-going basis policies aimed at improving reception of DAB digital radio through existing and new services. The licensee to whom the licence described in this document is awarded will be invited to join this group. However, applicants should base their applications solely on the information provided in this document and associated Codes.

## Submission of technical plans

- 4.11 Following the previous award of this licence in 2007, Ofcom gained international agreement for a network of 174 transmitters, which formed part of the technical plan submitted by the successful applicant. The proposed sites for these transmitters are now registered in the Ge06 Plan. Applicants are of course free to propose whatever transmitters they wish, but may find it helpful to have details of the sites which have already been registered and thus are cleared for use. We are therefore publishing alongside this notice of advertisement the following three files:

File name	Purpose
List of coordinated UK Block 11A transmitters	A spread-sheet downloaded from the ITU website giving broad outline details of the assignments.
ITU data for all coordinated UK Block 11A transmitters	Full details of the 174 coordinated sites in the ITU data format.
Google Earth file of coordinated UK Block 11A transmitters	A file of site locations downloaded from the ITU which can be displayed using the Google Earth software.

Since these proposed transmitters are already registered in the Ge06 Plan, they will affect Ofcom's ability to assess the international conformity of applicants' proposed technical plans. Therefore, for each of these 174 coordinated sites, applicants should indicate as part of their technical plan whether they wish to use it, modify it, or not use it.

- 4.12 Subsequent to our advice to Government on DAB coverage planning<sup>9</sup>, Ofcom generally carries out calculations of DAB coverage using the UK Planning Model ("UKPM"). The UKPM is a proprietary model which may not be available to all applicants. Therefore Ofcom will on this occasion assess all technical plans using the commercially available ATDI frequency planning software, ICSTelecom.
- 4.13 Ofcom will use the following datasets and settings in ICSTelecom:

### Datasets

- Ordnance Survey terrain data – 50 metre resolution
- Infoterra clutter data – 50 metre resolution
- Ordnance Survey Strategi road data for motorways and 'A' roads
- 2011 Census data for adults (aged 15+) to output area accuracy

### ICSTelecom settings

- Model pre-set – Fresnel

<sup>9</sup> <http://stakeholders.ofcom.org.uk/broadcasting/radio/coverage/dab-coverage/>

- Diffraction geometry – Deygout 94
- Subpath attenuation – coarse integration
- FZ fraction 0.8
- Earth radius (sea and land) 8,500km

4.14 In assessing the coverage delivered by applicants' technical plans, Ofcom will:

- not take into account co-channel interference, either from other administrations or from within the proposed network itself;
- not take into account ACI from existing UK DAB networks;
- define mobile road coverage as 54 dB $\mu$ V/m at 10m above ground level using power summation, and;
- define population coverage as 62 dB $\mu$ V/m at 10m above ground level using power summation which, according to present planning standards, broadly equates to useful indoor coverage in a suburban environment.

## Section 5

# Guidelines and procedures for submission of applications

- 5.1 The application should be presented in the format prescribed by Ofcom in Section 6 of this Notice, and should include responses to all of the questions. Pages should be numbered. All narrative should contain uniquely numbered paragraphs, and all financial or other tables within the supporting narrative should also be uniquely numbered and referenced using these numbers.
- 5.2 Applications must be clear, concise and simple in layout and style. Over-elaborate applications which include videos and/or other supplementary promotional material are strongly discouraged. Ofcom will not be influenced by the inclusion of illustrations or other devices designed to enhance the visual appeal of an application. In particular, applications should not include photographs and/or pictures. A limited number of charts is acceptable.
- 5.3 One electronic copy (in pdf or MS Word format) of each version of the application (e.g. a full version including confidential information as well as (if necessary) a non-confidential publishable version of the application) must be received by Ofcom no later than the closing-date specified in Section 1 of this Notice<sup>10</sup>. Applications received after this time will not normally be accepted. All applications will be acknowledged upon receipt. If e-mail is the chosen method of submission, the application must be sent to [commercialradio@ofcom.org.uk](mailto:commercialradio@ofcom.org.uk). Applicants should be aware, however, that e-mails are not an instantaneous means of communication, especially when they have large attachments. Applicants are therefore strongly advised to submit e-mail applications at least 48 hours in advance of the closing-date, so that urgent steps can be taken by the applicant if no acknowledgement from Ofcom is received. Applicants should also note that we are unable to receive emails of larger than 10MB in size.
- 5.4 Payment of the application fee must also be received (i.e. the funds must be present in the Ofcom bank account) by the closing-date specified in Section 1 of this Notice. Applicants may submit their payment by either of the following methods:
- a) Payment by BACS into the Ofcom bank account (sort code: 30-97-90, account number: 00782415, account name: Ofcom). Please note that any payments made using this method will take at least three working days to reach the Ofcom account.
  - b) Payment by CHAPS into the Ofcom bank account (details as above). Please note that although this is a 'same day' payment method, applicants intending to submit their payment on the closing-date itself should confirm with their bank the deadline for ensuring that it is received by Ofcom on that date.
  - c) Payment must be notified in advance to Ofcom's Remittances team (tel: 020 7783 4930 or email: [ofcom.remittances@ofcom.org.uk](mailto:ofcom.remittances@ofcom.org.uk)), with the notification including the following information:

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<sup>10</sup> Hard copies may also be submitted if an applicant wishes to do so, but any application which is submitted only in hard copy will not be accepted. Hard copies should be addressed to Neil Stock, Head of Radio Policy, Ofcom, Riverside House, 2a Southwark Bridge Road, London, SE1 9HA.

- the name of the licence to which the application fee relates (in the mandate reference field);
- the amount submitted;
- the payee name;
- the bank sort code;
- the account name, and;
- the anticipated receipt date

- 5.5 As soon as reasonably practicable after the closing-date for applications, Ofcom will announce the number of applications received, and for each applicant, will publish the name(s) and contact details as provided in response to Q.1(a) and (b) of the application (see Section 6). The announcement will also summarise each applicant's proposals as to the number of digital sound programme services, digital additional services and television licensable content services (as appropriate), to be broadcast, and details of the characteristics of each of those services, together with such other information connected with the application as Ofcom considers appropriate. At the same time, Ofcom will invite representations to be made to it with respect to the applications submitted, specifying the manner in which, and the time within which, such representations are to be made. As applications (save for confidential information) will be made available for public inspection on the Ofcom website, if an applicant wishes to submit any information in confidence, this should be presented in an appropriately-marked annex to the main application. Details of which parts of an application may be submitted in confidence are included in Section 6 of this Notice. If an applicant wishes to submit information in confidence other than where this is specifically indicated in Section 6, confirmation that this is acceptable must be sought beforehand, in writing, from Ofcom's Head of Radio Policy, explaining the reasons as to why that material is considered to be confidential. Such permission will only be given where Ofcom considers this to be appropriate.
- 5.6 An application may include a copy of any detailed market or audience research reports, or of any other information which an applicant wishes to provide to demonstrate the way in which the digital sound programme services to be provided on the radio multiplex address the requirements of section 47(2)(d) of the 1996 Act (see Section 6, Q12). A copy of any research or other evidence in support of the extent to which an applicant's proposals might encourage the acquisition of digital receivers, further to section 47(2)(e) of the 1996 Act, may also be submitted (see Section 6, Q13). All original research material, other than as summarised by the applicant in response to Q.12 of the application, will be regarded as confidential to Ofcom and not be made publicly available. Ofcom reserves the right to request any further supplementary material subsequently; if so, this will be specifically requested.
- 5.7 A completed application should also include the submission of the technical plan and financial projections (see Section 6, Questions 4, 6 and 10). These too will be regarded as confidential and not published.
- 5.8 An application may include only a single proposal for the array of digital sound programme services (including any ancillary services) and digital additional services to be provided. An applicant may submit more than one application, upon payment of a further application fee for each additional application. In these circumstances, each application will be considered separately.

- 5.9 Submission of an application will be taken as evidence of willingness to accept a licence, if offered, on the terms indicated.
- 5.10 Failure to comply with any of the above guidelines may render the application liable to disqualification. As soon as reasonably practicable after an initial review of applications against the above mentioned application requirements, we will provide written confirmation to any applicant whose application we judge to be invalid and confirm that we will not be able to give that application further consideration. However, if it appears to us that an application on its face complies with those requirements, we will assess the application in accordance with the process set out in Section 7 of this Notice.

### **False or misleading information**

- 5.11 Applicants should note that if we are satisfied at any time after making a licence award that information provided by the applicant in connection with its application was false in any material aspect (whether the applicant knew it to be false or was reckless as to whether or not it was false), or an applicant withheld material information knowingly or recklessly, we may serve a notice revoking the licence in question.

### **Purdah rules**

- 5.12 An important part of our regulatory principles is to ensure that any interventions are evidence-based, proportionate, consistent, accountable and transparent in both deliberation and outcome. We also consider that it is important to ensure that there is no appearance of bias or conflicts of interests in relation to the assessment process to which this Notice relates.
- 5.13 For that reason, a set of so-called 'purdah rules' that will govern the interaction of Ofcom with relevant persons will be published on the Ofcom website when they become available.

### **Collusion**

- 5.14 We will take any allegations of collusion extremely seriously. We retain the right to exclude an application in its entirety if we are satisfied that any agreement, cooperation or practice has as its object or effect the prevention, restriction or distortion of competition. Applicants should therefore ensure that they have in place effective and actively implemented compliance programmes, which should have the visible and active support of senior management and should be appropriate specifically in relation to matters relevant to applications in response to this Notice.

## Section 6

# The application

The application should be structured strictly in accordance with the following outline:

## Executive summary

Please provide a summary of your application, of no more than four pages in length.

## General information

### 1. Name of Applicant, Address, Telephone No. and E-Mail Address

This must be a single legal entity: either a body corporate or a named individual person. If the former, a copy of the certificate of incorporation must be included with the application.

### 2. Main Contact (For Public Purposes)

Please nominate at least one individual to deal with any press or public enquiries, stating:

Name:

Telephone (daytime):

Address:

E-mail address:

### 3. Main Contact (For Ofcom Purposes)

Please nominate one individual to whom questions of clarification and/or amplification should be sent, stating:

Name:

Telephone (daytime):

Address:

E-mail address:

*The response to this question may be submitted in confidence, separately from the other responses in this section (if an applicant does not submit the response to this question in a separate annex, the response will be published).*

## Section 47(2)(a) and (b): Extent of proposed coverage area and timetable for coverage roll-out

### 4. Summary of coverage proposals

Provide a summary, fully consistent with the more detailed information about transmission sites supplied separately (see Q.6 below), of the coverage areas proposed to be achieved

by the applicant's technical plan, and an estimate of the percentage of UK households, UK major roads and/or the UK adult (aged 15+) population which will be served by the national radio multiplex service for both indoor and outdoor coverage.

## 5. Timetable for coverage roll-out

Outline the timetable in accordance with which the coverage proposed at Q.4 would be achieved, and the technical means by which it would be achieved. This should also be fully consistent with the more detailed information provided in response to Q.6.

## 6. Detailed coverage proposals

Provide, in an electronic text file, details of the technical plan<sup>11</sup>, which should consist of the following components: assignment details, implementation table, and implementation data. In order to meet existing international agreements, applicants must supply a plan that conforms to the international criteria described in Annex 3 of this advertisement; this will form the basis of Ofcom's assessment. Applicants may also submit an enhanced plan which they will commit to building subject to successful international coordination.

