

## **FREEVIEW response to Ofcom's consultation:**

### ***'TV white spaces: approach to coexistence'***

**13<sup>th</sup> December 2013**

#### **1. Introduction**

##### **1.1 About Freeview**

Freeview is the UK's most popular television platform, used in over 19 million homes, three-quarters of the total. Over 10 million homes rely on Freeview as their sole provider of television (40%)<sup>1</sup>. Furthermore, the DTT platform, of which Freeview is the cornerstone, is set to remain the country's largest platform for the foreseeable future, with over 12 million main set homes forecast in 2020<sup>2</sup>.

Freeview provides universal and free-at-the-point-of-use access to PSB services and broadcasts over 95% of the country's most watched television programmes subscription-free<sup>3</sup>. With UK consumers spending an average of four hours a day watching television, Freeview services are a crucial part of millions of people's daily lives.

##### **1.2 About this response**

Freeview's response to this consultation has been put together on the basis of the organisation's role as custodians of free-TV and champions of its viewers' interests. It has been prepared by Freeview's management team and does not necessarily represent the individual views of our shareholders. We have limited our response to the areas that are relevant to the potential consumer impact of coexistence and where we therefore seek to represent our viewers' interests. Our comments are high level and consumer focused as we are cognisant that others in the industry will address the technical detail of Ofcom's proposed approach.

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<sup>1</sup> Source: BARB Establishment Survey Q3 2013

<sup>2</sup> Source: 3 Reasons LLP, Autumn 2013 Market Model

<sup>3</sup> Source: BARB viewing figures, Jan-Mar 2013

## **2. Response to consultation**

Freeview recognises the need to maximise efficiency in spectrum use and supports Ofcom in its initiative to enable the sharing of spectrum amongst different users. We support Ofcom in its view that dynamic spectrum access should only be introduced if there is a low probability of harmful interference to existing services.

Overall, we are concerned that the proposed approach to introducing white space devices as set out in the consultation, will preclude Ofcom from meeting its objective of minimising the likelihood of harmful interference. Such an outcome would be likely to have a detrimental impact on viewers and the overall health of the Freeview platform.

We recognise that the move to allow white space devices to access the UHF TV band represents unfamiliar territory both for Ofcom and the majority of stakeholders involved. However, despite recognition of the need to err on the side of caution due to uncertainty around potential levels of interference, the parameters being proposed are likely to increase the occurrence of interference rather than reduce it.

In order to ensure continuity of service for viewers and minimise the risk of television and radio services being disrupted, Freeview would encourage Ofcom to adopt the high level approach set out below in regard to implementing the introduction of licence-exempt services into spectrum currently used for DTT.

It is important to note that throughout digital switchover consumers opted for Freeview as their platform of choice and bought equipment in good faith expecting to be able to access the services available for many years to come. It is on this basis that we have developed our recommendations around sustaining current services.

### **1. Ensure coverage is maintained for all Freeview viewers**

Freeview is currently in almost 20 million homes with content being consumed on one or more TV sets at a time. Any consumer accessing Freeview services today should be able to continue to do so once white space devices are launched.

However, Ofcom is only proposing to maintain 98.5% PSB coverage and 90% commercial multiplex coverage when the reality is virtually every home in the UK can receive the service, albeit not always to the official standard.

On a similar note, there are several areas in the country where homes are receiving Freeview signals despite there being no local relay as agreed by Ofcom during the switchover process. No provision has been made to protect these services.

Individual transmitters can achieve higher coverage than the levels reached by the full suite of PSB & COM muxes. This has not been taken into account in Ofcom's proposals either.

And finally, there is a range of DTT transmission modes in use, all of which have differing levels of susceptibility to interference. This variable needs to be considered in Ofcom's approach.

## **2. Ensure reception of current services is maintained**

As with coverage, a consumer's ability to receive Freeview should be safeguarded. This includes both the suite of services they are currently able to receive plus the equipment through which they obtain them.

A significant proportion of Freeview homes use an indoor aerial to receive Freeview and under the current proposals this type of reception would not be protected. With one quarter of DTT receivers relying on indoor aerials, we believe it should be.

Viewers receiving HD and local TV channels should continue to have access to these services when white space devices are introduced. However it is not clear from the consultation whether protection measures will be put in place for the additional HD and local TV multiplexes.

Similarly, not all transmitters have been included in Ofcom's planning - English regional correction transmitters and alternative transmitters in overlap areas have been omitted.

## **3. Ensure power levels for white space devices are set at levels that will minimise interference**

We are concerned that the proposal to set power levels at up to 36dBm/(8MHz) both indoors and outdoors will significantly increase the risk of overload for Freeview receivers or aerial amplifiers as well as result in disruption to reception of indoor aerials.

We would encourage Ofcom to set a more appropriate limit of no more than 30dBm/(8MHz) for white space devices.

## **4. Develop proposals on how interference will be identified and complaints addressed**

Knowingly permitting interference from a licence-exempt service into a licensed service represents uncharted territory. The modelling used to calculate the likelihood of interference is only theoretical and trials are unlikely to provide a definitive view on the level to which interference occurs.

Given the uncertainty involved, it is critical that Ofcom develops proposals on how cases of interference will be identified and how complaints regarding interference will be collected and addressed.

There must be a well co-ordinated and well communicated consumer support scheme for viewers whose TV service is affected by interference from white space devices. Licence-exempt use should not mean that new users are also exempt from taking measures to minimise damage to existing services and from taking responsibility for consumer support when interference does occur.

Consumers should not be left without TV services for any length of time and it is important that complaints are dealt with appropriately. Inadequate response times could impact on consumer satisfaction and lead to reputational damage for Freeview.

Planning for a mitigation support scheme was underway long before 4G services were launched earlier this year. Given the full extent of 4G interference has yet to be determined, there is a risk in attempting to correlate the findings from the initial rollout of 4G services with the potential levels of interference from white space devices.

### **5. Ensure a low probability of interference to PMSE services and services below the UHF TV band**

We agree that PMSE and services below the UHF TV band should be protected from harmful interference. PMSE services play a critical role in some of the highly valued and much viewed content on the Freeview platform such as sporting events, concerts and royal occasions. The public's ability to enjoy this genre of programming should not be put at risk by the introduction of new technology.

### **6. Ensure equitable spectrum management is applied to all users**

We would like to see comparable measures to protect DTT and 4G services put in place by Ofcom. For licensed 4G services potentially affected by licence-exempt white space devices, a guard band of 8MHz is being proposed. For licensed DTT services, we do not think the parameters proposed by Ofcom are sufficiently stringent.

### **7. Ensure that changes to coexistence proposals can be swiftly implemented**

If cases of material interference arise, we want to know that Ofcom will be in a position to adjust the parameters within an appropriate timeframe in order to rapidly resolve the issue and restore DTT services.

## **3. Summary**

The introduction of white space devices will result in further interference to DTT signals and in turn further disruption to Freeview viewers. We recognise the need to maximise the use of spectrum and want to work with Ofcom to ensure that interference is minimised.

Overall, we are concerned that the parameters in Ofcom's current proposed approach to coexistence are not rigorous enough and will therefore not achieve the desired outcome of minimising interference. We would therefore encourage Ofcom to revisit its proposals in the areas we have noted in our response.