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Advertisement of licences for small-scale radio multiplex services

Round Five – South East England ‘macro area’

Publication date: 30 March 2023
Closing date for applications: 30 June 2023

Contents

Section

1. Overview

1.1 In this document, Ofcom proposes to grant licences to provide small-scale radio multiplex services, and is inviting applications for licences for the following 32 areas which together constitute the South East England 'macro area' (note we have re-named six advertised areas compared with previous Ofcom documents relating to this round for reasons of accuracy, consistency and brevity, but these changes do not affect the localities covered):

- Alton, Petersfield & Haslemere (previously referred to as Alton, Petersfield, Haslemere & Bordon)
- Ashford & Dungeness
- Biggleswade & North Hertford
- Brighton
- Canterbury
- Central Suffolk
- Chelmsford
- Colchester & Clacton
- Eastbourne, Newhaven & Lewes
- Great Yarmouth & Lowestoft
- Guildford & Woking
- Harlow
- Hastings
- Haverhill (previously referred to as Haverhill & surroundings)
- Haywards Heath & Uckfield (previously referred to as Haywards Heath, Heathfield & Uckfield)
- Ipswich & Felixstowe
- Luton
- Maidstone, Tonbridge & Tunbridge
- Margate, Dover & Folkestone
- North East London & South West Essex (previously referred to as Essex SW & NE London)
- North London
- North Sussex & Reigate (previously referred to as Sussex – north & Reigate)
- Portsmouth
- Reading
- Sittingbourne & the Medway Towns
- South Buckinghamshire
- South East London & North West Kent (previously referred to as South East London & North East Kent)
- South Hertfordshire
- South London
- South West Sussex
- Southend

- West London

1.2 In addition, we are also inviting applications in this round for three areas outside the South East macro area which are being re-advertised (although in the case of Alnwick & Morpeth and Merthyr & Rhondda Cynon Taff, the localities covered have been amended):

- Alnwick & Morpeth
- Isles of Scilly
- Merthyr & Rhondda Cynon Taff (previously known as Welsh Valleys)

1.3 A radio multiplex service is the means by which DAB digital radio stations are broadcast and can provide around ten stereo radio stations (and around 20 stereo services if DAB+ is utilised).

1.4 The advertisement of these licences constitutes Round Five of Ofcom's programme of small-scale DAB licensing, as set out in our statement on small-scale DAB licensing published in April 2020. Note that we intend to award no more than one small-scale radio multiplex licence for each area that we advertise (i.e. we have no plans to award additional small-scale radio multiplex licences for a given area once a small-scale radio multiplex service has been licensed by us to serve that area).

1.5 Small-scale radio multiplex licences are awarded by Ofcom in a competitive process. This means that applications are judged against specified criteria, and Ofcom awards each licence to the applicant which it considers best meets the criteria.

1.6 The closing-date for applications for the small-scale radio multiplex licences listed above is **5pm** on **Friday 30 June 2023**. The non-refundable application fee is £500.

1.7 Ofcom is also now inviting applications from potential programme service providers who would like to broadcast a Community Digital Sound Programme (C-DSP) service on a small-scale radio multiplex service for which a licence is being advertised in this document.

2. The licences being advertised

2.1 This section provides, for each small-scale radio multiplex licence we are advertising in Round Five, a map specifying the geographical area or locality which the licence is intended to cover, and relevant data for each licence area, including the adult population coverage. The table below explains the data we provide in more detail.

Data	Description
Licence area population	The total adult (aged 15+) population within the area that the advertised multiplex licence is intended to cover (i.e. the population enclosed by the red line on the map). This, and all other population data in these tables, is derived from 2011 Census data.
Size of licence area	The geographical size, in square kilometres, of the area that the advertised multiplex licence is intended to cover (i.e. the area enclosed within the red line on the map). The figure includes areas of sea where applicable.
Reserved C-DSP capacity	The small-scale DAB legislation requires Ofcom to ensure that small-scale radio multiplex licensees reserve broadcast capacity for a minimum of three Community Digital Sound Programme ('C-DSP') services. It also requires us to specify this reservation at the time of advertising a small-scale radio multiplex licence. For each licence we are advertising, Ofcom has determined the number of C-DSP services for which capacity must be reserved. These decisions were taken based on the factors set out in paragraph 6.13 of our licensing small-scale DAB statement. The licensee must ensure that at least 36 capacity units[1] are reserved for each C-DSP service. For example, a capacity reservation for three services means that 108 capacity units (i.e. 3 x 36 capacity units) must be reserved exclusively for use by C-DSP services. This capacity cannot be used by the multiplex licensee for any purpose other than for the carriage of radio services holding a C-DSP licence.
Local DAB service 1 (and licence area population)	This is the name of an existing local radio multiplex service which overlaps with the area to be covered by the small-scale radio multiplex service for which the licence is being advertised. The total adult (aged 15+) population within the existing local radio multiplex service's licensed area (which may

[1] 36 capacity units is equivalent to a DAB+ bitrate of 48 kbit/s at protection level EEP3A.

	be larger than the area it serves from its current transmitter network) is noted in brackets. Where more than one existing local radio multiplex service overlaps with the small-scale radio multiplex licence area being advertised, additional rows labelled 'Local DAB service 2 [..]' and "Local DAB service 3 […]' are included as appropriate.
Local DAB service 1 population overlap (and percentage)	The adult (aged 15+) population falling within the advertised small-scale radio multiplex licence area which also falls within the licensed area of the overlapping local radio multiplex service noted above. This overlapping population is provided as an absolute figure, and also as a percentage of the local radio multiplex service's total licensed area population in brackets. The extent of overlaps between small-scale and local radio multiplex service licensed areas is relevant, as there is a legal requirement to limit such overlaps to no more than 40% of the population in the licensed area of the existing local radio multiplex service.
Proposed frequency block	The nominal transmission frequency which has been allocated to the advertised small-scale radio multiplex licence area, and on which we intend for the service to be provided. Applicants should note that the frequency given here is provisional, reflecting Ofcom's intention at time of advertisement. It may change prior to licence award for spectrum management reasons, but applicants must base their applications on the specified frequency. For advertised areas within a macro area, a range of frequencies may be given.
Co-block small-scale DAB licence areas and/or local multiplexes	Lists any nearby small-scale radio multiplex services and/or any existing (or proposed) local radio multiplex services which share or may share the nominal transmission frequency block above. A spreadsheet containing links to licence area data and population data for these potential co-block areas is available on the Ofcom website: Supporting technical data and links for Round Five locations. This data is in MapInfo Interchange Format and can be imported into geographic information system (GIS) software packages. The spreadsheet also contains links to standalone maps for all small-scale and local radio multiplex licensed areas. The information on co-block DAB services is relevant given that there are limits on the amount of signal strength that a small-

	scale radio multiplex service can place into the licensed area of another radio multiplex service which uses the same frequency block. These signal strength limits are 38 dBµV/m at 10m height in the case of other small-scale radio multiplex licensed areas, and 29 dBµV/m at 10m height where local radio multiplex services use co-block frequencies. In the tables below for each map, local radio multiplex services are identified by the letters 'LRMS' following the area name. Other area names denote other actual or planned small-scale multiplex areas. For advertised areas within macro areas, it is not possible for Ofcom to set out in advance which of the advertised areas within a macro area will use specific frequency blocks, and the advertisement will therefore not set out any signal level constraints to other advertised areas within the macro area. Applicants should however be mindful that spectrum is scarce within macro areas and seek to limit the interference their technical plan could put into other areas. Applicants for advertised areas within macro areas should ensure that their proposed technical plan respects the 38 dBµV/m limit into all small-scale DAB areas outside the macro area, except where the advertisement specifies named areas where that limit does not apply.
Additional information	Further information or constraints that Ofcom believes the applicant for the specific licence area should be aware of. This may include such things as advice on areas of higher-than-expected interference, specific concerns about outgoing interference, and use of certain transmitter sites.
International issues	Information on what limits apply to the signal levels that the small-scale multiplex service can place into neighbouring countries. The limits on the UK's ability to put signals into other countries vary by frequency block and are also expressed as a total of all of the services operating on those blocks. As we are not able to allocate frequency blocks to each advertised area in advance in the macro area, and also do not know what technical plans applicants will propose, we have provided guidance on the likely international constraints to each of our neighbouring countries.
<Link to licence area data>	A link to data files which describe the geographic licence area. This data is in MapInfo Interchange Format and can be imported into a geographic information system (GIS) software package.

<Link> to population data>	A link to data files containing the population distribution within the licence area. This data is in MapInfo Interchange Format and can be imported into a geographic information system (GIS) software package.

2.2 Each small-scale radio multiplex licence will be granted for a period of seven years from the commencement of broadcasting, with a further five-year renewal period available. Services must be on air within 18 months of the licence being awarded. This is a legal requirement of the small-scale DAB legislation and successful applicants should expect Ofcom to apply it strictly.

2.3 At the same time as Ofcom is advertising the Round Five small-scale radio multiplex licences, we are also inviting applications from potential programme service providers who would like to broadcast a Community Digital Sound Programme ('C-DSP') service on any of the small-scale radio multiplex services for which a licence is being advertised in this document. There is no deadline by which an application for a C-DSP licence must be submitted to Ofcom. This means that the window for making an application for a C-DSP licence for a service to be provided on any of the small-scale radio multiplex services for which a licence is being advertised in Round Five is now 'open' for the foreseeable future. Prospective C-DSP licence applicants should also note that the C-DSP licence application process does not require them to align themselves with one or more applicants for the licence for the small-scale DAB radio multiplex service that they wish to broadcast on, and they can, if they so wish, wait until after the small-scale radio multiplex licence has been awarded before submitting a C-DSP licence application. However, we would advise multiplex applicants and potential C-DSP providers to liaise with each other at an early stage as a broadcaster will need a carriage agreement as well as a licence in order to reach its target community.

2.4 There is no restriction on an applicant for a small-scale radio multiplex licence also applying for a C-DSP licence to broadcast on that small-scale radio multiplex service (i.e. a small-scale radio multiplex licensee can also broadcast a C-DSP service on its own multiplex). Indeed, one of the matters the legislation requires Ofcom to consider in awarding a small-scale multiplex licence is the desirability of awarding to an applicant who is, or has as a participant, someone proposing to provide a C-DSP service in that locality.

2.5 The application forms (Part A and Part B) and accompanying guidance notes for C-DSP applicants and licensees are available on Ofcom's website.

2.6 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.

2.7 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.

2.8 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.

2.9 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.

About 'macro areas'

2.10 South East England is the second 'macro area' to be advertised by Ofcom in our programme of small-scale multiplex licensing. We have designated 'macro areas' as regions where there will be insufficient spectrum available to accommodate all of the identified small-scale radio multiplex service licence areas. Spectrum availability will be especially limited in coastal areas, and further information is given in the Annex to this advertisement.

2.11 Our approach to advertising licences in macro areas differs slightly from that adopted for small-scale DAB multiplex services elsewhere in the following respects:

2.12 a) We need to advertise all of the areas contained within a macro area together. This contrasts with our approach for non-macro areas of seeking a geographic spread of locations within each advertisement round.

b) Instead of specifying a nominal frequency block expected to be used for each small-scale multiplex area, this advertisement for a macro area sets out a range of frequency blocks that may be allocated.

c) Applicants will need to ensure that the transmitters they propose respect the outgoing interference limit specified in paragraph 4.68 of the Guidance Notes for applicants and licensees, and do not put a greater signal level into any small-scale areas that lie outside the macro area, except where the advertisement states otherwise. The advertisement does not set out any signal level constraints to other advertised areas within the macro area. Applicants should, however, be mindful that spectrum is scarce within macro areas, and should seek to minimise the signal level that their technical plan would put into other areas. Where an application fails to minimise the signal levels that the technical plan puts into other areas, we would consider this to have a bearing on the applicant's ability to establish

the service (which is one of the statutory award criteria) due to the need for further mitigations before a service could be licensed and come on the air

2.13 Assessment of applications within the macro area will initially be carried out in the same way as for areas that are not in a macro area. For each individual advertised licence for which one or more acceptable applications have been received, Ofcom will select a preferred applicant by considering the applications received for that licence against the statutory criteria.

2.14 Once Ofcom has selected a preferred applicant for each of the advertised licences for which acceptable applications have been received within the macro area, we will allocate the available frequency blocks with the aim of accommodating the technical plans provided by all of the preferred applicants. This process may require us to consider amendments to some or all of the technical plans in order to limit the amount of interference that small-scale multiplexes within the macro area cause to each other. These amendments may include restrictions on transmitter powers, antenna patterns or heights. As well as limiting interference, these mitigations would most likely reduce the coverage that some small-scale multiplexes may be able to achieve, perhaps significantly in some cases. Whilst amendments will often also be required outside macro areas, it is important for prospective applicants to note that these may be more significant within macro areas.

2.15 Where a particular frequency needs to be shared between several applicants in the macro area, we will seek to minimise the interference interaction between the areas, and to balance any consequent coverage impact on each of the areas. In carrying out the latter analysis, we will also consider whether the resulting balanced coverage would (in Ofcom's opinion) result in unviable multiplexes[2], and whether instead the frequency should be allocated to only a proportion (or perhaps only one) of the applicants across the macro area. We will not be able to award a licence in those areas where we are unable to allocate a frequency. In other words, even if we receive acceptable applications for an advertised area within a macro area, it may not be possible to make an award due to unavailability of sufficient spectrum.

2.16 In making decisions on how to allocate limited frequencies, and therefore those advertised areas where we are both able and unable to make awards, we will take account of the amount of capacity reserved for community digital sound programme services ('C-DSPs') in respect of each of the affected multiplexes. We will give preference to areas in which there are a higher number of reserved capacity slots (as specified in the advertisement), which reflect our expectation of the number of potential C-DSP services that may seek carriage on the multiplex in due course. That is, if the choice comes down to award a licence in an area with more reserved capacity slots or one with fewer, our preference will be to award in the area with more reserved slots. Where there are equal numbers of reserved slots, we will give preference to areas with more existing licensed community analogue services whose

[2] Unviable' may include an inability to serve the principal population centre within an advertised area, coverage being largely patchy or non-contiguous, and/or coverage that serves significantly less than half of the population that the applicant proposed.

coverage area substantially overlaps with the coverage area of the proposed small-scale multiplex (i.e. for which the multiplex would provide a route to digital).

2.17 When we have completed the process of frequency allocation, we anticipate that licence awards will be announced in a single batch at the end of the process, which differs from our practice outside macro areas. However, if there are any areas within the macro area not affected by frequency shortages (for example, because we receive no applications for some of the other areas we have advertised) it may prove possible to announce these awards earlier. We intend announcing licence awards for the three areas in Round Five outside the macro area (Isles of Scilly, Alnwick & Morpeth, and Merythr & Rhondda Cynon Taff) ahead of the completion of the macro area frequency allocation process as they are not affected by this aspect of the process.

Note on frequency blocks available in the South East England macro area

2.18 For some of the advertised areas, in addition to the blocks 7D, 8A, 8B, 9A, 9B, 9C, we have identified that it may be necessary to consider use of one of the frequency blocks 10B, 10C, 10D, 11B, 11C, 12A, 12C, 12D. The advertisement for each area sets out where this may apply.

2.19 Applicants for areas where blocks 10B, 10C, 10D, 11B, 11C, 12A, 12C, 12D might be used may wish to take this into consideration and limit the field strength (to a maximum of 29 dBµV/m) that their proposed transmitter network would present to the local radio multiplex licensed areas listed in the advertisement. Doing so will help maximise the network's compatibility with whichever frequency block is eventually chosen by Ofcom for use in that area. The local radio multiplex areas operating or planned to operate on frequency blocks 10B, 10C, 10D, 11B, 11C, 12A, 12C, 12D that will need protecting to a maximum interfering field strength of 29 dBµV/m are:

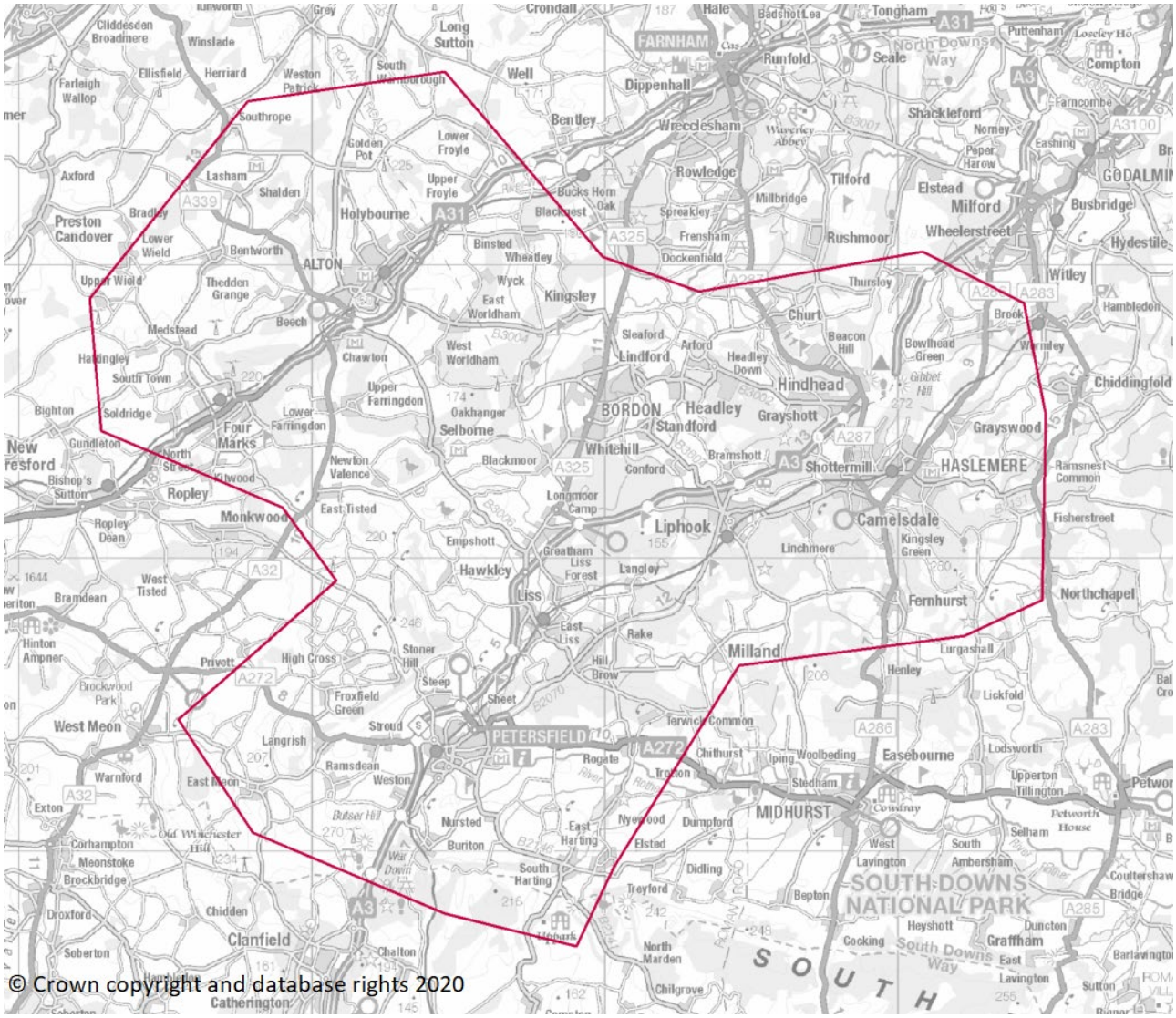
Frequency block	Service
10B	Norfolk
	Oxfordshire
	Sussex
10C	Northamptonshire
	Suffolk
	Surrey
10D	Herts, Beds & Bucks
11B	London 3
11C	Cambridge
	Kent

	South Hampshire
12A	London 2
12C	London 1
12D	Berkshire & North Hampshire
	Essex
	Peterborough

2.20 When Ofcom undertakes the final frequency allocation, we will review the interoperability of applicant transmission plans with local radio multiplex services. We will also take into consideration the likely impact of hole-punching from small-scale transmitters using blocks 10B, 10C, 10D, 11B, 11C, 12A, 12C, 12D.