- a) The first part of the technical plan is a table of assignment details. This gives the relevant technical detail of each transmitting station which the applicant is undertaking to provide as part of its network. It will be used to enable Ofcom to estimate the coverage which will be achieved by the applicant, on a basis consistent with other applicants. It will also enable confirmation of the plan's compliance with Ofcom's various technical requirements. All files must be supplied in text format which is in accordance with the ITU format defined for digital sound broadcasting assignments, details of which can be found at: [http://www.itu.int/ITU-R/terrestrial/docs/notice-forms/ge06/BS-GE06\\_Guide.pdf](http://www.itu.int/ITU-R/terrestrial/docs/notice-forms/ge06/BS-GE06_Guide.pdf).
- b) A table stating whether each of the 174 previously coordinated sites are to be used, modified or not used. If a site is proposed to be modified, please provide details.
- c) A separate table, the implementation table, should also be provided for the technical plan. This should list, for each proposed transmitter, the date of implementation promised with the parameters promised in the transmission plan, the owner/lessor of aperture space on the mast/tower, and any relevant accompanying notes. If it is proposed to introduce a transmitter with different parameters (typically lesser power or height) for an interim period (other than due to the need to protect analogue TV), then on both lists there should be one entry for the initial assignment, and a second entry for the one which replaces it, with a note stating which transmission assignment is replaced.
- d) Each transmission assignment should also be represented by site implementation data, specific to each transmission site. This detail is intended to elicit the practicability of the technical plan. For each site name (corresponding to assignment details and implementation table):
  - i) If existing aerials are to be used, this needs to be stated and an explicit reference made. If not, then applicants should provide a photograph or scale diagram (or set of photographs or diagrams), showing the portion of the supporting structure on which the radiating aerials are to be mounted. Show the radiating aerials, and

<sup>11</sup> This is the 'technical plan' referred to in Section 46(4)(b) of the 1996 Act.

the aerials of other services mounted immediately above, below, and at the same level as, the radiating aerials of the applicant's service.

- ii) Provide details of the location of the building in which the transmission equipment is to be housed, and confirmation that space is available for all of the equipment required (or describe what modifications to buildings and infrastructure will be required, if relevant).
- iii) Provide confirmation from each of the relevant parties that they have seen and agreed the applicant's proposals (to the extent that this includes new works) in respect of:
  - o aerial mounting on the supporting structure, as proposed in the sketch diagram;
  - o running of feeder cable from transmission system to aerial(s);
  - o sharing of aerials and insertion/use of combiners, where relevant;
  - o siting of transmission equipment;
  - o supply of power;
  - o building works (if any).

The relevant party in each case, namely whoever controls the infrastructure (mast, cableways, building, power), should be named explicitly<sup>12</sup>.

Note: submission of this information does not imply that Ofcom will validate the design of the aerial system. The licensee will be required to adhere as far as is reasonably practicable to the antenna pattern proposed in the assignment details, and in all cases to limit the maximum radiated power in any given direction as may be required by Ofcom.

- e) Provide the following details regarding transmission arrangements:
  - i) Any transmission contracts that have been agreed
  - ii) The status of these agreements

## 7. Other technical proposals

- a) Supply a network diagram, with associated tables and labels as necessary, showing in terms of functionality and (in principle) location: the source of each proposed digital sound programme service, digital additional service or television licensable content service, the point(s) of multiplexing, the point(s) of control of the elements of the multiplex (both FIC and MSC) and the distribution circuits to

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<sup>12</sup> Ofcom recognises that the level of detail required in response to this question may require an applicant to request information from a competitor. However, Ofcom needs to be able to assess mast aperture and other infrastructure proposals as part of its overall assessment of the technical plan. This is especially important where there is no realistic alternative site, as is the case at many major broadcast sites. If any prospective applicant however wishes to propose ways in which applicants can provide information which would allow Ofcom to assess implementation of the technical plan but which would not cause an applicant confidentiality concerns, Ofcom would be happy to consider these.

the transmitters. State the nature of the bearer circuit in each case, and its possible provider.

- b) For each of the data services proposed in Q.11(d) and Q.14, show: the transport mechanism within the multiplex on which it would be carried; whether stream or packet mode; the average net data rate (including any protection or encryption bits additional to those provided for in the EN 300 401 specification); the range of data rates which might apply in any one transmission frame in support of the service, both net and (specifically attributable to the service concerned) gross; the protection mechanisms applying to their effective transmission (with reference to the options available in the EN 300 401 specification, quantified where the specification provides for different numerical values to afford protection); whether it should be regarded as an additional service, a television licensable content service or an ancillary service; whether encrypted or not, and the encryption system envisaged; the use to which the data service would be put, including a justification for the multiplex capacity required. Outline how compliance will be achieved with the requirement that no more than the statutory proportion of the total multiplex capacity will be devoted to non-programme related data services (see paragraphs 3.52-3.54; the figure excludes Synchronisation, MCI and SI). See also Q.18, about audio services.
- c) With reference to the response to Q.18, supply a diagram showing the relationship between the following elements of the multiplex: services; service components; transport elements (MSC sub-channels: dedicated, and X-PAD; FIDC).
- d) List any of the services in the multiplex which it is proposed be susceptible to interruption by announcements common to more than one service. If announcements are to be made on a geographically-selective basis, describe how this is to be achieved within the provisions of the EN 300 401 specification.
- e) Describe how it is anticipated that the features of the EN 300 401 will be used, if at all, in consideration of continuity of a programme service, or the offering of an alternative service, to listeners who lose reception of the multiplex signal, particularly in vehicles.

*The response to this question may be submitted in confidence.*

## **Section 47(2)(b): Timetable for commencement of services**

### **8. Commencement of services**

If it is envisaged that any of the digital sound programme services or their related ancillary services will not begin broadcasting from the start of the radio multiplex licence period, provide details of which service(s) will not commence from the launch of the radio multiplex service, the reason(s) for this, and an indication of the expected timescale for the commencement of the service(s).

## **Section 47(2)(c): Ability to establish and maintain proposed service**

### **9. Ownership and control of company which will hold the licence**

#### **(a) Board of Directors**

- i) Provide the name, occupation, other directorships, other media interests, background and relevant media experience of each director (executive and non-executive), including the proposed chairperson.
- ii) If there are firm plans to appoint any further directors, provide information (with details of any specific individuals in mind). This information may be submitted in confidence.

#### **(b) Proposed Investors and Shareholding Structure**

Full details of the proposed shareholding structure should be provided, including:

- i) Names and addresses (the latter may be submitted in confidence) of all existing or proposed shareholders.
- ii) Total number, class/classes of shares and issue price of shares (specify voting, non-voting, preference, other etc.).
- iii) All voting shareholders and holders of 5% or more of non-voting shares and loan stock should be named. State the number, class/classes and price of shares to be issued to each investor.
- iv) Outline any shareholders agreements or arrangements which exist.
- v) Where a corporate body other than a current Ofcom licensee will be providing 30% or more of the required funding, details should be given of its directors and main shareholders, and of its activities.
- vi) Where the applicant is an existing company or subsidiary of an existing company, the applicant should provide the last three years' statutory accounts and management accounts for the last financial year for the applicant and/or the parent company.
- vii) Ofcom may request additional information (e.g. a banker's letter, statutory/management accounts) regarding the shareholders, or any other providers of finance, listed in the application.

#### **(c) Involvement of the Applicant in Specified Activities**

Details are required of the involvement by the applicant and its participants (including shareholders or other subscribers of more than 5% of the applicant's total funding requirements) in any of the activities listed below, and the extent of the interest. For these purposes, the applicant includes associates of the applicant (i.e. directors and their associates and other group companies).

- i) Advertising agencies;
- ii) Newspapers;

- iii) Other broadcasting interests;
- iv) Bodies whose objects are wholly or mainly of a religious nature;
- v) Bodies whose objects are wholly or mainly of a political nature;
- vi) Local authorities;
- vii) Other publicly-funded bodies.

*\* Applicants should note that this information is required for the purposes of checking compliance with the ownership rules, and is not relevant to an applicant's ability to establish and maintain its proposed service. If none of the categories above apply to the application this should be clearly stated.*

## **10. Financial and business plan**

### **(a) Overall Financial Strategy**

Explain how the applicant considers it is able to establish and maintain, throughout the licence period, its proposed service. This explanation should include an assessment of each of the following, but is not restricted to these factors:

- i) The network construction phase
- ii) The operational start-up phase
- iii) Marketing
- iv) Ongoing operation of the service

### **(b) Funding**

Detail the sources of finance that will be used to fund the licence, under the following headings:

- i) Share capital
- ii) Loan stock
- iii) Leasing/HP facilities (capital value)
- iv) Bank overdraft
- v) Grants and donations
- vi) Other (please specify)

Applicants should provide evidence that sufficient funds are available to each investing shareholder to cover their proposed investments.

For incorporated investing shareholders, applicants should provide a copy of the most recent statutory accounts.

Where relevant, provide information on:

- i) Loan terms (e.g. interest rate, repayment terms, redemption/conversion terms);
- ii) Assets leased.

All of the funding identified above should be confirmed to the applicant. If any funding has not been confirmed, or if there are any pre-conditions that have not yet been met that need to be met before the funding is released to the applicant, provide an explanation of what needs to be done, the dates by which it needs to be carried out, and any steps the applicant needs to take to ensure the funding is confirmed and/or released.

### **(c) Financial Projections**

The purpose of this question is to allow the applicant to demonstrate its understanding of the market. The forecasts should be based on reasonable assumptions that are logically applied and justifiable.

A letter should be provided from a firm of authorised UK accountants, addressed to the board of directors of the applicant, confirming that, in their opinion:

- a) The projections contained in the financial model have been properly and accurately compiled on the basis of the assumptions listed and explanatory notes accompanying the projections
- b) That the policies adopted follow generally accepted UK accounting standards
- c) Such accounting policies have been properly and consistently applied.

The applicant should provide financial projections for the pre-operational period and on an annual basis for the subsequent 12-year licence period. The projections must include:

- i) Profit and loss accounts
- ii) Balance sheets
- iii) Cash-flow forecasts
- iv) Appropriate supporting schedules

The forecasts should be supplied on an Excel spread-sheet or similar and guidance notes should be provided. The applicant must also complete and submit the spread-sheet at: [http://licensing.ofcom.org.uk/binaries/radio/digital/financial\\_template\\_national.xls](http://licensing.ofcom.org.uk/binaries/radio/digital/financial_template_national.xls) using information from its business model. Guidance notes for completion of the Template can be found in Annex 2 to this Notice.

This section must include a full listing of the underlying assumptions on which the financial projections are based.

The application should detail how revenue figures were derived, distinguishing between:

- i) Access fees
- ii) Fees based on audience or revenue shares
- iii) Other fees (please specify)

Revenue forecasts should also distinguish between digital sound programme, digital additional and television licensable content services.

The application should clearly set out the fee structure for each service provider, and explain the reasons for any differences in fees paid between providers. Where the applicant expects to receive fees based on audience or revenue shares of the services carried on the multiplex, forecasts of the audiences and revenues of those services should be provided.

*The response to this question may be submitted in confidence.*

#### **(d) Risks**

The financial information submitted by applicants should demonstrate that the business plan has sufficient resilience for the service to be maintained despite adverse movements in revenues and costs arising from more difficult trading conditions than expected.

The business plan must therefore:

- i) Incorporate a set of sensitivity tests, and;
- ii) Provide details of the main operational and financial risks to the business plan and explain how the applicant proposes to address these risks.

