

**What do you want Ofcom to keep confidential?:**

Keep name confidential

**If you want part of your response kept confidential, which parts?:**

**Ofcom may publish a response summary:**

Yes

**I confirm that I have read the declaration:**

Yes

**Ofcom should only publish this response after the consultation has ended:**

You may publish my response on receipt

**Additional comments:**

**Question 1: Do you agree that copy management would broaden the range of HD content available on DTT and help secure its long term viability as a platform? :**

Not in the long term, and possibly will inhibit take up.

Initially more some providers may require additional licencing fees if copy protection is not enforced, however in the longer term as HD becomes the norm such premiums will go away as content owners realise that they are ineffective. Indeed if the majority of manufacturers include it anyway in order to use the FreeviewHD trademark the pressure from content owners may reduce even in the short term.

In the short term negative conertations of DRM and a poorer flexibility than traditional broadcasting methods may actually inhibit takeup, restricting the size of the potential market. (I certainly will hold off purchasing one for this reason)

**Question 2: Do you agree that the BBC?s proposed multiplex licence amendment represents the most appropriate means for securing an effective content management system on HD DTT? :**

On the assumption that an effective content management system on HD DTT is in fact desirable, no. Previous experience with DRM technologies shows that all are broken in a relatively short period of time (eg HD-DVD, Blu-ray and DVD CSS). Setting aside the impossibility of a 100% effective system, the more data you encrypt the more effort likely to be involved in the counter measures, so option 5 is likely to be most effective.

Otherwise to achieve a broad coverage of semi-effective management option 2 is most appropriate while allowing for innovation in the home entertainment space.

**Question 3: Do you agree with the proposed change to Condition 6 in the Multiplex B Licence? :**

No.

**Question 4: Do you agree that Multiplexes C and D should be granted a similar amendment to their Licences as Multiplex B?. :**

Yes, if B is granted it then C and D should also be granted it. I don't support the granting to B however.

**Question 5: Do you agree that the BBC's proposed approach for implementing content management would safeguard citizens and consumers legitimate use of HD content, and if not, what additional guarantees would be appropriate? :**

No.

Fair dealing should include the ability to move it between personally owned devices, including legacy media servers (which may already support HD, or be upgradeable to do so). These devices may, for example, be built on Myth TV or other open source software. While on a closed box device some amount of control over copying may be achieved as mentioned in the consultation document, if running on generic PC hardware it would be nearly impossible to close all holes without essentially rewriting the entire software stack as a closed piece of code.

I also have concerns that while there are three possible modes only the most restrictive will ever be used and/or implemented. The regulator should at a minimum require that all are supported by a device and specify which should be required for BBC-owned content.

**Question 6: Do you agree that the BBC's proposed choice of content management technologies will have only a negligible impact on the cost of HD DTT receivers and their interoperability with other HD consumer equipment? . :**

For the most part as considered, yes.

Interoperability with computer orientated media servers and other home AV networks is likely to be very difficult, substantially inhibiting innovation in that market place.

Interoperability with open source systems is likely to be impossible, despite the claims made wrt HD freesat recorders currently existing (these are much more of a closed box product than those which utilise generic hardware).

**Question 7: Do stakeholders agree that the BBC's proposed Huffman Code licensing arrangements would have a negligible effect on the market for HD DTT receivers? :**

Open source based solutions would be adversely affected, despite the arguments given. In a closed box solution in which much of the end-to-end av stack is proprietary supported by auxiliary open source software it is possible to implement as described, however as soon as the user is given the ability to affect the device's software the copy protection is compromised.

USB devices for receiving HD DTT would never be made to work on non-proprietary operating systems as they would never support the copy protections required for the EPG data. Even on Windows/OS X systems it would be difficult to completely close all potential loopholes.

**Question 8: Do the BBC's proposed content management states and their permitted use for different categories of HD content meet the requirements of other HD broadcasters on DTT? . :**

No comment.

**Question 9: Are there any issues that you consider Ofcom should take into account in assessing the BBC's proposal, that have not been addressed by this consultation?:**

Attempts to put in place DRM content are doomed to failure and represent a waste of time and money that could be better spent on content and exploring internet based marketing models likely to be necessary in the future. Consumer opinion of DRM is poor, as shown by the migration towards DRM-free content in the online music business.

DRM often makes the legitimate experience worse than the pirated internet download experience due to the technical overhead involved that is not present in the DRM-free content available online. This discourages growth of the new market resulting in a poor experience for all. Little to no benefit is conferred through the use of DRM as committed pirates have managed to break all technological measures thus far deployed, and likely always will (through the analog hole if nothing else). All it takes is for one person to convert the content into a DRM-free form and it becomes readily available to all who wish to obtain a copy.

Ofcom should take a strong leadership position in the interests of consumers by seeking to convince the marketplace that DRM is the wrong answer and moving them to consider alternatives now, rather than wasting time and money deploying it.