



Avanti HYLAS 2 Limited
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28 GHz project team
Email: 28GHz@ofcom.org.uk

17 September, 2024

Dear 28 GHz Project Team,

Thank you for your letter dated August 20, 2024, in which you ask for more information about the use of the Ka-Band by Avanti Communications.

Please see below the information that you requested.

Please note that some of this information is commercially confidential and has been redacted from this document.

1. For currently operational satellites:
 - a. Have you deployed land-based user terminals in the Ka band? *Yes*
 - b. If yes, how many terminals have you deployed to date? *The total number of active terminals receiving capacity from Hylas Fleet in UK is 3<*
 - c. What use case(s) are these terminals used for? *Satellite Broadband, Cellular Backhaul, Emergency Services (cellular replacement), Government Comms, Mil Comms.*
 - d. What is/are the specific frequency range(s) within the Ka band (17.7-20.2 GHz downlink and 27.5-30GHz uplink) that your land-based user terminals use (uplink and downlink) to connect to your satellites? *Land-based user terminals communicating with Hylas 2, Hylas 3, and Hylas 4 operate within the 19.7 – 20.2 GHz (downlink) and 29.5 – 30 GHz (uplink) ranges.*

2. For future satellite services you are planning to deploy in the next 5-10 years: *Avanti does not have active plans to launch new satellites at this time*
 - a. Are you planning to deploy user terminals in the Ka band? *NA*
 - b. If yes, what use case(s) will these terminals be used for? *NA*
 - c. What is/are specific frequency range(s) that the land-based user terminals will use (uplink and downlink) to connect to your satellites? *NA*
 - d. When are you planning to make these services commercially available in the UK? *NA*

3. For current and future satellite services: What are your preferred channel sizes for Ka band land-based user terminals?

Current Hylas satellite use the following channel sizes: 3<

For future satellite services, the preferred channel size for Ka-Band land-based user terminals would depend on a number of factors, including service type/use case, terminal sizing, spot beam size, expected terminal population, terminal performance, platform/air interface used etc). Flexible channel sizing would be useful to ensure channelization is tailored to the requirements at hand at any given time.

Do you have flexibility to use different channel sizes? If so, please provide details.

3<



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4. Responses to our March consultation "increasing use of 27.5-30GHz" suggest that there is demand for land-based user terminals in the UK to access 2 x 224 MHz (27.8285 – 28.0525 GHz and 28.8365 – 29.0605 GHz) rather than 1 x 112 MHz (28.8365 – 28.9485 GHz). Do you have any information on how the availability of 2 x 224 MHz for land-based user terminals would impact the number of consumers and customers you could connect, product speed, or the quality of service you could provide via these land terminals (compared to just having 1 x 112 MHz available)?

⌘ In principle, increased spectrum availability would allow Avanti to resell a greater amount of capacity from third parties, or to provide more capacity from its own potential future satellites. Recall that the currently proposed 112 MHz bandwidth is lower than the channels currently provided by the Hylas Fleet.

Please do not hesitate to reach out to us if you have any questions.

Kind Regards,

Toby Youell

Senior Manager Market Access and Licensing