

## **TV white space: A consultation on white space device requirements**

The Digital TV Group (DTG) welcomes the opportunity to respond to the above consultation regarding white space device requirements within TV white space (470 MHz – 790 MHz).

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

Ofcom propose that both Master and Slave categories of devices must have the capability to receive and transmit data over TV White Space frequencies.

Please can Ofcom confirm that a device configuration of receive only can also be used in addition to the currently defined master and slave configurations.

Based on the information available in this consultation, the DTG are keen to impress that a number of options for the systems implementation are good to explore during the consultation phase; further to this, a full end-to-end test must be performed before any implementation occurs.

The DTG is well placed to support this as it maintains the UK's largest collection of representative samples of DTT and DSat receivers; totalling over 350, and covering a large proportion of the receivers sold in to consumer's homes since the introduction of digital TV services. The receiver collection can be used to determine better protection ratios and gather more accurate 'real-world' information about interference with TV's.

The DTG also play host to the UK's largest non-commercial example of a Gigahertz Transverse Electromagnetic (GTEM) Cell; which permits the accurate testing of interference without interruption from the ambient electromagnetic environment.

## **About the Digital TV Group (DTG)**

The Digital TV Group (DTG) is the focal point of the UK's digital TV industry. The Group, a not-for-profit membership organisation, brings the industry together to enable the successful delivery and evolution of digital TV and associated technologies.

The DTG publishes and maintains the technical specification for Freeview, Freeview HD and Connected TV (the D-Book) and runs the digital television industry's ISO accredited test centre: DTG Testing.

The DTG has published and maintained the D-Book for over a decade and the specification is updated annually to keep up with the pace of development in UK DTT. The D-Book is compiled by DTG working groups comprised of the DTG's membership and staff who continually update and peer-review the specification.

The first edition of the D-Book was written in 1996 when the current UK standard for terrestrial broadcasting (DVB-T) was new and untried. Early editions of the D-Book enabled the publication of the European digital TV specification: the E-Book.

In March 2009, the DTG published the 6th edition of the D-Book—enabling the launch of an initial three free-to-air HD channels on Freeview by late 2009, as well as the introduction of a broadband return path which has the potential to be used for streaming on-demand video content such as BBC iPlayer, ITV Player and 4oD. It also introduced DVB-T2, the new modulation scheme that is being used in the UK to deliver these services.

In March 2011 the DTG published D-Book 7, the detailed interoperability specification for digital terrestrial television with extended Connected TV functionality. D-Book 7 provides an industry-agreed baseline specification for Connected TV products and services that Sky, Virgin Media, YouView and others can build on for trademark requirements to support their services.

The DTG's test centre: DTG Testing tests digital TV products applying for the Digital Switchover Certification Mark (the 'digital tick'), Freeview, Freeview + and Freeview HD logos against the D-Book standard. Any manufacturer wishing to use the Freeview HD logo on a product must pass the required DTG Testing Freeview HD tests.

Since the DTG was established over a decade ago, the Group has worked closely with our members to adapt international standards such as DVB-T and DVB-T2 to create an interoperable UK digital TV platform that consumers can rely on.

The DTG currently has liaisons with international standardisation bodies including DECE (Ultraviolet), ETSI, HbbTV, and the Open IPTV Forum (OIPF). The DTG has incorporated parts of these standards into D-Book 7 and adapted them to make them work for the UK market. Extensions have now been fed back to the standardisation bodies to enable the next generation of standards across Europe.

The DTG continues to allow Digital Europe to use areas of D-Book copyright under licence to encourage international harmonisation.

Following the publication of D-Book 7, the Group is now finalising the test and conformance regime for Connected TV products and services and supporting the development of next generation technologies such as LTE, TV white spaces and home networking.