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For Decision

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1. Recommendation:

Following Ofcom's short industry consultation over the summer on a multiplex licence amendment requested by the BBC to encrypt HD Freeview Electronic Programme Guide (EPG) data, the project team has considered four potential options:

1. Ofcom allows a licence amendment on the basis of this consultation;
2. Ofcom refuses a licence amendment on the basis of this consultation;
3. Ofcom consults again on the licence amendment;
4. Ofcom consults again on the licence amendment and allows the BBC to encrypt its EPG data on interim basis until this second consultation reaches a final decision.

Taking into account the significant level of response and adverse comments to the first consultation both in terms of its scope and duration the team consider that option 1 is not a viable option and recommend that PE considers adopting either options 2, 3 or 4, the arguments for which are finely balanced.

2. Why?

Agreement was reached earlier this year between broadcasters and manufacturers in the Digital Television Group (DTG) that Digital Rights Management (DRM) digital copy control technology would form part of the minimum HD Freeview receiver specifications. This would require receiver manufacturers wanting to use the HD Freeview logo to include DRM in their products¹. Ofcom played no role in this decision².

It is currently a condition of the Multiplex B licence that the HD Freeview channels are broadcast in-the-clear without encryption even if DRM is applied to the content. This makes it feasible for receiver manufacturers to provide products without DRM, which can provide full access to the HD Freeview broadcast channels and EPG. These manufacturers would effectively be trading the benefit of not being able to use the HD Freeview logo against the benefits of not incurring additional DRM licensing costs and being able to provide consumers with potentially more attractive products which do not apply DRM content usage restrictions.

The BBC has reported to us that during negotiations with the Digital Television Licensing Authority (DTLA)³, who own the IPR for the DRM technology included in the minimum HD Freeview receiver specifications, that a greater level of surety is needed that receivers will implement DRM before it will license broadcasters to use its DRM technology. The BBC reported that this surety is being insisted upon by the DTLA for the horizontal HD Freeview free-to-air broadcast market⁴ to ensure that:

- manufactures implementing DRM are not competitively disadvantaged by manufacturers choosing not to implement DRM;
- broadcasters are able to offer rights holders a better guarantee that DRM copy protection will protect their content from digital piracy.

The BBC has so far not provided Ofcom with evidence of the DTLA licensing position or the impact not gaining a greater surety that DRM is implemented in receivers would have on its ability to secure third-party HD content rights for the Freeview platform.

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Following its discussions with the DTLA the BBC proposed an approach it believed would provide a level of greater guarantee that all manufacturers would implement DRM in their receivers. This involved the BBC leveraging unrelated IPR it owns in a system planned to deliver HD EPG data more efficiently (Huffman Codes), and to only license these codes (on a cost-free basis) to manufacturers who agreed to implement DRM in their products⁵. This approach would mean that HD EPG data would no longer be available in a free-to-air format and could only be accessed in receivers using secret Huffman Codes provided under licence from the BBC. The Multiplex B Licence currently requires any EPG service to be provided using published technical standards *which are freely available*.

¹ DRM meeting the HD Review requirements is already integrated as standard into HD receiver chips and the licensing cost of activating this technology in receivers is approximately \$0.5 per receiver.

² Ofcom has no regulatory powers over receiver specifications. The Intellectual Property Office (IPO) is responsible for overseeing legislation relating to consumer 'fair use' of digital content.

³ DTLA members include: Hitachi, Intel, Panasonic, Sony and Toshiba.

⁴ The DTLA has licensed its DRM to broadcasters on the HD Freesat platform, whose receivers all implement DRM.

⁵ The ability of a Huffman Code approach to prevent receivers entering the market without DRM has been questioned by Samsung. Freesat currently operate using a similar approach but are now planning to switch to the full CA encryption of its EPG data to prevent it being used in unlicensed receivers.

The BBC therefore asked Ofcom in the summer for an amendment to its Multiplex B licence which would allow them to transmit their HD EPG data to in what would effectively be an encrypted rather than free-to-air format. It is this request which has triggered Ofcom's involvement in DRM related issues on the HD Freeview platform. Ofcom wrote to interested parties asking for their views on a proposal that exceptions could be made to the requirement to make EPG data freely available for content protection purposes where Ofcom approved such proposals, and published the letter on the web site (also notified in a broadcast notification). The letter proposed allowing, in principle, changes to the licence which would have allowed measures to be taken to implement DRM such as the encoding of EPG data with Ofcom's agreement. The BBC would therefore have been able to implement their proposal but would have to have put forward more detailed proposals relating to how the copy protection measures would be used to allow Ofcom to consider whether approval were appropriate.