South East England 'macro area' advertisements

Alton, Petersfield & Haslemere



Licence area population: 98,330

Size of licence area (km²): 573 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): South Hampshire (1,203,463)

Local DAB service 1 population overlap (and percentage): 27,902 (2.3%)

Local DAB service 2 (and licence area population): Surrey (1,126,308)

Local DAB service 2 population overlap (and percentage): 62,699 (5.6%)

Local DAB service 3 (and licence area population): Sussex (1,344,906)

Local DAB service 3 population overlap (and percentage): 7,729 (0.6%)

Proposed frequency block: One of: 7D, 8A, 9A or 9B

Possible co-block small-scale DAB licence areas to be protected:

Other than the Winchester and Basingstoke small-scale DAB areas, this service must not cause any significant interference above 38 dBµV/m to other small-scale DAB areas outside of the Macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Midhurst DAB transmitter site, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna will be necessary to meet outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the south east England macro area. In particular, some high parts of the South Downs as well as high ground around Haslemere, Hindhead, Medstead, Four Marks and Golden Pot, may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on the air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[3]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 30 dBµV/m at the coast of France. International restrictions are not expected to be required towards Belgium or the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

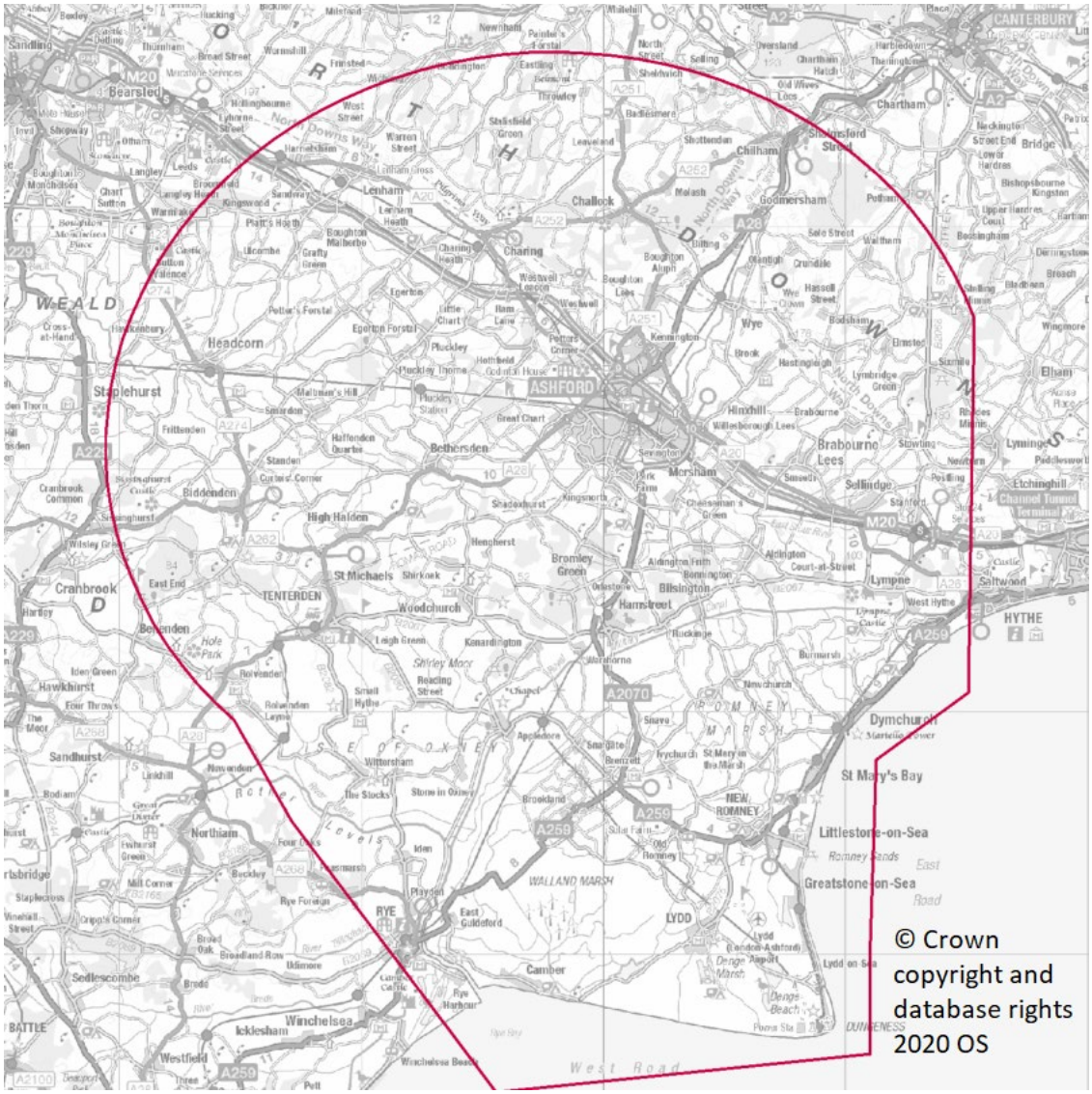
The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at

[3] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

Ashford & Dungeness



Licence area population: 140,151

Size of licence area (km²): 1,160 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): Kent (1,413,090)

Local DAB service 1 population overlap (and percentage): 134,292 (9.5%)

Local DAB service 2 (and licence area population): Sussex (1,344,906)

Local DAB service 2 population overlap (and percentage): 5,859 (0.4%)

Proposed frequency block: One of: 7D, 9A, 9B or 9C
A sub-band III allocation will be considered if one of the above blocks cannot be utilised.

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: Ofcom predictions indicate that all coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

If applicants wish to use the Charing Hill DAB transmitter site, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna may be necessary to meet some outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the south east England macro area. In particular, the high ground of the Kent Downs north of Ashford as well as areas around and to the west of Headcorn are expected to be subject to very high levels of interference. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[4]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 40 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

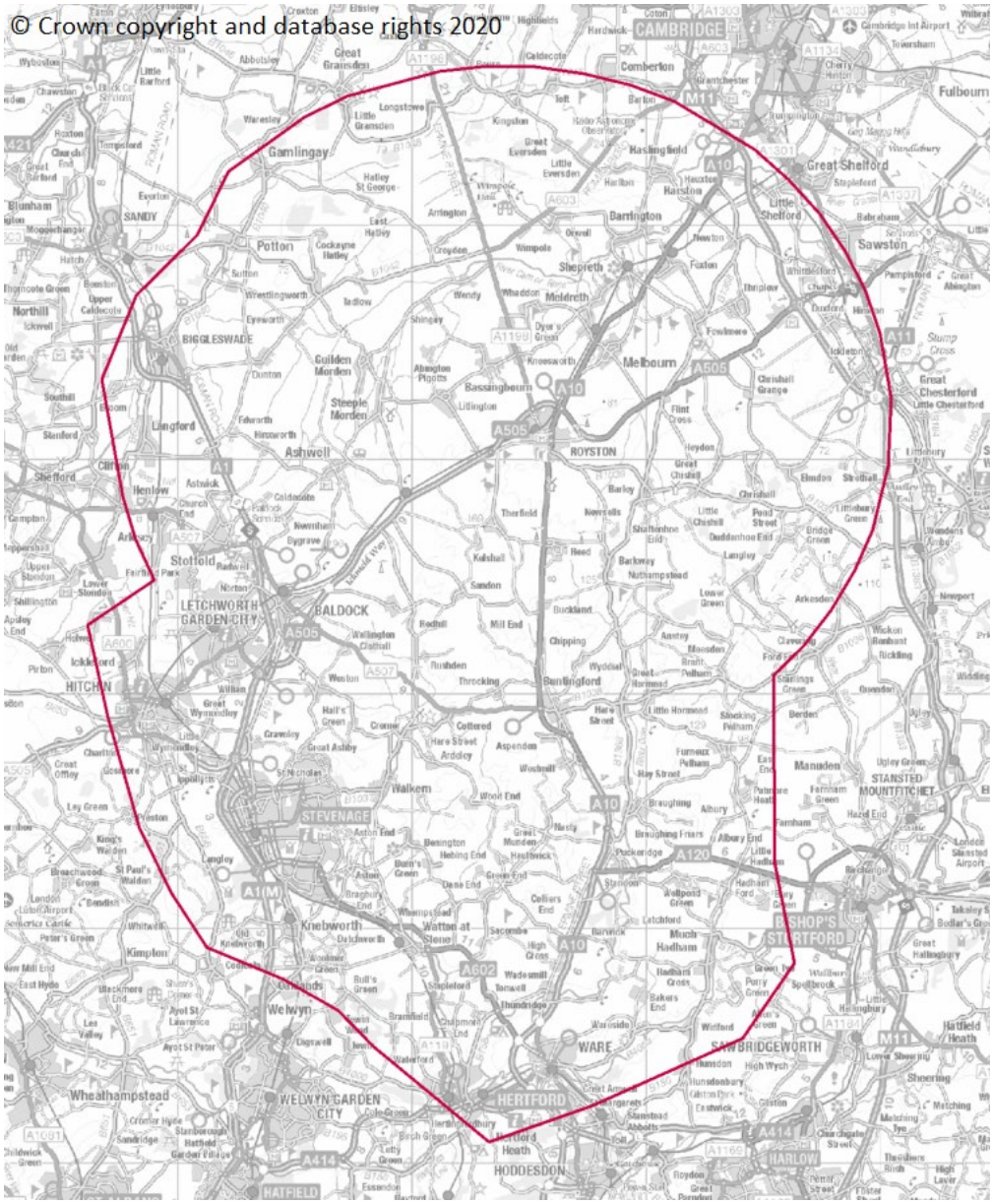
The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at

[4] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

Biggleswade & North Hertford



Licence area population: 297,513

Size of licence area (km²): 1,159 km²

Reserved C-DSP capacity: FIVE services

Local DAB service 1 (and licence area population): Cambridge (417,895)

Local DAB service 1 population overlap (and percentage): 50,764 (12.1%)

Local DAB service 2 (and licence area population): Herts, Beds & Bucks (2,008,567)

Local DAB service 2 population overlap (and percentage): 261,919 (13.0%)

Local DAB service 3 (and licence area population): London (10,102,817)

Local DAB service 3 population overlap (and percentage): 150,141 (1.5%)

Proposed frequency block: One of: 7D, 8A, 8B or 9B

Possible co-block small-scale DAB licence areas to be protected:

Other than the Bedford, Huntingdon & Surrounds and Cambridge small-scale DAB areas, and to some eastern parts of the Milton Keynes and Wellingborough small-scale DAB areas, this service must not cause any significant interference above 38 dBμV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Sandy Heath or Hertford transmitter DAB sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.

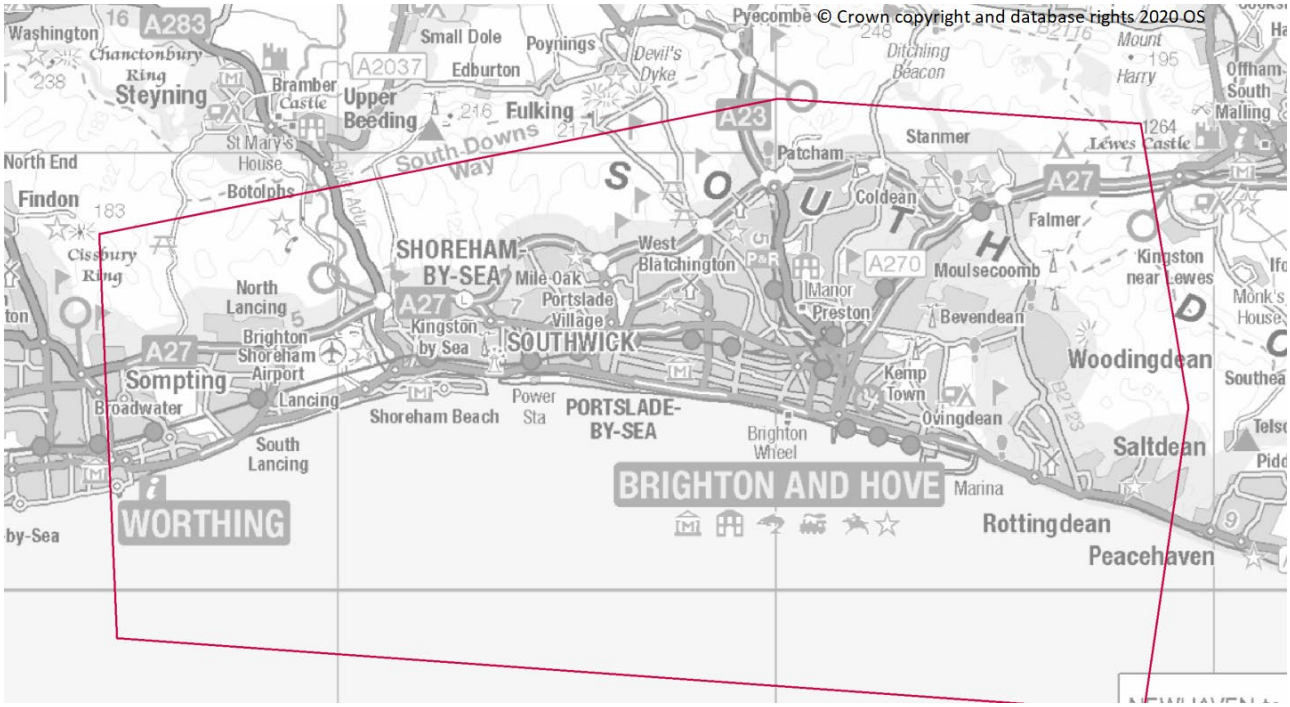
Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[5]).

International issues: No international restrictions are expected to be required for this area.

See licence area data and population data for this region.

[5] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Brighton



Licence area population: 302,227

Size of licence area (km²): 291 km²

Reserved C-DSP capacity: SEVEN services

Local DAB service 1 (and licence area population): Sussex (1,344,906)

Local DAB service 1 population overlap (and percentage): 302,227 (22.5%)

Proposed frequency block: One of: 7D, 9A, 9B or 9C
A sub-band III allocation will be considered if one of the above blocks cannot be utilised.

Possible co-block small-scale DAB licence areas to be protected:

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

Additional information: If applicants wish to use the Findon, Sussex Heights, Truleigh Hill or Whitehawk Hill DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna will be necessary to meet some outgoing interference criteria. Ofcom predictions also indicate that all coastal transmitters will need to use directional antennas if they are to meet international interference criteria. Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences

as realistically possible across the South East England macro area. In particular, the tops of the South Downs and high ground to the north of the area may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[6]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 35 dBµV/m at the coast of France. International restrictions are not expected to be required towards Belgium or the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

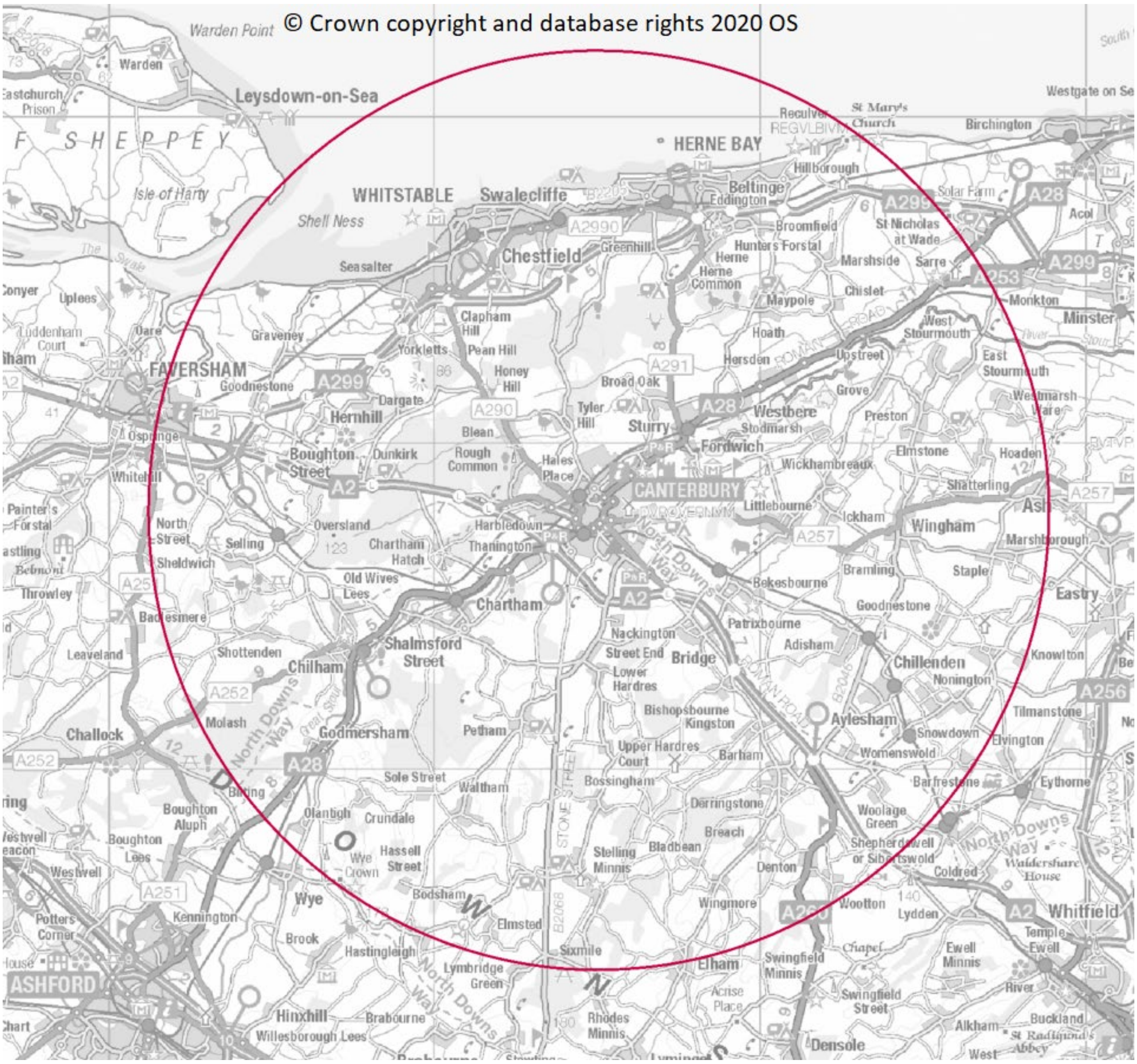
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[6] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Canterbury



Licence area population: 145,530

Size of licence area (km²): 564 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): Kent (1,413,090)

Local DAB service 1 population overlap (and percentage): 145,530 (10.3%)

Proposed frequency block: One of: 7D, 9A, 9B or 9C

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Dunkirk DAB transmitter site, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna may be necessary to meet some outgoing interference criteria. It is also likely that coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, the coast and the tops of the North Downs may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[7]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 32 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

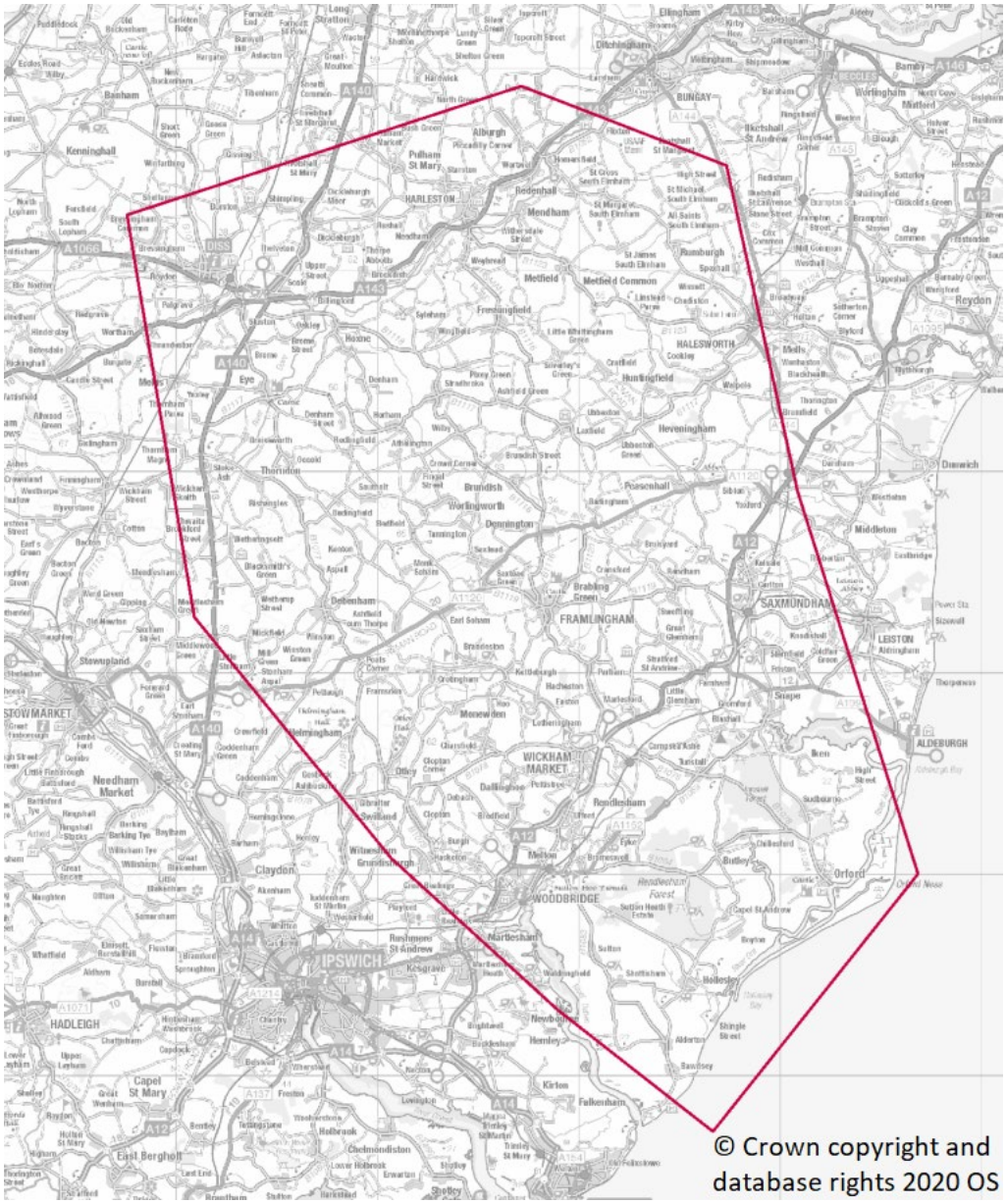
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[7] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Central Suffolk



Licence area population: 84,066

Size of licence area (km²): 1,255 km²

Reserved C-DSP capacity: THREE services

Local DAB service 1 (and licence area population): Norfolk (800,879)

Local DAB service 1 population overlap (and percentage): 19,506 (2.4%)

Local DAB service 2 (and licence area population): Suffolk (588,407)

Local DAB service 2 population overlap (and percentage): 64,560 (11.0%)

Proposed frequency block: One of: 9A or 9B

Possible co-block small-scale DAB licence areas to be protected:

Other than the Bury St Edmunds, Thetford & Mildenhall and Norwich small-scale DAB areas, this service must not cause any significant interference above 38 dBµV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Mendlesham transmitter site, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna may be necessary to meet some outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the SE macro area. In particular higher ground around Wickham Market, Woodbridge, Eye, Diss and Harleston may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[8]) .