### **Section 47(2)(d): Appeal to a variety of tastes and interests**

#### **11. Proposed digital sound programme services**

- a) Provide, for each digital sound programme service for which capacity is to be allocated, a description of the service. This description should encapsulate the nature and characteristics of the proposed service (e.g. type(s) of music and speech to be provided, target audience, etc.). The number of hours each day that the service will be broadcast must also be included. These service descriptions will form part of the licence. Therefore, questions of clarification may be asked prior to licence award and the wording amended to reflect this, if necessary.
- b) Outline the expected target audience of each digital sound programme service to be accommodated on the multiplex, in terms of demographic profile (i.e. age-range, gender, socio-economic background), ethnic composition, and/or any other relevant characteristics. To what extent will these services, taken as a whole, appeal to a variety of tastes and interests? To what extent will these services appeal to tastes and interests distinct from those catered for by the digital sound programme services provided on the existing national radio multiplex service?
- c) If agreement has been reached (either firmly or provisionally; state which) with particular providers of some or all of the digital sound programme services to be accommodated on the multiplex, identify these programme providers. For each one, state whether it has already been issued by Ofcom with a licence to provide a national digital sound programme service.

*Details of any arrangements with particular providers which the applicant considers to be commercially sensitive may be submitted in confidence.*

- d) Give details of any programme-related 'data' or other services to be provided to enhance the audio elements of the digital sound programme services proposed

to be provided. List separately those provided by the relevant digital sound programme licensees themselves (as 'ancillary' services) and those, if any, provided by other parties under a digital additional service licence.

- e) If it is intended to use an encryption system, state that this is so, and make clear to which digital sound programme services it will apply, and how listeners will subscribe to the service.

## 12. Audience requirements

Summarise the main findings of any original market research undertaken, or any analysis of existing audience research information, or any other form of evidence which demonstrates demand for the types of programme service and/or programme-related data or other data services proposed, or has otherwise influenced the applicant's proposals.

If original market research has been undertaken, please provide the following information for each piece of research:

- a) A statement of the key objectives of the research;
- b) The specific questions that the research sought to answer;
- c) How the research was conducted;
- d) The size and composition of the sample(s);
- e) When and where the research was conducted;
- f) A summary of the main findings from the research, showing how these demonstrate evidence of demand for the service proposed – this summary should represent a fair and accurate summary of the full results;
- g) A copy of any detailed audience research report or analysis, from which the summary provided in the main application document has been derived, full data tables for any quantitative research undertaken, and any questionnaire used (*these may be submitted in confidence*).

Please provide your responses to (a) – (e) in tabular format.

## Section 47(2)(e): Promotion of acquisition of digital receivers

### 13. Promotion of digital take-up

Outline the broad strategy proposed "for promoting or assisting the acquisition, by persons in the proposed coverage area of the service, of equipment capable of receiving the service". This should include any promotional activities planned by the national radio multiplex licensee and/or individual digital sound programme service or digital additional service providers, and/or any initiatives involving other parties. Outline fully the objectives and assumptions underlying any promotional or marketing strategy planned. (A copy of any supporting research should be supplied with the application.)

*Details of any specific initiatives which the applicant regards as commercially sensitive may be supplied in confidence.*

#### **14. Digital additional services and television licensable content services**

Provide details of any digital additional services and/or television licensable content services planned, other than programme-related data services (see Q.11(d) above), and the proportion of the total multiplex capacity which will be allocated to each of these.

### **Section 47(2)(f): Fair and effective competition**

#### **15. Measures taken to ensure fair and effective competition**

Detail the measures that have already been taken, and will be taken before and during the licence period, to demonstrate that "in contracting or offering to contract with persons providing digital sound programme services or digital additional services or television licensable content services, the applicant has acted in a manner calculated to ensure fair and effective competition in the provision of those services".

#### **16. Contacts with prospective service providers**

Provide a comprehensive list of all prospective providers of digital sound programme services and/or digital additional services and/or television licensable content services with whom the applicant has had contact prior to and during the preparation of this application, at the initiative of either party, and in whatever form. Summarise the nature of the proposals discussed and, for each proposal which is not among those planned for inclusion on the multiplex (as per Q.11 and Q.14 above), state the reason(s) why the prospective provider and/or the service(s) proposed by that provider has not been included.

*The response to this question may be submitted in confidence.*

#### **17. Contractual and other arrangements with service providers**

For each digital sound programme service provider and/or digital additional service provider and/or television licensable content service provider named in this application:

- a) Supply details of the terms of access, including financial agreements.
- b) To what extent are any or all of these terms of access conditional? Clarify any conditions that exist.
- c) In respect of each named service provider for which details of terms of access are provided, supply a letter from the service provider confirming its agreement with the account of the terms of access provided above, and in particular with the fees it expects to pay.

*The response to this question may be submitted in confidence.*

### **Technical quality**

#### **18. Division of multiplex capacity**

Show, by means of a pair of clearly-labelled tables, the proposed division of the available multiplex capacity into digital sound programme services and other services during all time periods. The tables should depict the proportion of the total available capacity (in kbits/sec) which it is proposed to allocate individually to each of the digital sound programme services listed in response to Q.11, plus any capacity reserved for expansion, and to each simulcast

radio service (if relevant) inclusive of any ancillary services. It should also show the total proportion of the available multiplex capacity which it is proposed to allocate to digital additional services and television licensable content services. Please also indicate what proportion of these services will be programme-related (see paragraph 3.36). One of the tables should refer to the capacity units taken by each service (i.e. inclusive of capacity used for error protection), and the other table should refer to the bitrate net of error protection capacity, together with the associated protection level (1 to 5) which it is proposed to use, in accordance with EN 300 401.

### **19. Basis of allocation of multiplex capacity**

On what basis have technical decisions on the allocation of multiplex capacity to each of the proposed digital sound programme services been made? How has the balance been determined between the number of services to be accommodated and the audio quality and robustness of reception which each will enjoy?

### **20. Audio characteristics**

For each digital sound programme service and simulcast radio service proposed to be provided, state whether it will be broadcast in 'stereo' or 'mono', and whether it will operate at 'full-rate coding' or 'half-rate coding'. The response to this question should be consistent with the proposed division of multiplex capacity set out in response to Q.18.

## Declaration

Applicants are required to conclude their submission by making the following declaration:

I hereby apply for and on behalf of [*INSERT Applicant Name*] (the “Company”) to the Office of Communications (“Ofcom”) for the National Radio Multiplex Licence (as specified in Ofcom’s Notice dated 1 July 2014) in order to provide the national radio multiplex service proposed in this application.

I confirm that the appropriate payment has been submitted for this application. I further confirm that the Company consents to Ofcom publishing this application on its website or otherwise disclosing this application to any person, together with the Company’s responses to any request by Ofcom for the Company to furnish additional information about its proposal. This consent does not extend to any part of this application or such responses that the Company has requested that Ofcom should keep confidential by including such information in a separate annex (or other agreed form) that is clearly marked ‘confidential’.

I declare that the information given by the Company in this application form is accurate and up-to-date to the best of my and the Company’s knowledge and that any matters which might influence Ofcom’s judgement as to whether the directors and substantial shareholders involved in the application are fit and proper persons to participate in a radio licence have been made known to Ofcom.

I further declare and warrant that the Company is not a disqualified person within the meaning of that expression as defined in Part II of Schedule 2 to the Broadcasting Act 1990 or as a result of a disqualification order under section 145 of the Broadcasting Act 1996, and that having made all reasonable enquiries neither the Company nor any person by which the Company is controlled will, as a result of this application, be in breach of any other requirement of Schedule 2 to the 1990 Act as amended.

Applicant Signature:

Name (BLOCK CAPITALS):

Position:

Date:

## Section 7

# Procedures for decision-making and next steps

- 7.1 The members of Ofcom's Broadcast Licensing Committee receive every application submitted for the licence, and consider each application under the statutory criteria set out in Section 2 of this Notice. The terms of reference of the Broadcast Licensing Committee are available at: <http://www.ofcom.org.uk/about/how-ofcom-is-run/committees/broadcast-licensing-committee/>.
- 7.2 An summary of key elements of each applicant's proposals, drawn both from the original application and any subsequent amendments or clarifications, will be prepared by the Ofcom executive and presented to the members of the Broadcast Licensing Committee for consideration. A full summary of the views received as part of the public consultation and, where appropriate, relevant background information such as listening data for existing stations, are also provided.
- 7.3 This brief will be used as a guide by the Committee rather than for the specific purpose of determining the successful applicant. In deciding on the licence award, the Committee must have regard to Ofcom's general duties as far as they are relevant to the licensing process.
- 7.4 The members of the Committee will receive a copy of each valid application submitted in response to this Notice. Executives will assist the Committee's assessment of applications by highlighting the different strengths and weaknesses of each application when preparing briefing material for the Committee.
- 7.5 The Committee will consider each application by having regard in particular to the extent to which the proposals appear in the Committee's opinion to meet the assessment criteria as discussed in more detail in Section 2 above.
- 7.6 It should be noted that the Committee will be looking at applications in the round and will consider how the sum of the parts of an application meets the aims and objectives for the establishment and on-going development of terrestrial digital sound broadcasting in the UK.
- 7.7 After it has considered all valid applications, the Broadcast Licensing Committee will finally decide –
- a) To award the national radio multiplex licence to the successful applicant, or
  - b) not to make an award.
- 7.8 Ofcom's intention is to decide and announce the successful applicant for the licence within four months of the closing-date for applications, depending on circumstances such as the degree of competition for the licence.
- 7.9 Where the Committee makes a decision to award the national radio multiplex licence, we shall, in accordance with section 47(5) of the 1996 Act, as soon as is reasonably practicable after making our determination, publish the name of the successful applicant to whom the licence has been awarded, as well as a statement setting out

the key determining factors under each of the statutory criteria which led to the decision will be published after the licence award.

### **After licence award**

- 7.10 After the announcement of the award, we would expect there to be an adjustment period while licence details are finalised and the successful applicant produces any necessary guarantees that formed part of the business plan that were contingent on winning the award.
- 7.11 Licence award is not the formal beginning of a licence; it is Ofcom's decision about which of the applicants should hold the licence. We will notify the successful applicant in writing that they have been awarded the licence.

### **Granting and commencement of the national radio multiplex licence**

- 7.12 We will aim to grant the national radio multiplex licence as soon as possible after the final technical plan is received and approved by Ofcom and incorporated into the licence. The commencement date in the licence will be the date when the national radio multiplex service will commence broadcasting.
- 7.13 If it transpires that an applicant is unable to complete all of the commitments and guarantees made during the application stage, it can either refuse the award or Ofcom can withdraw the award. If, however, during this period all relevant matters can be agreed, then the national radio multiplex licence will be issued.
- 7.14 In the event we decide not to award the licence we shall publish our decision (and the reasons for it) as soon as reasonably practicable. We anticipate this would normally occur soon after the Committee has made its decision. The actual time we require to do so will depend on the specific circumstances at that time.

### **Timetable for licence award**

- 7.15 The timetable for awarding this national multiplex licence will be as follows:
- 7.15.1 This Notice of Advertisement, published on 1 July 2014, constitutes the advertisement of the national radio multiplex licence;
- 7.15.2 The period for applications will be open until 29 January 2015, to allow interested parties to assemble their business cases and apply – note that, as discussed further in paragraph 3.66, Arqiva will publish a Reference Offer for Transmission Services during the week commencing 1 September 2014;
- 7.15.3 After the period for applications closes, a list of all applicants and all non-confidential aspects of each application will be published on the Ofcom website;
- 7.15.4 Ofcom will consider the licence applications received and will seek to make a licence award as soon as possible. We expect this to be possible from April 2015.

