

Reference: 01732239

Information Requests  
[information.requests@ofcom.org.uk](mailto:information.requests@ofcom.org.uk)

22 December 2023

### Freedom of Information request: Right to know request

Thank you for your request for information concerning SRN planning in Scotland. Your request was received on 6 December 2023 and we have considered it under the Freedom of Information Act 2000 (the 'FOI Act') and the Environmental Information Regulations 2004 (the "EIR").

#### Your request

*"I understand that, in support of the government-funded TNS element of the SRN scheme, Ofcom has provided MNOs with:*

*the TNS areas where coverage is required and nominal locations which radio software has determined will provide coverage across the area to the required level.*

*Could you please provide me with a list of the nominal locations in Scotland, either by National Grid Reference or Lat/Long co-ordinates."*

#### Our response

With reference to the request to provide information on the TNS (Total Not Spot) locations, please note that whilst Ofcom has provided MNOs (Mobile Network Operators) with a file defining total not spot (and partial not spot) areas for the purposes of SRN (Shared Rural Network), this information is itself based on predicted coverage information supplied to Ofcom by the MNOs. MNOs have provided Ofcom with the relevant information, rather than the other way round.

In line with your request, we are releasing the locations in Scotland that Ofcom confirmed to MNOs should be regarded as TNS for the purposes of SRN. This was based on our assessment of predictive coverage data provided to us by the MNOs. We are releasing the data in two files (to provide it at a size that is viewable by standard applications) in Excel format. One file provides data on total not spots to the north of a line dividing the Firth of Moray and Loch Linnhe, and a second file covering the rest of Scotland south of this division. The file identifies pixels, associated with their Eastings and Northings, and marked as 0 to define the presence of 0 MNOs predicted coverage.

We note that this file was constructed based on a specific set of inputs relevant for SRN in 2020, and may therefore not represent an accurate picture of current Total Not Spots in Scotland.

Please see Ofcom's [mobile coverage checker](#) for a more up to date view of individual MNOs coverage.

We have interpreted your reference to the “nominal locations which radio software has determined will provide coverage across the area to the required level” to mean the location of the sites which the MNOs planned to use (when they submitted their radio plans to OFCOM) in order to meet the “2020 coverage obligations” which were included in the MNOs’ licences to give effect to the SRN.<sup>1</sup>

For the reasons set out below, we consider that nominal locations fall under an exemption in the EIR and we have therefore decided not to disclose these.

The EIR states that a public authority may refuse to disclose environmental information requested to the extent, amongst other things, that its disclosure would adversely affect international relations, defence, national security or public safety (regulation 12(5)(a) of the EIR), and in all the circumstances of the case, the public interest in maintaining the exception outweighs the public interest in disclosing the information.

Ofcom has considered your request in light of the relevant statutory scheme. We have also considered previous advice from HM Government on the potential implications of disclosure of information relating to the location of mobile sites (and other information relating to mobile sites) in the context of national security. HM Government has raised significant concerns with Ofcom about the release of this type of information on national security grounds and has advised that disclosure of this type of information would adversely affect national security.

Taking this into account, Ofcom considers that regulation 12(5)(a) of the EIR is engaged; specifically, that disclosure of the information would adversely affect national security.

In applying this exception, Ofcom has balanced the public interest in withholding the information against the public interest in disclosing it and decided that in all the circumstances of the case the public interest in maintaining the exception outweighs the public interest in disclosure. In assessing this, under regulation 12(2), we have also applied a presumption in favour of disclosure. Annex A sets out the exception in full, as well as the factors we considered when deciding where the public interest lay.

We also note that regulation 12(5)(e) of the EIR may apply, given the confidential basis on which this information was provided to Ofcom, and the potential commercial impact of its release. However, we have not relied on this regulation in making our decision.

