

Consultation response form

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

Georgi Pojarliev
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA

Consultation title	Dark Fibre
Full name	James Blessing
Contact phone number	
Representing (delete as appropriate)	Organisation
Organisation name	Jisc
Email address	
We will keep your contact number and email address confidential. Are there any additional details you want to keep confidential? (delete as appropriate)	Part of the response (confidentiality of specific responses is noted in the response)
For confidential responses, can Ofcom publish a reference to the contents of your response?	Yes

Your response

<p>Question 2.1: Do you agree with our findings in relation to product market definition as set out in paragraphs 2.9 to 2.13 of the BCMR Temporary Conditions Statement, namely that we define a market comprising wholesale leased line services of all bandwidths at and below 1Gbit/s using contemporary interface (CI) technologies, including EFM? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? N</p> <p>Including EFM in the calculations for DFA may be an error, in that it distorts the market in terms of the shape of the areas that are excluded as being 'competitive' in an unintended way.</p> <p>EFM is usually used to deploy services to price-sensitive users that are looking to increase their upstream capacity or access guaranteed bandwidth type services without moving to a fibre based Ethernet service (and the associated increased costs).</p> <p>It is difficult to see any impact of imposing a DFA remedy upon the EFM market, unless the final</p>
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	<p>costs of the DFA product makes delivering the services near identical in cost, as this is the major determining factor in take-up.</p>
<p>Question 2.2: Do you agree with our findings in relation to geographic market definition as set out in paragraphs 2.14 to 2.19 of the BCMR Temporary Conditions Statement, namely that we define the following geographic markets: (a) the CLA; (b) the LP; (c) the CBDs of each of Birmingham, Bristol, Leeds, Glasgow and Manchester; and (d) the RoUK excluding the Five CBDs? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? N</p> <p>Jisc agree that certain areas are competitive and there is a range of wholesale providers available in delivering sub 1G services.</p> <p>If the test was that there were a DF product available (from any party) to build a competitive sub 1G access product, then Jisc would disagree with this finding (with the exclusion of Edinburgh where such a product exists courtesy of City Fibre).</p> <p>Jisc further requests that Ofcom would encourage BT to launch products across all these areas, in order that a National service provider could maintain the maximum level of design harmony. This design harmony would allow providers to deploy services into the market at more competitive rates to benefit the end user.</p>
<p>Question 2.3: Do you agree with our assessment of the CI Core, as set out in paragraphs 2.101 to 2.111 of the BCMR Temporary Conditions Statement? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? – <Confidential></p>
<p>Question 2.4: Do you agree with our findings that BT has SMP in the markets for Lower Bandwidth CISBO services in the LP, the CBDs of each of Bristol and Manchester and the RoUK excluding the Five CBDs, up to the end of March 2019, as set out in paragraphs 2.20 to 2.100 of the BCMR Temporary Conditions Statement? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? – N</p> <p>See answer to question 2.2</p>
<p>Question 3.1: Do you agree with our proposed design of the dark fibre access remedy? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? – <Confidential></p>
<p>Question 3.2: If BT were to make available a dark fibre product based on the design set out above, how long would it take before your company was in a position to purchase it? From what date would you want BT to make such a product available?</p>	<p>Confidential? – <Confidential></p>

<p>Question 4.1: Do you agree with our assessment of the benefits of our proposed dark fibre remedy? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? – N</p> <p>Jisc can see the benefits of the proposed approach, however, we restate that the inability to use the service above 1gbps as being problematic and severely limiting to the application of the service in the real world.</p> <p>We would, however, expect that Openreach would share the same concern and allow the product to be used at higher speeds in certain cases (through contractual limitations if needed), as described in Q3.2, we will take steps to find a solution this issue.</p>
<p>Question 4.2: Do you have evidence on the current relative prevalence of each scenario of active equipment configurations as shown in Figures 4.1 and Figure 4.2? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? – N</p> <p>Jisc sees that option as being the most prevalent deployment going forward as being 2c (as we need to be able to check the performance of the DF over time from both ends)</p> <p>Whilst the diagrams are clear and provide some use cases, there is a deficiency in explaining potential benefits when you start scaling operations at the a-end or delivering two diversely routed fibres in a single piece of equipment.</p> <p>There is another more creative solution to DF that is not addressed by the designs used. In this case, hardware with a coloured optic is placed in the CPE at site B, site A becomes a passive hub with a filter that is backhauled over another single fibre back to a core site and terminated there. Since space and power is at a premium in many sites, there is the potential for cost savings to be made in aggregating in such a manner and the hardware at the core site could then terminate fibres from many remote passive hubs.</p> <p>Option 3b should also be highlighted as a very risky approach due the lack of monitoring available to the service provider. It also would allow an end user to put any optic on the service with no control of the service provider potentially breaching the rules of any 1G limit.</p>
<p>Question 4.3: Do you agree with our view, as expressed in paragraph 4.27, that situations where cost savings to providers will be</p>	<p>Confidential? – N</p>

<p>available from dark fibre are likely to be common? Please set out your reasons and supporting evidence for your response.</p>	<p>As indicated above in 4.2, there are lots of different use cases and there may be providers who have use cases that might offer greater savings. Situations may also exist where the benefits are not within the direct costs of the fibre, but by having the ability to streamline operational functions and having fewer active elements within a single solution.</p> <p>Evidence to support this can be seen from BT's limited use of alternative hardware solutions in the Ethernet portfolio and the failure of attempts to introduce an alternative hardware option (even though there were clear benefits to service providers).</p>
<p>Question 4.4: Do you agree with our assessment of the risks and costs of our proposed dark fibre remedy? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? – N</p> <p>The risks and costs seem to reflect those that Jisc expects to incur with such a solution. The differential in SLA between EAD and DFA is the only area where there is tension about this solution.</p>
<p>Question 4.5: Do you agree that we should impose a dark fibre remedy for the period April 2018 to March 2019? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? – N</p> <p>Jisc does not believe that such a short period of time is helpful and would request that a longer period (say 3 years), with a review in the middle that would not materially impact the remedy until after the period. This would be useful in order for any risks to be mitigated.</p> <p>We would like to highlight that such a limited horizon for the certainty of the future of the product does mean that investments in hardware may have to be written off prematurely or limit the take up of the services in many locations in a distortion of the real-world demand for such a product.</p> <p>Part of the attraction of a dark fibre service is the long-term investment in the physical components that allow changes of the services delivered over that infrastructure to happen independently of the underlying infrastructure.</p>
<p>Question 5.1: Do you agree with our forecast for dark fibre take-up in 2018/19? Please set out your reasons and supporting evidence for your response, including any volume forecasts you have for consumption of dark fibre for 2018/19.</p>	<p>Confidential? Y</p> <p>We believe that having a zero percent cannibalisation of 10/100M is incorrect. With current pricing the savings of deploying DF on day one and then being able to provide up to 1G</p>

	<p>on demand (without an engineer visit, hardware change or “upgrade” charge) would push Jisc as an organisation to using DF as the default delivery mechanism regardless of speed (the difference would be in the settings on the hardware). There would be some cases where there are additional costs but the savings over the lifetime of the service would recover this initial outlay.</p>
<p>Question 5.2: Do you agree with our proposed charge control on the proposed dark fibre product? Please set out your reasons and supporting evidence for your response.</p>	<p>Confidential? – N</p> <p>Jisc can see the logic behind the methods used for the calculation of the charge control proposed, but are concerned that short term decisions may have a wider impact in terms of the benefit to the UK</p>

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