

JT's response on Ofcom's CFI: Review of the use of fixed wireless links and spectrum implications

17th January 2024

1. Introduction

JT (Jersey) Limited and JT (Guernsey) Limited (“JT”) welcomes the opportunity to respond to Ofcom’s Review of the use of fixed wireless links and spectrum implications received on 1st December 2023 (the “CFI”). This CFI response is non-confidential and can be published in full.

2. JT’s Responses

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).

JT currently utilises fixed links to provide mobile backhaul between remote masts sites and to connect JT’s core network between the Bailiwick of Guernsey islands (Guernsey, Alderney and Sark). Therefore JT’s use falls into the following use types: Mobile network operators (MNOs), Business Telecoms and Public safety.

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?

The main factor driving JT use of fixed links is the limited reach of JT own fibre infrastructure. If JT do not have fibre available at the location required for a mobile mast site then JT’s preference is to use a fixed link. This choice is made due to the cost of wholesale private circuits available from a third party. This is unlikely to change in 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.

The current spectrum available for fixed links is suitable for JT’s current needs.

Question 4: Is there anything about Ofcom’s current framework for authorising fixed links which you consider could be improved?

JT has no comment on Ofcom’s current framework of authorising fixed links.

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.**

JT’s total number of fixed links has remained static since 2016. The capacity of mobile backhaul fixed links has been increased from 250Mb to 1Gb with the move from a point to multipoint to a point to point system.

Question 6: How do you expect your usage to change over the next 5-10 years? Please provide information on:

- 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.

JT is not intending to increase the number of fixed links or the geographic distribution of the links. However as part of JT's network development we plan to increase the bandwidth capacity of our fixed links to cater for 5G and the expected increase in customer usage. Additionally as part of JT's network development plans we intend to request additional spectrum in the 7.5GHz, 18GHz and 38GHz ranges to support these works. This spectrum will replace some of JT's current 10.5GHz and 5.8GHz allocations.

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.

JT will be increasing the capacity on the links to support mobile backhaul.

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.

JT has no plans to use NGSO satellites to provide network backhaul.

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;

For JT's MNO requirements, 10% of connectivity is provided by fixed links. For Business telecoms fixed links form part of JT's core network for inter-island backhaul only (between Guernsey, Alderney and Sark).

- Explain how your business rationale for use of fixed links vs alternative connectivity solutions is changing over time;

JT's rationale for the use of fixed links has remained constant and we do not anticipate this changing.

- If possible, provide examples of your decision-making process for recently deployed connections.

JT will complete a cost benefit analysis for any potential new site. Factoring in the cost of installing JT fibre versus the payback period. Additionally, line of sight and cost/availability of third party fibre are also considered.

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:

- **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.

Co-Channel Dual Polar (CCDP) technology – JT does not currently use CCDP technology however, it is planned to be deployed as part of JT's network development on 15 fixed links (10% of MNO).

Question 9a: If you plan to use BCA would you plan to use this primarily for new links, upgrades to existing links or a mix? What factors affect your decision to deploy (or not deploy) BCA today? Please provide whatever detail you can.

JT has no plans to deploy BCA as a solution.

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.

JT has no current plans to utilise W and D bands.

Question 11: Do you expect to apply for new fixed links in the upper 6 GHz band in the future, and if so, in which geographical areas? What are the reasons for choosing this band over other available bands or alternative technologies? Is there a technical reason why you would choose the upper 6 GHz band?

JT has no current plans to apply for new fixed links in the upper 6 GHz band.

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?

JT is not aware of any international developments that could affect availability and utility of fixed links in the next 5-10 years.