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 32 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

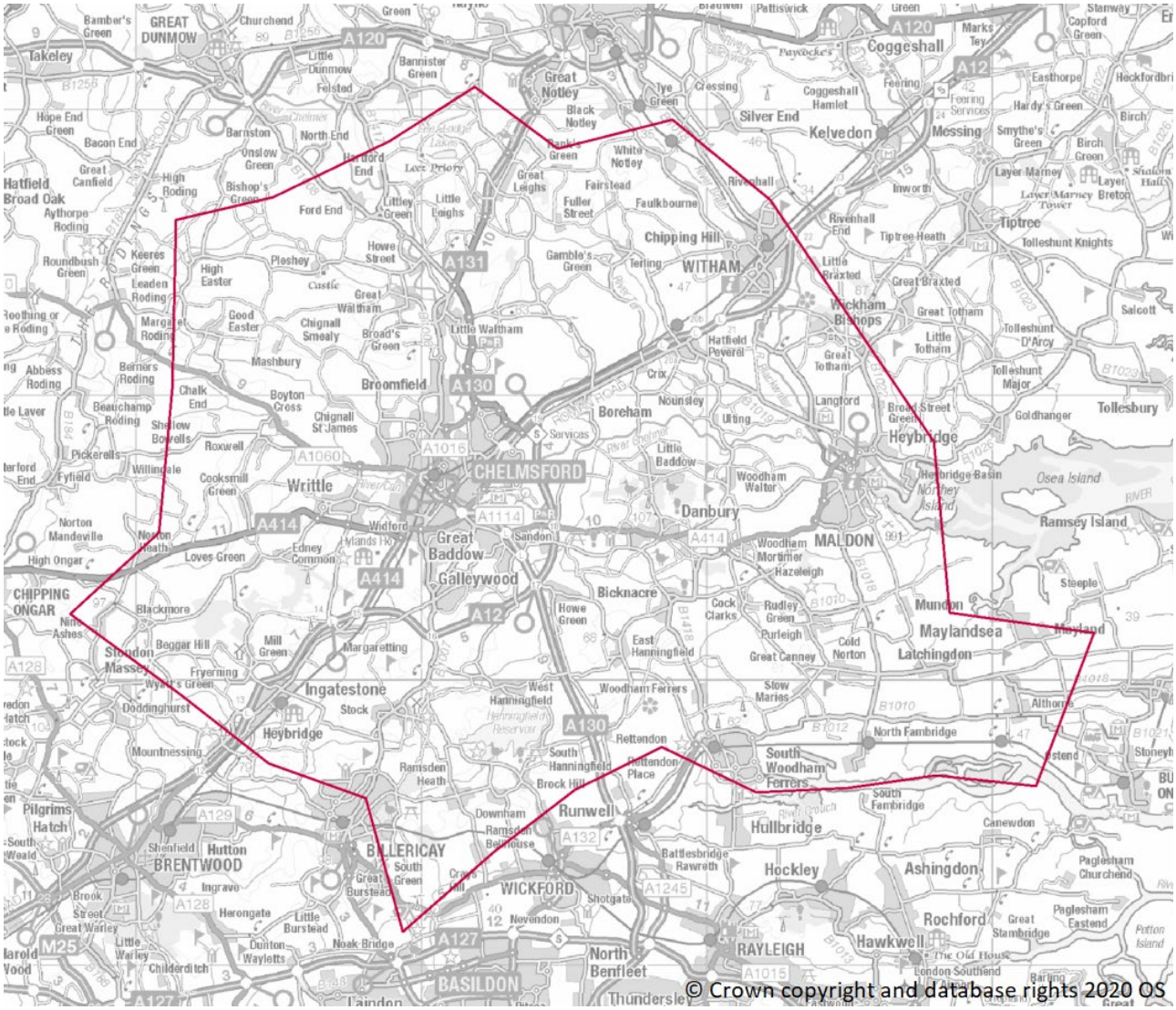
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

[8] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

See licence area data and population data for this region.

Chelmsford



Licence area population: 204,966

Size of licence area (km²): 603 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): *Essex (1,393,887)*

Local DAB service 1 population overlap (and percentage): *204,966 (14.7%)*

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B, 9C or 10B

Additional information: *If applicants wish to use the Danbury, Bakers Wood or Great Braxted DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.*

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, areas between the A1060 & the A130, between the A414 & the A12 and to the south east of Stock may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees ((Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[9]))*.*

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the Macro area.

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 30 dBµV/m at the coast of France, 30 dBµV/m at the coast of Belgium and 30 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

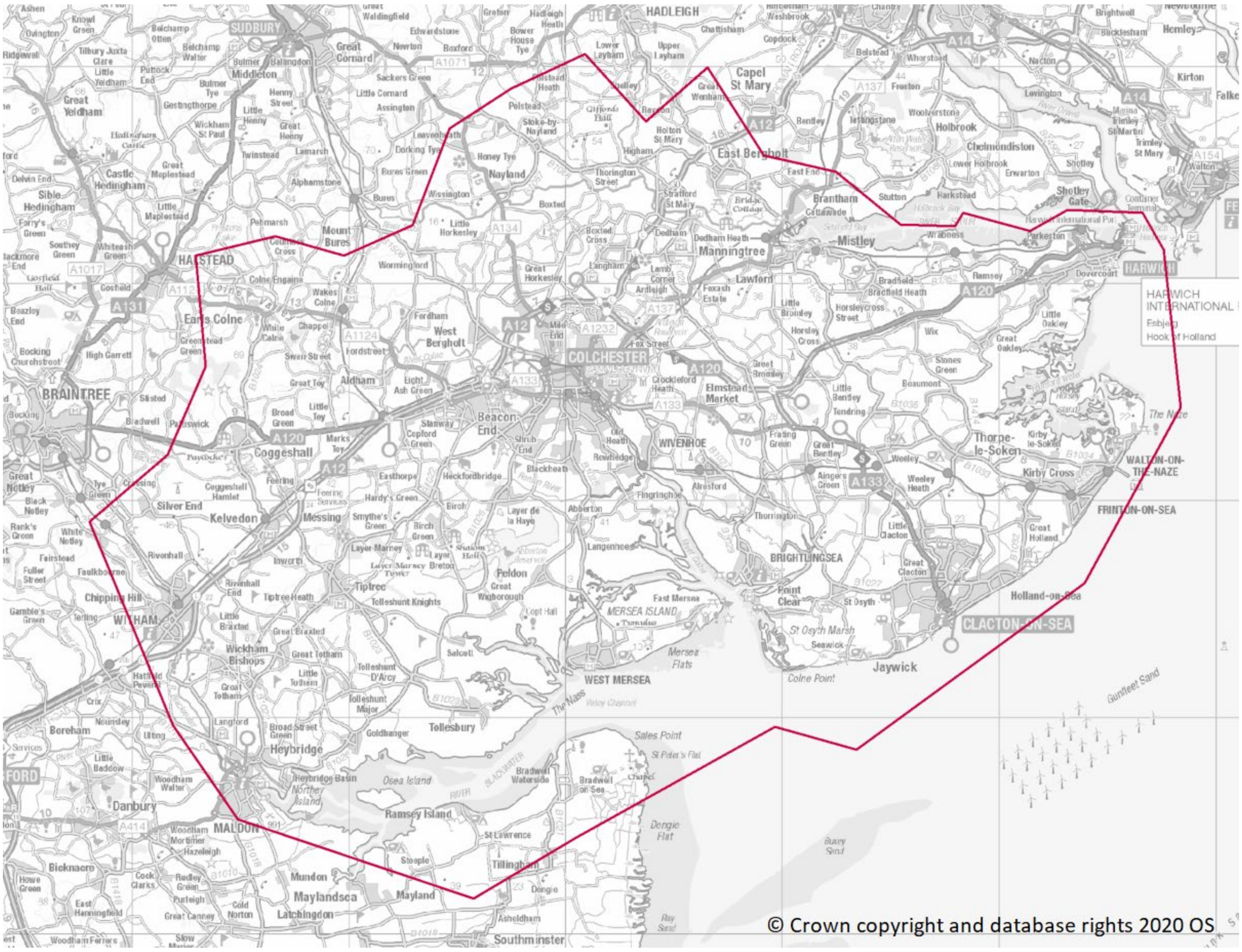
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[9] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Colchester & Clacton



Licence area population: 336,533

Size of licence area (km²): 1,231 km²

Reserved C-DSP capacity: FIVE services

Local DAB service 1 (and licence area population): Essex (1,393,887)

Local DAB service 1 population overlap (and percentage): 327,952 (23.5%)

Local DAB service 2 (and licence area population): Suffolk (588,407)

Local DAB service 2 population overlap (and percentage): 8,581 (1.5%)

Proposed frequency block: One of: 9A or 9B

Possible co-block small-scale DAB licence areas to be protected:

Other than toward the Bury St Edmunds, Thetford & Mildenhall small-scale DAB area, this service must not cause any significant interference above 38 dBμV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the Macro area it is part of.

Additional information: If applicants wish to use the Great Braxted, Manningtree or Sudbury DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria. Ofcom predictions indicate that all coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, the area around Great Braxted and Mersea Island may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[10])*).*

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 34 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

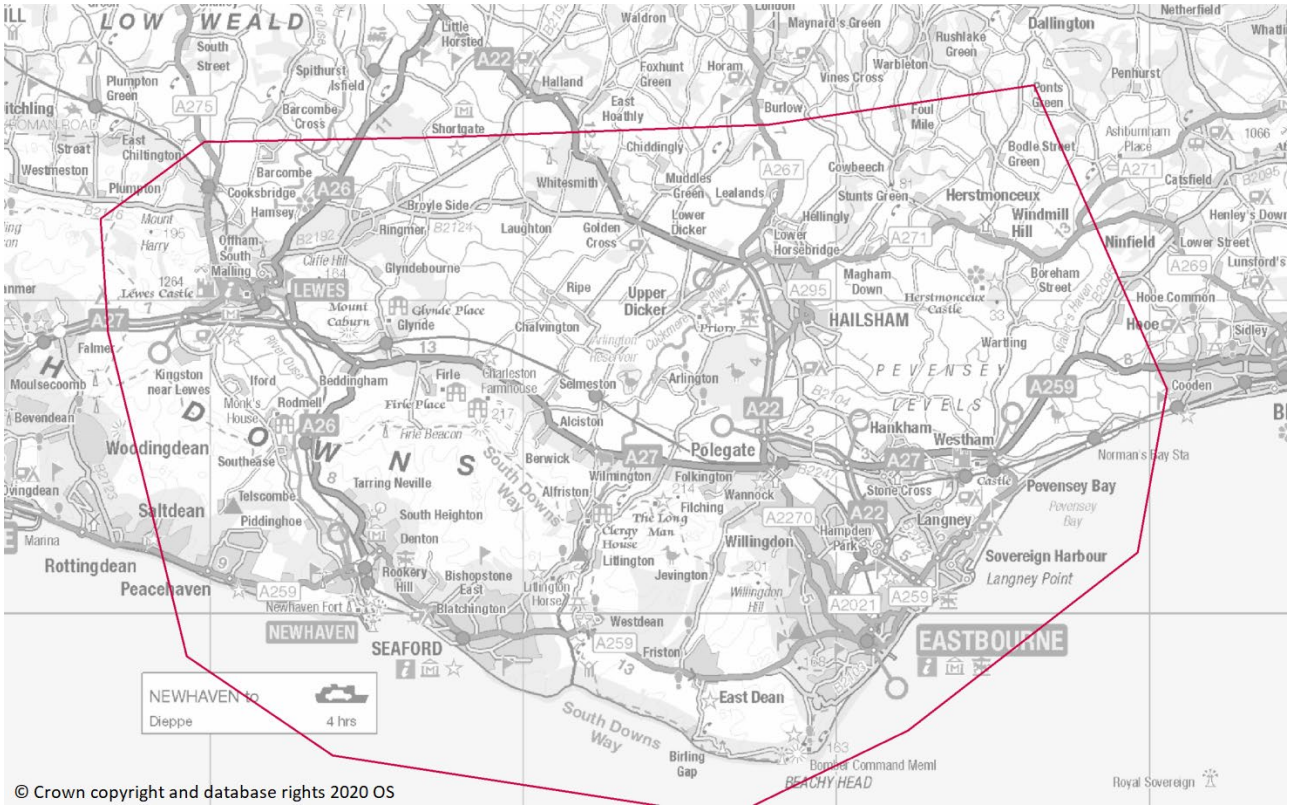
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[10] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Eastbourne, Newhaven & Lewes



Licence area population: 205,046

Size of licence area (km²): 610 km²

Reserved C-DSP capacity: FIVE services

Local DAB service 1 (and licence area population): Sussex (1,344,906)

Local DAB service 1 population overlap (and percentage): 205,046 (15.2%)

Proposed frequency block: One of: 7D, 9A, 9B or 9C

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Eastbourne, Heathfield or Newhaven transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria. Ofcom predictions also indicate that all coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the SE macro area. In particular, the tops of hills on the South Downs may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[11]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 37 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

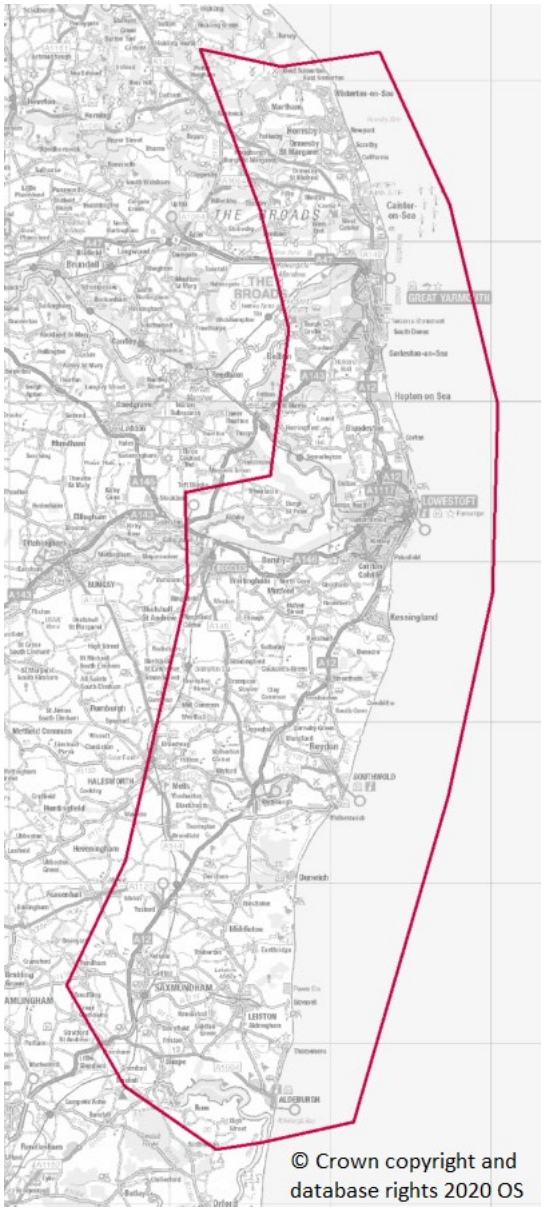
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[11] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Great Yarmouth & Lowestoft



Licence area population: 186,087

Size of licence area (km²): 1,072 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): *Norfolk (800,879)*

Local DAB service 1 population overlap (and percentage): *157,740 (19.7%)*

Local DAB service 2 (and licence area population): *Suffolk (588,407)*

Local DAB service 2 population overlap (and percentage): *105,902 (18.0%)*

Proposed frequency block: One of: 9A or 9B
A sub-band III allocation will be considered if one of the above blocks cannot be utilised.

Additional information: Ofcom predictions indicate that all coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular areas south of Southwold may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[12]).

Other than the North Norfolk and Norwich small-scale DAB areas, this service must not cause any significant interference above 38 dBµV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 32 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

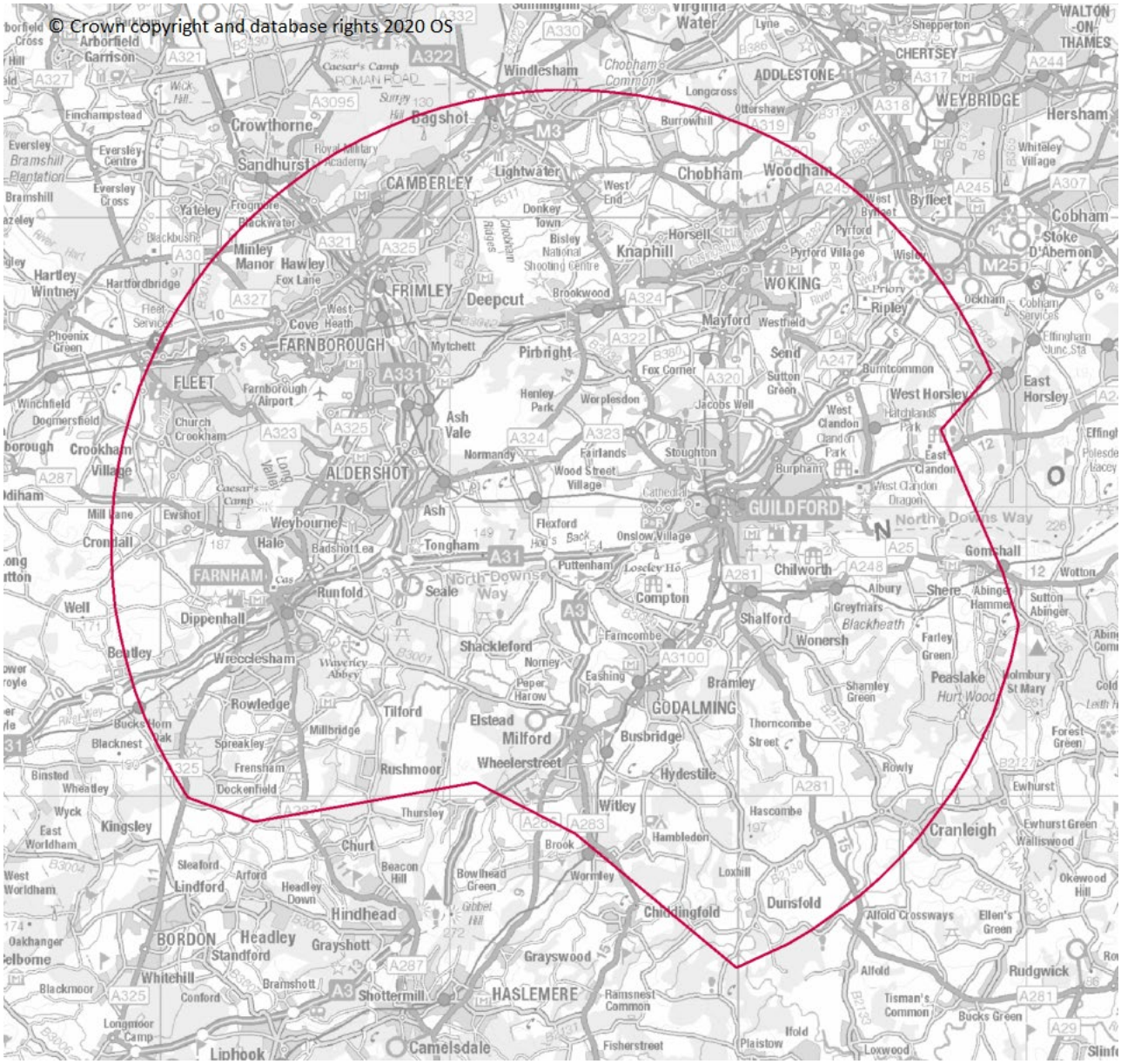
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region

[12] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Guildford & Woking



Licence area population: 442,769

Size of licence area (km²): 689 km²

Reserved C-DSP capacity: SEVEN services

Local DAB service 1 (and licence area population): *Berkshire & N Hampshire (905,496)*

Local DAB service 1 population overlap (and percentage): *4,364 (0.5%)*

Local DAB service 2 (and licence area population): *London (10,102,817)*

Local DAB service 2 population overlap (and percentage): *378,676 (3.7%)*

Local DAB service 3 (and licence area population): *Surrey (1,126,308)*

Local DAB service 3 population overlap (and percentage): *438,405 (38.9%)*

Proposed frequency block: One of: 7D, 8A, 9A, 9B or 9C

Possible co-block small-scale DAB licence areas to be protected:

Other than the Basingstoke small-scale DAB area, part of the North Berkshire and South Oxfordshire small-scale DAB area south & west of Goring and high ground in the eastern part of the Newbury small-scale DAB area this service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information:

If applicants wish to use the Dorking Cobbetts Lane, Guildford or Hungry Hill DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna may be necessary to meet some outgoing interference criteria.