- 7.16 Although we will seek to adhere to this timetable as closely as possible, it may be necessary to deviate from it in the event that further time is needed to deal with particular matters arising from the assessment process.

## Annex 1

# Existing national digital sound programme services

A1.1 The national digital sound programme services<sup>13</sup> currently available by way of the existing national radio multiplex service are as follows:

### **Planet Rock**

A specialist rock music service for rock aficionados. Classic Rock with some Modern Rock (plus some complementary tracks selected from genres appreciated by Rock fans) with stimulating speech, especially at breakfast. Identifiable specialist music programmes feature for at least 30 hours each week.

### **Premier Christian Radio**

A speech-led inter-denominational Christian radio station. The major emphasis is on news, current concerns and lifestyle issues and there are programmes that explain and comment on Christian belief. Traditional, modern and classic Christian music are mixed together to create a distinctive sound with music being up to 50% of broadcast content. The station is a multi-platform proposition e.g. internet content and a telephone helpline complement the broadcast output to help develop a community of listeners and supporters.

### **Kiss**

A contemporary and classic dance music station.

### **BFBS Radio**

A music-led station playing a mix of mainly CHR and Adult Contemporary music and targeting the predominantly younger personnel and families of those currently serving in the British Armed Forces together with those having links to Service life in general, past and present. The service will include news and information tailored for the target audience.

### **UCB UK**

A station with a Christian ethos playing a range of melodic and soft Adult Contemporary music. Speech will include lifestyle features, information and religious content. Minimum music content: 75%.

<sup>13</sup> The DAB versions of the three Independent National Radio (INR) services – Classic FM, Absolute Radio and TalkSport – are defined as ‘simulcast radio services’, and are not classified as national digital sound programme services.

### **Absolute 80s**

An 80s-centric music service known as Absolute 80s.

### **Absolute Radio 90s/Absolute Radio Extra**

The main element will be Absolute Radio 90s, a 90s-centric music service to complement and enhance the output of the Absolute Radio family of stations. During some time periods the channel will broadcast coverage of live events (e.g. Sports or live music), entertainment or comedy programming.

### **Team Rock**

A rock music-based radio station broadcasting a large and diverse range of specialist rock artists and genres. No more than 50% of the music during daytime will come from songs that have entered the UK Top 50 singles chart or can be reasonably termed as Classic Rock. The station will showcase the full range and breadth of the rock genre across the week including a wide number of specialist programmes.

### **Capital Xtra**

A music-led service featuring urban and dance music.

### **LBC**

A speech service of news, views, discussions, phone-ins and entertainment, catering for audiences across the UK.

### **TBA**

A service featuring music from the 70s, 80s and early 90s with particular appeal to audiences aged 35-54.

## Annex 2

# Financial template – Notes of Guidance

- A2.1 Ofcom requires each applicant to complete the financial template (the “Template”) which can be found at [http://licensing.ofcom.org.uk/binaries/radio/digital/financial\\_template\\_national.xls](http://licensing.ofcom.org.uk/binaries/radio/digital/financial_template_national.xls).
- A2.2 Each line item on the Template should be supported by accompanying narrative and/or further financial data in order to explain the basis of calculation and estimation. It should be linked to any underlying business model that applicant is using.
- A2.3 All narrative should contain uniquely numbered paragraphs for ease of future reference and pages should be numbered. All financial or other tables within the supporting narrative should also be uniquely numbered.
- A2.4 Wherever possible, internal links, functions and formulae within the spread-sheets supplied should be retained.
- A2.5 Applicants are invited to supplement their forecasts with any further relevant information which supports the projections made. This should be submitted at the same time as the application. Applicants should provide sufficient detail to allow a full appreciation of their financial projections.
- A2.6 Ofcom may require applicants to provide further data, narrative or explanation of the basis for their forecasts subsequent to the applicant making the application and prior to Ofcom’s award of the licence.
- A2.7 The applicant is responsible for ensuring that all appropriate totals and subtotals are correctly calculated, that each line item is correctly signed and that any tables or further analysis in the application are consistent with the inputs and outputs of the Template. Within the P&L, balance sheet and direct cash-flow all figures (e.g. revenues, costs, assets and liabilities) should be shown as positive values.
- A2.8 The applicant should explain whether the forecasts are in real or nominal terms, and what assumptions have been made about inflation.
- A2.9 For each line item in the P&L applicants should explain the cash flow assumptions used so that, given these assumptions, the direct cash flow could be replicated from the P&L.
- A2.10 The applicant should distinguish between the pre-op period and the 12-year operational phase of the licence.

### Financial Template – line items (rows)

- A2.11 All line items should come with sufficient detail to allow a full appreciation of the financial projections. Where specific information and schedules are required, these are highlighted below.

## Profit and Loss account

- A2.12 Revenue from digital sound programme services, digital additional services, television licensable content services and other revenue: Forecasts should be supported by detailed schedules. The levels and structure of tariff arrangements (e.g. fixed annual fee, payments related to revenue or other factors, etc.) should be fully set out in the explanatory notes in a way that allows Ofcom to evaluate the basis of the applicant's revenue assumptions. For each digital sound programme service, digital additional service and television licensable content service proposed, details of expected revenue streams should be provided, supported by relevant assumptions.
- A2.13 Contra revenue and costs: forecasts should be supported by schedules and explanatory notes.
- A2.14 Staff costs: provide a schedule showing a breakdown of numbers of staff, gross salaries, national insurance, pensions, and other direct staff costs. This schedule should reconcile to the P&L.
- A2.15 Transmission costs: include the assumptions used in forecasting transmission costs, and details of any transmission contracts in place. Projections should be consistent with the proposals for coverage roll out detailed elsewhere in the application.
- A2.16 Depreciation: schedules should be provided, explaining the policies used. These should reconcile to the fixed asset schedules.
- A2.17 Marketing costs – provide a schedule of on-going marketing spend broken down into the type of marketing and associated costs, e.g. TV, press, etc. Provide a commentary explaining the marketing strategy.
- A2.18 Receiver promotional costs (as per Q.13 of the main application document): if the applicant plans initiatives to promote the acquisition of receivers that will incur expenditure distinct from that incurred in relation to on-going marketing costs, then this should be split out. Details of the planned expenditure should be included and appropriate schedules provided.
- A2.19 Licence fees: Broadcasting Act and Wireless Telegraphy Act licence fees should be assumed to remain at existing levels for the duration of the licence. See paragraphs 3.25 and 3.26 of this notice of advertisement.
- A2.20 Other costs – attention should be drawn to any material items

## Balance sheet

- A2.21 Fixed assets – provide a schedule of fixed assets which should give relevant details, such as:
- Assets acquired
  - Estimates of cost
  - Basis of estimates of cost
  - Expected depreciation profile

The applicant should also include details of any major finance leases.

A2.22 Current assets – forecasts should include assumptions made on debtor days. Cash should reconcile to the cash flow forecasts.

A2.23 Current liabilities – forecasts should include assumptions made on creditor days.

Direct cash flow

A2.24 The direct cash flow should be reconcilable to the P&L using the cash assumptions provided. As per paragraph 9 of this annex, applicants should explain the cash flow assumption for each line item in the P&L.

A2.25 Capital expenditure: a schedule of future capital expenditure should be provided, which should relate to the fixed asset schedules and depreciation policies.

## Annex 3

# Constraints on Use of the Frequency

A3.1 Section 4 of this Notice of Advertisement, paragraphs 4.2 to 4.5, describes the constraints applying to use of the frequency due to international agreements. This annex consists of three appendices which give technical details of the various rights of implementation and protection which are relevant.

A3.2 The international agreement and associated plan to which these details relate was concluded in June 2006 in Geneva under the auspices of the International Telecommunications Union (ITU). It may be referred to as 'GE06' for convenience. The document 'Final Acts of the Regional Radiocommunications Conference for planning of the digital terrestrial broadcasting service in Parts of Regions 1 and 3, in the frequency bands 174 -230 MHz and 470-862 MHz (RRC06)' can be obtained from the ITU, details are at <http://www.itu.int/pub/R-ACT-RRC.14-2006/en>.

A3.3 The key principles of the agreement and plan which affect this licence, are outlined below.

**Modifying the Plan:** The agreement includes criteria and procedures for modifying the Plan. These criteria and procedures are designed to control the extent to which such modifications either allow for interference to services registered within the plan, or pre-empt equitable use of spectrum by different countries. Ofcom would seek to apply these procedures so as to control interference to this licence.

**Using the Plan:** Frequency use for digital radio is generally based on 'allotments'. This is a geographical area defined by a set of location points ('test points'). Rights of implementation, i.e. to bring individual transmitters into use, are defined within the GE06 agreement. These rights are defined by two sorts of condition, both of which must be satisfied:

- generic rights defined in the agreement, which are a function of the characteristics of the allotment;
- (in most cases) specific rights defined in bilateral agreements between countries.

A3.4 The latter conditions have been formulated as part of the process of agreeing the Plan, and typically involve some compromise between the ability to implement one allotment, and the need to protect another, in agreeing co- channel re-use of the same frequency. By contrast, the former conditions do not intrinsically protect allotments from interference, but those implementation restrictions, coupled with how the plan has been drawn up, have the effect of affording reasonable protection, typically without the need for the sorts of compromise found in the bilateral agreements.

A3.5 The technical criteria of this licence are laid out in the following appendices, each giving further details to the aspects mentioned in Section 4 of this licence advertisement. They deal with the characteristics of the internationally co -ordinated allotments upon which the licence for the second national radio multiplex is based.

- Appendix one gives the details of the internationally registered allotments upon which the licence is based.

- Appendix two gives details of T-DAB services in The Netherlands, Belgium, France and the Republic of Ireland which require protection, and the criteria by which Ofcom will calculate compliance with them. In addition, it seeks to quantify the levels of incoming interference which the frequency allocated to the licence is susceptible to.
- Appendix three is a list of all of the internationally co-ordinated allotments for local T-DAB services in the UK. It identifies those services which are already in operation, and gives an indication of, where known, when others could be advertised.

## Appendix 1

### Details of the UK T-DAB allotments upon which this service is based.

The second commercial national T-DAB multiplex is based upon the following allotments internationally agreed under the Ge06 Plan:

G_60004	England II
G_60032	Isle of Man II
G_60022	Northern Ireland II
G_60012	Scotland II
G_60005	Wales II

All five allotments are assigned frequency block 11A, it is therefore intended that they should operate together as a single frequency network. The test points of each allotment are given in the following pages of this appendix. When providing a Technical Plan for the licence the allotment to which each transmitter relates must be correct in the electronic file(s) supplied.

Applicants should note that under the Final Acts of Ge06 no transmitter is allowed to be more than 20 km outside of the allotment to which it relates otherwise an error will be flagged by the ITU conformity and validation software. However, if necessary, such transmitters might be coordinated as linked assignments, although Ofcom cannot guarantee a successful outcome to any such coordination requests.

Due to lack of spectrum there is currently no allotment allocated on the Channel Islands for this service.

