

Your response

The Joint Radio Company Ltd (JRC)

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 manages spectrum for Private Business Radio applications, telemetry & tele-control services and network operations.

As a representative of critical network operators, the Joint Radio Company (JRC) welcome the opportunity to respond to the Ofcom work plan for 2026-7 on behalf of the electricity and gas network operators. The Energy Networks are developing to become more dynamic to support the changing nature of both supply and demand. To address this more dynamic and complex energy context and to ensure that energy supplies remain robust and predictable over time, the Energy Network Operators are investing in Mission critical telecom solutions to ensure networks are resilient, adaptable secure and flexible to enable the Government's 'Net Zero' agenda recently defined with the Clean Power 2030 Plan.

Energy networks, transmission and generation, gas and electricity are evolving from rigid, centralised networks to networks that are predictive, responsive, adaptable, flexible and self managing. To do this, energy networks' existing operational telecom need to be both protected and developed ; protected now to provide the existing monitoring, control and automation of critical national infrastructure we rely on, and developed to enable the greater capacity required to increase the intelligence and the security needed for the networks of a Net Zero future.

Ofcom Plan of Work 2026-2027 : 'Enabling wireless in the UK economy'

Ofcom project 'Meeting the growing demand of spectrum for space':

JRC recognise the increased demand for spectrum for space use, it is important to also recognise that the Energy Network Operators (ENOs) make significant use of secure, high availability fixed links for the backhaul of critical control and automation networks across different band. The increased erosion of access to dedicated frequency bands for fixed links and the increased focus on band sharing puts additional pressure on the ENOs and their ability to manage their networks. We recognise that a sharing focus is a preferable outcome compared to the full clearance of any band, but encourage Ofcom to ensure they maintain a balance between adequate protection of incumbent services with the desire to grow the use of the spectrum for other uses such as satellite gateways.

- *Meeting the evolving demand of spectrum for wireless broadband (1.4 GHz auction)*

The Energy networks make use of BGAN service in the 1.5 GHz band to support the operational monitoring and control of the network, and as Ofcom move to enable deployment in the upper part of the 1.4 GHz band for wireless broadband we would encourage Ofcom to ensure these CNI services are suitably protected from interference

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- *Meeting the evolving demand of spectrum below 1 GHz:*

JRC welcome Ofcom's proposal for a cross sectional review of the current and future use of spectrum below 1GHz. The Energy Network Operators are in a time of unprecedented change as they move from centralised, carbon-intensive grids to more complex distributed networks as low carbon systems are employed with a need for greater monitoring, control and automation that is resilient and secure. The operational telecommunication networks which support those energy networks are a key resource for achieving the resilient flexible future networks required to meet CP2030 and Net Zero

As the energy networks evolve, the existing legacy OT networks in use across both distribution and transmission are stretched. A more intelligent monitoring, control and automation solution is required to enable the energy networks to be resilient to the changes of a network based on distributed renewable generation, a key component of CP2030.

The energy sector needs are becoming increasingly urgent as the networks evolve and additional OT solutions are required which themselves will require additional spectrum. JRC welcomes the wider government activity considering the specific requirements of mission critical comms and would encourage further work on identifying suitable options such as dedicated spectrum for a private CNI OT network.

We are working with DESNZ and DSIT to evaluate the future telecom options to support the evolving needs of the energy sector. We continue to be supportive of the identification of the 700MHz band as a potential option to deploy a private mission critical network across the UK. Future bands might be of use to the support further energy system requirements, such as the 600MHz band, that said, the potential availability of this spectrum after 2034, makes it a potential supplementary solutions, but energy networks needs enhanced telecom solution earlier to fully support the delivery of CP2030 objectives.

- *Increasing efficient use of spectrum:*

JRC welcomes the work Ofcom is undertaking in identifying future sharing opportunities in MOD spectrum.

However JRC is concerned about the adequate protection of incumbent services and the erosion of access to lower frequency spectrum bands which enable energy network operators to deploy low latency high availability links across long distance remote paths. JRC hopes that provision is made in any future spectrum sharing decisions, such as in the 6 GHz band, to ensure the CNI Operational Telecommunication links which enable the effective operation of the UK energy networks can remain in operation by means of an appropriate sharing arrangement.

- *International engagement- WRC-27:*

As part of this proposed work, we hope that Ofcom will continue to actively engage with our European neighbours to ensure that the UK is able to respond in a timely manner to any future plans for LTE networks on the continent so that and impact on legacy OT networks in the 450 MHz band can be mitigated.

- *Introduce new products for innovation and growth:*

Whilst we welcome Ofcom's ambition to support innovation and growth, at a time when the energy industry is undergoing significant change, with a clear need for enhanced operations telecommunications to support that change, we would request that Ofcom both ensure adequate protection of incumbent services when sharing spectrum but also request the continued access to

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the key spectrum bands for operational telecommunications which are critical to the safe, secure operation of our energy networks.

- *Licensing, Assurance, Compliance:*

We welcome any plan to streamline operations and to make spectrum usage open and available.

'Internet and post we can rely on'

Migration from legacy services: The managed transition away from legacy services

The Energy Network Operators rely resilient and secure communication solutions for operational telecommunications, and with the cessation of the PSTN network, there are many challenges for the industry in securing a viable and suitable alternative. We request that Ofcom ensure that all communication providers offer the full suite of alternative solutions provided by BT Openreach which meet those requirements, are made available in all areas.

Telecoms and Digital Infrastructure Security:

We will develop and promote consistent implementation of proven technical and operational resilience standards

We welcome any initiative which will enhance the resilience and security of the public mobile networks.

Ofcom's role reporting under the Networks and Information Systems (NIS)

Regulations to cover data centres: Security and resilience supervision programme: We are enhancing our supervision approach to ensure networks are secure and resilient.

We welcome any initiative which will enhance the resilience and security of the public mobile networks.

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