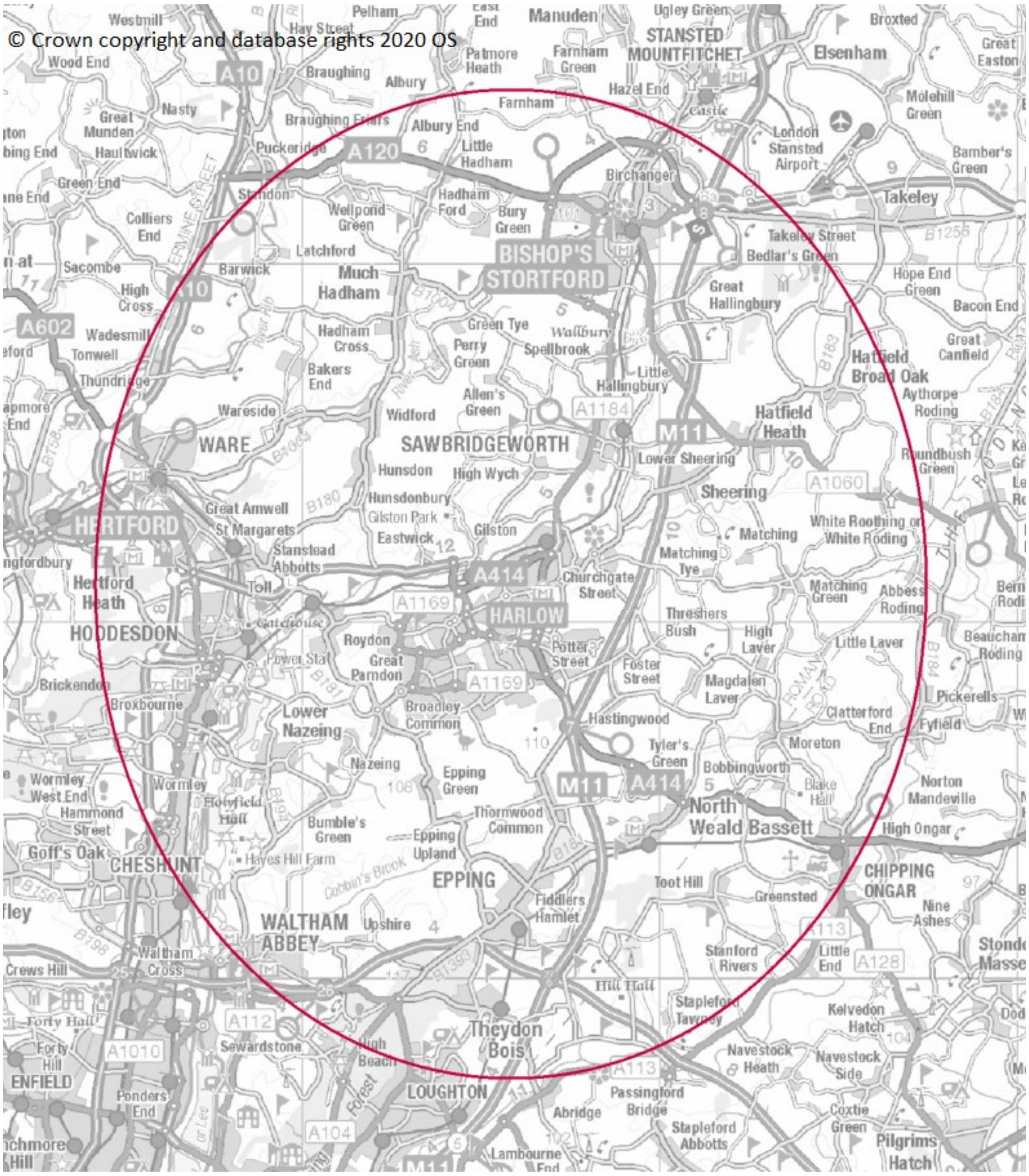
Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the SE macro area. In particular, the tops of hills on the North Downs and elsewhere may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[13]).

International issues: Field strength levels from this location are not expected to impact neighbouring administrations, but for the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 25 dBµV/m at the coast of France, Belgium or the Netherlands.

See licence area data and population data for this region.

[13] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Harlow



Licence area population: 214,826

Size of licence area (km²): 476 km²

Reserved C-DSP capacity: THREE services

Local DAB service 1 (and licence area population): Essex (1,393,887)

Local DAB service 1 population overlap (and percentage): 116,216 (8.3%)

Local DAB service 2 (and licence area population): Herts, Beds & Bucks (2,008,567)

Local DAB service 2 population overlap (and percentage): 98,610 (4.9%)

Local DAB service 3 (and licence area population): London (10,102,817)

Local DAB service 3 population overlap (and percentage): 174,585 (1.7%)

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B, 9C or 10B.

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information:

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, areas around Theydon Bois, Toot Hill, Waltham Abbey and between & Harlow & Ware are expected to be subject to very high levels of interference. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[14]).

International issues: Field strength levels from this location are not expected to impact neighbouring administrations, but for the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 25 dBµV/m at the coast of France, Belgium or the Netherlands.

See licence area data and population data for this region.

[14] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Hastings

Licence area population: 134,348

Size of licence area (km²): 493 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): Sussex (1,344,906)

Local DAB service 1 population overlap (and percentage): 134,348 (10.0%)

Proposed frequency block: One of: 7D, 9A, 9B or 9C
A sub-band III allocation will be considered if one of the above blocks cannot be utilised.

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Hastings DAB transmitter site, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna may be necessary to meet some outgoing interference criteria. Ofcom predictions also indicate that all coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, areas north of the B2093, along the B2089 and the elevated northern part of the area from Beckley Woods to Staplecross are expected to be subject to very high levels of interference. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[15]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 40 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

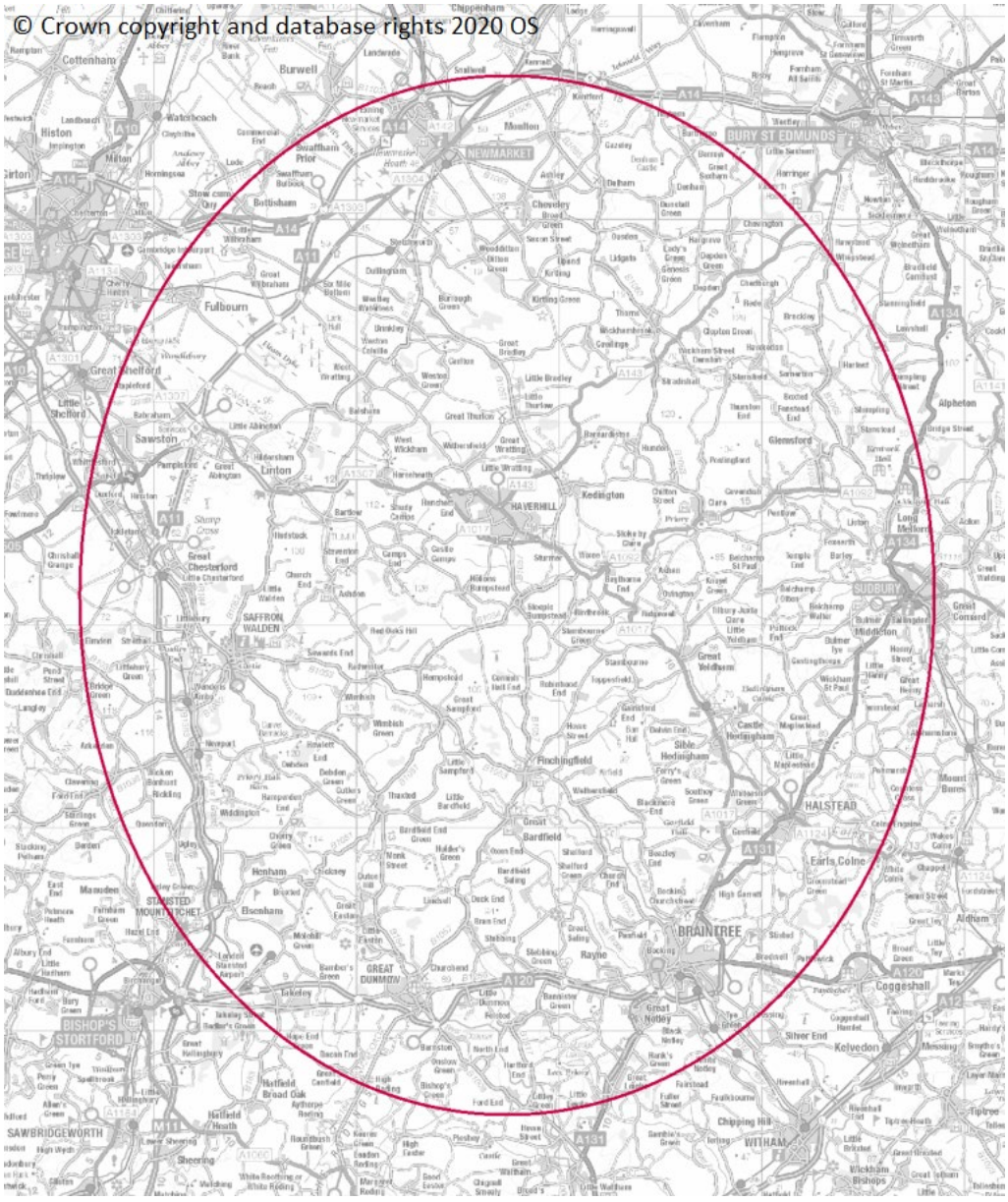
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[15] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Haverhill



Licence area population: 220,568

Size of licence area (km²): 1,584 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): *Cambridge (417,895)*

Local DAB service 1 population overlap (and percentage): *66,541 (15.9%)*

Local DAB service 2 (and licence area population): *Essex (1,393,887)*

Local DAB service 2 population overlap (and percentage): *104,214 (7.5%)*

Local DAB service 3 (and licence area population): *Suffolk (588,407)*

Local DAB service 3 population overlap (and percentage): *49,813 (8.5%)*

Proposed frequency block: One of: 7D, 9A or 9B

Possible co-block small-scale DAB licence areas to be protected:

Other than the Cambridge; Ely & March; Bury St Edmunds, Thetford & Mildenhall small-scale DAB areas, as well as some eastern parts of the Huntingdon small-scale DAB area, this service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information:

If applicants wish to use the Sudbury Sewards End or Wickhambrook transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.

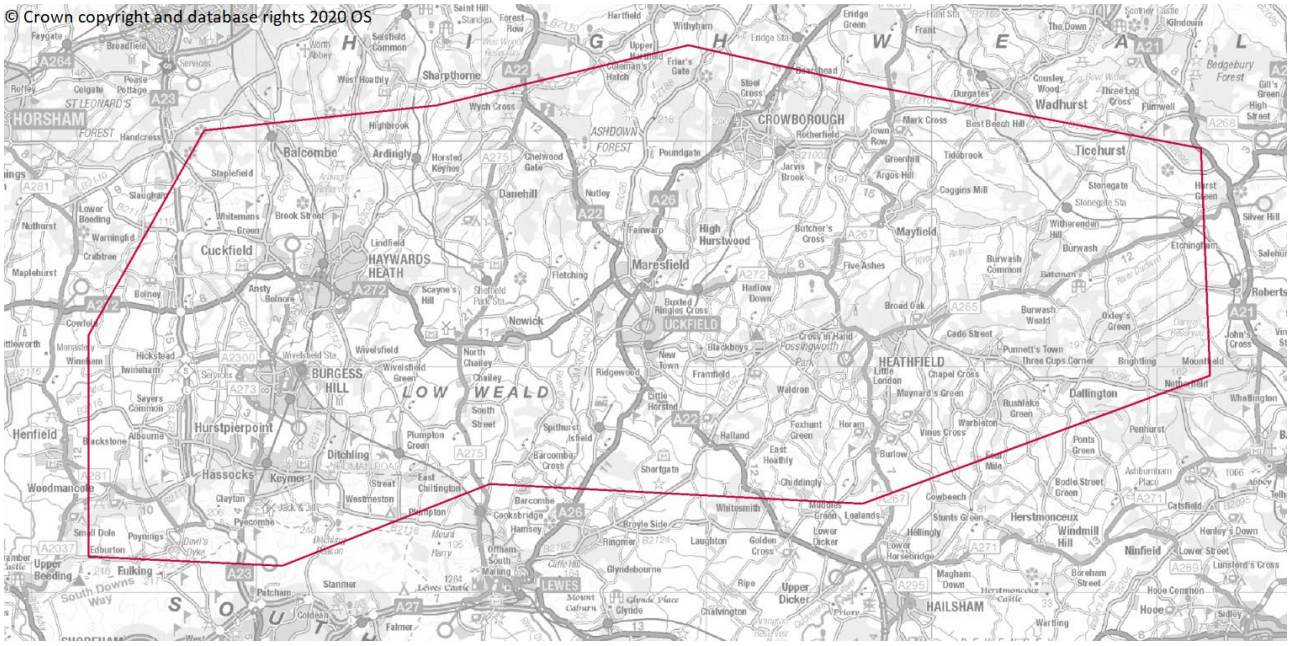
Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, areas around the A120 and around Newmarket are expected to be subject to very high levels of interference. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[16]).

International issues: Field strength levels from this location are not expected to impact neighbouring administrations, but for the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 25 dBµV/m at the coast of France, Belgium or the Netherlands.

See licence area data and population data for this region.

[16] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Haywards Heath & Uckfield



Licence area population: 155,820

Size of licence area (km²): 842 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): *Sussex (1,344,906)*

Local DAB service 1 population overlap (and percentage): *155,820 (11.6%)*

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B or 9C
A sub-band III allocation will be considered if one of the above blocks cannot be utilised.

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Heathfield or Truleigh Hill DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, high ground in and around Crowborough, Ashdown Forest and the South Downs may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[17]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 32 dBµV/m at the coast of France. International restrictions are not expected to be required towards Belgium or the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

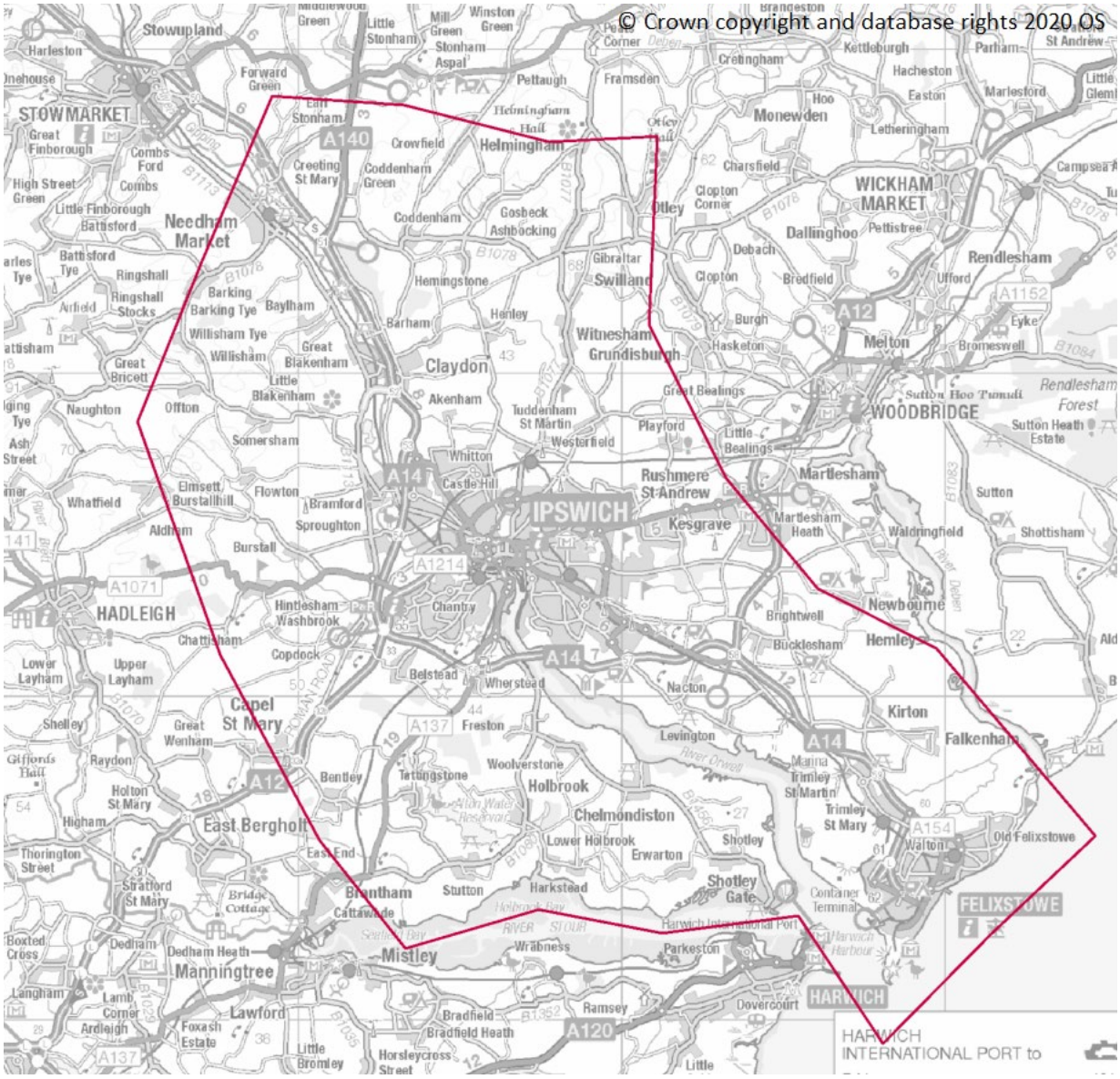
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[17] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Ipswich & Felixstowe



Licence area population: 189,945

Size of licence area (km²): 468 km²

Reserved C-DSP capacity: FIVE services

Local DAB service 1 (and licence area population): *Essex (1,393,887)*

Local DAB service 1 population overlap (and percentage): *1,088 (0.1%)*

Local DAB service 2 (and licence area population): *Suffolk (588,407)*

Local DAB service 2 population overlap (and percentage): *189,945 (32.3%)*

Proposed frequency block: One of: 9A or 9B

Possible co-block small-scale DAB licence areas to be protected:

Other than the Bury St Edmunds, Thetford & Mildenhall small-scale DAB areas, this service must not cause any significant interference above 38 dBµV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: Ofcom predictions indicate that all coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, areas around Creeting Bottoms, Helmingham and Capel St Mary may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (paragraph 4.14 onwards).