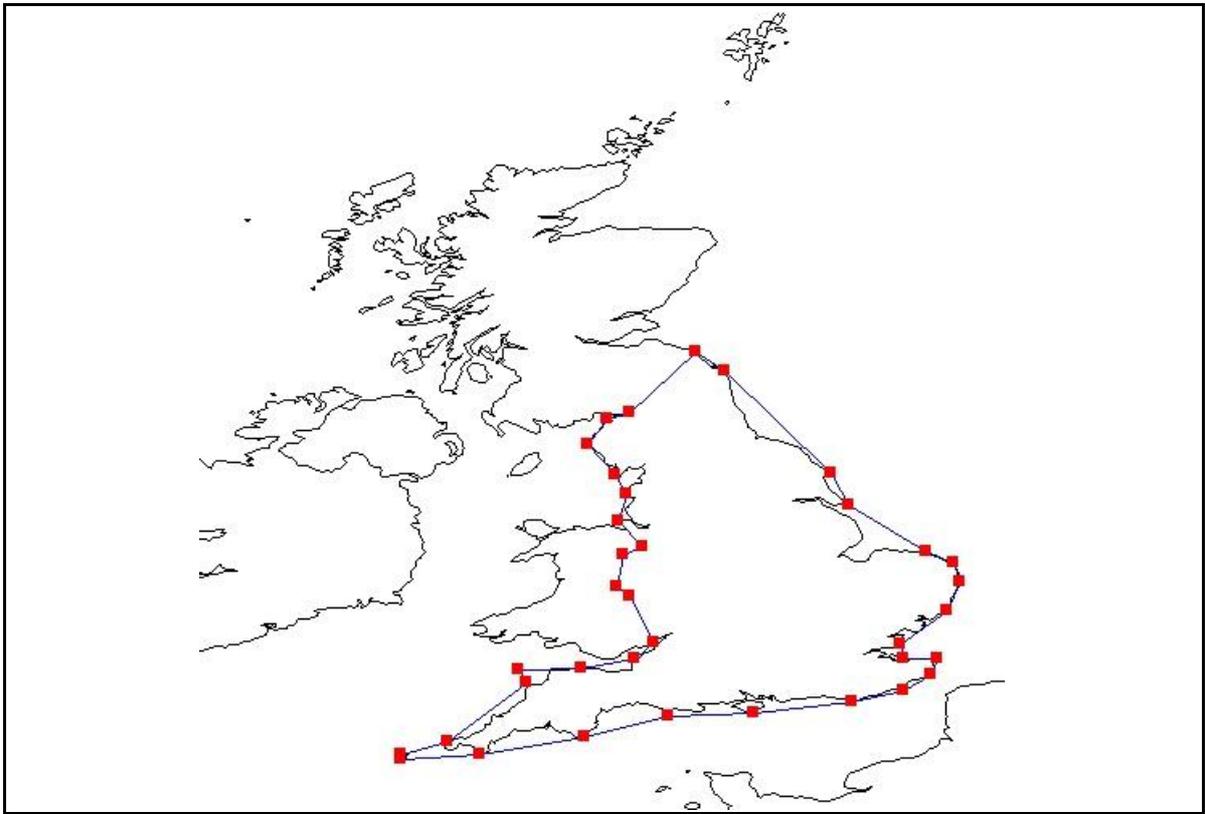
As mentioned elsewhere in this advertisement, following the previous award of this licence 174 transmitters were internationally coordinated and registered in the Ge06 Plan. While they could be implemented by the successful applicant without further coordination, they may make a significant contribution to the outgoing interference. Consequently in order to assess each technical plan Ofcom will need to understand what the applicant proposes for these sites. For each plan, applicants must supply a table indicating the sites it would suppress modify or implement as coordinated. For each modification, brief details of the proposed changes should be given. Applicants are also advised that the following 10 sites have been coordinated with parameters which exceed normal implementation levels; Angus, Bebside North, Bilsdale, Burnhope, Craiggelly, Durris, Olivers Mount, The Wrekin, Wenault and Whitby. These sites are all given t\_assgn\_code=L in the ITU format transmitter file accompanying this advertisement.

6	ENGLAND II
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8	1
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9a	1
9b	36

9c1	555200	553500	540600	533800	525600	524700	523000	520500
9c2	-0020400	-0013800	-0000600	0000900	0011700	0014100	0014600	0013500
9c1	513500	512200	512300	510800	505500	504400	503500	503200
9c2	0005500	0005700	0012700	0012200	0005700	0001300	-0011300	-0022800
9c1	501300	495800	495400	495800	500900	510100	511200	511400
9c2	-0034100	-0051200	-0062100	-0062100	-0054100	-0043100	-0043900	-0034400
9c1	512300	513600	521800	522600	525400	530100	532400	534800
9c2	-0025800	-0024100	-0030100	-0031300	-0030700	-0025000	-0031100	-0030400
9c1	540400	543100	545400	545900				
9c2	-0031400	-0033800	-0032200	-0030200				



6	ISLE OF MAN III
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8	1
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9a	1
9b	12

9c1	542500	541900	541700	541200	540800	540400	540200	540400
9c2	-0042100	-0042200	-0041900	-0042300	-0042900	-0043600	-0044900	-0044800
9c1	541200	542100	542300	542400				
9c2	-0044300	-0043300	-0042900	-0042500				



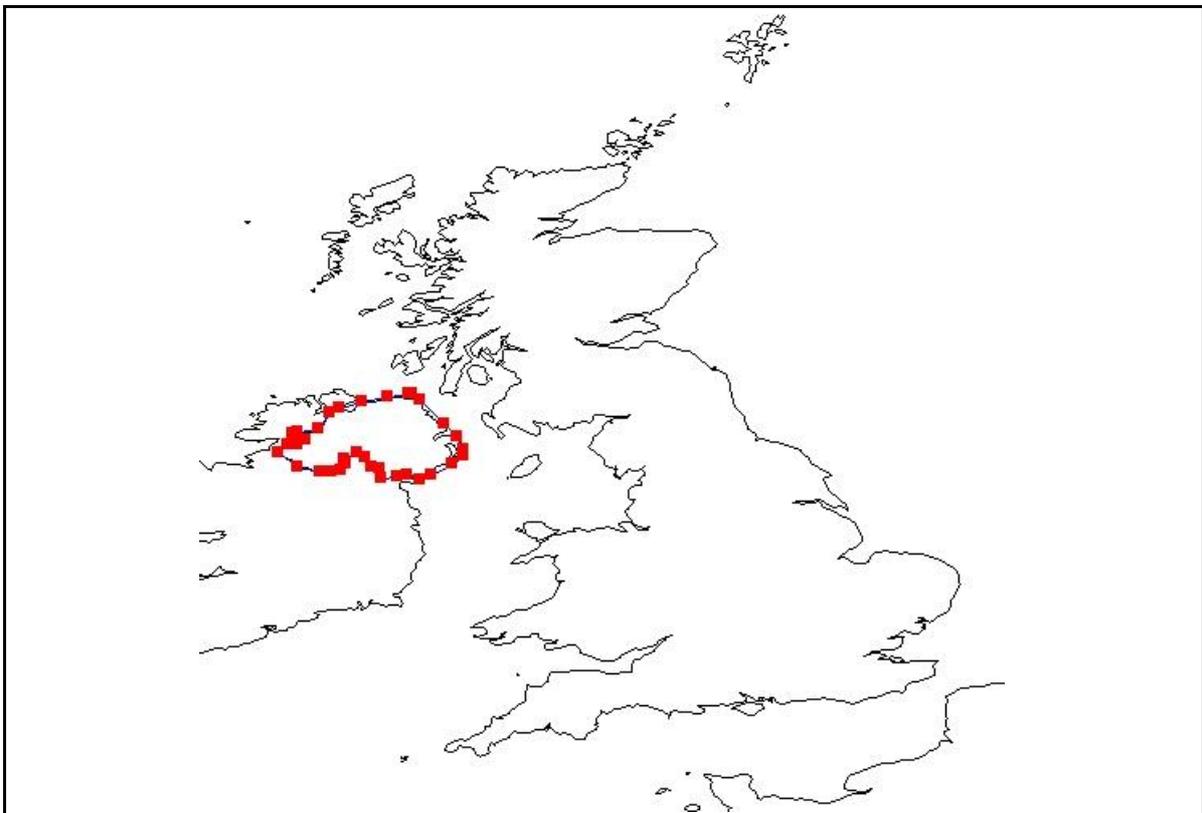
6	NORTHERN IRELAND II
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8	1
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9a	1
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9b	35
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9c1	551800	551800	551200	545000	543900	542800	542200	541500
9c2	-0061400	-0061100	-0060400	-0054300	-0053200	-0052600	-0052700	-0053600
9c1	540600	540200	540600	540400	540300	541100	541200	542100
9c2	-0055400	-0060400	-0061600	-0062400	-0063800	-0064000	-0064700	-0065300
9c1	542500	542000	541500	541000	540800	540800	541300	542600
9c2	-0070000	-0071100	-0070900	-0071400	-0072200	-0073100	-0075200	-0080800
9c1	543300	543300	543700	544000	544200	544400	544600	550100
9c2	-0080000	-0075100	-0074500	-0075400	-0075500	-0075100	-0073300	-0072300
9c1	550400	551100	551400					
9c2	-0071500	-0065500	-0063200					

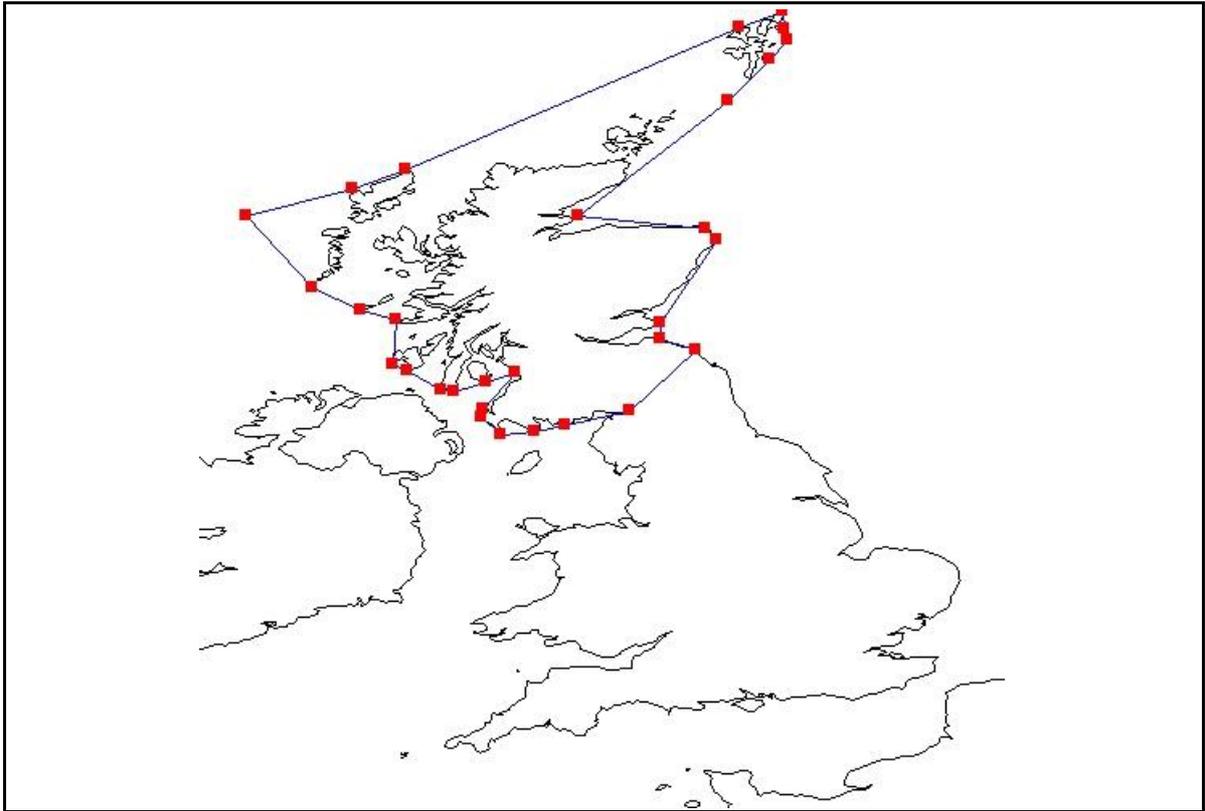


6	SCOTLAND II
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8	1
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9a	1
9b	30

