

**OFCOM Consultation on**  
**White Space device requirements**  
**RESPONSE FROM DIGITAL UK Ltd**

## **Digital UK**

Digital UK supports Freeview viewers and channel providers. We provide viewers with information about their options for receiving terrestrial TV and advice on reception and equipment. From January 2013 the company also handles the day-to-day technical management of the Freeview Electronic Programme Guide (EPG), allocates channel numbers and manages the launch of new services onto the platform.

Digital UK led the implementation of digital TV switchover from 2008-2012 and during 2013 is overseeing clearance of terrestrial TV services from the 800MHz band, paving the way for launch of 4G mobile broadband services.

The company is jointly owned by the BBC, ITV, Channel 4 and Arqiva.

## **Introduction**

Digital UK welcomes Ofcom's:

- recognition that DTT is the main platform for the delivery of TV services and that it delivers significant value for consumers, as well as fulfilling an important public policy role. It therefore follows that protecting Freeview viewers is also paramount;
- extensive and constructive engagement with the technical community in order to facilitate the introduction of White Space devices in a measured manner; and
- adoption of a cautious approach to the introduction of White Space Devices, and recognition that providing protection of the licensed Broadcasting and PMSE services is paramount.

Ofcom's approach to date gives the Broadcasters some comfort that their licensed services will not be jeopardised by the introduction of licence-exempt White Space Devices, but we note that the extent to which this is true will only become fully clear following the Consultation and implementation process. Broadcasters will continue to constructively engage with the process in order to protect the interests of Freeview viewers.

## **Consultation Questions**

Digital UK is generally supportive of the approach set out by Ofcom, but there are a few points we would like to raise as discussed under the relevant question response below.

**Question 1: Do you agree with our approach to defining the various categories of WSDs?**

We welcome Ofcom's separation of possible WSD implementations into "baseline" and "enhanced" frameworks and agree that completion of the former can better inform the design of the latter.

While Digital UK generally agrees with the device classifications proposed by Ofcom, we believe that the wording of the Device Type definitions is not completely clear and could be misinterpreted. We therefore suggest that the definitions be changed to be:

*A Type A device is one whose antennas are permanently mounted outdoors on a fixed structure.*

*Type B devices are all those which are not of type A. A type B device must have an integral antenna.*

These definitions make it clear that Type B devices can be located inside or outside, and can be fixed or moving, whereas type A devices must be static at all times.

We understand Ofcom's reasons for not mandating vertical geo-location capability, but would value a detailed discussion as to how the cautious height assumptions based on device type will be determined.

**Question 2: Do you agree with our proposed sequence of operations for WSDs?**

We believe that the sequence of operations is missing a key step in relation to slave White Space Devices. We believe that there should be a security exchange process by which a slave WSD confirms that it is attempting to associate with, and receive instructions from, a legitimate Master WSD. We do not propose a mechanism for this to occur but request that Ofcom works with potential White Space Device manufacturers to develop one.

We believe this step is necessary to avoid the small but real possibility that an individual or organisation maliciously establishes a rogue Master WSD to capture nearby slave devices and then permit unsuitable frequency use by those devices in order to cause interference to television reception or PMSE operation.

**Question 3: Do you agree with our proposed additional operational requirements for master WSDs?**

We agree with the proposed additional operational requirements for master WSDs.

**Question 4: Do you agree with our proposed additional operational requirements for slave WSDs?**

We infer from the Consultation that slave WSDs need not be connected to the same master WSD in order to communicate with each other, merely that they must be connected to a master WSD and have a common set of available channels over which they can communicate. We therefore presume that duplex operation would be permissible providing each slave device can "hear" its partner slave device, even if the channel used for reception by each device is not available to that device for transmission. While this is not an issue since it does not affect television reception or PMSE operation, it may be worth clarifying this point in the final White Space documentation.

We believe that slave WSDs must be required to establish that a master WSD is a legitimately authorised unit before associating with it and acting on its instructions, as discussed in our response to Question 2, above.

In all other respects we agree with the proposed additional operational requirements for slave WSDs.

***Question 5: Do you agree with the proposed device parameters, operational parameters and channel usage parameters?***

We agree with the proposed device parameters, operational parameters and channel usage parameters.

We particularly welcome the fact that no device may use the TV spectrum until it has received the necessary authorisation to do so from an Ofcom-authorised White Space Database

***Question 6: Do you agree with our approach of implementing the requirements in the example SI and the draft IR and VNS?***

We agree with Ofcom's proposed approach to implementing the requirements in the example SI and the draft IR and VNS.

**Next Steps**

Digital UK supports Ofcom's stated plan for further stakeholder engagement and implementation. In particular:

- we welcome the fact that Ofcom is continuing to discuss the necessary co-existence parameters while the VNS and SI work is finalised
- we agree that Ofcom should calculate TVWS availability in-house and then pass it on to the client WSDBs
- we support the idea of holding an end-to-end trial before client databases are authorised for operation
- we welcome the idea of a phased geographical introduction of White Space Devices to allow time to address any unforeseen implementation issues

Digital UK looks forward to continuing its supportive engagement with Ofcom in the WSD authorisation process and to a future satisfactory implementation of White Space Devices into the UK market.

10 January 2013