Your response

Question	Your response
Question 1: Please provide a description of your current use of fixed links (or indicate which of the use types in Table 3.1 best describe your use type)	Inter-site connectivity
Question 2: What are the factors driving your choice of fixed links over alternative connectivity solutions, and which factors have the biggest impact on your decisions? Is this likely to change in the next 5 years? If so, what do you expect will change?	Cost and reliability are the biggest factors. An additional factor is to have multiple connectivity solutions for network diversity. This is not likely to change over the next 5 years.
Question 3: Is the current spectrum available for fixed links in the UK suitable and sufficient for your needs? If not, what would you change and why? If you believe changes are required, please give specific examples and reasons along with supporting evidence if available.	I think the current spectrum that is available is adequate.
Question 4: Is there anything about Ofcom's current framework for authorising fixed links which you consider could be improved?	Use on-line forms more instead of documents like this one.
 Question 5: How has your use of fixed links changed between 2016 and now? Please provide information on: Reasons for increase or decrease in the number of your links since 2016; Changes in the capacity of your links since 2016, including how you have; delivered this capacity change, e.g., different channel bandwidths, different link technology (please specify), etc. 	We have upgraded from traditional links to H/V links with dual transmission on both the horizontal and vertical axis on different channels. This provides a more reliable connection and higher throughput.
Question 6: How do you expect your usage to change over the next 5-10 years? Please provide information on:	We expect to install more links to interconnect other sites and provide more backup links.

 any increase/decrease in the number of links (by band) and bandwidth expected; likely changes in geographic distribution of links; likely changes in distribution of links by frequency band; likely changes in capacity of links and how you expect to deliver this capacity; other changes not covered above 	
Question 7: Which of the developments listed above are expected to have the biggest impact on your use of fixed links? Are there other developments to be aware of that have not been listed? Please explain the reasons for your answer.	Mostly the developments are due to natural growth and expansion of the organisation.
Question 7a: Are you considering using NGSO satellites to provide backhaul for your network? If so, please provides details of the capacity requirements/expectations and the locations where delivery of this type of backhaul would be likely.	Νο
 Question 8: If you already use alternative transport options for delivering your services, please: Provide an indication of the proportion of your services delivered over fixed links vs each alternative that you currently use. Is this proportion likely to change over the next 5-10 years? Is so please provide details; Explain how your business rationale for use of fixed links vs alternative connectivity solutions is changing over time; If possible, provide examples of your decision-making process for recently deployed connections 	Roughly 25% of our inter-site connectivity is via fixed links. We also use fixed links internally on our campuses where it saves time and money significantly on the installation.

Question 9: Which of the listed technologies are you already using or do you plan to use in the future? For each that you are using/plan to use, please explain:	Same as previous answers
 the current extent of your use, whether you expect to expand or shrink your use over the next 5-10 years, and how availability of these capabilities might impact your choice to deploy fixed links vs an alternative. 	
Estimates of numbers or percentage of links deployed with each capability now and in the future would be valuable. We are particularly interested in feedback on future use of BCA.	
Question 9a: If you plan to use BCA would you plan to use this primarily for new links, up- grades to existing links or a mix? What factors affect your decision to deploy (or not deploy) BCA today?	Not currently
Please provide whatever detail you can	
Question 10: Do you have a need for W and D bands for fixed links use (or alternative uses)? If so, in what timescale? Please provide further details, including any evidence you have to support your response.	Not at this point
Question 11: Do you expect to apply for new fixed links in the upper 6 GHz band in the fu- ture, and if so, in which geographical areas? What are the reasons for choosing this band over other available bands or alternative tech- nologies? Is there a technical reason why you would choose the upper 6 GHz band?	Not currently, but 6 GHz is better when trying to avoid rain-fade on long links.
Question 12 : Are there other international developments that you are aware of that could affect availability and utility of fixed links in the next 5-10 years?	No

Please complete this form in full and return to <u>fixedlinks.review@ofcom.org.uk</u>.