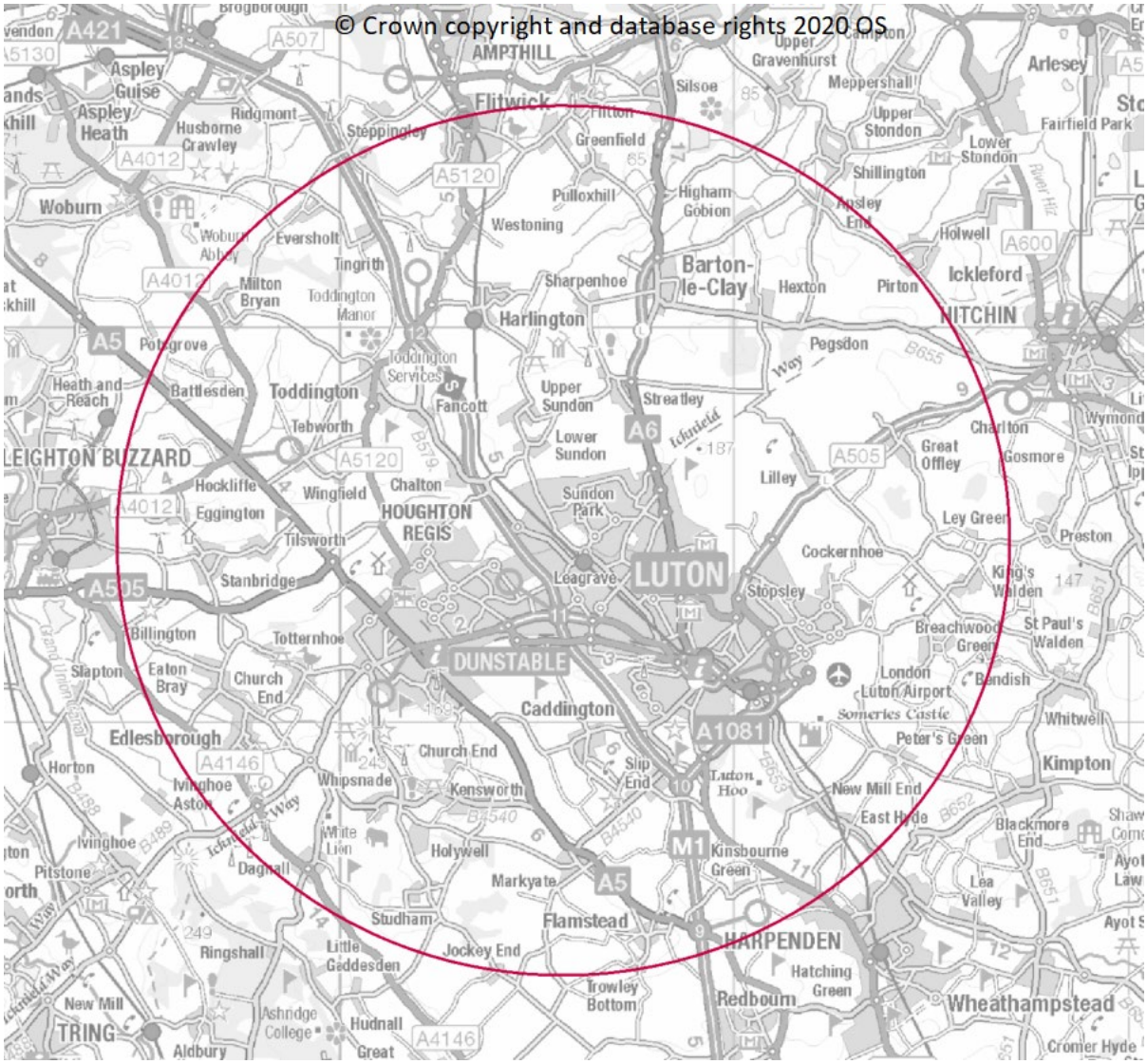
International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 32 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

Luton



Licence area population: 247,015

Size of licence area (km²): 375 km²

Reserved C-DSP capacity: SEVEN services

Local DAB service 1 (and licence area population): *Herts, Beds & Bucks (2,008,567)*

Local DAB service 1 population overlap (and percentage): *247,015 (12.3%)*

Local DAB service 2 (and licence area population): *London (10,102,817)*

Local DAB service 2 population overlap (and percentage): *173,623 (1.7%)*

Proposed frequency block: One of: 7D, 8B or 9A

Possible co-block small-scale DAB licence areas to be protected:

Other than the North Buckinghamshire, Milton Keynes and Bedford small-scale DAB areas, this service must not cause any significant interference above 38 dBµV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Zouches Farm DAB transmitter site, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.

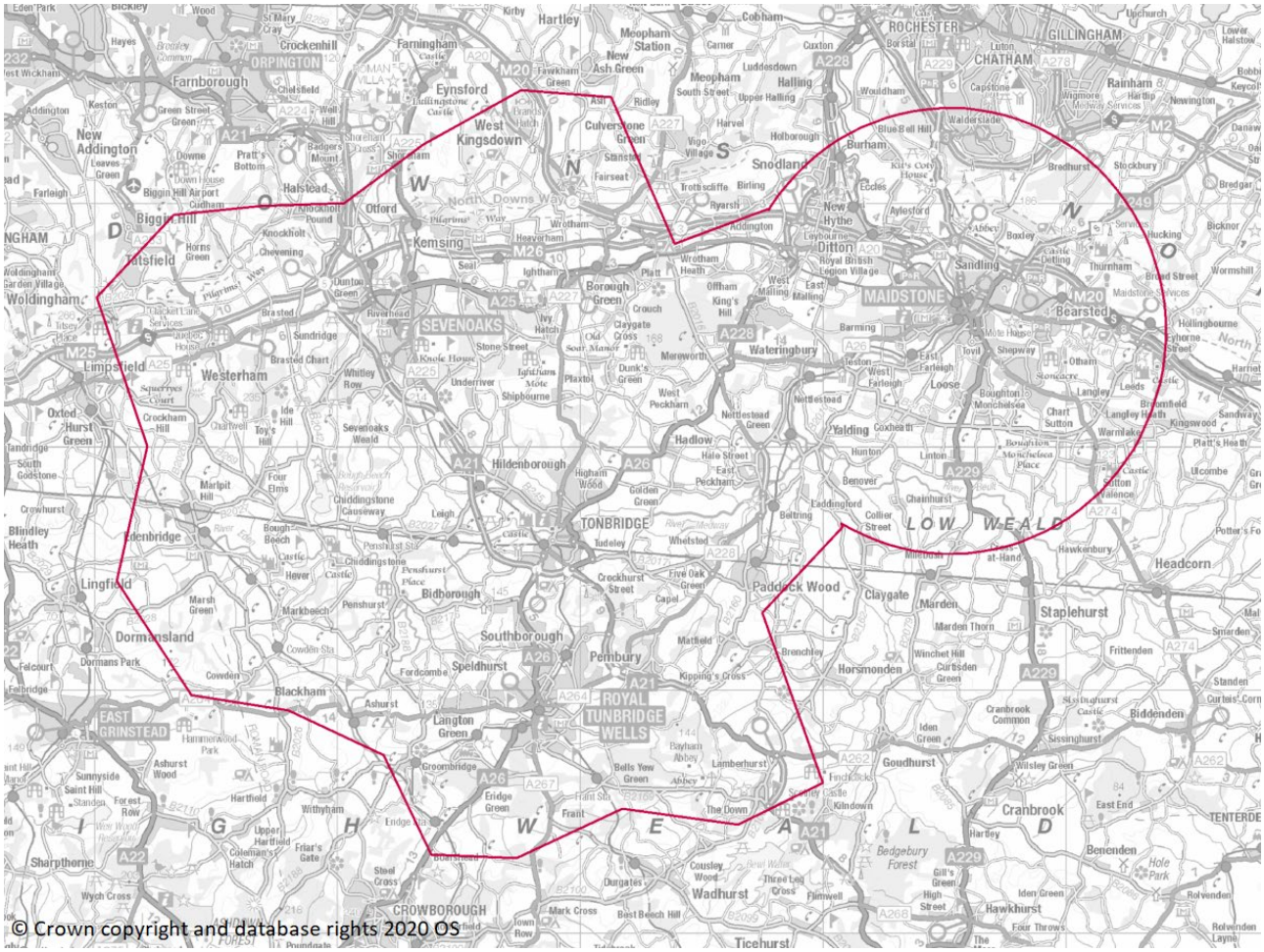
Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, across the elevated southern part of the area from Whipsnade to Peter's Green may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[18]).

International issues: No international restrictions are expected to be required for this area.

See licence area data and population data for this region.

[18] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Maidstone, Tonbridge & Tunbridge



Licence area population: 355,976

Size of licence area (km^2): 917 km^2

Reserved C-DSP capacity: FIVE services

Local DAB service 1 (and licence area population): Kent (1,413,090)

Local DAB service 1 population overlap (and percentage): 349,103 (24.7%)

Local DAB service 2 (and licence area population): London (10,102,817)

Local DAB service 2 population overlap (and percentage): 207,392 (2.1%)

Local DAB service 3 (and licence area population): Surrey (1,126,308)

Local DAB service 3 population overlap (and percentage): 2,169 (0.2%)

Local DAB service 4 (and licence area population): Sussex (1,344,906)

Local DAB service 4 population overlap (and percentage): 2,824 (0.2%)

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B, 9C or 12D

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Bluebell Hill, Kemsing or Wrotham DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna will be necessary to meet outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, high ground near Sevenoaks and on the North Downs may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[19]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 30 dBµV/m at the coast of France. International restrictions are not expected to be required towards Belgium or the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[19] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Margate, Dover & Folkestone

Licence area population: 260,350

Size of licence area (km²): 742 km²

Reserved C-DSP capacity: SEVEN services

Local DAB service 1 (and licence area population): *Kent (1,413,090)*

Local DAB service 1 population overlap (and percentage): *260,350 (18.4%)*

Proposed frequency block: 9B

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Creteway Down, Dover, Etchinghill, Margate, Ramsgate, Swingate, or Turnpike Hill transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria. Ofcom predictions indicate that all coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, across the Isle of Thanet. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[20]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 45 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

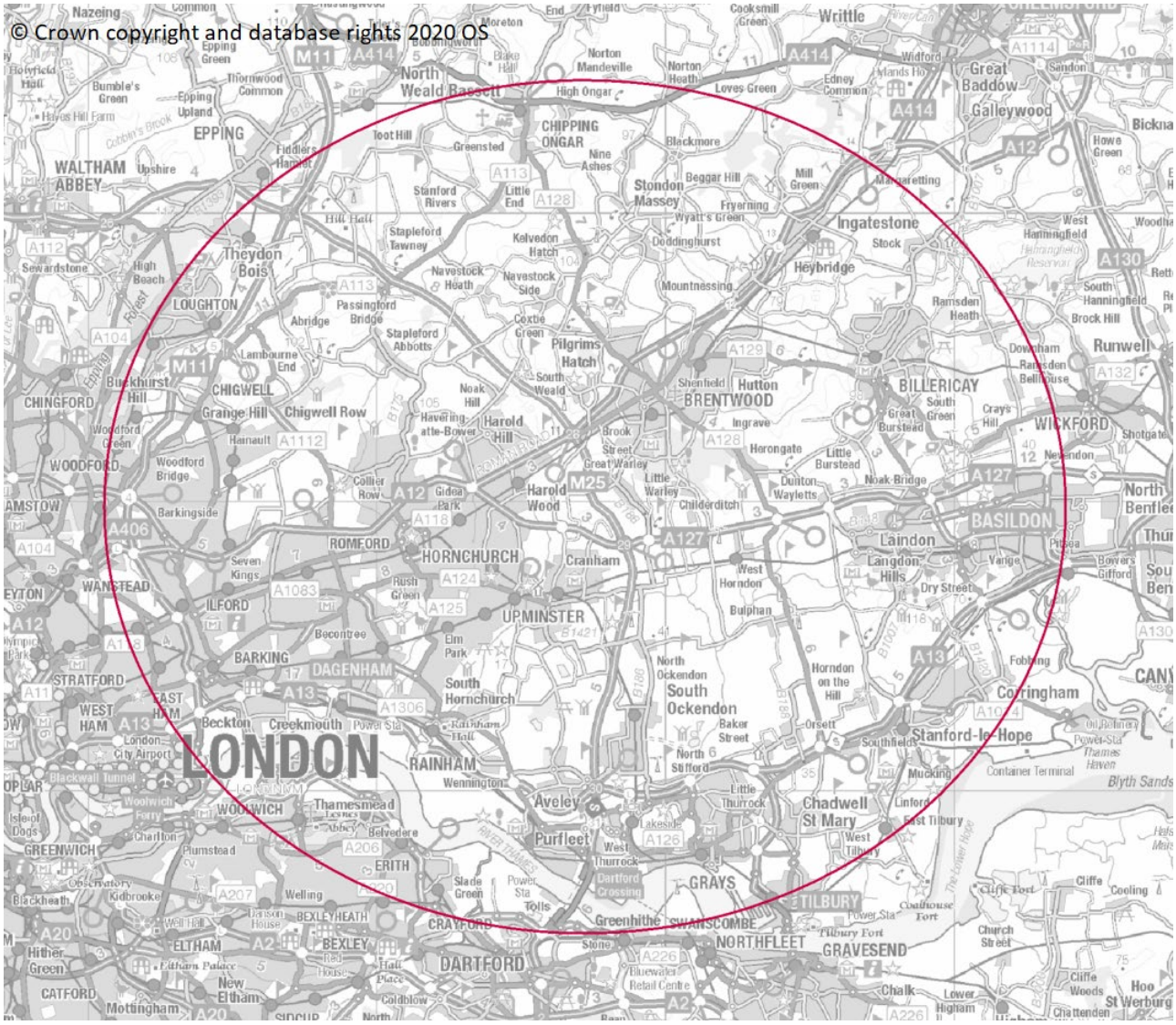
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

[20] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

See licence area data and population data for this region.

North East London & South West Essex



Licence area population: 959,705

Size of licence area (km²): 726 km²

Reserved C-DSP capacity: SEVEN services

Local DAB service 1 (and licence area population): Essex (1,393,887)

Local DAB service 1 population overlap (and percentage): 319,699 (22.9%)

Local DAB service 2 (and licence area population): London (10,102,817)

Local DAB service 2 population overlap (and percentage): 915,841 (9.1%)

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B, 9C or 10B

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information:

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, across areas north of the A12. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[21]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 30 dBµV/m at the coast of Belgium and 30 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[21] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

North London

Licence area population: 3,640,216

Size of licence area (km^2): 730 km^2

Reserved C-DSP capacity: NINE services

Local DAB service 1 (and licence area population): Essex (1,393,887)

Local DAB service 1 population overlap (and percentage): 61,979 (4.4%)

Local DAB service 2 (and licence area population): Herts, Beds & Bucks (2,008,567)

Local DAB service 2 population overlap (and percentage): 96,268 (4.8%)

Local DAB service 3 (and licence area population): London (10,102,817)

Local DAB service 3 population overlap (and percentage): 3,640,216 (36.0%)

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B, 9C or 10B

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Alexandra Palace, Brookmans Park, BT Tower, Croydon, or Crystal Palace DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.

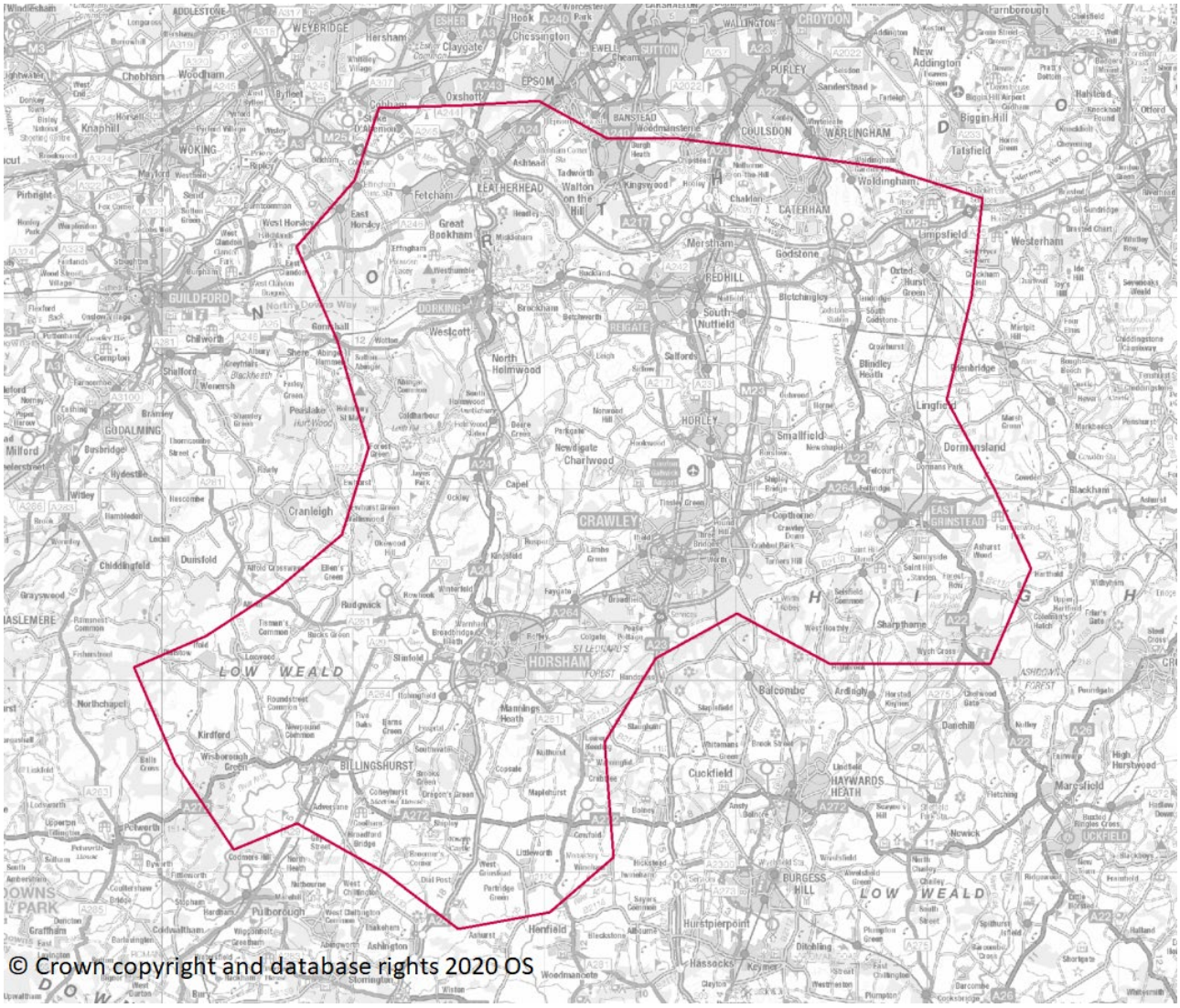
Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the SE macro area. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[22]).

International issues: Field strength levels from this location are not expected to impact neighbouring administrations, but for the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 25 dBµV/m at the coast of France, Belgium or the Netherlands.

See licence area data and population data for this region.

[22] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

North Sussex & Reigate



Licence area population: 442,716

Size of licence area (km²): 1,189 km²

Reserved C-DSP capacity: FIVE services

Local DAB service 1 (and licence area population): London (10,554,694)

Local DAB service 1 population overlap (and percentage): 442,715 (4.2%)

Local DAB service 2 (and licence area population): Surrey (1,126,308)

Local DAB service 2 population overlap (and percentage): 233,804 (20.8%)

Local DAB service 3 (and licence area population): Sussex (1,344,906)

Local DAB service 3 population overlap (and percentage): 204,928 (15.2%)

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B or 9C
A sub-band III allocation will be considered if one of the above blocks cannot be utilised.

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Caterham Old Park Wood, Leatherhead Stoke D'Abernon or Reigate Hill DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna may be necessary to meet some outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, high ground on the North Downs may be subject to very high levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[23]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 30 dBµV/m at the coast of France. International restrictions are not expected to be required towards Belgium or the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

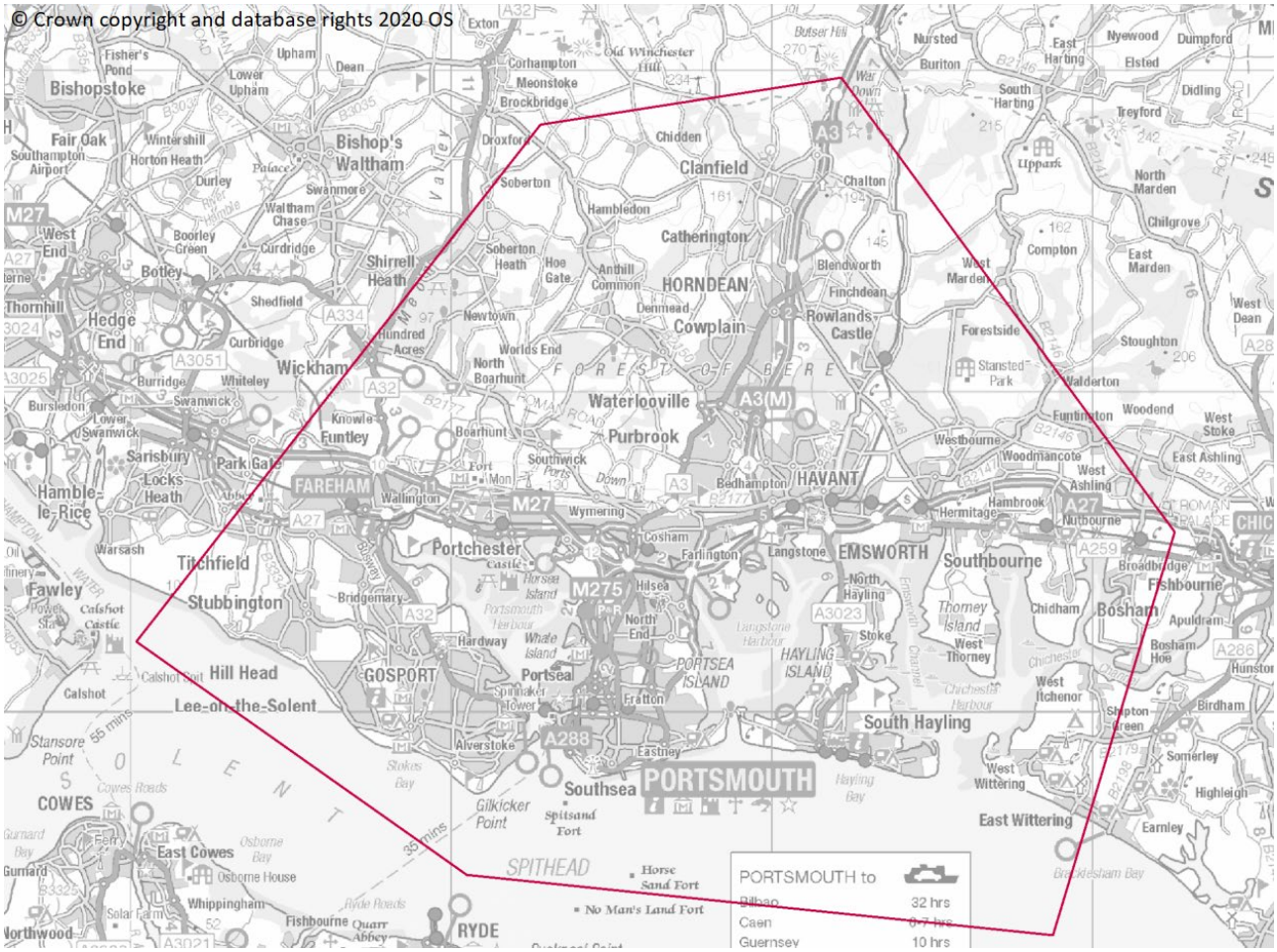
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

[23] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

See licence area data and population data for this region.

