



## JRC Response to the Discussion document

### Strategic Review of Digital Communications

**JRC Ltd**  
Dean Bradley House  
52 Horseferry Road  
London SW1P 2AF  
United Kingdom

+44 (0)20 7706 5199  
+44 (0)20 7222 0100  
info@JRC.co.uk  
www.JRC.co.uk/about

## KEY POINTS

- JRC welcomes the opportunity to respond to this consultation.
- JRC notes that Ofcom's 'key goal of our strategy is to make sure that the UK's citizens and businesses are served by high-quality, widely available telecoms, both fixed and mobile.
- JRC highlights that the stable supply of electricity is an essential resource for the delivery of almost all goods and / or services to UK citizens and consumers, e.g. high-quality, widely available telecoms, both fixed and mobile.
- JRC highlights that the European Utilities Telecoms Council (EUTC) has identified that an increasing amount of radio spectrum<sup>1</sup> is / will be needed to manage the growing Utility Operations Smart Grid system(s) required for the long-term stable supply of electricity.
- JRC hopes that Ofcom will recognise the importance of the UK-wide stable supply of electricity and facilitate the availability of spectrum for new and existing Utility Operations systems. It should be noted that Utility Operations communications typically need to be resilient, have priority access, and low end-to-end latency, etc, so standard public mobile systems may not be suitable as an alternative medium.
- JRC notes '*Ofcom's overarching approach to improving availability has been to rely mainly on private sector investment, driven by competition*'. Adding '*This approach distinguishes communications from other network utilities such as water and energy where **regulation** plays a greater role in determining the specifics of investment programmes*'.
- JRC highlights that, regarding regulation, it may be necessary for the same regulatory / penalty obligations placed on Utility Operations systems to be added to any third-party communications system before the proposed system could be considered suitable. If not, then only self-owned and managed resilient-machine-to-machine (RM2M) systems are likely to continue to be suitable. (The energy utilities can expect a financial penalty if consumers are disconnected for more than 3 minutes. This penalty is multiplied by the number of disconnected customers. The duration is referred to as Customer Minutes Lost.)
- JRC notes Ofcom's statement that the private sector investment, driven by competition '*approach will not deliver service availability for all consumers. In particular, poor service availability is a particular concern for consumers and businesses in more rural areas where the economics of commercial network deployment are more challenging. Private sector investment does therefore need to*

<sup>1</sup> [http://eutc.org/sites/default/files/public/UTC\\_Public\\_files/EUTC%20Spectrum%20Position%20Paper.pdf](http://eutc.org/sites/default/files/public/UTC_Public_files/EUTC%20Spectrum%20Position%20Paper.pdf)

*be supported by targeted intervention to extend network availability*'. JRC highlights that meeting its regulatory / penalty requirements has a cost that is met by the consumers. JRC therefore requests that the water and energy utilities should also be supported by targeted intervention / financial assistance to extend network availability.

- JRC suggests that, regarding *'What options are there for policy makers to do more to extend availability to areas that may otherwise not be commercially viable or take longer to cover'*, Ofcom should compel public mobile operators to meet their license commitments on coverage in rural areas.
- JRC highlights that, whilst digital modulation schemes can improve spectrum efficiency when the communications medium is operating at 100% capacity, the utilities typically use low data rate technologies in narrow band, e.g. 12.5 kHz, channels. It may therefore be considered incorrect when some suppliers repeatedly suggest that broadband is the only solution for data communication requirements.

## Questions for discussion

**Q1: Do stakeholders agree that promoting effective and sustainable competition remains an appropriate strategy to deliver efficient investment and widespread availability of services for the majority of consumers, whilst noting the need for complementary public policy action for harder to reach areas across the UK?**

JRC agrees that promoting effective and sustainable competition remains an appropriate strategy to deliver efficient investment and widespread availability of services for the majority of consumers.

