

## **Consultation response form - Draft JRC Responses**

Please complete this form in full and return via email to <u>WRC-19@ofcom.org.uk</u> or by post to:

Georgina Cowley Ofcom Riverside House 2A Southwark Bridge Road London SE1 9HA

Consultation title	UK preparations for the World Radiocommunication Conference 2019 (WRC-19)
Full name	Nick Woollard
Contact phone number	020 7706 5199
Representing (delete as appropriate)	Organisation
Organisation name	Joint Radio Company (JRC) Limited
Email address	Nicholas.Woollard@jrc.co.uk

## Confidentiality

We ask for your contact details along with your response so that we can engage with you on this consultation. For further information about how Ofcom handles your personal information and your corresponding rights, see <u>Ofcom's General Privacy Statement</u>.

Your details: We will keep your contact number and email address confidential. Is there anything else you want to keep confidential? Delete as appropriate.	Part of the response (as indicated within the relevant responses).
Your response: Please indicate how much of your response you want to keep confidential. Delete as appropriate.	Part of the response (as indicated within the relevant responses).
For confidential responses, can Ofcom publish a reference to the contents of your response?	Yes

## 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 In general, JRC supports the priority levels given to the various Agenda items. JRC, however, is concerned that the current Low Priority given to 1.9.2 could result in harmful interference to the control systems of critical national infrastructure. (See the JRC response to Q18.)
Question 2: Ofcom is supporting the following three priority bands for IMT identification in the RRs: 24.25 – 27.5 GHz 40.5-43.5 GHz (as part of a wider global 37-43.5 GHz tuning range) 66 – 71 GHz If you don't agree with any of these bands, or think we should be promoting other bands, please provide justification for your views.	Confidential? – N The JRC requests that the UK 26 GHz position be revised to align with the RSPG opinion (RSPG18-005 FINAL) that: 'Regulatory flexibility for the progressive release of the 26 GHz band will facilitate an efficient introduction of 5G without having an unnecessary negative impact on the current users of the band. Member States should plan any migration of fixed links necessary for ensuring the availability of the band for 5G, taking into account the geographical dimension of the market demand for 5G'.
Question 3: What are your views on the suitability of the currently identified bands for HAPs and do you think there is a requirement for additional spectrum? Recognising that we support 26 GHz as a global band for IMT under agenda item 1.13, what are your views on the bands currently under study for HAPs, both globally and in ITU-R Regions?	Confidential? – N The JRC requests that the UK 26 GHz position be revised to align with the RSPG opinion (RSPG18-005 FINAL) that: 'Regulatory flexibility for the progressive release of the 26 GHz band will facilitate an efficient introduction of 5G without having an unnecessary negative impact on the current users of the band. Member States should plan any migration of fixed links necessary for ensuring the availability of the band for 5G, taking into account the geographical dimension of the market demand for 5G'.

Question 4: What are your views on the bands within scope of Agenda Item 1.16 and their suitability for Wi-Fi and Wi-Fi like services? Do you agree that Ofcom should support the CEPT position of No Change? If not, please provide evidence to support your view.	Confidential? – N No comment.
Question 5: Do you agree that UK support the inclusion of the updated Recommendation M.1849-1 ("Technical and operational aspects of ground-based meteorological radars") in footnote No.5450A? What are your views on the requirement to include a reference to ITU- R Recommendation ITU R M.1638 1 in footnotes No.5447A and 5.450A and the potential impact upon Wi-Fi (and similar technologies)?	Confidential? – N No comment.
Question 6: Do you agree that UK support a position of not making changes to the Radio Regulations to reference specific bands for M2M/IoT usage?	Confidential? – N JRC agrees with not making changes to reference specific bands for M2M / IoT usage. Additionally, M2M and IoT appear to have become generic terms for most types of data transmission systems. Unfortunately, this could lead to a misunderstanding that any one type of M2M / IoT system would be suitable for all data transmission scenarios. It should be noted that, whilst a range of M2M / IoT technologies may be available, the suitability of each technology may depend more on the level of necessary resilience of the system within which it is operating. The term Resilient Machine to Machine (RM2M) is becoming increasingly used to distinguish when an M2M system includes enhanced resilience.
Question 7: What are your views on the potential removal of the limitations listed above?	Confidential? – N No comment.

Question 8: What are your views on the approach we are proposing to take in respect of ESIMs and are there any additional factors that you think we should take into account?	Confidential? – N No comment.
Question 9: What are your views on the establishment of regulatory provisions, in Article 22, that cover non-GSO operation between 37.5 and 51.4 GHz?	Confidential? – N No comment.
Question 10: What are your views on the various issues under consideration under Agenda Item 7, particularly in respect of the bringing into use of non-geostationary satellite networks (i.e. Issue A)?	Confidential? – N JRC is concerned that, without sufficient restrictions, non-GSO systems operating within the 460 to 470 MHz band could cause harmful interference to the UK's electricity and gas grid monitoring and control systems. More compatibility studies are required using the characteristics of the fixed systems deployed in the band, not just mobile systems.
Question 11: What are your views on Agenda Item 9.1.1?	Confidential? – N No comment.
Question 12: What are your views on the potential establishment of satellite pfd limits, in the 1 452 – 1 492 MHz band, to protect terrestrial use?	Confidential? – N JRC has no comment regarding a satellite pfd limit.
Question 13: Do you have any views on the bands being studied and are there any other considerations which you think should be taken into account? What are your views on the appropriateness of the current emission limits in the band 3 700 – 4 200 MHz?	Confidential? – N No comment.

