#### 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?:

No I do not.

This is based on evidence from the USA, where content producers and rights owners lobbied the FCC for the same, and ultimately failed. For the moment at least.

The significance of this is that the content producers in the USA had argued that they would not be able to transmit HD content without the flag. However, events have proven this argument to be bluster. HD content is being happily broadcast in the USA, with permission of same rights holders, without the broadcast flag.

The evidence seems to be clear in showing that lack of copy management will diminish availability of HD content.

See <a href="http://en.wikipedia.org/wiki/Broadcast\_flag">http://en.wikipedia.org/wiki/Broadcast\_flag</a> for links to sources.

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?:

I am a technologist and programmer. So I must point out that no such thing as "effective content management system" can exist. All such systems will be easily subverted through trivial software hacks and, as such software modifications are always easily distributed to and applied by non-technical users, such systems are easily subverted en masse.

That is to say, in order to make this system effective you would have to ensure it is enforced in hardware somehow, and enforced in hardware in \*all\* possible media players[2]. This means you would have to make it illegal to have software based decoders for media in \*all\* computers. Such a requirement is beyond the wildest dreams of even the most pro-content-management people out there.

Further, I object in principle to the premise of this question that there is any kind of appropriate content management.

I answer no, on the basis that there is no evidence that there is any generally useful effect from the implementation of content management.

If certain people are invested in the illogical idea that such protection is required, then the proposed scheme is as effective as any other.

2. Note that even hardware content protection is usually subvertable. However, application may require expertise that raises the bar. So hardware protection could be effective to a degree in certain fields, such as game consoles - because the content is not generally useful except on the restricted hardware.

However content protection is not one of those fields, because the small number of people with the expertise can easily upload the content to the internet using Peer-to-Peer technologies.

Thus, you would require hardware protection in \*all\* media players for a scheme to be effective.

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

I would answer no, unless it is clarified that the FRND licensing terms MUST admit licensing by "free software" and "open source" software.

NB: The BBC in their submission offer this possibility. My answer is that OfCom MUST specify this requirement in any change to the licence.

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

Absolutely not. It is clear from the consultation this is being proposed in the greater part to ensure that receiver manufacturers must implement the content protection scheme, even if they do not implement FreeViewHD.

This would seem to be an uncalled for attempt to leverage content protection and encryption into place on the back of existing TV for which there is \*no\* argument to be made for content protection.

If this were a proposal from a private corporation, it might be called an attempted abuse of monopoly powers. Which I hope OfCom will bear in mind.

Let existing FreeView remain wholly unencrypted.

# 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?:

The prime guarantee must be that free software is continued to allow access.

Free software[1] benefits not just those programmers who enjoy its practice and use. Free Software contributes to a pool of infrastructural code from which inventors can draw, to build the next generation of technology. It is therefore vital, not just to the interests of a small number of programmers but to the interests of business and the public at large, that free software be allowed to participate in broadcast technologies.

As an example, much of the internet's infrastructure is built on free software. This has allowed countless number of companies to build new products and even innovate in wide number of fields. Such as Google and its search engine, or even the BBC and its iPlayer offering - both of these rely on a number of free software projects in their backend.

On this basis, care must be taken that any licences explicitly include free software implementation.

1. Meaning free in the sense of "freedom" - not cost per se. That is, that the source code is freely available, typically under terms that protect the continued freedom of the source code.

## 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? .:

On the basis that content protection is an ineffective fig-leaf, being proposed simply to sate certain people who believe that the pig of content protection can make their dreams of being prevent content leaking to the internet fly, I would say that logically any such implementation is a fairly significant waste of resources. As such I would argue any cost is unjustified.

If the opinion of those who will not accept that any content protection project is ultimately doomed prevails, and some content protection must be chosen, then I guess this scheme wastes no more money than others.

## 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?:

In light of previous arguments above:

If care is taken that service licenses require that the licensing terms be amenable to free software and open source software, then yes.

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 opinion.

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?: