

## ITV plc response to Ofcom discussion paper on net neutrality<sup>1</sup>

### 1. Introduction and Summary

ITV plc welcomes the opportunity to contribute to the debate on traffic management and net neutrality. As Ofcom is well aware, consumer demand is increasing significantly for online content that requires high bandwidth and/or low latency – such as video streaming and VoIP services – placing greater and greater demands on broadband networks. Ofcom’s discussion document is therefore timely, particularly in the light of increasing international (including European Commission) interest in this subject.

ITV approaches this issue from its perspective as a content provider. ITV is actively engaged in steps to distribute its content online – both via ITVPlayer to the computer screen, and increasingly via internet protocol (IP) delivery to the TV screen, including to Virgin Media, BT Vision, and in future to PS3, Canvas and other devices. In this context, this submission explains our view that the open internet needs to be secured for the longer term, and that Ofcom’s current stance – which, in contrast with regulators in other territories, appears to favour self-regulation by industry, supported only by a requirement for transparency – may not go far enough.

This response does not address each of Ofcom’s discussion questions in turn. Rather, we expand on the following points:

- Our overall objective is to secure the open internet for UK citizens and consumers. We consider that consumers should continue to be free to access any legal online content of their choice, within the constraints of their internet access speed, and that Ofcom should consider the maintenance of net neutrality as one its main strategic objectives. As part of this stance, Ofcom needs to take a clearer position on negative discrimination (or “throttling” of services) – in particular, we believe that Ofcom should make a clear statement prohibiting negative discrimination on the basis of both content type and content provider.
- In a highly concentrated broadband access market, which is increasingly categorised by vertical integration and service bundling, a significant departure from net neutrality has the potential to create serious consumer harm. In particular, access providers could engage in discriminatory prioritisation that favours their own content services over those of third parties. In our view, the increasing prevalence of bundling creates a barrier to switching and raises concerns about informational clarity – and so simply relying on consumers’ switching behaviour may not be sufficient to address these concerns.
- Nonetheless, we recognise that some traffic management and prioritisation is inevitable in a bandwidth-constrained world, and indeed that such traffic management could actually deliver benefits to consumers of services such as VoIP and online video streaming. However, Ofcom should acknowledge the significant risks inherent in this approach, and should make clear that – should it

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<sup>1</sup> Ofcom, *Traffic Management and ‘net neutrality’*, Discussion Document published 24 June 2010 (referred to as the “discussion document” in this response).

prove necessary – Ofcom is willing to put in place safeguards to ensure that traffic prioritisation is not used in an anti-competitive manner, and to ensure that the quantity of prioritised traffic does not grow to a point where *de facto* throttling of the open internet is occurring.

- Therefore, if it appears likely that the benefits of the open internet will be seriously undermined, Ofcom needs to consider two main safeguards. First, if evidence of anti-competitive prioritisation emerges, Ofcom should make clear that it is willing to put in place a regulatory regime that ensures that access to traffic prioritisation is made available to all content providers on a fair, reasonable and non-discriminatory (FRND) basis. Second, Ofcom should set out a clear roadmap for the prohibition of *de facto* negative discrimination. The latter requires Ofcom to make a clear commitment to introduce regulation – through, for instance, the definition of minimum quality of service standards – if the open internet is increasingly marginalised.
- In parallel, we agree with Ofcom that further steps need to be taken to improve transparency for consumers. However, we consider that Ofcom's apparent reliance on self-regulation, supported only by a requirement for transparency, may not be sufficient to deliver optimal outcomes for consumers. In particular, we believe that such a policy position would not maximise investment incentives, unless Ofcom makes clear that it is also willing to take regulatory steps to preserve the open internet, should these prove necessary. Overall, we believe that Ofcom's discussion document does not go far enough, and that Ofcom should be willing to take further steps to preserve the open internet for the longer term.

## **2. Our overall objective: securing the open internet for citizens and consumers**

In the context of significantly increasing demand for online content, our starting point is that network providers should provide the necessary infrastructure (and resulting bandwidth) to meet the legitimate expectations of consumers based on the broadband access products which have been sold to them. In particular, consumers should be free to access any legal online content of their choice, within the constraints of their internet access speed. This has been the experience of UK consumers since the advent of the internet and constitutes a status quo that should be maintained. In order to maintain consumers' internet experience, network providers should have flexibility to deliver different broadband packages to consumers, in such a way as to ensure that investment incentives are maintained. In particular, given that network providers are by definition responsible for their networks, and have the clearest and most direct nexus with consumers, it should be the network providers' responsibility to compete on capacity and price so that consumers drive (and therefore ultimately pay for) the necessary infrastructure investment.