Portsmouth



Licence area population: 444,102

Size of licence area (km²): 566 km²

Reserved C-DSP capacity: SEVEN services

Local DAB service 1 (and licence area population): South Hampshire (1,203,463)

Local DAB service 1 population overlap (and percentage): 444,102 (36.9%)

Local DAB service 2 (and licence area population): Sussex (1,344,906)

Local DAB service 2 population overlap (and percentage): 16,459 (1.2%)

Proposed frequency block: One of: 7D or 8B
A sub-band III allocation will be considered if one of the above blocks cannot be utilised.

Possible co-block small-scale DAB licence areas to be protected:

Other than toward the Isle of Wight, Southampton and Winchester small-scale DAB areas as well as the high ground of Pepperbox Hill and north of West Dean within the Salisbury small-scale DAB area and Nine Barrow Down within the Poole, Purbeck & Wimborne small-scale DAB area, this service

must not cause any significant interference above 38 dBµV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use a transmitter site on the Portsdown ridge, Ofcom predictions indicate that a low power and/or directional antenna may be necessary to meet some outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, high ground on the South Downs may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[24]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 35 dBµV/m at the coast of France. International restrictions are not expected to be required towards Belgium or the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

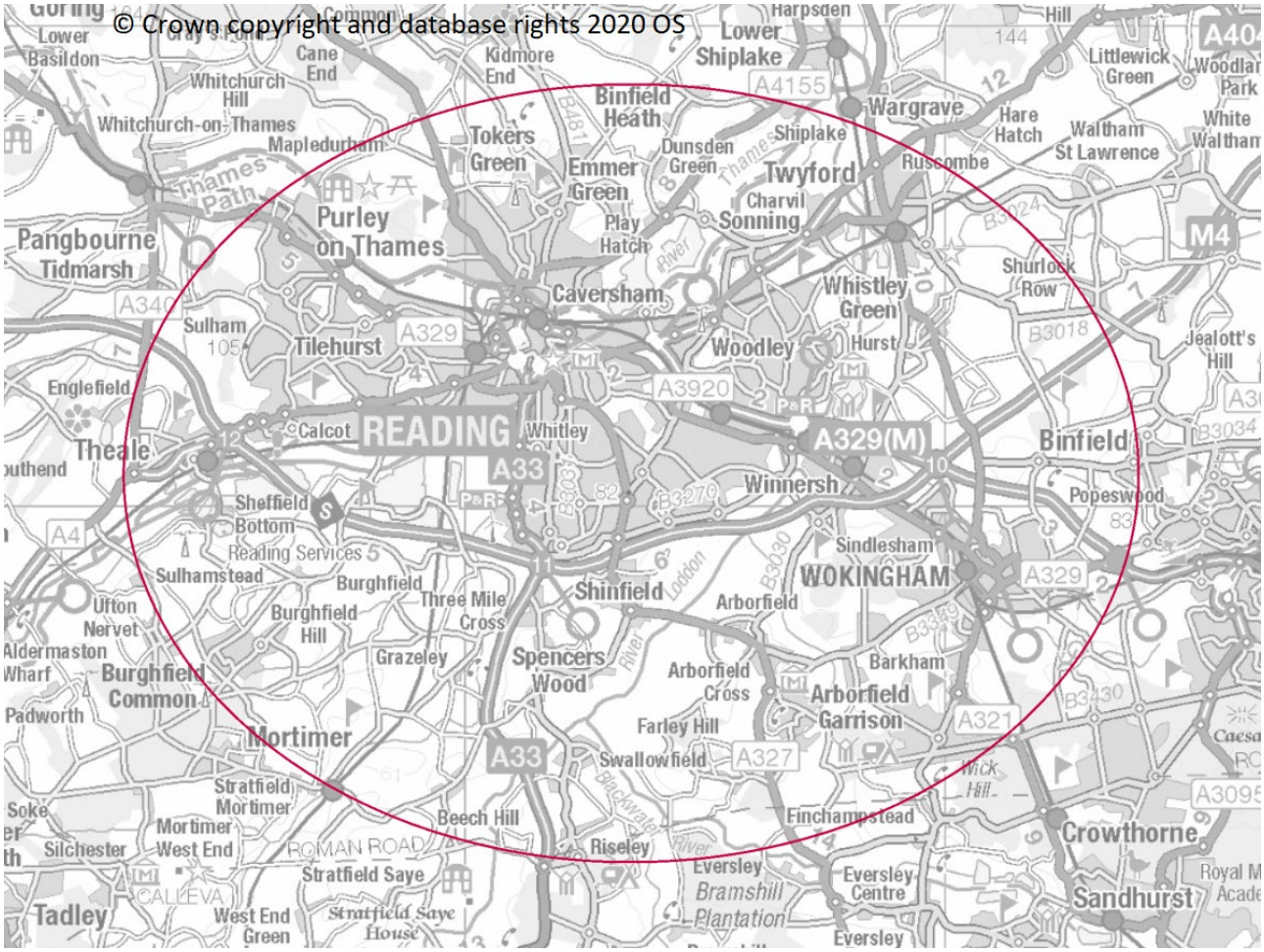
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[24] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Reading



Licence area population: 271,011

Size of licence area (km^2): 261 km^2

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): *Berks & North Hants (905,496)*

Local DAB service 1 population overlap (and percentage): *271,011 (29.9%)*

Proposed frequency block: One of: 7D, 9B or 9C

Possible co-block small-scale DAB licence areas to be protected:

Other than the Berkshire & South Oxfordshire, Basingstoke and Newbury small-scale DAB areas, this service must not cause any significant interference above 38 dBµV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Coppid Beech DAB transmitter site, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna may be necessary to meet some outgoing interference criteria.

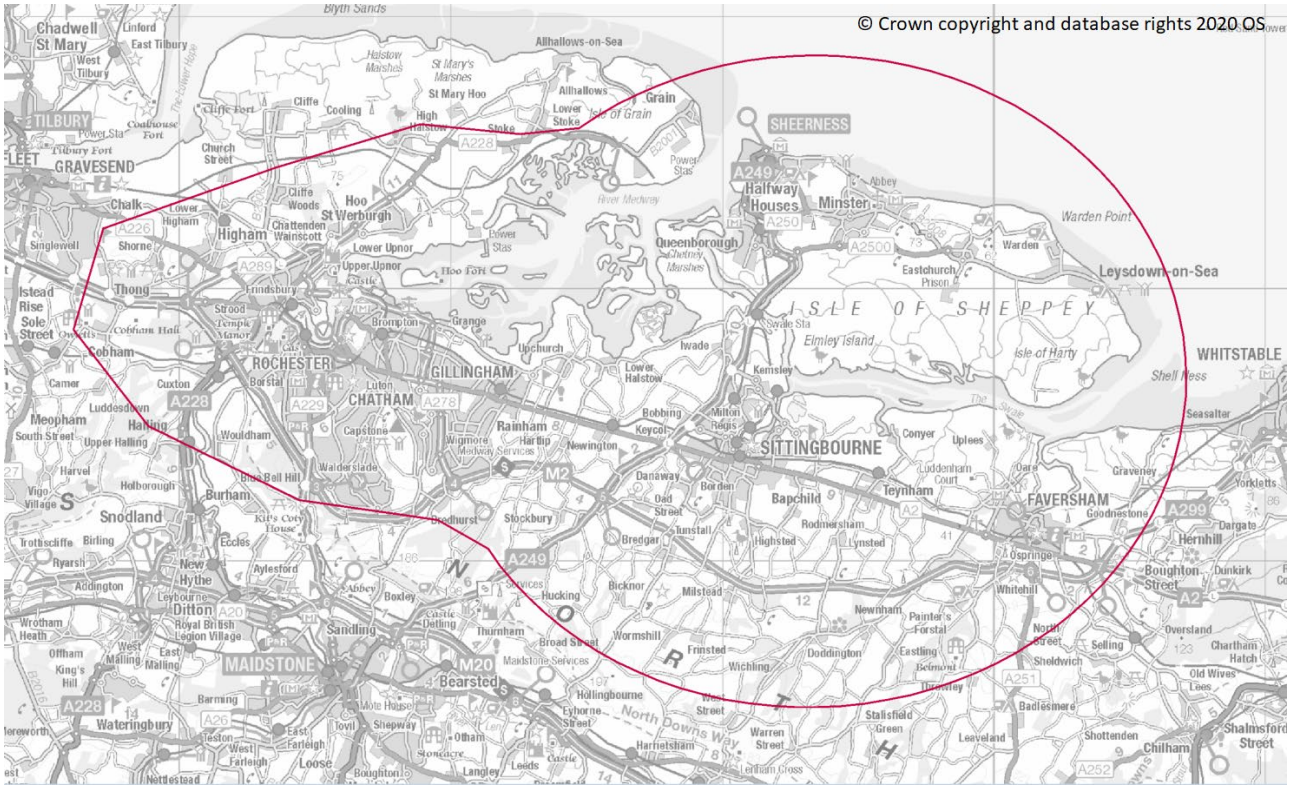
Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, areas around Emmer Green, Beech Hill, Burghfield Hill and Binfield are expected to be subject to very high levels of interference. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[25]).

International issues: Field strength levels from this location are not expected to impact neighbouring administrations, but for the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 25 dBµV/m at the coast of France, Belgium or the Netherlands.

See licence area data and population data for this region.

[25] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Sittingbourne & the Medway Towns



Licence area population: 327,369

Size of licence area (km²): 674 km²

Reserved C-DSP capacity: SIX services

Local DAB service 1 (and licence area population): Kent (1,413,090)

Local DAB service 1 population overlap (and percentage): 327,369 (23.2%)

Local DAB service 2 (and licence area population): London (10,102,817)

Local DAB service 2 population overlap (and percentage): 138,384 (1.4%)

Proposed frequency block: One of: 9A or 9B

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Bluebell Hill or Faversham DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria. Ofcom predictions also indicate that all coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, the coast and high ground on the North Downs may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[26]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 30 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

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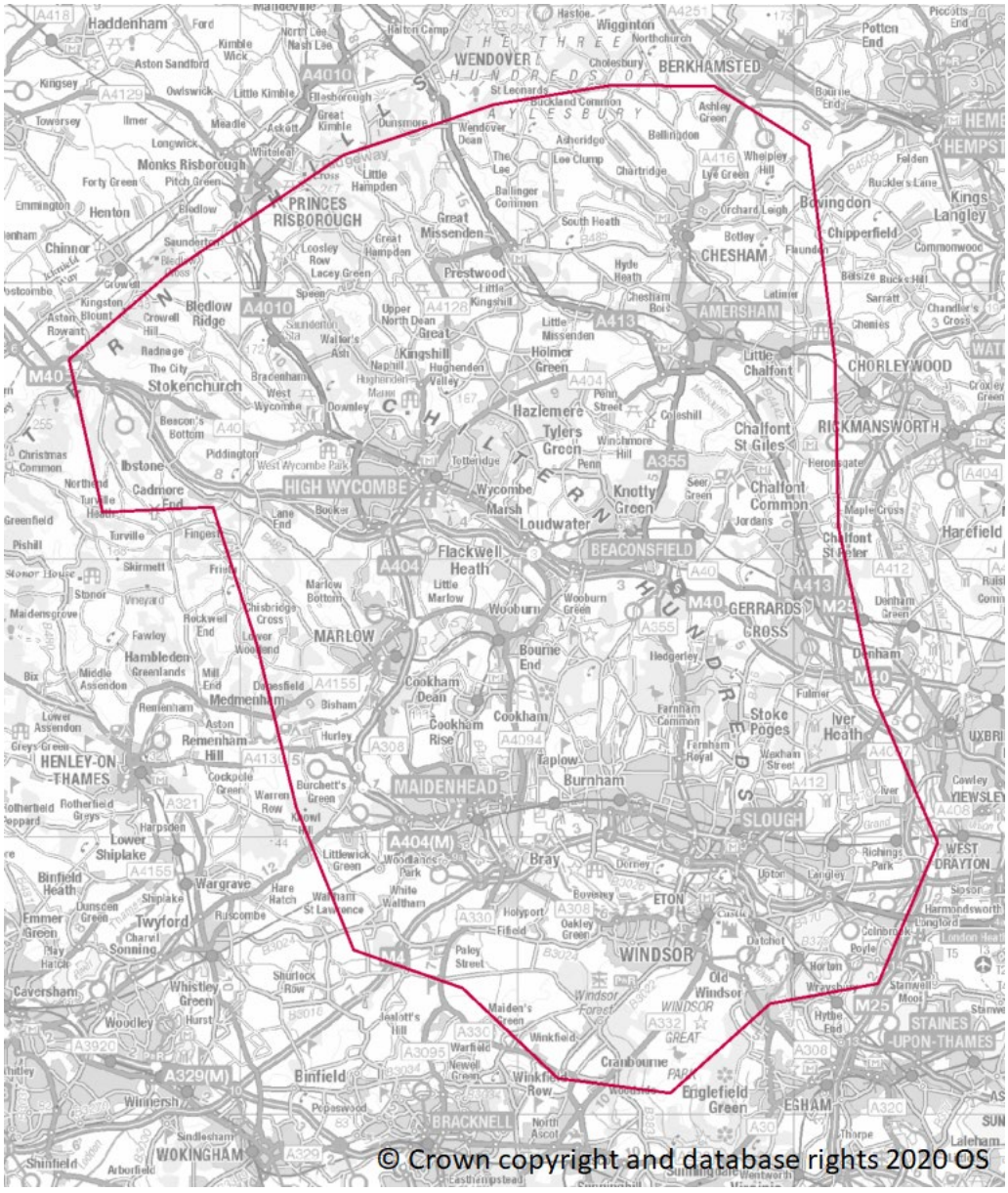
South Buckinghamshire



Licence area population: 459,936

Size of licence area (km²): 739 km²

Reserved C-DSP capacity: SEVEN services

Local DAB service 1 (and licence area population): Herts, Beds & Bucks (2,008,567)

Local DAB service 1 population overlap (and percentage): 250,807 (12.5%)

Local DAB service 2 (and licence area population): London (10,102,817)

Local DAB service 2 population overlap (and percentage): 457,458 (4.5%)

Proposed frequency block: One of: 7D, 8B, 9B or 9C

Possible co-block small-scale DAB licence areas to be protected:

Other than the North Buckinghamshire, Newbury, Berkshire North & South Oxfordshire and Basingstoke small-scale DAB areas, this service must not cause any significant interference above 38 dBµV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Chepping Wycombe or High Wycombe DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna may be necessary to meet outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, high ground on the Chiltern Hills may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[27]).

International issues: No international restrictions are expected to be required for this area.

See licence area data and population data for this region.

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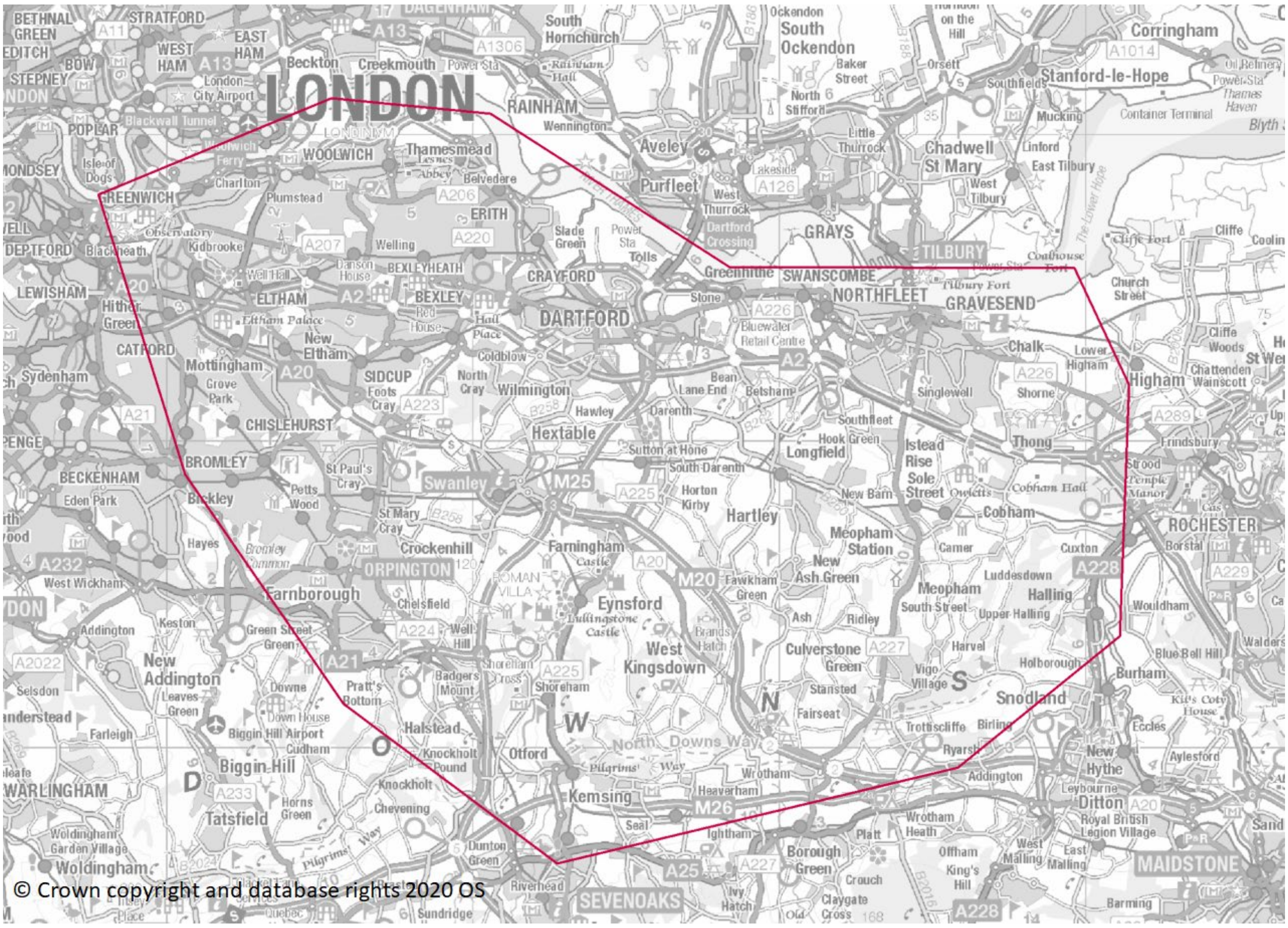
South East London & North West Kent



Licence area population: 776,535

Size of licence area (km²): 562 km 2

Reserved C-DSP capacity: SIX services

Local DAB service 1 (and licence area population): *Kent (1,413,090)*

Local DAB service 1 population overlap (and percentage): *222,252 (15.7%)*

Local DAB service 2 (and licence area population): *London (10,102,817)*

Local DAB service 2 population overlap (and percentage): *776,535 (7.7%)*

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B or 9C

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Kemsing or Wrotham DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna will be necessary to meet outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, high ground on the North Downs may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[28]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 30 dBµV/m at the coast of France. International restrictions are not expected to be required towards Belgium or the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

