

## **Ofcom consultation on**

# **“License Exempt Short Range Devices in the 870 to 876 MHz and 915 to 921 MHz Bands: Technical Proposals”**

## **Qualcomm Response**

### **February 2014**

Qualcomm welcome the opportunity to respond to Ofcom public consultation on “License Exempt Short Range Devices in the 870 to 876 MHz and 915 to 921 MHz Bands: Technical Proposals”.

The SRD industry has expanded considerably over recent years and has now developed into a number of different industrial sectors including metering, automotive applications, alarms, and in wider terms, non-specific SRDs such as home and building automation, telemetry, data transmissions, etc. As a result of that, it is expected that the current designations of spectrum for SRDs will be inadequate to meet their future needs.

The frequency bands under consideration in this consultation are used or studied in many countries outside Europe for SRDs, which make them attractive for systems deployed on an international basis leading to the benefits of global economies of scale and a support for international trade. Thus, Qualcomm welcome the initiative by Ofcom to introduce license exempt short range devices in the frequency bands under consideration in this consultation.

That said, the current regulatory rules and measures being considered for SRD operations in the 870-876MHz and 915-921MHz are based on previously defined SRD technical characteristics (e.g. ETSI TR102 649-2). Presently, the maximum transmission bandwidth is limited to 600kHz. Additionally, the maximum duty cycle limit in current rules is very restrictive, especially for Access Point (AP) operation. Relaxing the duty cycle limit for devices with advanced spectrum sharing capabilities like LBT/AFA can enable more applications and increase the economic value of the spectrum.

Qualcomm believe that the addition of wider bandwidth SRDs for use in the 870-876 MHz and 915-921 MHz bands across CEPT countries will potentially enable many new Internet of Things (IoT) and similar SRD-oriented applications through higher achievable data rates, natural IP support, as well as many power and capacity efficient features.

In this context, Qualcomm would like to draw the attention to:

- the IEEE 802.11ah standard currently under development designed to address wideband SRDs with advanced spectrum sharing capability. Currently, the 900 MHz band has been allocated in many countries including US, South Korea, Japan for 11ah use.
- the recently initiated ETSI ERM activities aimed at developing a system reference document (SRDoc) including technical characteristics and spectrum requirements of wideband SRDs with advanced spectrum sharing capability for operation in the UHF 870-876 MHz and 915-921 MHz frequency bands

Finally, Qualcomm would like to ask Ofcom to continue supporting and contributing to the ETSI ERM efforts in the development of the SRDoc for wideband SRDs and to continue considering and evaluating the role that the 802.11ah standard can play in the future in the bands under consideration in this consultation.