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

Yours sincerely

Information Requests

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<sup>1</sup> <https://www.ofcom.org.uk/spectrum/information/cellular-coverage>

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](mailto: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  
Water Lane  
Wilmslow  
Cheshire  
SK9 5AF

## Annex A

### Regulation 12(5)(a) of the Environmental Information Regulations 2004

<p><b>The exception</b></p> <p><i>Regulation 12(5)(a) of the Environmental Information Regulations 2004 – a public authority may refuse to disclose information to the extent that its disclosure would adversely affect international relations, defence, national security or public safety.</i></p> <p>The regulation is engaged because disclosure of this information would adversely affect national security.</p> <p><b>The public interest test</b></p> <p>Regulation 12(5)(a) is subject to the public interest test.</p> <p>Key points:</p> <p>Ofcom can refuse to disclose information under this exception only if in all the circumstances of the case the public interest in maintaining the exception outweighs the public interest in disclosing the information. In assessing this, under regulation 12(2), Ofcom must also apply a presumption in favour of disclosure.</p> <p>In carrying out the public interest test, Ofcom should consider the arguments in favour of disclosing the information and those in favour of maintaining the exception, attaching the relative weight to each argument (for and against disclosure) to decide where the balance of public interest lies.</p> <p>We have set out the matters Ofcom have considered in reaching its decision with respect to the public interest below.</p>	
<p><b>Factors for disclosure</b></p>	<p><b>Factors for withholding</b></p>
<ul style="list-style-type: none"> <li>• <b>Transparency:</b> There is always a general public interest in transparency. The EIR implements EU Directive 2003/4/EC on public access to environmental information. Recital 1 of the preamble to the Directive states this public interest: <ul style="list-style-type: none"> <li><i>“Increased public access to environmental information and the dissemination of such information contribute to a greater awareness of environmental matters, a free exchange of views, more effective participation by the public in environmental decision-making and, eventually, to a better environment.”</i></li> </ul> </li> <li>• <b>Accountability:</b> As part of the Shared Rural Network programme, the MNOs have given certain coverage commitments which have been written into their spectrum licences in the form of coverage obligations (the “2020 coverage obligations”).<sup>2</sup> Some individuals may want to know whether the MNOs are likely to bring specific locations into their coverage footprint as a result of extending their mobile coverage to comply with the 2020 coverage obligations.</li> </ul>	<p>HM Government has advised Ofcom that:</p> <ul style="list-style-type: none"> <li>• Disclosure of this type of information raises significant concerns on national security grounds and would adversely affect national security.</li> <li>• Specifically, disclosure of this type of information would create an increased threat to the UK’s Critical National Infrastructure (CNI). CNI is those critical elements of infrastructure (including assets, facilities, systems, networks or processes), the loss or compromise of which could result in major detrimental impact on the confidentiality, integrity, and availability of networks, or delivery of essential services (including those of the emergency services).</li> <li>• Government has strong concerns about publishing this type of information and has advised that publishing information on mobile sites constitutes a security risk.</li> <li>• Government’s concerns centre on four areas: <ol style="list-style-type: none"> <li>1. <b>Espionage/sabotage:</b> Publishing this type of information could enable an attacker to remotely survey which mobile sites would be of interest from an espionage, sabotage or disruption perspective.</li> <li>2. <b>Jamming:</b> Publishing this type of information could enable the jamming of radio signals.</li> </ol> </li> </ul>

