Proposed Strategy for Managing the Radio Spectrum - 2019 to 2021

Consultation on ComReg's new Radio Spectrum Management Strategy Statement

Response

The Joint Radio Company (JRC) welcomes the opportunity to respond to this consultation. JRC supports the actions of the Commission for Communications Regulation (ComReg) to review and update its Radio Spectrum Management Strategy for the period 2019-2021.

We acknowledge the efforts of ComReg over recent years and currently with the proposed Multi-Band award to support the increasing demand from the consumer and enterprise for mobile data access. However, it is important that ComReg does not overlook the importance of spectrum access for other users / segments. To this end we are encouraged by the initiative[1] to enable access to the spectrum in the range 410-415.5 & 420-425.5 MHz which has the potential to support 'Smart Grid' developments in Ireland and be critical to helping the Irish Government deliver upon key environmental targets agreed with the International Community.

In light of the increasing importance of robust and resilient operational telecommunications systems to the Utility sector[2] it is surprising to note that ComReg has not acknowledged the Utility sector as a key user of spectrum both currently and more so in the future – perhaps as part of its periodic Spectrum Strategy review being undertaken here it should also consider what new services / applications will need to be accommodated.

The appraisal of economic impact of spectrum can be a very subjective exercise as has been acknowledged by ComReg and whilst the approach proposed by Frontier appears to be pragmatic there are some additional aspects worthy of consideration;

- Societal Benefit or Social Value; and
- The impact of Secondary Users.

Social Value: there is an inherent societal value of the provision of services to consumers / enterprise that goes beyond the cost / price of provision and hence economic value created. This can be characterised in the provision of Broadcast services that inform, educate and support communities / cultural identity. Whilst in the case of energy supply this is characterised by reliable and cost-efficient provision of energy on which enterprise and community are able to depend. In the case of water management, safe drinking water and efficient removal of sewage waste are essential for the welfare of society.

Secondary Users: are those that utilise spectrum as a key enabler of their operational capability. The communications systems deployed allow the enterprise to function more efficiently and cost effectively and can be critical to the safe management and operation of supply systems, e.g. energy networks. The cost to an economy from the loss of electricity supplies is several orders of magnitude greater than the cost of the electricity not supplied.

[1] https://www.comreg.ie/publication-download/consultation-proposed-release-410-415-5-420-425-5-mhz-sub-band

[2] Navigant Research White Paper, The Urgent Need for a Licensed Broadband Spectrum Allocation for Critical Infrastructure. Why the Utility Industry and Regulators Must Come Together in Support of Interoperable, Future-Proof Smart Grid Networks. Richelle Elberg, Q2 2018. Commissioned by pdvWireless

We encourage ComReg to seek to incorporate these additional components in the detailed economic appraisal to be undertaken by Frontier.

Background

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

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

JRC's Scanning Telemetry Service is used by radio based Supervisory 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 supports the European Utility Telecommunications Council's Radio Spectrum Group, and participates in other global utility telecom organisations. JRC participates in European Telecommunications Standards Institute (ETSI) working groups developing new radio standards, and European telecommunications regulatory groups and workshops.

JRC also manages microwave fixed link and satellite licences on behalf of the utility sector.

JRC works with the Energy Networks Association's Future Energy Networks Groups assessing ICT implications of Smart Networks, Smart Grids & Smart Meters and is an acknowledged knowledge source for cyber-security in respect of radio networks.