9c1	605000	603500	602500	600800	593200	575000	574000	573000
9c2	-0004800	-0004600	-0004400	-0010000	-0013600	-0034700	-0015500	-0014600
9c1	561700	560200	555200	545900	544600	544100	543800	545300
9c2	-0023500	-0023500	-0020400	-0030200	-0035800	-0042400	-0045400	-0051100
9c1	550000	553300	552500	551600	551700	553400	554000	561900
9c2	-0051000	-0044100	-0050700	-0053500	-0054600	-0061600	-0062900	-0062500
9c1	562700	564700	575000	581400	583100	603700		
9c2	-0065600	-0073900	-0083700	-0070300	-0061700	-0012600		

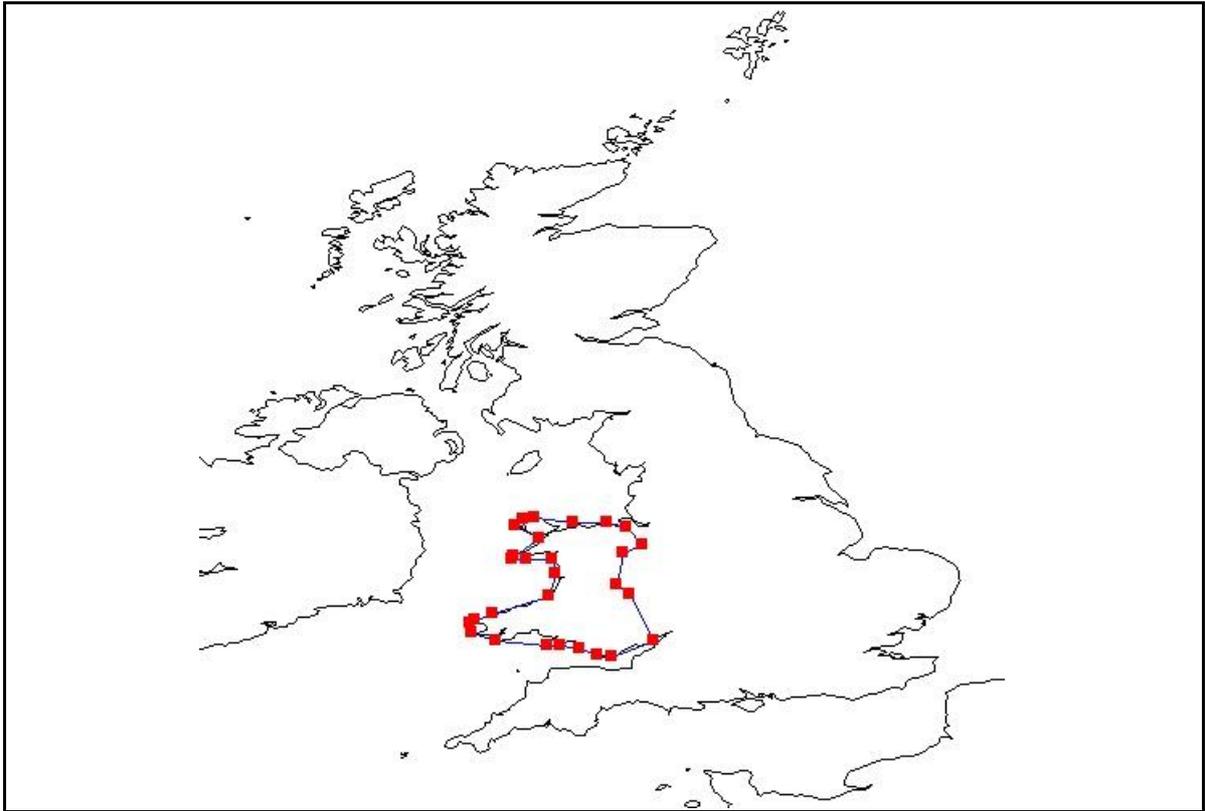


6	WALES II
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8	1
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9a	1
9b	28

9c1	532500	532000	532100	531600	530100	525400	522600	521800
9c2	-0042500	-0035100	-0032100	-0030500	-0025000	-0030700	-0031300	-0030100
9c1	513600	512300	512400	513000	513300	513200	513600	514400
9c2	-0024100	-0031700	-0033000	-0034500	-0040200	-0041400	-0045900	-0051900
9c1	515200	515500	520100	521600	523500	524800	524800	524800
9c2	-0052100	-0051600	-0050100	-0041200	-0040600	-0040900	-0043200	-0044500
9c1	525100	530700	531800	532300				
9c2	-0044300	-0042100	-0044200	-0043400				



## Appendix 2

### Co-ordination criteria with other T-DAB services

This national T-DAB service will operate co-block with five other significant allotments registered under Ge06 in neighbouring administrations. The details of these allocations are given below along with the Administrative Declarations which specify the criteria for their implementation.

Applicants should note that in some cases these declarations define an asymmetric relationship under which incoming interference will be higher than that allowed to be radiated by the UK service.

In most cases the Administrative Declarations mention the ITU conformity process which allocates the right to export specific levels of outgoing interference, a so called interference envelope. This allowance can be quantified through the generation of a set of test points.

These test points are defined as follows. Where interference exceeds 12 dB $\mu$ V/m the field strength levels for an allotment can be generated for geometrical contours at distances of 60, 100, 200, 300, 500, 750 and 1,000 km from the boundary of the parent allotment. At the centre of each allotment a point of reference is defined from which 360 radials are developed at 1° steps starting from true north. The point where the radial crosses the cut-off field-strength contour and any geometrical contours lying outside the national boundary of the notifying administration will be the location of the calculation points.

For those neighbouring administration allotments that are allowed to convert in accordance with Ge06 Plan Ofcom has used the ITU conformity checking software in order to generate a set of test points and envelope field strengths. These are included in a spread sheet accompanying the advertisement of this licence. Applicants should be aware that the interference from all of the allotments will need to be summed in order to calculate the total incoming interference level.

All of the above calculations should be carried out in accordance with the Final Acts of Ge06.

The five co-block allotments of concern are:

Allotment name:	<b>VLAANDERENDAB2</b>
Administration:	Belgium
Frequency block:	11A

Co-ordination criteria:

The present Administrative Declaration states: In case of protection of T-DAB in the Flemish Community, the maximum interfering field strength (1% time) at the border of the allotment is restricted to 37 dB $\mu$ V/m. United Kingdom accepts an implementation without restrictions of Reference Network 6 (RPC5) in case of T-DAB in the Flemish Community. In case of assignments, the cumulative FS of the assignments will not exceed these values.

Clarification: The Belgian Vlaanderen allotment may be implemented in accordance with the ITU conformity process and test points are supplied in the accompanying spreadsheet. The transmitters of the English allotment of the service being advertised are restricted to 37 dB $\mu$ V/m at the edge of the Flemish allotment.

A set of test points defining the interference from the Vlaanderen allotment is supplied with this advertisement.

Allotment name: **HAUTE-NORMANDIE**  
Administration: FRANCE  
Frequency block: 11A

Co-ordination criteria:

The present Administrative Declaration states: "The calculated field strength of either DAB allotment should not exceed 42 dB( $\mu$ V/m) at the boundary test points of the other allotment."

Clarification: the French Haute-Normandie allotment is allowed to deliver field strengths of 42 dB $\mu$ V/m along the south coast of England and the English allotment of the service being advertised may deliver a similar level of interference at the boundary of the Haute Normandie allotment.

Allotment name: **BASSE-NORMANDIE-REGIONAL**  
Administration: France  
Frequency block: 11A

Co-ordination criteria:

The present Administrative declaration states: "The France allotment may be implemented without special restriction; and the combined cumulative field strength of UK allotments G\_\_6004 and G\_\_6005 on this frequency must not exceed a field strength of 37 dB( $\mu$ V/m) at the boundary test point of the F allotment."

Clarification: The French Basse-Normandie-Regional allotment may be implemented in accordance with the ITU conformity process. Toward the French allotment the combined interference caused by both the transmitters of both the English and Welsh allotment of the service being advertised will be taken into account and treated as one allotment.

A set of test points defining the interference from the French Basse Normandie allotment are supplied with this advertisement.

Allotment name: **23NH**  
Administration: The Netherlands  
Frequency block: 11A

Co-ordination criteria:

The present Administrative declaration states: "The cumulative interfering field strength from allotment G\_\_60004 at the boundary of allotment 23NH is restricted to 38 dB $\mu$ V/m.

Allotment 23NH may be implemented without coordination with the United Kingdom under the normal procedures of GE06 (Article 4 Chapter 2 conformity check)”

Clarification: the Dutch allotment may be implemented in accordance with the ITU conformity process and the English allotment of the service being advertised may deliver 38 dB $\mu$ V/m at the boundary of the Dutch allotment

A set of test points defining the interference from the Dutch 23NH allotment are supplied with this advertisement.

Allotment name:	<b>IRL DAB REG CORK</b>
Administration:	Ireland
Frequency block:	11A

Coordination criteria: all allotments (UK and Irish) maybe converted in accordance with the ITU conformity process.

A set of test points defining the interference from the Irish Cork allotment are supplied with this advertisement.