Actions that would threaten this consumer experience include the following:

- Access providers selectively throttling particular third party services or applications

- Access providers selectively throttling a particular content type to preserve bandwidth for other services (e.g. over-the-top video streaming)
- Access providers restricting access to the internet from particular devices, when these devices do not constitute a threat to the network itself
- Access providers selectively prioritising traffic (resulting in less bandwidth being available for general internet traffic).

In our view, Ofcom should start from the presumption that such actions are undesirable, and run contrary to the principles of the open internet. Therefore, in the interests of fair and effective competition online and in the interests of consumers and citizens, we consider that the maintenance of net neutrality and avoidance of these actions should be amongst Ofcom's main strategic objectives.

As discussed in more detail in subsequent sections of this response, a departure from net neutrality has the potential to create significant citizen and consumer harm. In particular we note that the UK broadband access market is concentrated (after a wave of consolidation driven by economies of scale) and that a number of the operators are vertically integrated with TV content providers. For instance, almost 12m of the UK's c. 18m broadband homes<sup>2</sup> are accounted for by BT, Virgin Media and Sky, all of which are vertically-integrated between broadband access and content provision, and between them account for 99% of UK pay TV subscribers. There is a risk that these organisations will become the new gatekeepers – controlling consumers' access to online content. In this context, these companies may have the incentive to prioritise traffic in favour of their own services to the detriment of competitors, consumers and citizens.

Ofcom should be willing to take the necessary steps to ensure that such harmful prioritisation does not take place. This is particularly important in a world in which bundling of services is becoming increasingly prevalent, thereby reducing churn and creating a barrier to switching. The importance of bundling is made clear by recent statements made by Virgin Media and Sky. For instance, in a recent earnings release<sup>3</sup>, Virgin Media said:

*“Our focus on bundling our cable and mobile products continues to help drive customer value, as reflected in much lower churn rates for bundled customers. The monthly churn rate for a quad play customer is less than 0.7% compared to around 0.9% for a triple play and around 2.7% for a single product on net customer”*

Moreover, at a recent conference involving Jeremy Darroch, CEO of BSkyB, the following discussion took place:

*Interviewer:*

*“Can you talk about the benefits to churn of selling more products to customers?”*

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<sup>2</sup> Data from Screen Digest for Q1 2010 shows that BT, Virgin and Sky account for 11.8m out of 17.8m broadband homes.

<sup>3</sup> See page 4 of Virgin Media earnings release for calendar Q209.

Darroch:

*“There’s a clear benefit....the more products we get in customers’ homes...the deeper the relationship we have...the better the loyalty profile they have.....If we grow that penetration we can reduce churn further....that’s a very valuable benefit to the business.”<sup>4</sup>*

Bundling is therefore seen by access providers as a means of reducing churn, and therefore as a potential barrier to consumer switching. In this context, in the absence of appropriate regulatory measures, the increasing prevalence of bundled services would provide Sky and Virgin with the ability (as well as the incentive) to favour their own IP-delivered content services over those of third-party content providers. Consumer detriment could therefore arise, even though these providers have not been formally found to hold significant market power (SMP). As discussed further in a later section of this submission, we therefore believe that Ofcom should be willing to address this concern, even in the absence of a formal finding of SMP.

With consumer switching between broadband providers low and with broadband services increasingly bundled with other content and telephony products, the market has become increasingly ill-equipped to self-regulate in relation to these issues – as Ofcom’s own discussion document admits, further steps will need to be taken in order to make switching easier<sup>5</sup>. Hence there is a need for clear regulatory oversight – and potential further regulatory action – to protect the rights of consumers.

Ofcom therefore needs to make clear that, in a world of sufficient bandwidth, the neutral net should be maintained. Moreover, Ofcom should set the expectation that a departure from net neutrality is only acceptable if it is driven by insufficient bandwidth – i.e. that network providers should not depart from net neutrality in order to further their own commercial interests – and that Ofcom would be willing to step in with regulatory action if it appeared likely that the benefits of an overwhelmingly neutral net are being undermined.

