

Your response

Question	Your response
<p>Question 1: Do you agree with the prioritisation of the agenda items, as shown in Annex 5, and if not why?</p>	<p>Confidential? – N</p> <p>HPE agrees with Ofcom’s classification of WRC23 agenda item (AI) 1.2 as high priority item. The decision for or against an identification of the 6425-7025 MHz band (Region 1) and the 7025-7125 MHz band (globally) for IMT is of major economic and strategic importance. An IMT identification of one or both of these bands would most probably make these bands unavailable for licence-exempt use and hence greatly reduce the ability to deliver gigabit services to UK consumers and businesses.</p>
<p>Question 2: What are your views on the continued need to protect global aeronautical and maritime services, in the 4.8 – 4.99 GHz band, under this agenda item?</p>	<p>Confidential? – Y / N</p>
<p>Question 3a: Do you agree that the UK interest in the bands 3 600-3 800 MHz and 3 300-3 400 MHz in Region 2 (North & South Americas) should be limited to any impacts on UK operational use in those areas?</p>	<p>Confidential? – Y / N</p>
<p>Question 3b: Do you agree that the UK should maintain its objections to changes to the regulatory environment for the band 3300-3400 MHz (in Region 1, Europe, Africa, Middle East), noting UK has interests in use of radar for both ground and airborne operations?</p>	<p>Confidential? – Y / N</p>
<p>Question 3c: What is your view on the use of 6425-7025 & 7025-7125 MHz, and what evidence do you have to support this view? How does that inform your views on a IMT identification in these bands?</p>	<p>Confidential? – N</p> <p>HPE shares the view recently expressed by Ofcom and other European administrations that the 6425-7025 MHz and 7025-7125 MHz bands (the ‘upper 6 GHz band’) should not be identified for IMT. As a mobile allocation exists for the said bands, administrations wishing to deploy IMT in those bands are free to do so. In contrast, an IMT identification would tag those bands for IMT and</p>

thus greatly restrict administrations' freedom of choice for the future use of these bands.

Furthermore, we believe that there are various other bands, in particular the 26 GHz band and the 3.8-4.2 GHz band that are much more suitable for addressing the primary use cases envisaged for IMT in the upper 6 GHz band, such as enhanced mobile broadband (eMBB), especially in dense urban areas and 5G enterprise networks for Industry 4.0 factories, resp.

Roughly 90% of data is generated and consumed indoors, people spend 90% of their days indoors, and 90% of work is done indoors. Consequently, future applications such as metaverse/AR/VR/XR will be used predominantly indoors, where Wi-Fi is the local wireless connectivity technology of choice for millions of British consumers and businesses. To satisfy the bandwidth and latency requirements of these applications an adequate amount of licence-exempt spectrum will have to be provisioned.

For enterprise deployments, it is not only the very wide channels supported by Wi-Fi 6/6E/7 that are important but also the large number of channels that 1200 MHz of licence-exempt spectrum will make available and the diversity of channel widths (from 20 MHz to 160 MHz and eventually 320 MHz) which will allow enterprises to allocate channels or groups of channels to different applications and services, depending on their QoS requirements (e.g., data rate, latency, and availability). Educational facilities such as the University of Michigan which recently upgraded its campus network and installed 16,000 Wi-Fi 6E Access Points depend on having the full 6 GHz band available for use by licence-exempt technologies. Verticals, such as ports, airports, logistics hubs, factories, and hospitals that have been running on Wi-Fi networks for many years need the full 6 GHz band to fully exploit the capabilities of the OFDMA-based technologies Wi-Fi 6E and Wi-Fi 7 which will satisfy the stringent QoS demands of these environments in the vast majority of cases.

Unlike for IMT, there is no alternative mid-band spectrum available for Wi-Fi. As Wi-Fi is mostly deployed indoors, higher frequencies are unsuitable for providing the coverage and performance expected from Wi-Fi, due to

	<p>increased propagation losses. Even if it were technically feasible, selecting a different band outside the 5925-7125 MHz range for future Wi-Fi would contradict the objective of spectrum harmonisation, increase product complexity and result in higher prices for end users and businesses.</p> <p>HPE therefore urges Ofcom to adopt and promote a position of 'No Change' on WRC-23 AI 1.2, as far as a possible IMT identification of the 6425-7025 MHz and 7025-7125 MHz bands is concerned.</p>
<p>Question 3d: What are your thoughts on the current UK view that IMT should not be identified in Region 2 in the band 10-10.5 GHz in order to ensure the protection of the globally operating EESS (active) systems and airborne & vessel mounted radars?</p>	<p>Confidential? – Y / N</p>
<p>Question 4: Do you agree that, where no additional technical limitations are placed on mobile services, the UK can support an upgrading of the mobile allocation, in 3600 - 3800 MHz, from secondary to primary?</p>	<p>Confidential? – Y / N</p>
<p>Question 5: What are your views on the development of regulatory conditions to facilitate deployment of high altitude IMT base stations in IMT identified bands below 2.7 GHz?</p>	<p>Confidential? – Y / N</p>
<p>Question 6: Do you agree that a formal modification to the Radio Regulations is not needed for fixed service applications that use IMT technologies?</p>	<p>Confidential? – Y / N</p>
<p>Question 7: What are your views on the proposed approach for 470-694 MHz, recognising the national decisions already in place and taken for DTT multiplex licensing in the band, and the additional and supplementary spectrum made available for UK PMSE usage?</p>	<p>Confidential? – Y / N</p>

