

## Ofcom Consultation: 'Maximising the benefits of 700MHz clearance'

### Cisco Response

#### Overall

- Cisco would like to thank Ofcom for the opportunity to feed into its thinking on the 700MHz band clearance. Cisco supports the clearance of the 700MHz band for use for mobile data and agrees that the new use designation of the 700MHz band should be done in a technology neutral way.

#### Mobile Data Usage

- Cisco's Visual Networking Index (VNI) sets out a credible, rolling five year forecast for network usage across the world. The latest version of this – which focuses on mobile data – was released in February. This forecasts that UK mobile data usage will increase at a 47% Compound Annual Growth Rate between 2015 and 2020 (from 0.1 exabytes per month in 2015 to 0.6 exabytes per month in 2020).
- The VNI predicts that the overall numbers of devices using mobile data in the UK will double in the UK between 2015 and 2020 – from 106m to 205m. Although we predict that growth in machine-to-machine devices will outstrip growth in other types of devices using mobile data (their share of the overall numbers of devices will go from 19% to 54%), we see smartphones being the main users of mobile traffic (a consistent 71% from 2015 to 2020). This smartphone use will primarily be driven by video which we forecast will grow from 59% of all mobile traffic in 2015 to 77% in 2020.
- In this context, it is right that Ofcom is seeking to designate more spectrum to mobile data via the 700MHz band.

#### 700MHz Clearance Timing

- In terms of timing, Cisco congratulates Ofcom on its efforts to make the band available for mobile use as early as possible so as to maximise the benefits. As the VNI forecast shows, the potential for steep increases for mobile data will mean that networks must be prepared to cope with this new demand.

#### 700MHz Centre Gap

- Cisco supports the making available of the 700MHz centre gap for mobile use and agrees that this would maximise the benefits of this spectrum for consumers and businesses given the likely strong demand for mobile data downloading.
- We also consider mobile use of this section of the band to be an effective way of ensuring that there is no interference to the proposed uplink and downlink sections of the 700MHz band from other potential uses of the centre gap. We see other uses of this section of the band as potentially requiring inefficient spectrum management techniques to guard against interference with the mobile data use.
- We agree with Ofcom's argument that there is no strong case for delaying the transition of this 700MHz centre gap spectrum from interim multiplex use to mobile data use.

#### Spectrum for the Internet of Things and the Centre Gap

- On the question of other options for use of the centre gap, we appreciate Ofcom's efforts to ensure an adequate range and variety of spectrum is available for Internet of Things and machine-to-machine use, including in its recent report on 'More radio spectrum for the internet of things'.
- We would like to encourage Ofcom to keep IoT and M2M spectrum needs under review so the societal and economic benefits of these technologies are not held back in any way. The VNI forecast (outlined above) predicts a large increase in the numbers of M2M devices connected to the network over the next 5 years. These devices will have heterogeneous network requirements in terms of speed, latency, coverage etc. It is therefore right that Ofcom actively considered the spectrum requirements of these new devices. Cisco would be delighted to work with Ofcom on this.

#### Consumer Disruption

- Although we agree that reallocating the 700MHz band for mobile data will maximise benefits, we are mindful of the need to avoid undue disruption for consumers of DTT services. We would like to encourage Ofcom to consider the likely long-term use of parts of the 600MHz band for mobile data and therefore take this into account when considering how it repositions DTT services in this band.

#### **Matthew Houlihan**

Head of Government Affairs, UK & Ireland

Cisco