In this context, we recognise that constraints on bandwidth are unlikely to be fully resolved – and so there may never be complete “sufficiency” in network capacity. As a result, we recognise that some form of traffic management is likely to be inevitable – and for this reason, we are not necessarily calling for complete prohibition of all of the “non-neutral” actions set out above. However, our key concern is that Ofcom should ensure that its policy stance does not undermine the UK’s ability to progress as close as is possible to the point of sufficiency, and that it should ensure that incentives to invest in networks are maintained and ideally strengthened. In this context, and as discussed further below, we believe that Ofcom’s stance does not go far enough to ensure that investment incentives – and therefore consumer benefits – are maximised.

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<sup>4</sup> Q&A session following a presentation made by Jeremy Darroch at the Bank of America Merrill Lynch TMT conference in June 2010.

<sup>5</sup> See paragraph 4.21 of the discussion document.

### 3. A clear prohibition on negative discrimination

As part of its commitment to the open internet, ITV is opposed to negative discrimination against IP traffic (“throttling”). In particular, we strongly believe that traffic throttling should not be conducted on the basis of:

- Content Provider: throttling access to content from a particular company or institution
- Content Type: throttling access to a particular type of legal content e.g. VoIP, gaming or streamed video.

We are concerned that Ofcom is not currently taking a firm stance in relation to throttling. In our view, UK consumers are entitled to the guarantee that neither of these throttling behaviours will be engaged in – with such a guarantee underpinned by a clear statement from Ofcom prohibiting such negative discrimination<sup>6</sup>. This guarantee would preserve service transparency, protect consumers from anti-competitive behaviour and maintain the freedom of consumers to manage their own access priorities.

We note that consumers have suffered in the past due to a lack of guidance on these issues. For instance, until recently the UK’s largest ISP (BT) restricted the speed of traffic using certain streaming video protocols during peak hours for a large proportion of its customers. The maximum speed permitted was around 10% of the advertised headline speed of a consumers’ broadband package.

Given the limited bandwidth of current mobile network technologies, we recognise that traffic management is currently more aggressively adopted than in fixed line – however, we believe that common net neutrality standards should be established irrespective of technology.

Nonetheless, adopting a pragmatic view, in the light of currently restricted bandwidth, we do not oppose non-discriminatory traffic management that aims to safeguard fair access to the internet for consumers who are competing for bandwidth at peak times. For example, it could be permissible to restrict the bandwidth to a household that consumes large amounts of bandwidth, in order to preserve access to the wider community.

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<sup>6</sup> We consider that a legitimate exception to this rule could be defined for peer to peer (P2P) content distributed via BitTorrent networks. Although such networks are not inherently illegal, they are predominantly used to distribute content that infringes copyright. For instance, a recent report by the Internet Commerce Security Laboratory found that 89% of BitTorrent seeds came from identified illegal files, and only 0.3% of seeds came from identified legal files. The remainder (c. 10%) of BitTorrent traffic was primarily pornographic in nature and of unclear legality. On this basis, we consider it reasonable for ISPs to discriminate against P2P traffic via BitTorrent networks, as these networks take up significant bandwidth and are overwhelmingly used for illegal purposes. In conjunction with this, ISPs could be required to make best efforts to exclude legal P2P content from throttling, but it must be noted that this is difficult due to the nature of the BitTorrent protocol.

#### 4. Traffic prioritisation in a capacity-constrained world

As noted earlier, ITV believes that, in a world of sufficient (or near-sufficient) bandwidth, the primarily neutral net should be maintained. However, we also recognise that some form of traffic management is inevitable, as constraints on bandwidth are likely to remain. This raises the question as to what departures from net neutrality should be permitted in a bandwidth constrained world. In this context, we note the following:

- The prohibition of negative-discrimination (outlined above) would continue to apply in all states of the world – i.e. there can be no departure from this prohibition.
- Any departures from net neutrality should, as far as possible, only be temporary – with neutrality restored once investment has taken place to ensure that there is sufficient capacity in broadband networks to enable consumer demand to be met without prioritisation.
- This means that Ofcom should ensure that any steps to permit traffic prioritisation do not undermine the incentives for investment in next generation networks. We discuss the steps that Ofcom might take in further detail below.

