Your response

Question	Your response
Question 1: Do you agree with the prioritisation of the agenda items, as shown in Annex 5, and if not why?	Confidential? – N The ITU process for deciding on an allocation to AMS(R)S in agenda item 1.7 is prioritized as low. While prioritization might be assessed from different perspectives, we agree that decision on an allocation will not automatically change the way the spectrum in the range 117.975 -137 MHz will be used or even how it will be assigned. The allocation, provided that compatibility with adjacent band services is guaranteed, would just only bring additional flexibility to the future decisions on frequency assignments to AMS(R)S.
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?	Confidential? – N No comments.
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?	Confidential? – N No comments.
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?	Confidential? – N No comments.
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?	Confidential? – N No comments.
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?	Confidential? – N No comments.

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?	Confidential? – N No comments.
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?	Confidential? – N No comments.
Question 6: Do you agree that a formal modification to the Radio Regulations is not needed for fixed service applications that use IMT technologies?	Confidential? – N No comments.
Question 7: What are you 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?	Confidential? – N No comments.
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?	Confidential? – N No comments.
Question 9: Do you agree that the UK continues to support the maritime distance figure for ESIMs that work to nongeostationary 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?	Confidential? – N No comments.
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?	Confidential? – N No comments.

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?	Confidential? – N No comments.
Question 12: What are your views on the proposed approach to this agenda item concerning the fixed satellite service in 17.3-17.7 GHz in Region 2?	Confidential? – N No comments.
Question 13a: On Topic B, what are your views on the post milestone procedures for non-geostationary satellite systems?	Confidential? – N No comments.
Question 13b: On Topic L, what are your views on regulatory conditions for Telemetry, Tracking and Command (TT&C) for NGSO inorbit servicing?	Confidential? – N No comments.
Question 13c: What are your views on the remaining topics currently listed for Agenda Item 7?	Confidential? – N No comments.
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?	Confidential? – N No comments.
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?	Confidential? – N No comments.
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?	Confidential? – N We would like to highlight that the ITU-R process for WRC 23 focuses on an allocation to AMS(R)S, therefore the ITU-R will not make any assignment, nor undertake any coordination process. ICAO and/or OFCOM, when applicable, can undertake any necessary coordination process, after the ITU would have decided to add a new allocation to AMS(R)S. Similarly, as for other allocations included in Art 5 of the RR to

AMS(R)S and AM(R)S in different bands, or even in the same band covered by AI 1.7 should WRC-23 take a decision on a new allocation, the allocation decision took (will take) only effect to trigger subsequent frequency assignment procedures and coordination and planning criteria which were later (or will be) established by ICAO. What is certainly very relevant is to ensure that the new allocation would ensure technical compatibility with adjacent band services. The compatibility between AMS(R)S and AM(R)S can be ensured via frequency assignment planning or coordination procedures similarly as those currently applicable for AM(R)S (both within ICAO and/or between administrations agreements).

It should be also important that OFCOM consider the benefit of an allocation in the whole band 117.975-137 MHz, because it would give flexibility in the future for the aeronautical sector to decide on which systems to deploy, which technologies (voice, data), which coverage or which type of complementarity with terrestrial AM(R)S, etc. Note should also be taken on the fact that some of the proposed technologies for AMS(R)S based on data services would not even require exclusivity of the channel assignments, but would make efficient use of spectrum by time domain sharing of access to the same channel by the data link for AM(R)S and the data link for AMS(R)S.

Note should be taken that UK airports host large number of international flights. Those international flights are dependent upon availability of suitable infrastructures on the ground throughout the whole flight itinerary. These infrastructures do not exist in large oceanic areas, remote areas and many territories around the globe. Therefore, OFCOM might wish to consider the benefit for the aviation sector in the UK thanks to availability of suitable infrastructures beyond UK. The AMS(R)S can bring short term solutions for such lack of ground infrastructures. To develop terrestrial systems around the globe to have similar capabilities of aeronautical safe services as in Europe, it would be required likely unaffordable investments levels, which the satellite solution can solve.

	The above cost impacts are even further relevant because the novelty of the AMS(R)S is to use exactly the same equipment as already installed in the aircraft avionics, thus, creating an universe of all aircraft being capable to establish link with the AMS(R)S. Other alternative technologies based also on satellite could mitigate the coverage problem too due to lack of AM(R)S systems but they would require installation of new equipment on board the aircraft.
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?	Confidential? – N No comments.
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?	Confidential? – N No comments.
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?	Confidential? – N No comments.
Question 20: What are your views on Agenda Item 1.11 and the proposed UK position to support modernisation of GMDSS?	Confidential? — N No comments.
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?	Confidential? – N No comments.
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?	Confidential? – N No comments.

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?	Confidential? – N No comments.
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?	Confidential? – N No comments.
Question 25: Do you agree that formal international recognition for Space Weather Sensors should be implemented in the Radio Regulations?	Confidential? – N No comments.
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?	Confidential? – N No comments.
Question 27: Do you agree that the formalised time reference in common global use, is not a matter of spectrum regulation?	Confidential? – N No comments.
Question 28: Do you have any comments concerning the Standing Agenda Items, where not covered elsewhere in this document?	Confidential? – N No comments.
Question 29: Do you have a view on any of the footnotes to which UK is a party?	Confidential? – N No comments.
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? – N No comments.
Question 31: Do you have any comments on Agenda Item 9.3 considering Resolution 80?	Confidential? – N No comments.

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? — N No comments.
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? – N No comments.