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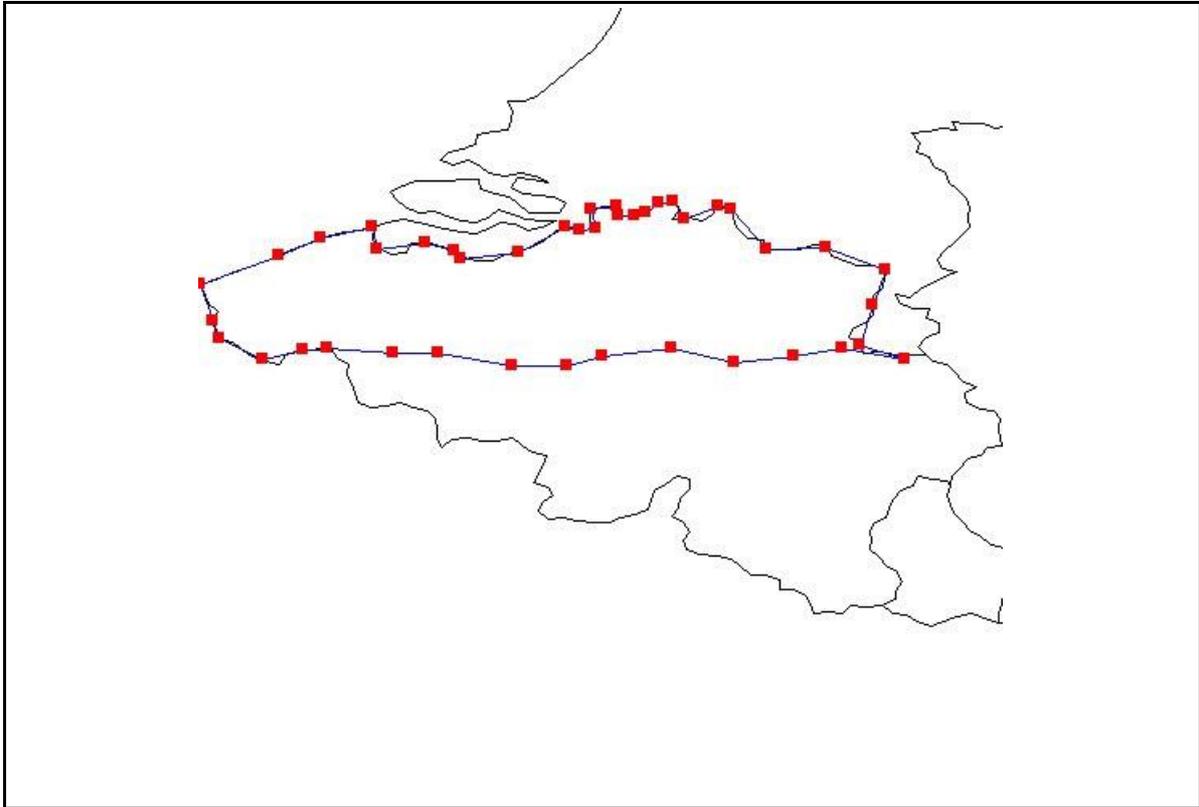
6	VLAANDERENDAB2
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8	1
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9a	1
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9b	42
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9c1	510528	511400	511853	512213	511602	511739	511524	511315
9c2	0023230	0025500	0030702	0032200	0032314	0033723	0034522	0034720
9c1	511500	512230	512130	512148	512718	512806	512524	512534
9c2	0040400	0041713	0042135	0042556	0042433	0043216	0043241	0043719
9c1	512632	512903	512942	512436	512828	512737	511600	511626
9c2	0044021	0044421	0044831	0045126	0050102	0050455	0051500	0053218
9c1	510950	505954	504800	504400	504700	504500	504300	504700
9c2	0054917	0054541	0054200	0055500	0053700	0052300	0050600	0044800
9c1	504500	504200	504200	504600	504600	504700	504632	504345
9c2	0042800	0041800	0040200	0034100	0032800	0030900	0030157	0025039
9c1	505008	505500						
9c2	0023759	0023600						



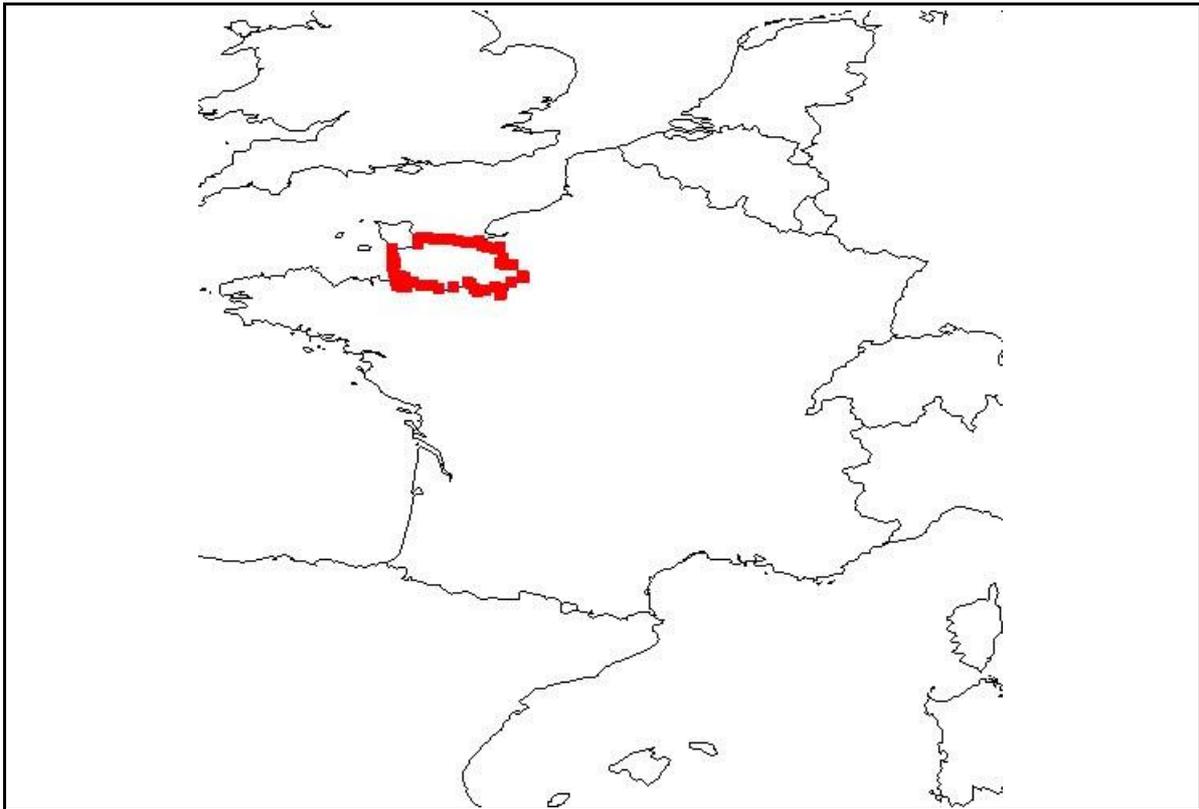
<b>6</b>	BASSE-NORMANDIE-REGIONAL
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<b>8</b>	1
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<b>9a</b>	1
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<b>9b</b>	57
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<b>9c1</b>	483730	483817	483805	483909	483954	484445	485050	485435
<b>9c2</b>	-0013130	-0012638	-0012147	-0012307	-0012726	-0013352	-0013526	-0013258
<b>9c1</b>	490018	490404	491031	491035	491637	492011	492036	492302
<b>9c2</b>	-0013327	-0013625	-0013533	-0013513	-0010737	-0010700	-0010636	-0010413
<b>9c1</b>	492351	492106	492037	492054	492005	491715	491741	491931
<b>9c2</b>	-0005615	-0005001	-0003815	-0003141	-0002329	-0001401	-0000709	0000034
<b>9c1</b>	491922	491438	491141	491109	491300	491228	485943	485445
<b>9c2</b>	0000040	0000339	0000859	0001758	0002315	0002321	0002609	0002328
<b>9c1</b>	485302	485230	484007	483941	483239	482021	481931	482557
<b>9c2</b>	0002848	0003655	0004833	0004856	0003609	0002429	0002341	0002343
<b>9c1</b>	482845	482440	482252	482607	483123	483242	482859	482651
<b>9c2</b>	0001756	0000732	-0000229	-0000430	-0000837	-0001253	-0002821	-0004433
<b>9c1</b>	482958	482945	482954	483250	482824	482737	482743	483004
<b>9c2</b>	-0005112	-0010334	-0010335	-0011313	-0011945	-0012531	-0012524	-0013030
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<b>9c2</b>	-0013131							



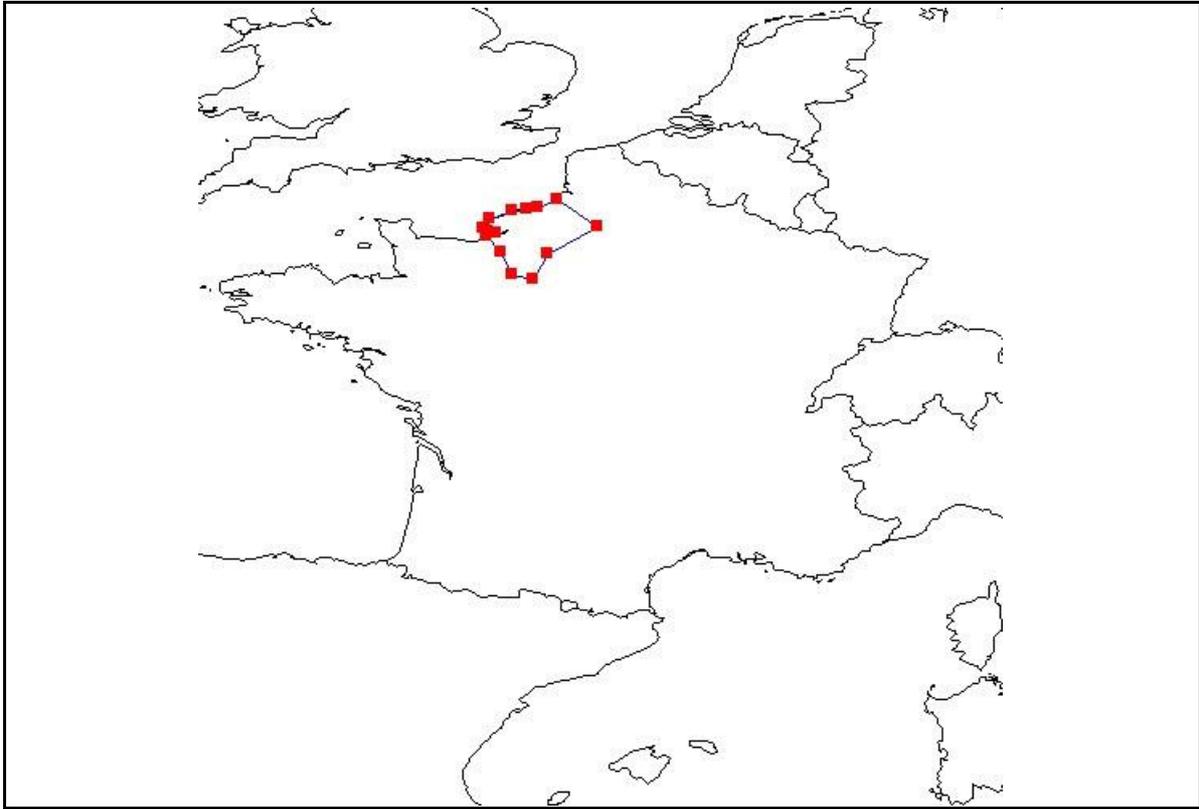
<b>6</b>	HAUTE-NORMANDIE
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<b>8</b>	1
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<b>9a</b>	1
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<b>9b</b>	14
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<b>9c1</b>	493124	494227	495134	495336	495534	500407	493408	490428
<b>9c2</b>	0000351	0001040	0003429	0005044	0010412	0012420	0020939	0011404
<b>9c1</b>	483532	484018	490447	492349	492655	492750		
<b>9c2</b>	0005829	0003458	0002246	0000659	0001727	0000756		



