

Consultation response form

Please complete this form in full and return via email to mobilecoverageconsultation2018@ofcom.org.uk or by post to:

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Your response

Question 1: Do you agree with our proposal to impose two geographic coverage obligations and a premises obligation in the 700MHz award?

Ofcom need to come to a more settled view whether they want all mobile operators to be on all new masts. This maximises the bandwidth on every mast and consumer choice between mobile operators. On the other hand, it may seriously reduce the amount of extra rural coverage being delivered from this historic opportunity. Also, if the two outside coverage obligations are delivered by the same set of shared masts then one might question - why two coverage obligations?

The alternative is for mobile operators to stay within their two site sharing arrangements or strike out on their own – this maximises the new rural coverage delivered, but each site is more bandwidth constrained and less (or no) consumer choice between mobile operators.

I believe that Ofcom could secure the best of both coverage, choice and bandwidth for rural citizens and I set out some possibilities for achieving this in the answer to Q7.

Question 2: Do you agree with our proposed target for geographic coverage?

No. There is a significant gap between the EU view of “good quality coverage” as delivering 30 Mb/s (EU Decision No 243/2012/EU41) and the Ofcom view as delivering 2 Mb/s. But even the 2 Mb/s is not assured as there is a further gap between the aim of Ofcom for consumers to have delivered to them glitch-free steaming at 2 Mb/s and their verification approach that appears to take no account of the available bandwidth and the likely number of concurrent users. Users may receive a -105 dBm signal at the cell edge but get nowhere near 2 Mb/s in the busy period in a bandwidth as small as 5 MHz (the bandwidth package size Ofcom is proposing). The 2 Mb/s is likely to be more assured closer to the cell centre but that is shrinking the coverage! That is why the coverage targets for data, as they stand, are meaningless. Bandwidth is the missing critical parameter against likely levels of concurrent use.

Ofcom needs to examine more closely the bandwidth impact of the different combinations of mobile operators on a new rural mast resulting from the coverage obligations but taking into account all the UHF spectrum that may be on that mast. Historically, relatively few masts have all four mobile operators on them (perhaps 10-15%). The two site sharing groups represent more of the norm. There are still many sites with just one mobile operator. The impact of this is huge on what a rural local community might enjoy by way of a reliable 2 Mb/s data connection. If the 700 MHz auction follows the same pattern as the 800 MHz auction, then a new rural mast with Vodafone and O2 on it would have a total of 76 MHz of paired UHF spectrum. If, instead, that new rural mast accommodated only BT and H3G, it would have 20 MHz. If it were just BT or H3G alone, it would only have 10 MHz.

Rural communities are likely to be penalised twice. First, they may not enjoy a choice of all four mobile operators and second, the sub-set of mobile operators that turn up will not have access to all the available UHF spectrum. The difference in service levels between two different rural communities addressed by two different coverage obligations from different

	<p>MNO groups <u>could be as much as 8:1</u> and 10 MHz alone is just not good enough. Spectrum caps are of no help with this level of disparity. I suggest solutions in the answer to Q7.</p>
<p>Question 3: Do you agree with our proposed target for in premises coverage?</p>	<p>Ofcom are leaving open whether the extra 10db for indoor coverage is being delivered by more masts (keeping the balance between down path and up path) or by significantly increasing the transmitter power on the down path. The latter would meet the obligation for considerably less cost, but it raises the question of what is happening to the viability of the up-path, as smartphones are power limited. Citizens, and particularly small businesses, need up-path capacity.</p> <p>This comes back to the basic issue of what is “good quality coverage” and whether the definition and verification needs something said about the up-path performance.</p>
<p>Question 4: Do you agree with our proposed approach to targets for the Nations?</p>	<p>No – the coverage targets for data, as they stand, are meaningless. For details see response to Q2.</p>

Question 5: Do you agree with our proposal that these obligations be met within 3 years of the 700MHz award?

No

Ofcom have not separated out coverage of all major roads and instead, are depending upon their general coverage obligations achieving this. The risk of putting a time limit, like 3 years, is that it distorts priorities towards hassle free locations rather than locations of national importance, like covering all major roads.

Question 6: Do you agree that sharing information on the location of new sites in rural areas in advance of submitting a planning notice would be appropriate?

Ofcom need to decide whether the provision of loss making rural coverage is best achieved by a competitive market or as a cooperative venture between mobile operators to meet a social obligation at the lowest cost. This proposal is falling somewhere between the two approaches. I personally do not believe there is much of a market in loss making coverage and a deeper level of cooperation than just information sharing makes the most sense.

Question 7: Do you have any other comments?

The coverage obligations are, in effect, a taxpayer's subsidy (foregone auction revenues). This entitles Ofcom to be more decisive in specifying what it wants for this public subsidy. The two shortcomings mentioned in the answer to Q2 above could be addressed if the coverage obligations required a "neutral host" approach and for all the UHF spectrum to be available on these new "neutral host" rural masts.

A second-best solution would be to permit "dynamic spectrum expansion" (opportunistic use) of the entire 700 MHz band on the new masts in rural locations that had only a sub-set of mobile operators on them. The policy for rural areas must be to get all of the bandwidth on every mast. The claim of "good quality coverage" would be far more credible with 30 MHz of bandwidth behind it than only 5 MHz of bandwidth.

I am encouraged by Ofcom's determination to improve the reach and reliability of the nation's basic mobile infrastructure. I trust my concerns and comments are helpful to Ofcom in that endeavour. I am happy to clarify any points.

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