JRC notes 'Ofcom's overarching approach to improving availability has been to rely mainly on private sector investment, driven by competition'. Adding 'This approach distinguishes communications from other network utilities such as water and energy where **regulation** plays a greater role in determining the specifics of investment programmes'.

JRC highlights that it may be necessary for the same regulatory / penalty obligations placed on Utility Operations systems to be added to any third-party communications system before the proposed system could be considered suitable. If not, then only self-owned and managed resilient-machine-to-machine (RM2M) systems are likely to continue to be suitable. (The energy utilities can expect severe financial penalty if consumers are disconnected for more than 3 minutes.)

JRC notes Ofcom's statement that the private sector investment, driven by competition 'approach will not deliver service availability for all consumers. In particular, poor service availability is a particular concern for consumers and businesses in more rural areas where the economics of commercial network deployment are more challenging. Private sector investment does therefore need to be supported by targeted intervention to extend network availability'. JRC highlights that meeting its regulatory / penalty requirements has a cost that is met by the consumers. JRC therefore requests that the water and energy utilities should also be supported by targeted intervention / financial assistance to extend network availability.

**Q2: Would alternative models deliver better outcomes for consumers in terms of investment, availability and price?**

JRC suggests that communications suppliers should be penalised for not supplying the service(s) for which they take payment. This could temper the claims which are made by some suppliers, e.g. very high data rates.

**Q3a: We are interested in stakeholders' views on the likely future challenges for fixed and mobile service availability. Can a 'good' level of availability for particular services be defined?**

JRC highlights that Utility Operations systems are typically designed for 99.0 to 99.99% availability. Public mobile systems would need to supply these availabilities, and other guarantees, even to potentially the remotest geographical locations in order for them to be considered for extensive Utility Operations communications.

**Q3b: What options are there for policy makers to do more to extend availability to areas that may otherwise not be commercially viable or take longer to cover?**

JRC suggests that Ofcom should compel public mobile operators to meet their license

commitments on coverage in rural areas.

JRC notes Ofcom's statement that the private sector investment, driven by competition *'approach will not deliver service availability for all consumers. In particular, poor service availability is a particular concern for consumers and businesses in more rural areas where the economics of commercial network deployment are more challenging. Private sector investment does therefore need to be supported by targeted intervention to extend network availability'*.

JRC highlights that the utilities meeting their regulatory / penalty requirements has a cost that is met by the consumers. JRC therefore requests that the energy and water utilities should also be supported by targeted intervention / financial assistance to extend network availability.

JRC highlights that the utilities typically need to plan their grid control networks for 99.0 to 99.99% availability, even into remote rural areas.

***Q4: Do different types of convergence and their effect on overall market structures suggest the need for changes in overarching regulatory strategy or specific policies? Are there new competition or wider policy challenges that will emerge as a result? What evidence is available today on such challenges?***

JRC has no comments.

***Q5: Do you think that current regulatory and competition tools are suitable to address competition concerns in concentrated markets with no single firm dominance? If not, what changes do you think should be considered in this regard and why?***

JRC has no comments.

***Q6: What do you think is the scope for sustainable end-to-end competition in the provision of fixed communications services? Do you think that the potential for competition to vary by geography will change? What might this imply in terms of available regulatory approaches to deliver effective and sustainable competition in future?***

JRC has no comments.

***Q7: Do you think that some form of access regulation is likely to continue to be needed in the future? If so, do you think we should continue to assess the appropriate form on a case by case basis or is it possible to set out a clear strategic preference for a particular approach (for example, a focus on passive remedies)?***

JRC has no comments.

***Q8: Do you agree that full end-to-end infrastructure competition in mobile, where viable, is the best means to secure good consumer outcomes? Would alternatives to our current strategy improve these outcomes, and if so, how?***

JRC has no comments.

***Q9: In future, might new mobile competition issues arise that could affect consumer***

***outcomes? If so, what are these concerns, and what might give rise to them?***

JRC has no comments.