Question 14: Do you agree that no changes to the RRs are required, under Agenda Item 9.1.7, and that managing the unauthorised operation of earth station terminals (deployed within its territory) should be addressed by the national administration concerned?	Confidential? – N No comment.
Question 15: What are your views on the need for additional fixed satellite service allocations in the band 51.4 – 52.4 GHz?	Confidential? – N No comment.
Question 16: What are your views on Agenda Item 1.8, particularly the need to enhance maritime safety, set against the need to respect the international spectrum allocations and the protection of passive services in adjacent bands?	Confidential? – N No comment.
Question 17: What are your views on Agenda Item 1.9.1, particularly the need to respect the current integrity of the AIS?	Confidential? – N No comment.
Question 18: What are your views on Agenda Item 1.9.2, particularly the need to take into account current national users in the bands defined by RR Appendix 18?	Confidential? – Y JRC notes that, with the shortage of suitable 400 MHz Band UHF spectrum, a significant proportion of the 154-156 MHz and 162-164MHz spectrum is licensed within areas of the UK for the monitoring and control systems of the electricity grid network. With the on-going requirement for the electricity networks to be made smarter, and with the challenges associated with gaining access to suitable additional 400 MHz Band spectrum soon, it is possible that increased access to this VHF spectrum will be required. Confidential? – N JRC suggests that it is very important to take into account the current national users and their potential need for increased access to parts of this spectrum.

Question 19: What are your views on Agenda Item 1.10 and do you think that any changes to the Radio Regulations may be necessary?	Confidential? – N No comment.
Question 20: What are you views on Agenda Item 1.11, and do you agree that no specific identification for rail communications is required in the Radio Regulations?	Confidential? – N Railway communications for the purpose of safety and control is generally considered best kept separate from the commercial communications. The availability and resilience required for safety critical signalling functions is much higher than commercial telecommunication: railway operational communications will thus benefit from separate identification and recognition in the Radio Regulations.
Question 21: What are you views on Agenda Item 1.12 and do you agree that there is no requirement for specific identification to ITS in the Radio Regulations?	Confidential? – N No comment.
Question 22: What are you views on Agenda Item 9.1.4 concerning radiocommunications for sub-orbital vehicles?	Confidential? – N Any proposed Air-Ground-Air communications to or from the sub-orbital vehicles should take into consideration existing users of the proposed spectrum. Additional consideration should be taken when the proposed systems could cause harmful interference to existing critical systems.
Question 23: What are your views on Agenda Item 1.1, recognising that licensed amateur operators in the UK already have access to parts of the 50 – 54 MHz band?	Confidential? – N No comment.
Question 24: What are your views on Agenda Item 1.2 concerning power limits for MetSat, Mobile Satellite and EESS, and the linkage to agenda item 1.7?	Confidential? – N JRC agrees that a suitable power flux density mask is needed to protect terrestrial services.

Question 25: What are your views on Agenda Item 1.3, particularly on any limits required to protect terrestrial use?	Confidential? – N JRC agrees that a suitable power flux density mask is needed to protect terrestrial services. These terrestrial services include the monitoring and control of the UK's electricity grid. JRC appreciates Ofcom's on-going work to ensure that these critical national infrastructure systems will be protected from harmful interference and is keen to support Ofcom with their analysis as appropriate.
Question 26: What are your views on Agenda Item 1.7 considering spectrum needs for short duration satellites, noting also the potential linkages to Agenda Item 1.2?	Confidential? – Y 148-149 MHz spectrum is already licensed and deployed within areas of the UK for the monitoring and control systems of the electricity grid network. With the on-going requirement for the electricity networks to be made smarter, increased access to this VHF spectrum will be required. In addition, TFL uses the same spectrum within the M25 for critical operational communications with their fleet of 10,000 London Buses, and is currently in the midst of substantial investment upgrading the system for digital operation, due for completion by the end of 2018. Confidential? – N JRC suggests that, whatever spectrum is considered, it is very important to take into account the current national users and their potential need for increased access to parts of this spectrum in the future.
Question 27: What are your views on Agenda Item 1.15, particularly on the protection needs of passive services?	Confidential? – N No comment.

Question 28: What are your views on Agenda Item 9.1.6, particularly on the categorisation of WPT and whether WRC action is required?	Confidential? – N Whilst they may be assumed to be inductive rather than electro-magnetic, there is concern that these systems could cause harmful interference to power line transmission (PLT) systems, e.g. those used to control Europe's electricity grid networks. JRC supports the approach advocated in paragraph 7.26 "that impact of WPT on radiocommunication services needs to be considered and studied and where necessary we support measures to limit, proportionately, the impact on other radiocommunication services."
Question 29: Do you have any comments concerning the Standing Agenda Items, where not covered elsewhere in this document?	Confidential? – N No comment.
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 comment.
Question 31: Do you have any comments on Agenda Item 9.3 considering Resolution 80?	Confidential? – N No comment.
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 JRC proposes the introduction of 'Utility Operations' as an ITU defined service in the same way as Public Safety and Disaster Relief (PPDR) and Programme Making and Special Events (PMSE) are identified as distinct services requiring special recognition.

Please complete this form in full and return via email to <u>WRC-19@ofcom.org.uk</u> or by post to:

Georgina Cowley Ofcom Riverside House 2A Southwark Bridge Road London SE1 9HA