

Reference: 01744416

Information Requests
information.requests@ofcom.org.uk

30 January 2024

Freedom of Information request: Right to know request

Thank you for your request for information concerning DAB signal strengths and Leicester. This request was received on 3 January 2024 and we have considered it under the Freedom of Information Act 2000 (the "FOI Act").

Your request & our response

In respect of the document

https://www.ofcom.org.uk/data/assets/pdf_file/0031/95719/technical-policy-guidance-for-dab-multiplex-licensees.pdf (Technical policy guidance for DAB multiplex licensees, 9 May 2023) and other data you may hold to Leicester SSDAB and Leicestershire local DAB multiplexes:-

1: In 5.6 you refer to 4 thresholds (63, 68, 70, 75). Can you please give some examples when and where you have applied the 68, 70 and 75dBuV/m thresholds?

The various thresholds you have quoted have been used in earlier spectrum planning models that assigned different target signal levels to various types of ground cover or clutter (the allowance for what sits on top of terrain). That planning model was principally designed for predicting nationwide coverage and is not commercially available. Ofcom has instead moved to using a planning model that is open to third parties. We have used the planning level of 63dB μ V/m consistently with that planning model.

2: Are you able to confirm your data indicates Leicester City is "dense urban"? According to the ONS Leicester is the most densely populated area of the UK outside the M25. According to the clutter data we have here from ATDI, Leicester City is "Dense Urban". If your data does not indicate that Leicester is "dense urban" could you please let me know what data source you are using and why not.

We use a clutter dataset produced by Infoterra that was converted by ATDI for use in the HTZ prediction tool. I have enclosed a map showing the attribution of clutter type to Leicester and a key to what the colours represent. It's worth noting that 'dense urban' clutter type covers only small parts of the UK, and only a few pixels (in the darker brown colour) within Leicester City. However, our planning model treats 'dense urban' areas in the same way as 'urban' (lighter brown) and 'industrial' (turquoise) when predicting signal strengths – further explanation is given in the response to Q3 below. It's worth bearing in mind that when referring to clutter, dense urban relates

to the type and size of buildings and not population density.

3: Has Ofcom applied the dense urban thresholds in respect of calculating the "40% rule" for Leicester SSDAB?

We have calculated overlap using the 63dBuV/m threshold as set out in our April 2020 statement¹ on how we would license small-scale DAB, which sets out how we would define coverage and measure overlap with local multiplexes. The planning tool we use adds different levels of signal attenuation corresponding to clutter when predicting signal levels. An extra allowance of 2dB is made in the signal level predictions for areas having urban 15m clutter (light brown areas), dense urban clutter (darker brown areas) and industrial clutter (turquoise areas).

4: Leicestershire Local DAB service had coverage issues very shortly after launch that the Copt Oak and Houghton on the Hill transmitters did not provide adequate service in Leicester City Centre and Leicester Cardinal Telephone Exchange was installed shortly afterwards. Are you able to share any data that you hold on the reasons for this?

We have identified two documents that set out the coverage predicted by Copt Oak and Houghton-on-the-hill, with and without additional transmitters including Leicester Cardinal. We do not hold any further information relating to the reasons for the inclusion of a transmitter at Leicester Cardinal.

https://webarchive.nationalarchives.gov.uk/ukgwa/20160702165302mp_/http://www.ofcom.org.uk/static/radiolicensing/mcamaps/dl000034.pdf (Copt Oak and Houghton on the Hill only)

[Leicestershire DAB Coverage Plan Final Report Dec14.docx \(ofcom.org.uk\)](#) (Six transmitters)

5: In respect of Leicestershire local DAB, can you please provide your coverage map (and indicate the thresholds) of the coverage from the original service from Copt Oak and Houghton on the Hill without Leicester Cardinal? My understanding is this provided 63dBuV/m across the city, which was not sufficient and Leicester Cardinal was bought online to bring the signal up to 70dBuV/m across the city.

See response to previous question for the coverage maps. We have no information on the predicted actual signal levels provided by the Leicestershire local DAB transmitters, either with or without Leicester Cardinal.

6: In 5.7 you state that your default position is to use the field strength equivalent to "useful suburban". In what circumstances would you use the thresholds for "dense urban"?

Our default is to use 63dBuV/m and we do not use other field strengths.

7: Table 5 of this document indicates it is Ofcom policy that 70.3dbuv/m is required to provide "usable" service in a dense urban area. Can you confirm this interpretation of your document is correct?

¹ [Statement: Licensing small-scale DAB – how Ofcom will exercise its new functions - Ofcom](#)

The thresholds in the Technical Policy Guidance document are for guidance, and it is not Ofcom policy that dense urban areas require 70.3 dB μ V/m. It is worth noting the difference between population density and building size clutter, as our aim is to serve residential areas rather than business districts.

8: Can you let me know of any research or evidence that you have which indicates that the "useful suburban" threshold of 63dBuV/m will provide usable service in a dense urban environment? If you are able to do this, could you please indicate why the "dense urban" thresholds exist at all?

We do not hold this information.

9: Are you able to provide a coverage map of the Leicester SSDAB multiplex using the "usable dense urban" threshold of 70.3dBuV/m?

We do not hold this information.

If you have any further queries, then please send them to information.requests@ofcom.org.uk quoting the reference number above in any future communications.

Yours sincerely

Information Requests

If you are unhappy with the response you have received in relation to your request for information and/or consider that your request was refused without a reason valid under the law, you may ask for an internal review. If you ask us for an internal review of our decision, it will be subject to an independent review within Ofcom.

The following outcomes are possible:

- the original decision is upheld; or
- the original decision is reversed or modified.

Timing

If you wish to exercise your right to an internal review **you should contact us within two months of the date of this letter**. There is no statutory deadline for responding to internal reviews and it will depend upon the complexity of the case. However, we aim to conclude all such reviews within 20 working days, and up to 40 working days in exceptional cases. We will keep you informed of the progress of any such review. If you wish to request an internal review, you should contact information.requests@ofcom.org.uk

If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. Further information about this, and the internal review process can be found on the Information Commissioner's Office [here](#). Alternatively, the Information Commissioner can be contacted at:

Information Commissioner's Office
Wycliffe House
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Wilmslow
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