***Q10: Does the bundling of a range of digital communications services, including some which may demonstrate enduring competition problems individually, present new competition challenges? If so, how might these issues be resolved through regulation, and does Ofcom have the necessary tools available?***

JRC has no comments.

***Q11: What might be the most appropriate regulatory approaches to the pricing of wholesale access to new and, risky investments in enduring bottlenecks in future?***

JRC has no comment.

***Q12: How might such pricing approaches need to evolve over the longer term? For example, when and how should regulated pricing move from pricing freedom towards more traditional charge controls without undermining incentives for further future investment?***

JRC has no comments.

***Q13: Are there any actual or potential sources of discrimination that may undermine effective competition under the current model of functional separation? What is the evidence for such concerns?***

JRC has no comments.

***Q14: Are there wider concerns relating to good consumer outcomes that may suggest the need for a new regulatory approach to Openreach?***

JRC has no comment.

***Q15: Are there specific areas of the current Undertakings and functional separation that require amending in light of market developments since 2005?***

JRC has no comment.

***Q16: Could structural separation address any concerns identified more effectively than functional separation? What are the advantages and challenges associated with such an approach?***

JRC has no comments.

***Q17: What do stakeholders think are the greatest risks to continuing effective consumer engagement and empowerment?***

JRC has no comment.

***Q18: What indicators should Ofcom monitor in order to get an early warning of demand-side issues?***

JRC has no comment.

**Q19: What options might be considered to address concerns about consumer empowerment at each stage of the decision-making process (access, assess, act)? What more might be required in terms of information provision, switching and measures to help consumers assess the information available to them? What role may Ofcom have to play compared to other stakeholders (including industry)?**

JRC has no comments.

**Q20: Are there examples in competitive or uncompetitive sections of the market where providers are not currently delivering adequate quality of services to consumers? What might be causing such outcomes?**

JRC has no comments.

**Q21: What further options, if any, should Ofcom consider to secure better quality of service in the digital communications sectors?**

JRC has no comment.

**Q22: Might there be future opportunities to narrow the focus of ex ante economic regulation whilst still protecting consumers against poorer outcomes?**

JRC has no comment.

**Q23: Where might future network evolutions, including network retirement, offer opportunities for deregulation whilst still supporting good consumer outcomes?**

JRC has no comment.

**Q24: What are the potential competition and consumer protection implications of the rise of OTT services? Might the adoption of such services enable future deregulation without raising the risk of consumer harm?**

JRC has no comments.

**Q25: Are there any areas where you think that regulation could be better targeted or removed in future? What would be the benefit of deregulation as well as the main risks to consumers and how these could be mitigated? Please provide evidence to support your proposals.**

JRC has no comments.

## **Background**

JRC Ltd is a wholly owned joint venture between the UK electricity and gas industries specifically created to manage the radio spectrum allocations for these industries used to support operational, safety and emergency communications. JRC also represents gas and electricity interests to government on radio issues.

JRC manages blocks of VHF and UHF spectrum for Private Business Radio applications, telemetry & tele-control services and network operations. JRC created and manages a national cellular plan for co-ordinating frequency assignments for a number of large radio networks in the UK.

JRC also manages a significant number of 1.4 GHz links and is keen for their protection and the on-going access to this band.

The VHF and UHF frequency allocations managed by JRC support telecommunications networks to keep the electricity and gas industries in touch with their network assets and field engineers throughout the country. The networks provide comprehensive geographical coverage to support the operation, installation, maintenance and repair of plant in all weather conditions on a 24 hour / 365 days per year basis.

JRC's Scanning Telemetry Service is used by radio-based System Control and Data Acquisition (SCADA) networks, which control and monitor safety critical gas and electricity industry plant and equipment throughout the country. These networks provide resilient and reliable communications at all times to unmanned sites and plant in remote locations to maintain the integrity of the UK's energy generation, transmission and distribution.

JRC works with the Energy Networks Association's Future Energy Networks Groups assessing the ICT implications of Smart Networks, Smart Grids and Smart Meters.