<p>Question 8: What are your views on the need to establish an international regulatory environment that provides adequate protection of UK fixed links from earth stations in motion, in the band 12.75 – 13.25 GHz, which is also practicable from an enforcement/implementation perspective?</p>	<p>Confidential? – Y / N</p>
<p>Question 9: Do you agree that the UK continues to support the maritime distance figure for ESIMs that work to non-geostationary satellites and to test the other conditions agreed at WRC-19 for ESIMs working to geostationary satellites to ascertain whether these remain appropriate for non-geostationary satellites?</p>	<p>Confidential? – Y / N</p>
<p>Question 10: What are your views on whether an allocation to inter satellite links is necessary for existing satellite allocated bands and whether this would provide benefits internationally?</p>	<p>Confidential? – Y / N</p>
<p>Question 11: What are your views on the need for additional satellite allocations in support of narrowband IoT “M2M” type applications, noting that there remains the continued use of PMSE for wireless cameras in the band 2010 – 2025 MHz?</p>	<p>Confidential? – Y / N</p>
<p>Question 12: What are your views on the proposed approach to this agenda item concerning the fixed satellite service in 17.317.7 GHz in Region 2?</p>	<p>Confidential? – Y / N</p>
<p>Question 13a: On Topic B, what are your views on the post milestone procedures for non-geostationary satellite systems?</p>	<p>Confidential? – Y / N</p>
<p>Question 13b: On Topic L, what are your views on regulatory conditions for Telemetry, Tracking and Command (TT&C) for NGSO inorbit servicing?</p>	<p>Confidential? – Y / N</p>

<p>Question 13c: What are your views on the remaining topics currently listed for Agenda Item 7?</p>	<p>Confidential? – Y / N</p>
<p>Question 14: Noting that any UK position will be developed only after the ITU Plenipotentiary Conference, do you have any comments relating to the use of Article 48 that may be addressed at WRC-23?</p>	<p>Confidential? – Y / N</p>
<p>Question 15: What are your views on the need to establish an international regulatory environment for sub-orbital vehicles, which at the same time does not limit flexibility of spectrum options, and retains international safety considerations?</p>	<p>Confidential? – Y / N</p>
<p>Question 16: Do agree that where the adjacent band compatibility issues are addressed and ICAO coordination processes are not compromised, that the addition of an aeronautical satellite (AMS(R)S) allocation to the band can be supported?</p>	<p>Confidential? – Y / N</p>
<p>Question 17: Do agree that functions related to international aviation safety are a matter for ICAO? On this basis, and absent any contrary information from ICAO, should the UK support the development of an international spectrum regulatory framework for UA use of FSS that would support efficient use of spectrum?</p>	<p>Confidential? – Y / N</p>
<p>Question 18: Recognising the recent diminishing industry interest in this item relating to possible modification of the aeronautical HF assignment plan, and the general lack of global interest, do you agree that UK move towards a No Change proposal under this agenda item?</p>	<p>Confidential? – Y / N</p>
<p>Question 19: What are your views on the need for additional spectrum, specifically in the 15 and 22 GHz bands, for non-safety aeronautical use?</p>	<p>Confidential? – Y / N</p>

<p>Question 20: What are your views on Agenda Item 1.11 and the proposed UK position to support modernisation of GMDSS?</p>	<p>Confidential? – Y / N</p>
<p>Question 21: What are your views on the approach to the review of 1240-1300 MHz, recognising that discussions concerning future satellite navigational needs for the UK are a matter for Government?</p>	<p>Confidential? – Y / N</p>
<p>Question 22: What are your views on a new spectrum allocation in the 40-50 MHz range to support and enhance climate monitoring, such as, environmental shifts in ice sheets?</p>	<p>Confidential? – Y / N</p>
<p>Question 23: What are your views on upgrading the Space Research Service allocation, from secondary to primary, in the 14.8-15.35 GHz band?</p>	<p>Confidential? – Y / N</p>
<p>Question 24: What are your views on the potential for defragmentation in this band to facilitate both EESS (passive) use and provide for larger contiguous blocks for fixed & mobile allocations?</p>	<p>Confidential? – Y / N</p>
<p>Question 25: Do you agree that formal international recognition for Space Weather Sensors should be implemented in the Radio Regulations?</p>	<p>Confidential? – Y / N</p>
<p>Question 26: What are your views on the limits proposed to protect EESS (passive) under Agenda Item 9.1 topic d) and do you have any views on which of these limits might be accommodated in the Radio Regulations and how?</p>	<p>Confidential? – Y / N</p>
<p>Question 27: Do you agree that the formalised time reference in common global use, is not a matter of spectrum regulation?</p>	<p>Confidential? – Y / N</p>

Question 28: Do you have any comments concerning the Standing Agenda Items, where not covered elsewhere in this document?	Confidential? – Y / N
Question 29: Do you have a view on any of the footnotes to which UK is a party?	Confidential? – Y / N
Question 30: Are you aware of any specific issues, not covered elsewhere in this document, which are likely to be raised in this part of the Director’s Report and of which you think Ofcom should be aware?	Confidential? – Y / N
Question 31: Do you have any comments on Agenda Item 9.3 considering Resolution 80?	Confidential? – Y / N
Question 32: What changes to the Radio Regulations have you identified that would benefit from action at a WRC and why? Do you have any proposals regarding UK positions for future WRC agenda items or suggestions for other agenda items, needing changes to the Radio Regulations, that you would wish to see addressed by a future WRC?	Confidential? – Y / N
Question 33: What are your views on the use of IMT stations that use antennas that consists of an array of active elements, in bands shared with satellite services?	Confidential? – Y / N