Ofcom's proposal was broadly supported by broadcasters and manufacturers⁶, but strongly opposed in nearly 200 responses from individual consumers, consumer groups and open source software developers. These raised a range of consumer and competition concerns not addressed in the original consultation, and a number of respondents asked whether in view of these, Ofcom's consultation had been sufficient in terms of its duration and scope.

Moving forwards the project team has considered four options:

1. Allow a licence amendment on the basis of the first consultation

This option would provide early clarity for receiver manufactures and third party HD content rights negotiations (subject to the precise terms of any proposal which Ofcom would need to approve), but is not considered viable in view of the wider consumer and competition issues not addressed by the original consultation.

2. Reject the licence amendment on the basis of the first consultation

This option would also provide early clarity for receiver manufactures and third party content rights negotiations. The other likely outcomes of this option are:

- uncertainty over the range of HD content available on the Freeview platform. No evidence has been provided by the BBC yet of the impact rejecting the licence amendment would have on its ability to secure third-party HD content rights;
- a reduced number of potentially reliable receivers in the market that have been compliance tested by the DTG to the HD Freeview specifications;
- the availability of receivers which do not impose DRM copy restrictions.

3. Conduct a second consultation on the licence amendment

This option would allow Ofcom to make a full assessment of issues raised by the first consultation. The main questions a second consultation would be seeking to address are:

⁶ The DTG Council recently agreed in principle to including the EPG data encryption approach in the minimum receiver specification for HD Freeview receivers, pending Ofcom's decision on the multiplex licence amendment.

1. Whether it is appropriate to allow encryption of EPG data for content protection purposes generally;
2. What impact the BBC's proposal would have on competition in the receiver market;
3. Whether the consumer benefits of more HD Freeview receivers implementing DRM, which is likely to be achieved if the BBC's proposal is approved, outweigh the benefits of a receiver market where only receivers compliant with the HD Freeview receiver logo implement DRM.

This will involve balancing arguments for potentially enabling a wider range of HD content on Freeview and providing a more uniform reliable receiver market for consumers, against maintaining the ability of manufacturers to provide consumers with receivers without DRM.

The questions that would be out of the direct scope of this second consultation include:

1. The broader question of whether DRM is generally a good or bad thing for the HD Freeview platform. In this respect, it is worth noting that, had the BBC been able to find a DRM solution which was consistent with its licence, Ofcom would not have had locus to intervene;
2. How broadcasters should be permitted to apply DRM to their content. Ofcom does not have any specific powers in respect of DRM and is only involved in the process due to the fact that the proposal requires a licence amendment in respect of EPG data, not DRM itself. However, because the BBC's proposal removes the ability for consumers to purchase receivers without DRM, Ofcom's decision on the BBC's proposal is likely to be dependent on advice from the IPO on whether broadcasters planned use of DRM would be consistent with consumer 'fair use' and 'format shifting' of the content.

The difficulty associated a second consultation on these complex set of issues⁷ is that it is unlikely to conclude before February 2010 at the earliest. This means that when DVB-T2 HD broadcasts commence in the Granada switchover region in December 2009 the BBC would need to make its EPG data available in a free-to-air format pending a decision from the second consultation.

Whilst our current expectation is that most of the first generation of DVB-T2 receiver products provided by major manufacturers will be compliant with the HD Freeview logo and implement DRM, if the consultation process were delayed this could create a risk that cheaper receivers without DRM from smaller scale manufacturers would enter the market around the time of the 2010 World Cup and that the EPG on these devices would stop functioning if Ofcom were to subsequently approve the BBC proposal. A delay in the consultation process could also cause some major manufacturers planning to provide DVB-T2 receivers for service launch to pause their development of HD products, so as not to needlessly incur DRM licensing costs, whilst they wait for Ofcom to make up its mind.

4. Conduct a second consultation on the licence amendment and allow the BBC to encrypt its EPG data on an interim basis

This is similar to option 3 but ensures that receiver equipment is less likely to be purchased by consumers whose EPG would stop functioning if Ofcom approves the BBC proposal. This approach is aligned with recent agreements reached by DTG Council and

⁷ The 'fair use' and 'format shifting' aspects of the consultation would need to be handled in collaboration with the IPO.

current industry expectations that HD EPG data will be encrypted on Freeview using the BBC's proposed approach.