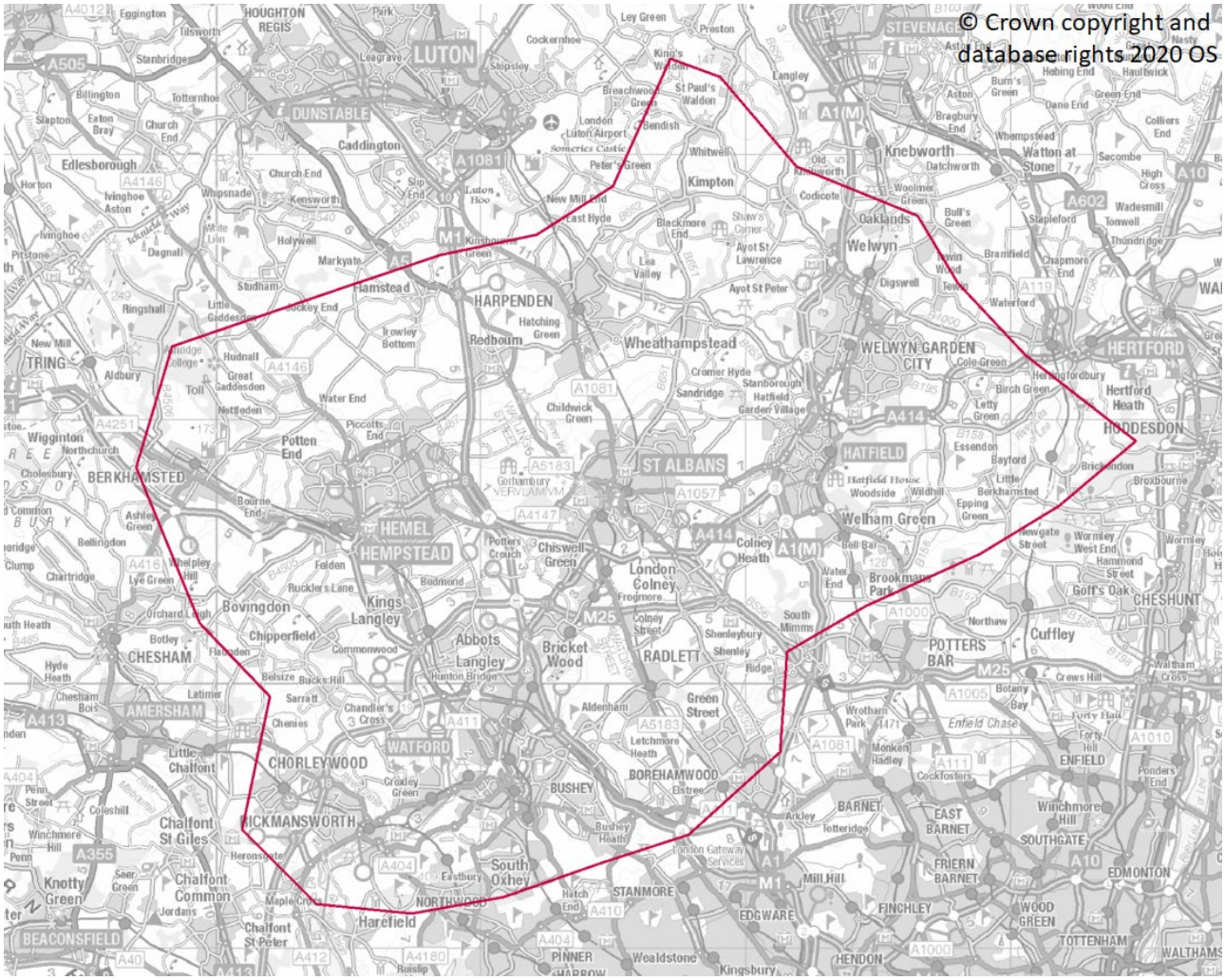
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[28] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

South Hertfordshire



Licence area population: 507,549

Size of licence area (km²): 671 km²

Reserved C-DSP capacity: FIVE services

Local DAB service 1 (and licence area population): Herts, Beds & Bucks (2,008,567)

Local DAB service 1 population overlap (and percentage): 503,657 (25.1%)

Local DAB service 2 (and licence area population): London (10,102,817)

Local DAB service 2 population overlap (and percentage): 507,549 (5.0%)

Proposed frequency block: One of: 7D, 8B, 9A, 9B or 9C

Possible co-block small-scale DAB licence areas to be protected:

Other than the North Buckinghamshire small-scale DAB area, this service must not cause any significant interference above 38 dBµV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Brookmans Park, Epping Green, Mount Vernon or Pimlico (Hemel Hempstead) transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[29]).

International issues: No international restrictions are expected to be required for this area.

See licence area data and population data for this region.

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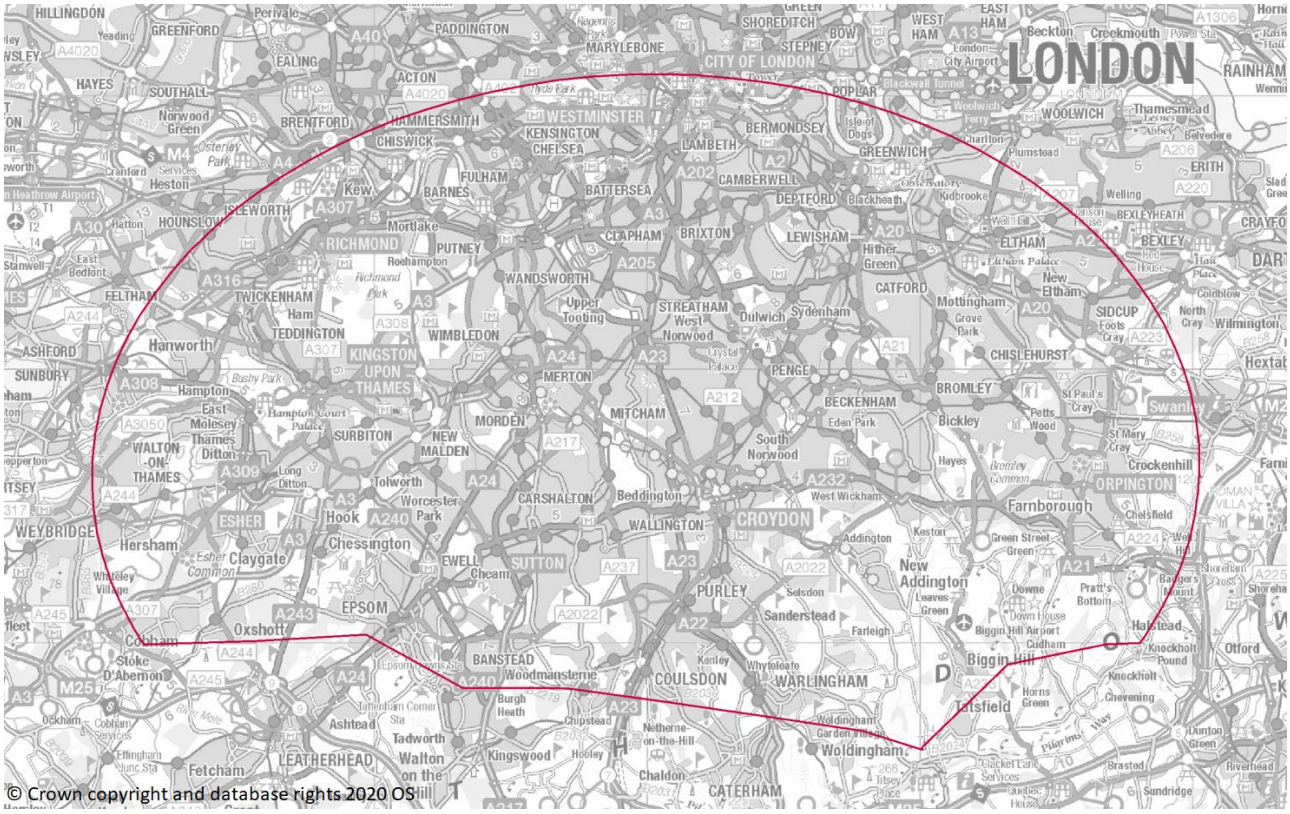
South London



Licence area population: 2,799,064

Size of licence area (km²): 758 km²

Reserved C-DSP capacity: NINE services

Local DAB service 1 (and licence area population): Kent (1,413,090)

Local DAB service 1 population overlap (and percentage): 858 (0.06%)

Local DAB service 2 (and licence area population): London (10,102,817)

Local DAB service 2 population overlap (and percentage): 2,799,064 (27.7%)

Local DAB service 3 (and licence area population): Surrey (1,126,308)

Local DAB service 3 population overlap (and percentage): 172,682 (15.3%)

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B 9C or 10B

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the BT Tower, Crystal Palace or Croydon transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[30]).

International issues: Field strength levels from this location are not expected to impact neighbouring administrations, but for the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 25 dBµV/m at the coast of France, Belgium or the Netherlands.

See licence area data and population data for this region.

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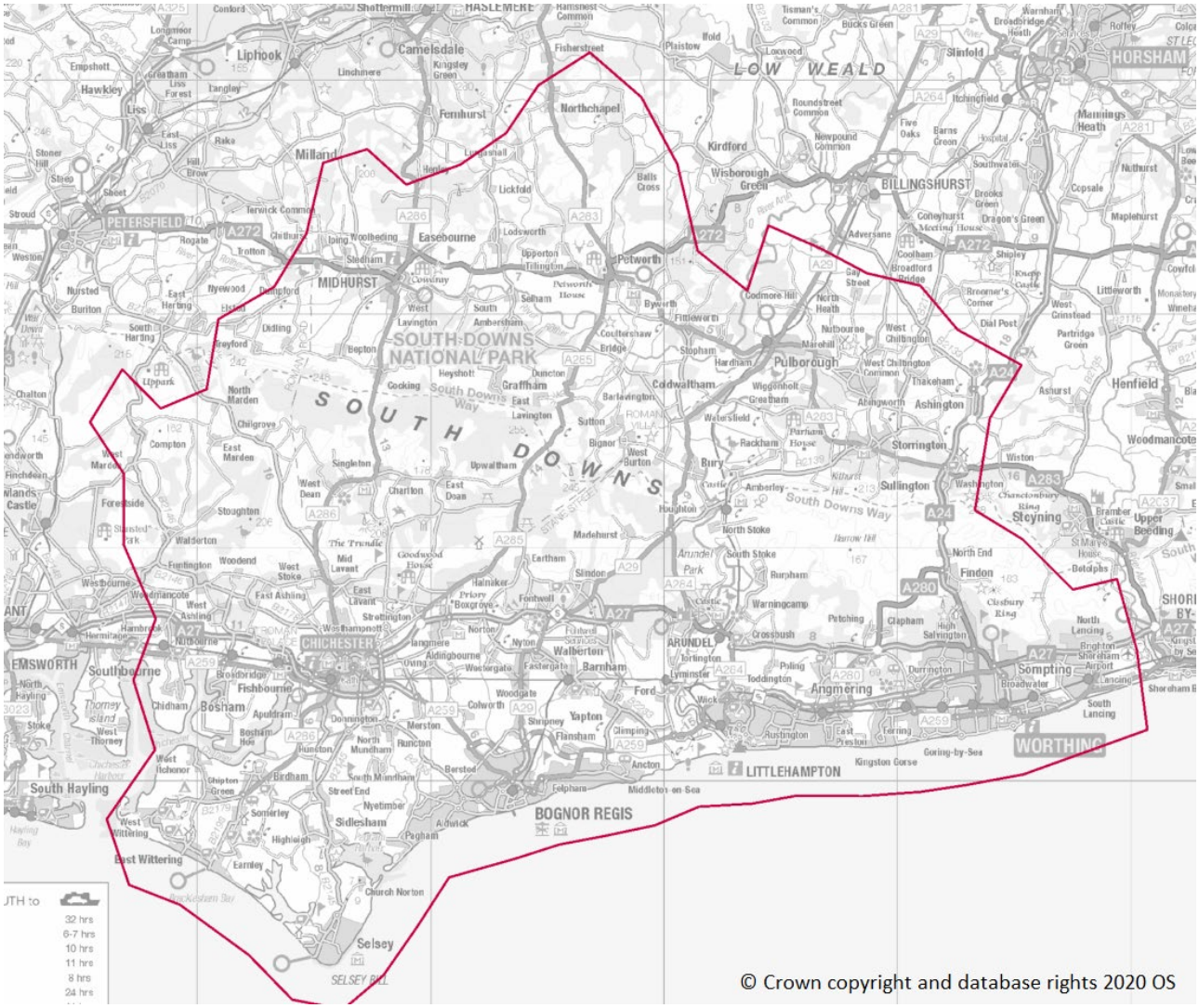
South West Sussex



Licence area population: 333,840

Size of licence area (km^2): 1,062 km^2

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): South Hampshire (1,203,463)

Local DAB service 1 population overlap (and percentage): 54,898 (4.6%)

Local DAB service 2 (and licence area population): Sussex (1,344,906)

Local DAB service 2 population overlap (and percentage): 333,840 (24.8%)

Proposed frequency block: One of: 7D or 9C
A sub-band III allocation will be considered if one of the above blocks cannot be utilised.

Possible co-block small-scale DAB licence areas to be protected:

Other than toward the Isle of Wight small-scale DAB area, this service must not cause any significant interference above 38 dBμV/m to other small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Midhurst, Burton Down Findon or The Trundle DAB transmitter sites, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria. Our predictions also indicate that coastal transmitters will need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, high ground on the South Downs may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[31]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 37 dBμV/m at the coast of France. International restrictions are not expected to be required towards Belgium or the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at

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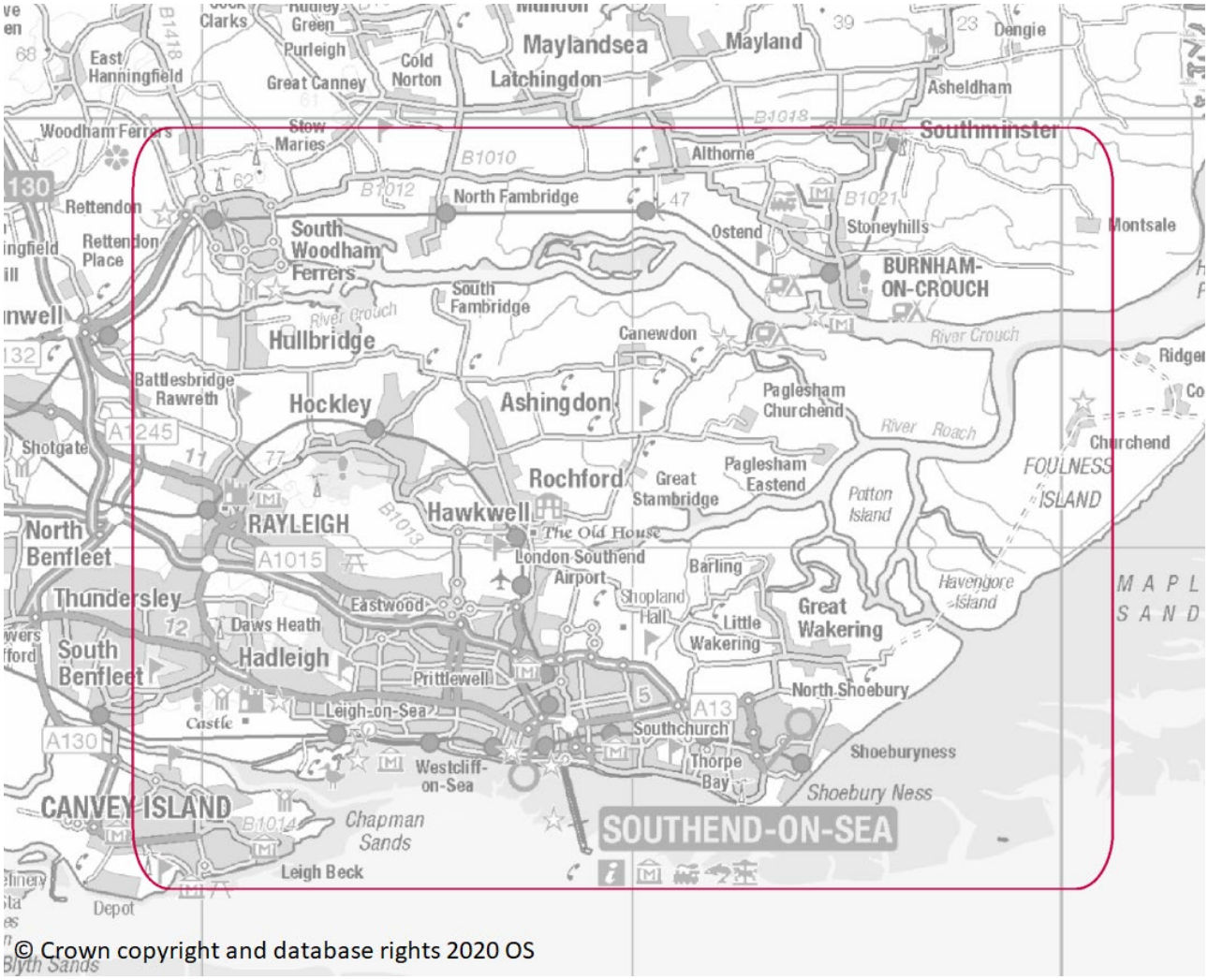
times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

Southend



Licence area population: 276,970

Size of licence area (km²): 374 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): *Essex (1,393,887)*

Local DAB service 1 population overlap (and percentage): *276,970 (19.9%)*

Proposed frequency block: One of: 9A or 9B

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: Ofcom predictions indicate that coastal transmitters may need to use directional antennas if they are to meet international interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. In particular, South Benfleet, areas north of Rayleigh and Foulness may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[32]).

International issues: The final international restrictions that will apply to this multiplex can only be defined once the frequency is allocated. The bi-laterally agreed level at the coast of each neighbouring administration will be the power summed level of all small-scale DAB networks operating on that frequency block. For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 33 dBµV/m at the coast of France, 32 dBµV/m at the coast of Belgium and 32 dBµV/m at the coast of the Netherlands. However, applicants should note that the final level of outgoing interference may be revised to a lower level and technical plans will need to be adjusted accordingly.

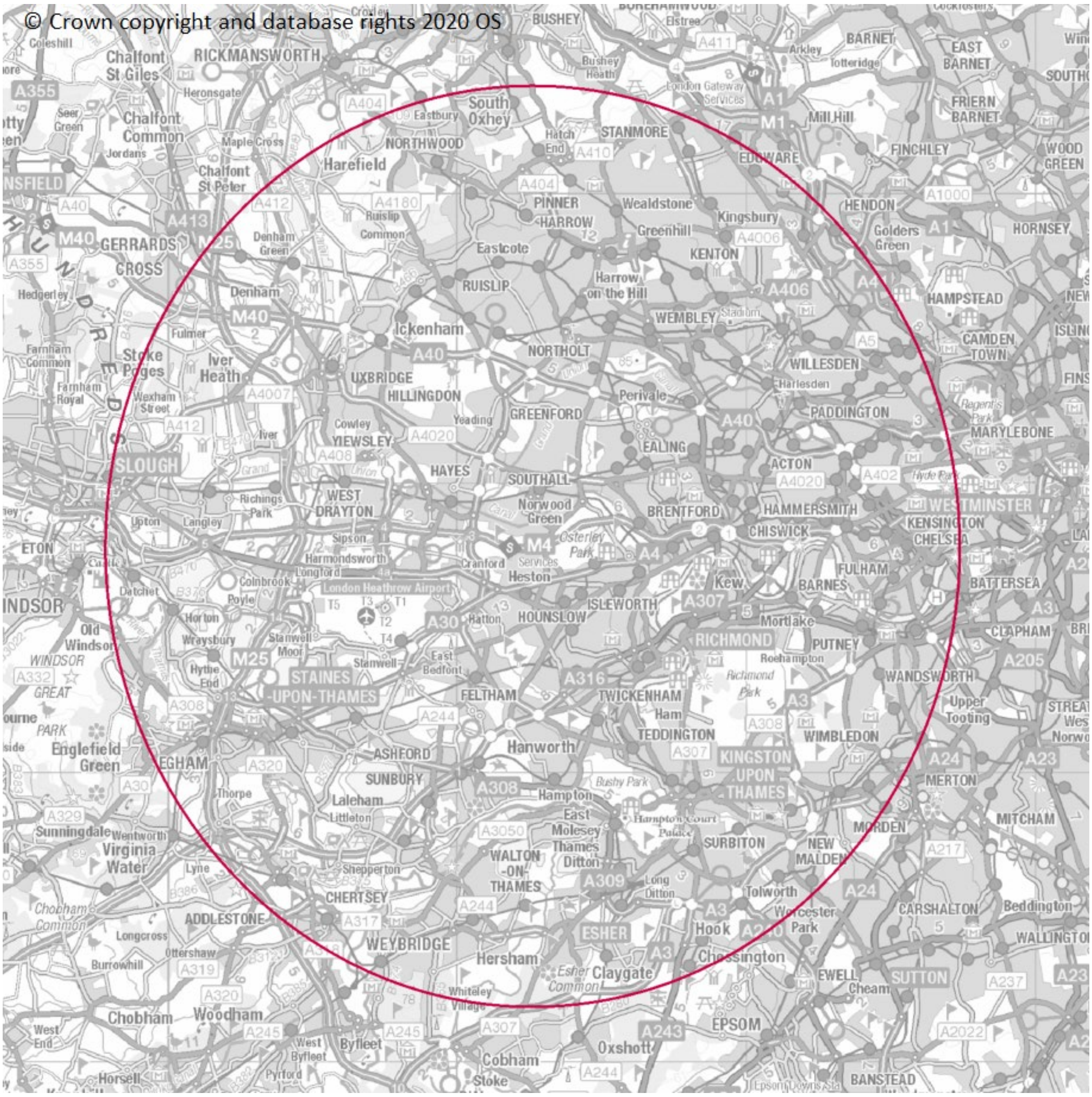
There will be varying levels of incoming interference from DAB services in neighbouring countries on the blocks available for this location. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and the Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicants' information, the Table in the Annex at the end of this document gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

The predicted levels of incoming interference (from neighbouring countries) may compromise coverage along the UK coastline or slightly in-land for some of the advertised areas (particularly at times of enhanced propagation), but coverage further inland is less likely to suffer from this interference.

