

# **QUALCOMM INCORPORATED RESPONSE TO OFCOM CONSULTATION ON THE AWARD OF AVAILABLE SPECTRUM: 1452 – 1492 MHz**

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## **Introduction**

QUALCOMM Incorporated welcomes this initiative by Ofcom. We confine our response on the technical packaging options and emphasize the importance of pursuing Europe-wide harmonization of this spectrum.

## **European harmonisation**

We welcome Ofcom's initiative to re-examine the use of this spectrum and introduce more flexibility. We would caution however that any approach that the UK takes, particularly regarding spectrum band planning, needs to be consistent to the approach being taken within mainland Europe.

The practical reality is that mobile terminals are designed and manufactured for the pan European and global market. Channel plans which are "UK only" and not harmonized with the rest of Europe will result in UK only terminals. A UK only solution will result in a lack of a wide range of terminals which are more expensive.

We therefore recommend that Ofcom does not licence before the direction and content of any potential Europe-wide band plan is clear.

## **Packaging options for the lower 27.5 MHz of this spectrum**

We note that there are a number of technologies that could be deployed in the terrestrial portion of this spectrum. As Ofcom indicates these technologies use different channel bandwidths and we therefore support a licensing regime that also enables the option to support 5.1 MHz systems. Our preference is to divide the spectrum into five lots of 5.1 MHz packages which then enables the option for 1.7 MHz and 5.1 MHz systems.

## **Use of Downlink & TDD modes**

At the present time, the mixed use of TDD and Downlink modes is not technically feasible in this spectrum and frequency guard bands are required between TDD and Downlink modes.

We anticipate that Europe-wide downlink only terminals will be designed to operate across the whole of the 27.5 MHz of spectrum. If Ofcom were to adopt a channelization

plan that places TDD within this downlink, this mixed use of the spectrum will create significant interference. At the present time terminals for the mass market cannot be designed to vary their receive bandwidth and switch between TDD and Downlink. Even if this were technically feasible, terminals would be highly costly and inefficient. If TDD is to be considered then a specific pan European sub band with a spectrum guard band between TDD and Downlink would be needed.

### **UHF vrs L Band**

We would also stress that the potential availability of L band should not disrupt the Europe-wide activity to make some UHF spectrum available for mobile broadcast systems. L band spectrum can complement UHF spectrum for mobile broadcast systems in some markets but should not be seen as a substitute. We encourage Ofcom to expedite the release of UHF spectrum for systems such as mobile broadcast.

### **Contacts**

We would be delighted to explore any of these further with Ofcom if necessary.

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