There are a number of potentially significant risks associated with this option:

- Ofcom could be considered to have pre-judged the outcome of the second consultation without properly taking into account the range of consumer and competition raised by the first consultation;
- It would temporarily foreclose the receiver market to manufacturers not wanting to include DRM in their products, which may become a significant issue if the BBC proposal was subsequently refused;
- Third party rights contracts agreed on the basis of EPG data encryption continuing may need to be re-negotiated if Ofcom refused the licence amendment.

None of the four options set out above are risk free. On balance we consider that the only three credible options are 2, 3 and 4. Option 2 provides the greatest level of market clarity for DVB-T2 launch but uncertainties remain over its impact on the range of HD content available on Freeview. Option 3 provides a procedurally robust way to deal with the consumer and competition issues raised by the first consultation but does create a risk that a future Ofcom decision would switch EPG access off on some receivers. Option 4 is aligned with agreements recently reached in the DTG between the broadcaster and manufacturers but also presents a reputational and procedural risk to Ofcom in appearing to pre-judge the outcome of a second consultation against a backdrop of strong consumer interest.

3. Stakeholders:

Consumers and consumer groups are likely to respond positively to a decision to adopt options 2 or 3 and negatively to options 1 and 4. The consumer concerns associated with option 4 might be partially addressed by attaching the conditions that DRM restrictions cannot be applied to the content until the second consultation has reached a final decision and that adequate guarantees are provided that consumer 'fair use' and 'format shifting' of the content will be preserved.

The BBC (and potentially ITV and C4) would prefer option 1 but are likely to view option 4, and to a lesser extent option 3, as an appropriate compromise given the level of consumer opposition and recent negative press coverage⁸. The potential impact of option 2 on third party rights negotiations is uncertain⁹ and is likely to differ for different PSBs.

Manufacturers are seeking early certainty over receiver specifications which would be provided by option 2. Options 3 and 4 should have no real impact on major manufacturers planning to provide products for the 2010 World Cup, who are already intending to use the HD Freeview logo and implement DRM, but in practice the uncertainty created by consulting again may cause some manufacturers to delay their product developments until Ofcom makes up its mind.

4. Impact Assessment (including Equality Impact Assessment) and risk:

⁸ 17 September, FT, "Anger at digital copy protection plans".

⁹ A similar rights dispute over free-to-air satellite overspill into other countries was resolved by broadcasters agreeing to pay more for third-party content rights.

Ofcom could face a potentially significant reputational risk if it were to adopt option 1. If approval for the licence amendment (and ultimately the BBC proposal) were given on the basis of the current arguments put forward by the BBC it might be observed that Ofcom had effectively mandated the use of DRM in receivers to appease rights holders without accounting for its wider impact on consumers and competition. A similar decision to mandate the use of a 'broadcast flag' DRM system in receivers in the US proved to be highly controversial and was subsequently overturned in the courts.

There may also be a risk of legal challenge to a decision to approve the licence amendment and the BBC proposals thereafter on two grounds. Whilst Ofcom would not be formally approving the BBC proposals in the long term under Option 4, the same grounds are likely to be equally valid in respect of Option 4.

Firstly, it may be argued that we have not followed due process since we did not conduct an impact assessment in the consultation and stakeholders may argue that this is an "important" decision which we have not considered sufficiently carefully and on which they have had insufficient time to respond. As regards Option 4, whilst we would be approving only on an interim basis, it could be argued that we had effectively decided the issue by allowing manufacturers prepared to introduce DRM a first mover advantage to the detriment of other manufacturers.

Secondly, stakeholders may argue that, in reaching such a decision, Ofcom has not had sufficient regard to its competition duties. By approving the BBC proposals to link the availability of EPG data to DRM, it could be argued that the BBC is leveraging its position as the holder of the multiplex licence to secure DRM thereby affecting competition at the level of the manufacturers. A manufacturer which wished to produce an HD box without DRM would not be able to provide an EPG and would therefore be placed at a competitive disadvantage. The BBC needs to show that (a) the introduction of DRM is a necessary objective and (b) that the EPG route is the most proportionate to achieve that objective. We are awaiting the BBC's submission on this issue. As above, Option 4 would be equally susceptible to challenge on this basis since it would limit the ability of manufacturers which did not want to include DRM in their products to compete effectively.

