

Space spectrum strategy

BT's response to the consultation published on 15 March 2022

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1 Introduction

BT welcomes Ofcom's Space Spectrum Strategy¹ consultation document that sets out Ofcom's proposed strategy for managing radio spectrum used by the space sector.

BT is generally supportive of the proposals made within the consultation document. We provide some detailed comments and observations in response to the consultation questions, as set out below.

2 **Response to consultation questions**

Question 1: Are there other trends in the space sector (or the broader spectrum environment) that we should monitor and/or take account of in our strategy?

BT agrees with the developments and trends in the space sector technology and use cases that that Ofcom has identified in Section 3 of the consultation document.

As Ofcom has recognised in other sections of the document, NGSO satellite systems will potentially be of increasing importance for providing backhaul connectivity to mobile network base stations in areas where fixed network connectivity is unavailable or prohibitively expensive, as well as for additional resilience where conventional backhaul solutions are available.

A further trend is the increasing capacity of satellite systems in terms of data rates that are demanded and can be delivered to end users. These increasing bandwidth requirements may require additional spectrum as well as improved spectral efficiencies that arise from technology developments.

Question 2: Do you agree with the broad areas we have prioritised for our work?

Yes, BT agrees with the broad areas of work that Ofcom has identified as well as the priorities that Ofcom proposes to assign to these.

Question 3: Are there other issues and actions that are likely to be important over the next 2 – 4 years?

Ofcom's lists of proposed actions in each of the space sector work areas as set out in the Tables 1-4 of the consultation document are comprehensive and we have not identified any missing important items.

Question 4: Do you have any evidence on whether specific actions should be a high priority?

BT welcomes the priority that Ofcom has given to review of the 14.25-14.5GHz band with a consultation scheduled for Spring 2022.

Work to develop appropriate protection criteria for satellite networks that promote spectrum sharing should be a priority for Ofcom given the relevance of these to ongoing work in ITU, including WRC-23 agenda items.

¹ https://www.ofcom.org.uk/ data/assets/pdf file/0024/233853/consultation-space-spectrum-refresh.pdf

Question 5: Do you have any other issues you wish to comment on?

No, BT has no other issues that we wish to comment on.

Question 6: Are there other issues and actions specifically relating to NGSO communication systems that are likely to be important over the next 2 – 4 years?

In relation to future NGSO networks with very large numbers of satellites, i.e., >1000, Ofcom should ensure that appropriate PFD limits continue to be applied to avoid interference from satellites into terrestrial services, particularly 18GHz fixed links. Currently the appropriate per satellite PFD limits are set out in RR 21.16.6, but these are under study by ITU-R WP4A and this could ultimately lead to proposals to change these limits under a suitable ITU World Radiocommunication Conference agenda item.

Question 7: Do you have any evidence on whether specific actions relating to NGSO communication systems should be a high priority?

No, BT has no evidence to support any particular items being high priority.

Question 8: Do you have any other comments relating to NGSO systems?

No, BT has no other comments.