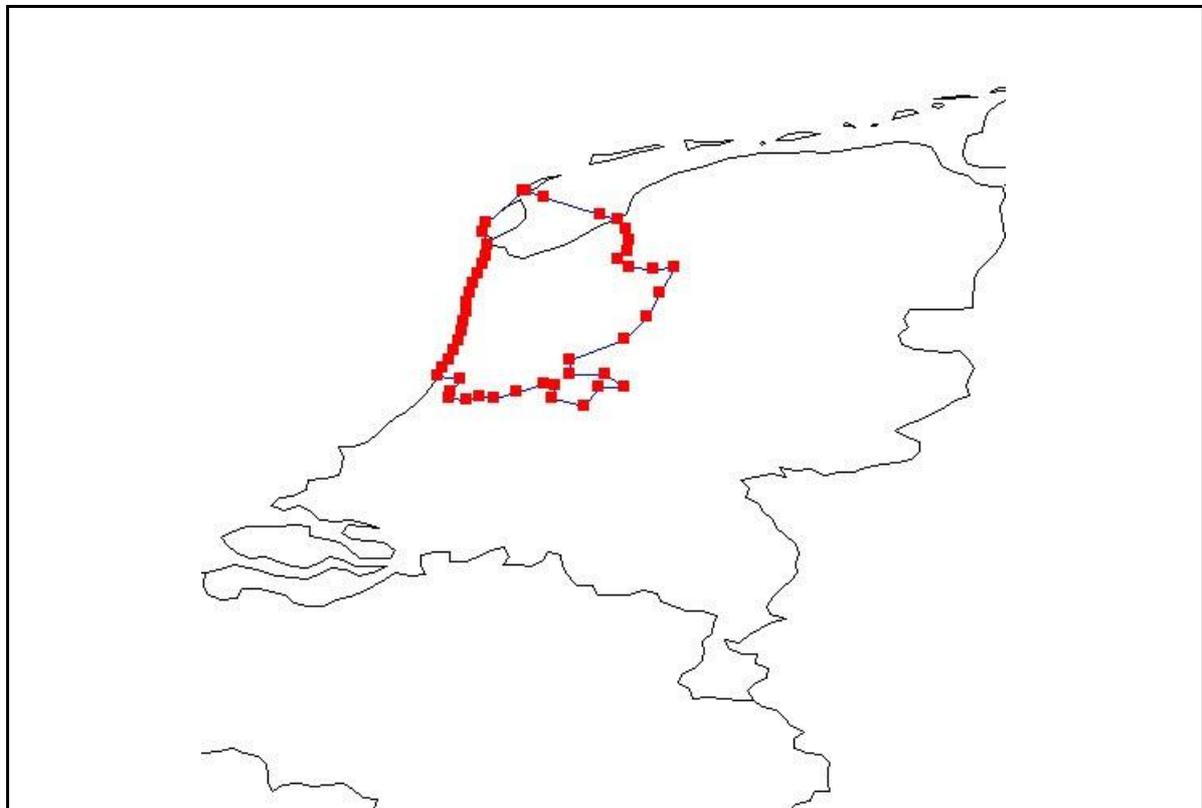
6	23NH
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8	1
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9a	1
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9b	48
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9c1	521933	522139	522414	522657	522936	523224	523518	523803
9c2	0042934	0043104	0043240	0043405	0043525	0043621	0043710	0043755
9c1	524050	524338	524618	524902	525149	525432	525720	530123
9c2	0043809	0043900	0043946	0044112	0044233	0044326	0044403	0044237
9c1	530413	531330	531312	531135	530630	530448	530208	525908
9c2	0044327	0045416	0045512	0050018	0051616	0052136	0052348	0052442
9c1	525538	525327	525100	525024	525055	524329	523654	523000
9c2	0052424	0052130	0052436	0053148	0053744	0053347	0052950	0052324
9c1	522400	521949	521948	521612	521629	521038	521301	521656
9c2	0050748	0050748	0051800	0052315	0051557	0051155	0050243	0050335
9c1	521724	521500	521310	521340	521245	521253	521442	521835
9c2	0050000	0045221	0044555	0044136	0043750	0043256	0043323	0043611



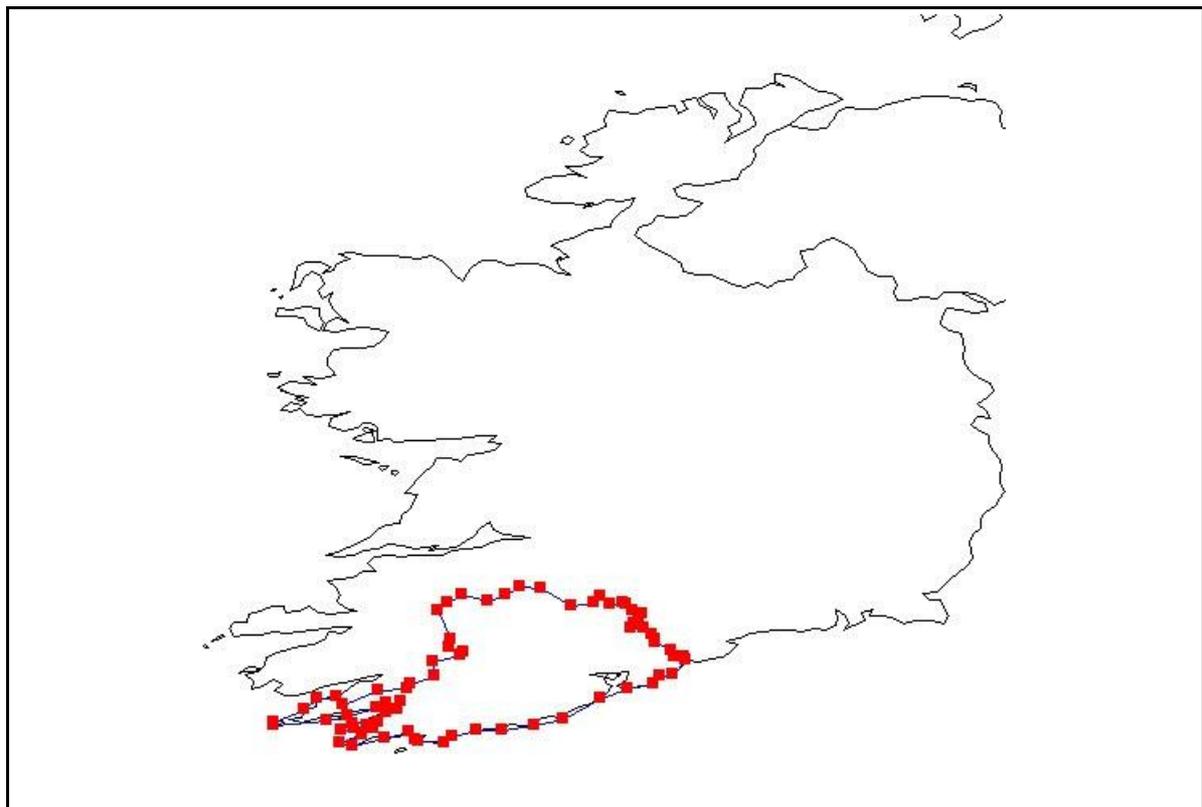
6	IRL DAB REG CORK
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8	1
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9a	1
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9b	72
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9c1	515725	515227	515145	514912	514737	514400	513715	513430
9c2	-0075104	-0075517	-0075944	-0080150	-0081035	-0082000	-0083256	-0084303
9c1	513253	513304	513108	512850	512914	513000	513225	513018
9c2	-0085405	-0090254	-0091135	-0091403	-0092248	-0092408	-0092629	-0093450
9c1	512732	512852	513140	513327	513606	513448	513350	513311
9c2	-0094602	-0095005	-0094225	-0093845	-0093654	-0094052	-0094506	-0094932
9c1	513509	513916	514007	514250	514245	514102	513811	513637
9c2	-0094604	-0093425	-0093009	-0092918	-0093357	-0093743	-0094714	-0095441
9c1	513444	513550	514020	514400	514459	514151	514710	514735
9c2	-0101308	-0101246	-0100244	-0095747	-0095123	-0094914	-0093644	-0092706
9c1	514915	515210	515651	515909	520005	520151	520447	521447
9c2	-0092535	-0091729	-0091759	-0090821	-0090731	-0091225	-0091144	-0091638
9c1	521748	522025	521801	522012	522307	522236	521640	521748
9c2	-0091305	-0090801	-0085911	-0085259	-0084805	-0084053	-0083021	-0082235
9c1	521945	521711	521733	521714	521435	521338	521214	521011
9c2	-0082010	-0081701	-0081213	-0081122	-0080915	-0080542	-0080645	-0080846
9c1	520830	520830	520618	520454	520331	520039	515836	515840
9c2	-0080931	-0080529	-0080213	-0080113	-0080113	-0075548	-0075440	-0075131



## Appendix 3

### The Local Radio Plan

Adjacent Channel compatibility with other (UK) T-DAB digital radio services.

The table below specifies the present list of internationally co-ordinated local allotments and their implementation status. Other allotments may be added at a later date.

Allotment name	Block number	Comments
DERBYSHIRE	10B	Expected to be on-air by December 2014
OXFORDSHIRE	10B	On-air
GLOUCESTERSHIRE	10C	On-air
NORTH DEVON	10C	On-air
NORTH YORKSHIRE	10C	Expected to be on-air by December 2014
NORTHAMPTONSHIRE	10C	On-air
SUFFOLK	10C	Advertisement date to be confirmed
WEST SUSSEX	10C	On-air as Surrey
HOME COUNTIES	10D	On-air as Hertfordshire, Bedfordshire and Buckinghamshire
LINCOLNSHIRE	10D	Expected to be on-air by December 2015
NORTH WEST WALES	10D	Expected to be on-air by December 2014
SOMERSET	10D	Expected to be on-air by December 2014 using block 10B
WREXHAM & DEESIDE	10D	On-air as NE Wales and West Cheshire
AYR	11B	On-air
BOURNEMOUTH	11B	On-air
BRADFORD & HUDDERSFIELD	11B	On-air
BRISTOL & BATH	11B	On-air
CORNWALL	11B	On-air
HUMBERSIDE	11B	On-air, but expected to move to Block 10D
INVERNESS	11B	On-air
LEICESTERSHIRE	11B	On-air
LIVERPOOL	11B	On-air, but expected to move to Block 10C
LONDON II	11B	On-air
NORWICH	11B	On-air, expected to move to Block 10B and expand to serve the whole of Norfolk
PERTH & DUNDEE	11B	On-air
SHREWSBURY & WOLVERHAMPTON	11B	On-air, expected to expand to include all of Shropshire
SUSSEX COAST	11B	On-air, expected to expand to serve all of Sussex and change to Block 10B
TEESSIDE	11B	On-air
ABERDEEN	11C	On-air
BIRMINGHAM	11C	On-air
CAMBRIDGE	11C	On-air
EXETER & TORBAY	11C	On-air
GLASGOW	11C	On-air
ISLE OF MAN I	11C	Advertisement date to be confirmed
KENT	11C	On-air
MANCHESTER	11C	On-air, expected to change to Block 12C
SOUTH HAMPSHIRE	11C	On-air
SOUTH YORKSHIRE	11C	On-air
SWINDON	11C	On-air
TYNESIDE	11C	On-air

CENTRAL SCOTLAND I	11D	On-air
ENGLAND I	11D	On-air
FERMANAGH & TYRONE	11D	Now on-air as Digital One serving all of Northern Ireland
ISLE OF MAN III	11D	Possible extension to the first national commercial multiplex
WALES I	11D	On-air
HEREFORD & WORCESTER	12A	On-air
LONDON I	12A	On-air
PLYMOUTH	12A	On-air but expected to move to block 12D
PRESTON & BLACKPOOL	12A	On-air
SCOTLAND I	12A	On-air
SWANSEA	12A	On-air
YORKSHIRE	12A	On-air
UK BBC	12B	On-air
CARDIFF & NEWPORT	12C	On-air
LONDON III	12C	On-air
NOTTINGHAMSHIRE	12C	On-air
COLWYN BAY	12D	Expected on-air by December 2014 (as North Wales)
COVENTRY	12D	On-air, expected to expand to serve all of Warwickshire
EDINBURGH	12D	On-air
ESSEX	12D	On-air
LEEDS	12D	On-air
NORTHERN IRELAND I	12D	On-air
PETERBOROUGH	12D	On-air
READING & BASINGSTOKE	12D	On-air
SOUTH WEST WALES	12D	On-air
STOKE-ON-TRENT	12D	On-air
WEST WILTSHIRE	12D	On-air, expected to expand to serve south Wiltshire and move to Block 10D