<sup>2</sup> <https://www.ofcom.org.uk/spectrum/information/cellular-coverage>

<ul style="list-style-type: none"> <li>• <b>Information already in the public domain:</b> Some local planning authorities have published information on the location of mobile sites (including on proposed sites). Information on mobile site locations is also available on some open source websites and mobile network operators' (MNOs) websites may indicate the general location of some masts (as well as future roll-out plans).</li> <li>• The location of mobile sites and other technical data is published in some other countries including in Ireland, France and Australia.<sup>3</sup></li> </ul>	<p>3. <b>Physical security:</b> Information relating to hub sites (mobile sites that act as their own radio coverage site and also serve to 'daisy chain' other sites), switch sites, and data centres would be of particular concern from a national security perspective. The physical security of hub sites will become even more important as features such as Mobile Edge Computing become widely available.</p> <p>4. <b>Developments in emergency services communications:</b> In the future, knowledge of commercial networks could help enable an attacker to target the UK's emergency service communications network to a degree that knowledge would not have enabled in the past. This is due to the Emergency Services Network programme switching emergency service communication from the private Airwave network to a commercial network.</p> <ul style="list-style-type: none"> <li>• Government has acknowledged that where detailed technical information is not requested, an attack is more difficult. However, site location provides the starting point for an attack to gain and build additional and more detailed information that may then make any subsequent attack more likely to succeed.</li> <li>• Government is also concerned that disclosure of information on mobile sites in Scotland would set a precedent for disclosure in response to requests about other geographic areas, resulting in further aggregation of information on mobile sites.</li> <li>• Current open source options are of much more limited use to a potential attacker than the data being requested - the data set being requested has the potential to be more damaging due to both its granularity and authoritative status.</li> </ul> <p>We have also taken into account the following:</p> <ul style="list-style-type: none"> <li>• Some of the publicly available data (such as local planning data) has not been updated for several years and is likely to be inaccurate and incomplete. Further, MNOs' websites only provide general location information and do not disclose specific site locations.</li> </ul>
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<sup>3</sup> <http://siteviewer.comreg.ie/#explore> (Ireland); <https://www.cartoradio.fr/index.html#/cartographie/stations> (France); [https://web.acma.gov.au/pls/radcom/site\\_proximity.main\\_page/](https://web.acma.gov.au/pls/radcom/site_proximity.main_page/) (Australia).

	<ul style="list-style-type: none"> <li>• There have been a significant number of attacks on mobile sites in recent years and publishing information on the location of sites (or potential sites) risks further sites being attacked. Such attacks always have an adverse impact such as customers losing mobile signal and mobile operators incurring additional costs but they can have severe consequences, for example, where a mobile site that supports critical communications for the emergency services is attacked. Such attacks can also cause physical harm to employees of mobile operators, emergency services personnel and the general public.</li> <li>• On accountability, when the 2020 coverage obligations fall due (i.e., on 30 June 2024 and 31 January 2027), Ofcom will assess compliance and then publish information about its assessment. In the meantime, Ofcom continues to publish information about mobile coverage through its Connected Nations and infrastructure reports <a href="#">Connected Nations and infrastructure reports</a>, and the <a href="#">Mobile and Broadband checker</a>.</li> </ul>
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**Reasons why public interest favours withholding information**

- The greater likelihood of the adverse effect, the greater the public interest in maintaining the exception. This is affected by how extensive the adverse effect is – in this case the adverse effect on national security has the potential to affect the security of the United Kingdom and its people, and the opportunity for the adverse effect to arise is ongoing.
- The impact of the adverse effect on national security also has the potential to harm the United Kingdom and its people and is therefore severe.
- Publicly available data does not disclose specific site locations or has not been updated for several years and is similarly likely to be inaccurate and incomplete.
- The security risk is also materially higher when all of the requested information is aggregated into a single user-friendly dataset, and published.
- We have carefully considered whether the arguments around transparency and accountability may outweigh the arguments in favour of withholding the information. In doing so, we have taken into account the national security risks identified above as well as the high risk of attacks on mobile sites which can have significant adverse consequences.
- On balance, the arguments against disclosure – including the likelihood and severity of the adverse effect on national security, and the increased threat to national security in respect of the requested information when compared to the information already in the public domain - carry greater weight than the arguments in favour of disclosure. Therefore, the public interest in maintaining the exception outweighs the public interest in disclosure.

### **Regulation 12(5)(a) exception**

I have delegated authority from the Ofcom Board to make decisions in relation to Ofcom's obligations under the Environmental Information Regulations 2004 (EIR).

Taking into account the advice from Government on the potential implications of disclosure, in my reasonable opinion, disclosure of the information requested would adversely affect national security. Regulation 12(5)(a) of the EIR therefore applies.

In applying this exception, I have balanced the public interest in withholding the information against the public interest in disclosing the information. I have set out above the factors I considered when deciding where the public interest lies.

I have decided that in all the circumstances of the case, the public interest in maintaining the exception outweighs the public interest in disclosing the information. In assessing this, I have applied a presumption in favour of disclosure.

Disclosure of the information requested is therefore refused under regulation 12(5)(a) of the EIR.

If you have any queries about this letter, please contact [information.requests@ofcom.org.uk](mailto:information.requests@ofcom.org.uk).

Signed:

Date: 22 December 2023

David Willis

Group Director, Spectrum