

Sir Chris Bryant MP
Minister of State for Data Protection and
Telecoms
By email

Dame Melanie Dawes
Chief Executive
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31 October 2024

Dear Chris,

Thank you for your letter of 28 August about Ofcom's reporting on the availability of mobile services in the UK. We recognise the importance of the issues raised and understand the concern that some consumers may get a misleading picture of mobile coverage in their area.

I would like to assure you that accurate reporting on the availability of mobile services in the UK is a priority for Ofcom. As you highlight in your letter, we have an ongoing programme of work in this area and will be overhauling our web-checker and the data behind it by next summer.

Ofcom has been reporting on coverage on our website since 2015. To do this, we use signal strength predictions from the MNOs, but this does have limitations. In particular:

- **Signal strength predictions are generally reasonable for determining average coverage over a wide area but come with significant uncertainty when trying to determine coverage in a specific location, particularly in low signal areas.** This means that when looking at a precise location the coverage may be above or below the predicted level, leading to some consumers not getting the service they expected.
- **The signal strength thresholds have been in place for many years,** but the amount of data that people use is changing, so the current thresholds don't always give an accurate guide to what customers consider a reliable service.
- **Many local factors affect the quality of the service,** such as congestion on the network (when large numbers of devices try to connect at the same time, or where the MNO has deployed insufficient capacity) or signal interference from other nearby mobile sites or other mobile customers. Signal strength alone does not capture these other factors.
- **The signal strength predictions from MNOs relate to outdoor coverage.** However, signal strength is reduced when it goes through walls and windows, with the extent of that reduction dependent upon the type of material and its thickness. This means that indoor coverage is particularly hard to predict, although it will always be less than outdoor coverage.

We, like you, understand the frustrations of consumers. We have a work programme in place to update how we report on coverage in our regular publication *Connected Nations*, and to deliver a significant improvement in our webchecker. Specifically:

- **To compensate for the known uncertainty, we are planning to use higher signal thresholds when presenting local predictions.** This will remove some of the false positive coverage predictions that can be so frustrating.
- **We are looking to use crowdsource data to build on the coverage predictions,** providing more insight into where and when the consumers can expect a good experience. The

limitations of this data means it can only be used when looking at wider areas, but could help consumers understand which MNO would best suit their needs in a given area.

- **We are assessing predicted signal strength information at a more granular level** (50 or 25 metre squares instead of the current 100 metre squares) to determine if it is possible to reduce the local uncertainty to some extent.
- **We are overhauling the website, to explain the issues better and make it clearer what the webchecker does and doesn't do.**

The analytical work will be completed by the end of the year and we will implement the most effective changes in our *Connected Nations* reports and webchecker tool by summer 2025. We believe this will deliver a meaningful improvement in the reporting of coverage that will help consumers better understand the service they can expect to receive. It is worth being clear that the result of raising the thresholds will mean lower reported coverage in most parts of the country.

You mention your own experience and feedback from your constituents about mobile coverage in your constituency. As an example of how our plans might affect understanding of coverage in any particular area, our analysis of the MNO predictions and our own drive-test measurements shows:

- As is the case in much of the country, at the signal thresholds we use for measuring aggregate coverage, much of your constituency has coverage from all four MNOs. The average outdoor coverage for the MNOs is 96.5% of the geography, with little difference between them.
- Coverage at a higher signal strength threshold more likely to represent where there is a reliable service reduces the average coverage to 81.3%, with differences between MNOs more noticeable.
- We have carried out our own performance measurements (download and upload speeds) in the area using equipment in our vehicles. Although this is only a limited sample it suggests meaningful differences between MNOs, with 96% of tests achieving 10 Mbit/s with EE, but only 63% of O2's tests achieving this level.

This analysis of the Rhondda and Ogmore constituency mirrors what we expect to see for the rest of the country as we update our webchecker signal strength thresholds to better align with what consumers would consider to be a reliable service. We find that different MNOs are the 'best' in different areas, so while EE has the best coverage in Rhondda and Ogmore it will not necessarily have the best coverage in all areas. The performance measurements in Rhondda and Ogmore provide an indication of what a large-scale measurement programme might bring in giving consumers a richer understanding of the differences between the MNOs.

In many areas there are significant differences in performance between the MNOs but consumers currently don't have this information. We believe that enabling consumers to compare the different MNOs will help them make informed choices and could provide operators with a competitive incentive to improve, to attract and retain customers. Our planned use of crowdsource data will help here to some extent.

Once we have completed our current programme of work we will take stock and, if necessary, will consider more radical options such as undertaking a large-scale performance measurement programme, or whether Ofcom could take a bigger role in holding industry to account. However, I should flag that either of these two options would have resource implications which we will need to weigh against other priorities. In any event we will be very glad to work with you and your Department to push MNOs to improve the information they provide to us and consumers.

Finally, you suggested the use of mobile network coverage data collected from refuse collection lorries. We are aware of the programme supported by Government funding across the River Severn area. We have previously discussed this approach with your officials and while it does have limitations, it could provide a view of mobile network performance that may contribute to the overall picture. Those involved in the River Severn area programme have said they want to work closely with Ofcom and we plan to explore how we can work with them to use their data and findings.

As well as improving the reporting of mobile coverage we would also be very happy to work with you and your officials as you consider any policy initiatives to improve substantive mobile coverage across the UK.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Melanie Dawes', written in a cursive style.

MELANIE DAWES