See licence area data and population data for this region.

[32] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

West London



Licence area population: 2,267,807

Size of licence area (km²): 707 km^2

Reserved C-DSP capacity: NINE services

Local DAB service 1 (and licence area population): Berks & North Hants (905,496)

Local DAB service 1 population overlap (and percentage): 53,122 (5.9%)

Local DAB service 2 (and licence area population): Herts, Beds & Bucks (2,008,567)

Local DAB service 2 population overlap (and percentage): 30,417 (1.5%)

Local DAB service 3 (and licence area population): London (10,102,817)

Local DAB service 3 population overlap (and percentage): 2,267,807 (22.4%)

Local DAB service 4 (and licence area population): Surrey (1,126,308)

Local DAB service 4 population overlap (and percentage): 206,106 (18.3%)

Proposed frequency block: One of: 7D, 8A, 8B, 9A, 9B, 9C or 10B

Possible co-block small-scale DAB licence areas to be protected:

This service must not cause any significant interference above 38 dBµV/m to small-scale DAB areas outside of the macro area.

The transmitter network for this service should be designed to minimise the interference to other proposed licences within the macro area it is part of.

Additional information: If applicants wish to use the Mount Vernon DAB transmitter site, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.

Applicants for this area should expect interference within the advertised area to be higher than generally allowed for small-scale DAB areas. This is due to the need to use the limited frequency resource across the macro area more intensively. Ofcom will endeavour to limit this interference while balancing the need to award as many licences as realistically possible across the South East England macro area. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[33]).

International issues: Field strength levels from this location are not expected to impact neighbouring administrations, but for the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 25 dBµV/m at the coast of France, Belgium or the Netherlands.

See licence area data and population data for this region.

[33] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

Re-advertised licence areas

Alnwick & Morpeth

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Licence area population: 167,626

Size of licence area (km²): 1,417 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): Tyne and Wear (1,475,294)

Local DAB service 1 population overlap (and percentage): 167,626 (11.4%)

Proposed frequency block: 8B

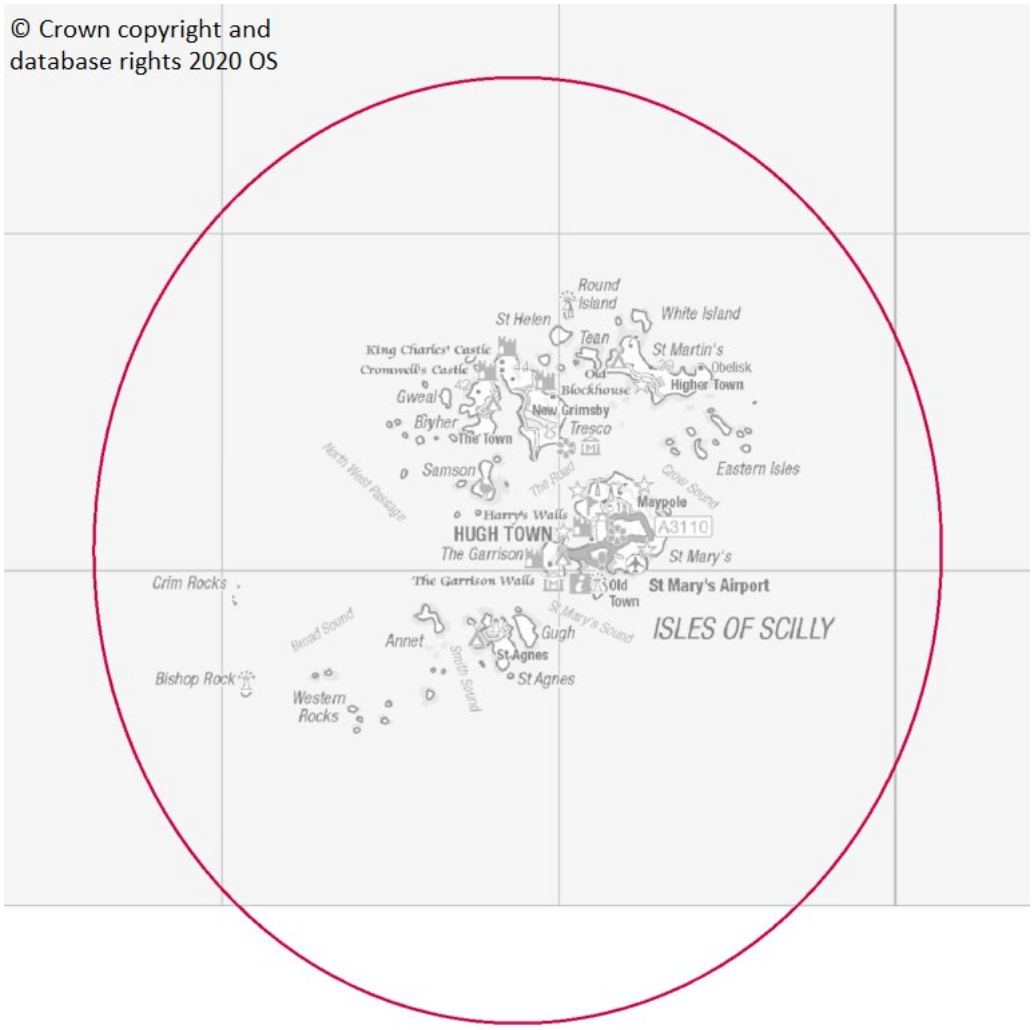
Possible co-block small-scale DAB licence areas to be protected: Scottish Borders, Peterlee, Stockton-on-Tees and Carlisle & Penrith.

Additional information: The boundaries of the advertised area have changed compared with when this area was advertised in Round One, and the reserved C-DSP capacity has been adjusted accordingly.

International issues: No international restrictions are expected to be required for this area.

See licence area data and population data for this region.

Isles of Scilly



Licence area population: 1,879

Size of licence area (km²): 496km²

Reserved C-DSP capacity: THREE services

Local DAB service 1 (and licence area population): Cornwall & Plymouth (732,168)

Local DAB service 1 population overlap (and percentage): 1,879 (0.3%)

Proposed frequency block: 8A

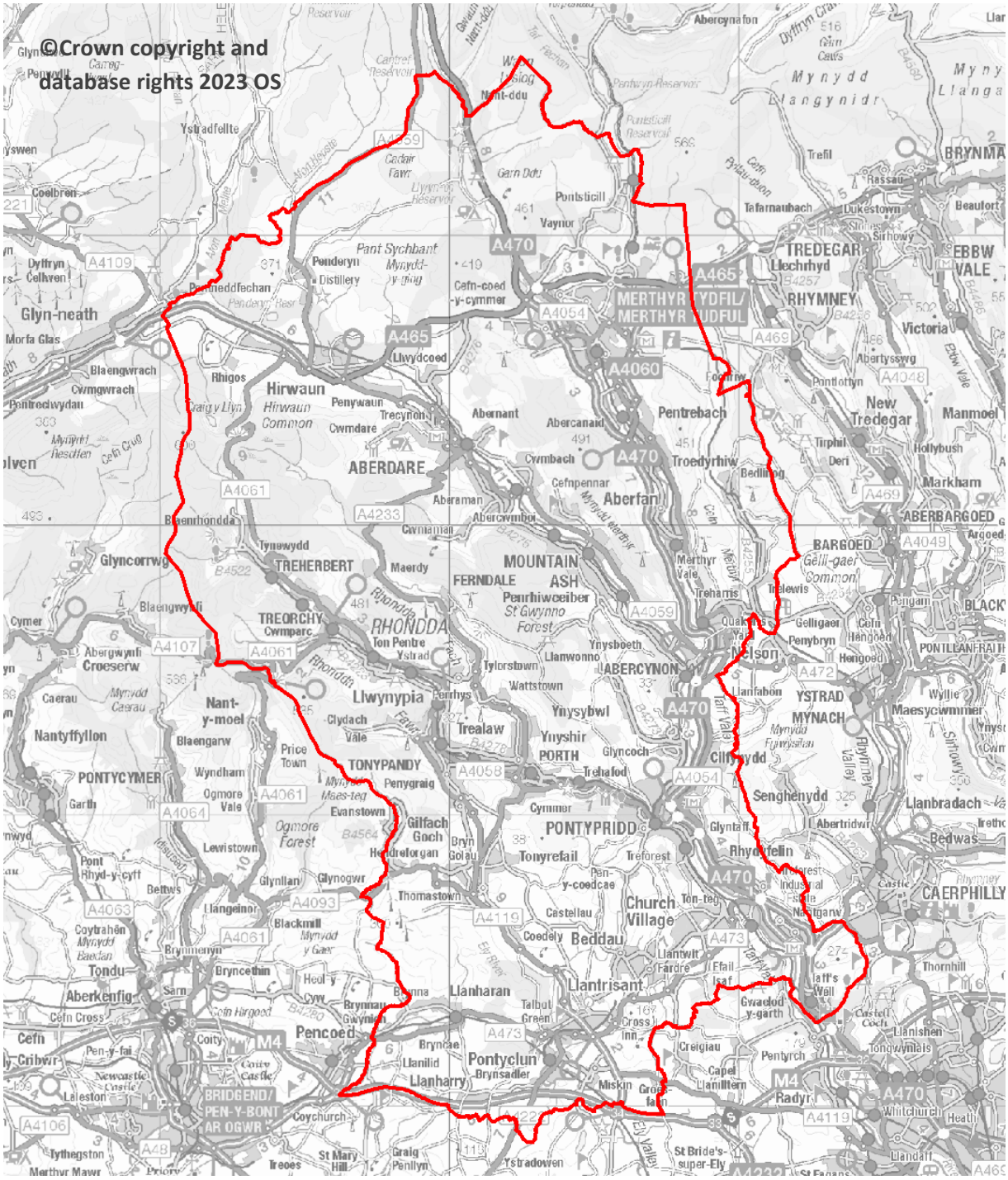
Possible co-block small-scale DAB licence areas to be protected: East Cornwall.

International issues: For the guidance of applicants, the interference from the technical plan supplied with this application should be designed not to exceed 30 dBµV/m at the French coast and 27 dBµV/m at the coast of the Republic of Ireland. However, applicants should note that the final level of outgoing interference may need to be revised and technical plans may need to be adjusted accordingly e.g. a change of transmission frequency.

There will be some level of incoming interference, ranging from low to very high, from DAB in neighbouring countries on the blocks available for this service. Currently it is difficult to determine the actual level of such incoming interference as the rollout of DAB in France, Belgium and The Netherlands is not yet complete and/or is still in planning. Thus, applicants should be aware that small scale DAB coverage now or in the future may be subject to incoming interference from our neighbours, especially on and near the UK coastline. For applicant's information, the Table in the Annex gives a colour coded estimate of the predicted levels of incoming interference at specified points on the UK coast, based on the best information available currently.

See licence area data and population data for this region.

Merthyr & Rhondda Cynon Taff



Licence area population: 241,513

Size of licence area (km²): 534 km²

Reserved C-DSP capacity: FOUR services

Local DAB service 1 (and licence area population): South-east Wales (1,154,815)

Local DAB service 1 population overlap (and percentage): 241,513 (20.9%)

Local DAB service 2 (and licence area population): Swansea (506,014)

Local DAB service 2 population overlap (and percentage): 338 (0.07%)

Proposed frequency block: 9A

Possible co-block small-scale DAB licence areas to be protected: Aberystwyth, Cheltenham & Tewkesbury, South Gloucestershire, Yeovil, Exeter and South Pembrokeshire.

Additional information: The boundaries of the advertised area have changed significantly compared with when this area was advertised in Round One (as Welsh Valleys), and the reserved C-DSP capacity has been adjusted accordingly.

If applicants wish to use the Cefn Eglwysilan DAB transmitter site, Ofcom predictions indicate that a low power, low antenna height and/or directional antenna are expected to be necessary to meet outgoing interference criteria.

Within this advertised area, elevated location and ridges may be subject to higher levels of incoming interference from small-scale DAB multiplexes that may already be on-air or may come on air in the future. Such areas might include high ground south of Pontypridd, Mynydd Maes-teg, Mynydd Merthyr, Mynydd Maendy and St Gwynno Forest. Further details are given in Ofcom's Technical Policy Guidance for DAB multiplex licensees (Section 4: Planning Standards: wanted coverage and interference protection – Co-channel interference, paragraph 4.14 onwards[34]).

International issues: No international restrictions are expected to be required for this area.

See licence area data and population data for this region.

[34] Ofcom has consulted on making revisions to the Technical Policy Guidance for DAB multiplex licensees, and the document may be re-issued before this advertisement closes, and certain paragraph numbers may change.

3. How to apply

Submission of application form and fees

3.1 Applications for any of the small-scale radio multiplex licences advertised in this document must be made using the small-scale radio multiplex licence application form. The application form is divided into two parts: Part A (which we will publish on our website) and Part B (which will remain confidential). For applicants wishing to apply – subject to the ownership restrictions – for more than one small-scale radio multiplex licence, a separate application form will be required for each application.

3.2 Prior to completing an application, it is *essential* that applicants should read the guidance notes on small-scale radio multiplex licences carefully. In addition to providing further information about the questions we ask in the application form, the Notes of Guidance provide a detailed guide to the small-scale DAB multiplex licensing regime as a whole, including matters such as the ownership restrictions, the statutory assessment criteria and how Ofcom will interpret these criteria in our assessment of applications.

3.3 The closing date for the receipt of completed small-scale radio multiplex licence application forms, and other required documentation, is **5pm** on **Friday 30 June 2023**. Both the confidential and non-confidential parts of the application form should be sent by e-mail to: smallscaleDAB@ofcom.org.uk. The subject line of the e-mail should be clearly labelled as "[Applicant name] application for SSDAB mux licence: [licence area]." The deadline for receipt of applications will be strictly enforced, so you are advised to submit your application in plenty of time to allow for any potential delivery problems. You should receive an auto-response from smallscaleDAB@ofcom.org.uk confirming that your email has been received by Ofcom. If you do not receive a response, it is likely your application has not been received and you should contact Ofcom's Contact Centre on 0300 123 3333 and ask to leave a message for the Broadcast Licensing team, who will respond to your message as soon as possible.

3.4 An application fee of **£500** will be payable for each small-scale radio multiplex licence application submitted. This fee will not be refundable in any circumstances. Electronic bank transfer payments must be received in Ofcom's bank account no later than five working days after the application form has been received by Ofcom. Failure to comply with these requirements may render the application liable to disqualification. Full details of how to make the application fee payment can be found in the 'Application fee' section in the guidance notes on small-scale radio multiplex licences.

Assessment process

3.5 Ofcom will assess applications against both our general duties and the specific statutory assessment criteria (as reproduced and expanded upon in the Notes of Guidance) and based upon the proposals presented in the completed application form. It is the applicant's responsibility to ensure that the submitted application is complete, with every question

responded to (or, where appropriate, marked 'Not applicable') and all additional information required (such as the technical plan) provided in addition to the application form. 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 be unfair to any other applicant for the licence.

3.6 In the course of assessing applications, Ofcom may seek clarification and/or amplification of proposals in any application and require the applicant to provide us with additional information.

3.7 All of the non-confidential ('Part A') sections of the application forms that we receive will be published on our website following the closing-date for applications. In assessing the applications, Ofcom may take into account any comments received from the public, which can be made to it at smallscaleDAB@ofcom.org.uk with respect to the applications submitted.

3.8 Ofcom does not necessarily expect to be able to award licences for every area being advertised in the South East England macro area. Consequently, we will need to plan the spectrum carefully with a view to licensing as many services as possible, and therefore we expect to inform all successful applicants for areas within the macro area at the same time.

3.9 However, if there are any areas within the macro area not affected by frequency shortages (for example, because we receive no applications for some of the other areas we have advertised) it may prove possible to announce these awards earlier, along with the three areas outside the macro area that are being re-advertised.

3.10 Once a licence award decision has been made and applicants have been informed, Ofcom will publish the key determining factors which led to our decision.

A1. Estimated incoming interference on UK coast

This annex is intended to provide information on the frequencies that are available along the coast of the South East England macro area and the interference that the advertised polygons may experience from transmitters elsewhere in Europe.

Small-scale DAB licence areas advertised inland should generally be unaffected by the incoming international interference detailed below.

Spectrum usage rights held by the UK and its neighbouring countries were established in 2006 at the Regional Radiocommunication Conference held in 2006 (RRC-06) and form the digital audio broadcasting allocations registered in the Geneva Plan (GE06). The spectrum allocated for small-scale DAB services in the UK must co-exist with national, regional, local and low-power DAB services from our neighbouring countries.

Ofcom is in the process of co-ordinating frequency use for UK small-scale DAB services with France, Belgium and the Netherlands. From the information we have gathered from these administrations, we are able to estimate the levels of incoming interference from each neighbouring country. We can then combine these estimates as a powersum to provide an indication of the total interference towards the UK.

Using this data, we can identify the levels of interference on each frequency block and indicate where coverage may be affected or where certain frequencies may not be usable.

Prospective applicants should be aware that if all areas advertised in the South East England macro area are applied for, Ofcom may not be able to find a frequency for every area, although this will depend upon the coverage that applicants are seeking to provide, and the technical plans they submit.

The table below indicates the estimated cumulative field strength levels from our neighbouring administrations' DAB networks towards each of the UK primary small-scale DAB blocks:

- Green blocks indicate incoming interference levels of 38dBµV/m or lower.
  These levels are deemed acceptable for co-channel DAB allocations to co-exist without interference.
- Yellow blocks indicate incoming interference levels of between 39dBµV/m to 43dBuV/m.
  These levels will cause some interference but should not cause significant impacts to coverage.
- Orange blocks indicate incoming interference levels of between 44dBµV/m to 48dBuV/m.
  These levels will cause interference, and depending on location, impacts to coverage. The frequency block may be useable if the applicant's proposed transmitter network provides an adequate level of signal to overcome the interference in the desired coverage area(s).

- Red blocks indicate incoming interference levels of 49dBµV/m or higher.
  These levels are deemed generally unacceptable for co-channel DAB allocations, and we do not plan to use them in the specified coastal locations, although they may be usable in specific circumstances if the applicant's proposed transmitter network provides an adequate level of signal to overcome the interference in the desired coverage area(s).

The numbers shown are estimated field strength in dBµV/m at 10m above the ground:

Test point location	SSDAB Areas	Block 7D	Block 8A	Block 8B	Block 9A	Block 9B	Block 9C
Portsmouth	Portsmouth	34	41	41	36	42	35
Selsey	SW Sussex	34	45	45	37	42	36
Bognor Regis		33	44	45	36	42	36
Worthing	Brighton	34	44	45	34	42	37
Brighton		35	44	45	33	41	38
Beachy Head	Eastbourne	42	52	52	35	44	42
Bexhill	Hastings	40	54	54	37	42	41
Rye	Ashford & Dungeness	42	57	57	35	42	43
Dungeness		46	60	60	39	44	46
New Romney		46	59	59	39	44	46
Dymchurch		46	59	58	39	43	46
Folkestone	Margate Dover & Folkestone	47	60	59	40	44	47
Dover		49	60	59	42	45	49
Deal		50	58	55	43	45	50
Ramsgate		50	57	53	46	46	50
Margate		50	57	53	46	46	50
Whitstable	Canterbury	47	49	48	40	40	47
Sheppey	Sittingbourne & Medway Towns	48	48	46	43	43	48
Grain		47	46	45	42	42	47
Stanford le Hope	London	43	42	41	39	39	43
Canvey Island	Southend	45	46	43	41	41	45
Southend		47	48	46	41	41	47
Foulness		48	52	48	43	43	48
West Mersea	Colchester & Clacton	47	51	47	43	43	47
Clacton		50	53	49	45	45	50
Walton on the Naze		51	53	49	46	46	51
Felixstowe	Ipswich & Felixstowe	52	54	49	46	46	52
Orford Ness	Central Suffolk	53	55	49	47	47	53
Southwold	Great Yarmouth & Lowestoft	54	54	49	48	48	54
Kessingland		54	53	50	48	48	54
Lowestoft		55	53	50	48	48	55
Great Yarmouth		55	52	49	47	47	55
Caister on Sea		55	50	49	47	47	55
Hemsby		55	50	49	47	47	55
Horsey		54	47	48	46	46	54

Applicants are advised to consider this information before applying for locations within the South East England macro area and should be aware that coverage in some polygons could have varying degrees of interference depending on which areas can be awarded and which frequencies can be assigned as part of the overall planning process for the macro area.