

Your response

Question	Your response
Question 1: Do you have any comments on Ofcom's proposed Plan of Work 2023/24?	<p><i>(Non-Confidential)</i></p> <p>The Joint Radio Company Ltd (JRC) JRC Ltd is a wholly owned joint venture between the Energy Networks Association and National Grid created to manage the radio spectrum allocations for the Energy Network Operators used to support operational, safety and emergency communications. 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. Additionally JRC manages a block of 10.5 GHz spectrum and hundreds of microwave links that are integral to the energy network operators control systems. As</p>

critical systems operators, the Joint Radio Company (JRC) welcomes the opportunity to respond to this consultation on behalf of its Members. JRC notes that communication networks are dependent on access to resilient and robust electricity supplies. As the smart grid evolves, existing monitoring and control systems are being expanded very significantly. This expansion in the operational communications needs of the energy network operators will require access to additional spectrum. This developing need is being explored within Ofcom's current direct engagement with the Energy Utilities.

JRC Response

JRC is pleased to respond to Ofcom's consultation around the 2023-2024 workplan. We recognise that Ofcom has an ever-increasing role in facilitating and regulating a wide range of communications relevant developments for the overall benefit of UK PLC – particularly the rapidly evolving areas of online services, media and access to the same. We note that spectrum management is just one component of Ofcom's large remit. As such the majority of the proposed work items are not directly relevant to JRC and its Members. However, we note that almost every work item included in the 2023-2024 programme is dependent upon a secure, reliable and resilient energy supply. Specifically, section 2.2 makes mention of 'Secure and resilient Telecoms Infrastructure'. We observe that in a world where almost every aspect of daily life is dependent upon an online service and internet connection of one form or another that the need to ensure a constant and stable energy supply is more important than ever – especially during the transition to an economy that is net zero and dependent on distributed renewable energy (DER) sources. Disruption to energy supplies has always had the potential for massive disruption to society but in the third decade of the 21st century it is difficult to overestimate the potential impact to society of any loss of energy supply, even when compared to the situation at the beginning of this century. Resilience and reliability of the UK's intrinsically coupled energy and telecommunications infrastructure has never been more important. Publication of Ofgem's report into Storm Arwen during winter 2021- 2022 highlighted several key recommendations for improvement including '*Handling of Incidents – limited monitoring on the lower voltage networks, hindered the DNOs from understanding the full scale and complexity of faults. This impacted the resources they initially deployed to undertake repairs, restore power, and support customers. We have made three recommendations to improve the identification of faults and the deployment of generators.*' [Storm Arwen Report | Ofgem](#)

JRC would also highlight recommendation R4 from the E3C report into storm Arwen - '*Energy Network Operators should continue to engage with DCMS and Ofcom to secure the utility spectrum so that the energy sector can develop its own resilient data/voice networks in the future*' [Storm Arwen review: final report \(publishing.service.gov.uk\)](#) JRC and the Energy Network Operators are working closely with DCMS and Ofcom to ensure that this recommendation is addressed and anticipate this being at the core of the expected statement from Ofcom.

Additionally, six large renewable energy companies have jointly written to HM Government citing concerns that they cannot connect more renewable generation to the UK DNO networks due to infrastructure constraints – which would be partly addressed by increased control and monitoring at the periphery of electricity networks - [UK energy trade bodies urge policy changes to modernise electricity network, as power demand spikes amid cold snap](#) - edie

JRC is encouraged to see the priority given to the ‘Future telecommunication needs of Utilities’ including a review of the spectrum needs of utilities. We look forward to the publication of the results of this piece of work during Q1 2023. It is positive that the connection between this piece of work and the governments climate change and environmental policy objectives has been recognised. Following closely on the COP 27 event in Egypt last autumn, UK Government continues to announce further environmental policies which are amongst the most ambitious in the world (especially those around additional wind power, EV adoption and electrification of domestic heating). It is essential that the Energy Network Operators are provided access to the appropriate tools and inputs to facilitate a digital transition and access to appropriate radio spectrum is key to enabling this development. JRC looks forward to a positive outcome from this focussed piece of work which we have been involved with for the last five years. It is hoped that the recent developments in Ireland, Germany, Spain and Poland around additional utility spectrum access will be acknowledged and replicated to some degree. The current work item within Ofcom also reflects ongoing discussions within RSPG, ITU, ETSI and national regulators in all ITU regions. Whilst we have acknowledged that the work item referenced is targeted at the requirements of UK Utilities, we are concerned that simultaneously utilities are having access to other spectrum allocations curtailed or removed completely, e.g. 26GHz, 1.4GHz, 6GHz. We acknowledge and appreciate Ofcom’s recent work in ITU WP5A along with regulators from other European countries – including proposals at ITU that dedicated utility spectrum could be allocated a similar status as PPDR and other mission critical sectors.

Indeed, recent announcements regarding changes to the microwave bands to be used for 5G & 6G services, coupled with either LTE or WiFi based solution in the 6GHz range are likely to necessitate expensive hardware swap outs the costs of which will be borne by the energy consumer. Our observation is the major changes to these three frequency bands seems at odds with the current work activity to review the changing (increasing) requirements for utilities to have access to dedicated radio spectrum to facilitate ‘Smart Grid’ developments. It is interesting to note that the South Korean regulator recent removed access to MNOs for millimetre wave 5G deployments due to lack of interest.