The main risk associated with option 2 is that it could have an as yet undetermined impact on the content available on the HD Freeview platform and is out of step with current industry consensus and expectations reached in the DTG.

The main risk associated with option 3 is that, if Ofcom were subsequently to approve the BBC proposals, it could prevent some receivers purchased by consumers from accessing the HD EPG. This would effectively reduce the ability of those manufacturers which had not implemented DRM in receivers to compete on an ongoing basis and might require consumers which had purchased receivers to purchase new ones.

As well as the options identified above in relation to option 1, option 4 would also be problematic on the basis that Ofcom could be considered to have pre-judged the outcome of the second consultation. Ofcom would have effectively concluded, by deciding to conduct a further consultation, that requiring DRM to be implemented in all receivers would not be appropriate in the present circumstances. However, we would have allowed DRM to be introduced as a requirement for all receivers in any event on an interim basis which therefore suggests that we had in fact decided that DRM in all receivers was appropriate and the second consultation provided a means of complying with process to

show that we had considered consumer concerns appropriately even though we had already decided that DRM in all receivers was appropriate.

5. Milestones and next steps:

Option 2

October 2009: Issue statement on first consultation

Option 4

October 2009: Issue statement on first consultation

November / December 2009: Issue second consultation

February / March 2009: Reach and publish final decision on licence amendment

6. Attachments & previous versions:

Annex A: Summary of consultation responses.

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Annex A: Responses to 'Enquiry to Ofcom from BBC Free to View Ltd concerning its DTT high definition multiplex licence'

A.1 Consumer responses:

We received **191 responses from individuals and small organisations**, all of these responses were strongly opposed to the BBC's proposals.

Almost half made some reference to the **rights of consumers as licence fee payers**. These respondents argued that the BBC's proposals are not in the public interest because the content management system imposed will unfairly limit what viewers can do with content shown on BBC HD channel. 60 respondents linked this argument with a **concern that the BBC is going back on it's free to air (FTA) obligations** by encrypting the SI.

A large number of responses came from users and supporters of open standards and software. For example, many individuals were Myth TV users (a free and open source application which turns a computer with receiver equipment into a DVR). These users were particularly concerned that their software would not work with the HD broadcasts because there is no centralised body with which to sign the DTLA licence agreement.

33 responses expressed an objection to DRM in any form. Many saw this DRM proposal as the thin end of the wedge for content protection systems on broadcasts. They particularly disapproved of what they perceived as a US content rights holders imposition of DRM on FTA broadcasts in the UK. Individuals also **criticised the BBC's argument that their proposals will prevent piracy**. Some argued that it would make piracy worse by forcing viewers online to do what they want with content.

Several individuals complained that there is a competition issue here surrounding the control either the BBC or the rights holders would have over the technical specification of receiver equipment. They also stated that locking down the specification would restrict innovation in the DTT platform.

To support their argument many consumers referenced the **FCC's rejection of the broadcast flag** on FTA content in the US in 2006.

A1.1 Consumer rights group responses

Both the **VLV** and the **Open Rights Group** submitted responses to Ofcom.

The **VLV** argued that the restrictions imposed on consumers would not be coherent with copyright law and related legislation. They **highlighted the rights of consumers with regard to the fair use of content**, and recommended that Ofcom "takes a more citizen-orientated stance in this matter".

The **Open Rights Group** echoed many of the general consumer concerns, particularly the **concern that compression of the SI is simply encryption**

“through the back door”. They also raised the issue of the control the BBC would have over which equipment can receive its broadcasts. They were also concerned that self-customised equipment for people with disabilities could be compromised by the ‘encryption’ of the SI.

A.2 Industry responses

A2.1 Broadcasters

We received responses from **ITV, Channel 4, UKTV and TopUp TV.**

ITV and Channel 4 both supported the BBC’s proposals, and insisted that content management systems are a necessity on Freeview HD. They argued that if these systems were not present as described it would significantly impact upon their ability to secure HD content for their services. Channel 4 estimates that without copy protection between 10 and 20% of its programme schedule would not be available for the HD simulcast service.

UKTV supported the proposal and expected Ofcom to be consistent with its approach towards non-PSB HD services which may be provided in the future.

TopUp TV rejected the proposal as an insufficient way of protecting content on DTT. They also argued that PSB service providers should not be permitted to impose commercial conditions upon manufacturers with whom they have no commercial relationship.

A2.2 Set top box manufacturers

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