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What do you want Ofcom to keep confidential?:

Keep nothing 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? :

No. There is no possibility that it would broaden the range of content.

Anyone who elects not to provide high definition content because they are afraid that someone will do the equivalent of borrowing a videotape from a friend will simply be out-competed by providers who do not share those worries.

The availability of content on DVD and Blu-Ray disc does not seem to be affected by the fact that these formats have no effective barrier to copying. Why should broadcast television be any different?

[note: I said *effective* barrier. Purported copy-protection schemes on these systems are entirely ineffective. I will go further, and note that in all cases, an effective barrier to copying is so onerous as to be an effective barrier to consumer acceptance]

Fortunately the BBC's proposals are simply a waste of time from the copy-prevention point of view. They will have no effect on the unauthorised availability of broadcast content.

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? :

No. It is not in any way a technical barrier to copying.

Encrypting EPG data would make ordinary watching of television annoyingly difficult without cracking that encryption, but in no way prevents the capture and manipulation of the stream. You cannot, in fact, prevent capture and manipulation of the stream in a broadcast medium.

Cracking of the "encryption" is itself an inevitable result, since the plaintext is trivially knowable. What *are* these people thinking? Who thought changing the Huffman table was an encryption system? I was "cracking" that level of "encryption" with pencil and paper when I was fourteen. The guide *is* still in English, right? You don't even have to distribute a copy of the tables. A program with access to the EPG and a dictionary of English words could construct it on the fly.

Then we come to the restrictions. Nominally one can make a copy to an external, removable device even on the most restrictive setting. How will copies of *that* be prevented? What was the point of all this again?

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

No. EPG data should be in the clear, and conform to the appropriate standard. There should be no restrictions on viewers using equipment of their own choice (and in some cases of their own manufacture) to view the content which is being paid for by the compulsory license fee which they are paying.

I have some Open Source software I use to watch television. I pay a license fee, giving me a stake in this game. Is the BBC prepared to deal with individuals?

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

No, for the same reason as Question 3

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? :

It will make things more annoying for homebrew users.

It will have limited effects on ordinary users (unless they have to spend all their time updating their Huffman tables) except for the additional bugs.

It will have no effect whatsoever on someone who wants to upload something to some bittorrent site, so it's a dead loss for everybody except the content providers, for whom it has no benefits whatsoever.

It is, in fact, not technically possible to impede the people who will devote time to copying, without so impeding the people who just want to watch telly that they give up and do something else.

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? . :

Assuming it's just a lookup table, It will simply introduce the usual set of bugs in consumer equipment where the manufacturers are forced to deviate from the published standards.

Manufacturers of end-user equipment typically do not have much software experience, and license packages from other suppliers (often the chip manufacturers) to handle much of the low-level functionality. I work in the semiconductor industry and see this all the time. They concentrate on user interface and tactile interface (screen layout, button size, placement, responsiveness etc).

If you make them do their own thing, they'll have to add their own layers of testing where previously they would have been able to rely on someone else's testing.

In addition, the content management proposals will require an additional coding and testing burden, which is subject to error. This will result in problems where the device cannot reliably do something which should in fact be permitted, because of a fault.

The standard of embedded software in the set-top-boxes I have seen over the years suggests that additional complexity will have a more than linear effect on additional software faults.

So equipment quality will suffer as a result of doing this.

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? :

It'll certainly have an effect on me, since I'll have to get hold of a copy those tables. I make my own system.

Can I promise not to copy BBC HD to all and sundry (why would I want to? I just want to watch telly) and get a copy of the Huffman tables?

As for the market as a whole, it will tend to hurt the smaller manufacturers more, since development costs are fixed. It will also restrict the functionality of devices in the market, since manufacturers will omit features rather than bear the cost of attempting to police their use.

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? . :

Can't say.

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?:

Various thoughts:

1) High definition content provides a sharper image. It does not provide a better story, better acting, improved information content or greater educational value. It is in no wise deserving of greater protection. Some higher definition content has a greater production cost, but this was true (and the difference much greater) with the change from Black and White to Colour. These costs will fall.

2) When the Huffman tables become widely distributed and well known outside of the BBC's control, how to they plan to manage the situation? Will they change the tables, requiring the update of every receiver in the land? How many times a year will they do this? Remember that the tables are trivially susceptible to a known plaintext attack.

3) Some make the argument that standard definition content continues to be available without restriction. However, Ofcom should consider that at some point standard definition content will be discontinued, and what is now called "High Definition" will become the only available content. What happens then?