In a bandwidth-constrained world, we consider that a limited level of traffic prioritisation can be justifiably seen as improving online customer experience. For instance, consumers' access to services such as VoIP and online video streaming – which require lower latency than less time-sensitive uses such as downloading – could be enhanced through traffic prioritisation. As a result, we believe that access providers should be permitted to engage in some prioritisation of traffic for this purpose. However, in so doing Ofcom should acknowledge the significant risks inherent in this approach, and should make clear that it is willing to put in place safeguards to prevent two particular scenarios:

- i) Traffic prioritisation must not be used in an anti-competitive manner – in particular, an ISP should not be able to prioritise traffic for its own services relative to a competitor.
- ii) The quantity of “prioritised traffic” must not grow to a point where *de facto* throttling of the wider internet is occurring – traffic prioritisation should manage short term bandwidth conflicts, not create a lasting restriction on bandwidth available for non-prioritised services.

We discuss the potential safeguards below.

#### 5. Regulatory action to prevent abuses and to maximise investment incentives

We believe that Ofcom should make clear that it is willing to put in place regulatory steps to preserve the open internet, in the event that evidence emerges of the harmful scenarios set out above. In particular:

- If network providers use traffic prioritisation in an anti-competitive manner, Ofcom should be willing to put in place a regulatory regime that ensures that such prioritisation is available to all content providers on a fair, reasonable and non-discriminatory (FRND) basis. The threat of such regulatory action is important as it would reduce the incentive of access providers to discriminate against third-party content providers, and would also reduce their ability to earn excess returns from the provision of prioritised access. If such anti-competitive behaviour occurs, then Ofcom will be made aware of it through stakeholder complaints. In this context, and as set out earlier, we also believe Ofcom should make clear that it is willing to step in even if there is not a finding of significant market power (SMP) in relation to a particular ISP – we therefore disagree with Ofcom that discriminatory behaviour is only a concern if the discriminating ISP has been found to have market power. Addressing this issue may therefore require the threat of *ex ante* regulation of ISPs, rather than simply a reliance on *ex post* competition law.
- In order to preserve incentives for future investment, Ofcom should (a) set out a clear *ex ante* prohibition on negative discrimination (as discussed earlier), and (b) define a roadmap for the prohibition of *de facto* negative discrimination arising from excessive levels of traffic prioritisation. The latter step requires Ofcom to make a clear commitment to introduce *ex ante* regulation – through, for instance, the definition of minimum quality of service (QoS) standards – in the event that the quantity of prioritised traffic becomes so significant as to result in a *de facto* throttling of the open internet. Monitoring of this scenario could require collation of data and views from consumer and stakeholder complaints, and through Ofcom's general market intelligence activities (e.g. the communications market report and the new digital infrastructure report). We also consider that Ofcom should carry out further work to define what would be the appropriate minimum QoS in the UK. By way of example, we note that the FCC has adopted a definition that involves a speed of 4Mbps as the minimum QoS for broadband internet.

Further safeguards may be required to ensure that consumer benefit is maximised and that any adverse effects on competition are minimised. In particular:

- It is important to note that there is likely to be vertical integration between ISPs and Content Delivery Network (CDN) providers – therefore, any FRND access conditions would need to apply to CDN providers, regardless of whether or not the CDN provider also has its own content business.
- Although Ofcom states that matters such as Deep Packet Inspection (DPI) are outside the scope of the current discussion document, we believe that Ofcom should make clear that, if an access provider needs to gather data about (say) ITV's internet traffic for traffic management purposes, then this data must not be made available to other parts of the access provider's business (e.g. to the access provider's own content business).
- Ofcom should make clear that the right to block access to a device that constitutes a threat to the network is not abused by access providers. In particular, if access providers introduce consumer devices that are tied into their own networks, they should not be able to discriminate in favour of their proprietary devices and against third party devices.

Such safeguards would work to deliver maximum benefits for consumers – as traffic prioritisation would be permitted where this is in consumers' interests, whereas throttling would be prohibited; and the credible threat of *ex ante* regulation would minimise anti-competitive prioritisation and promote incentives for network investment. In the absence of such clarity in Ofcom's position, there is a risk that traffic management and prioritisation could become a permanent feature of the internet, that access providers could behave anti-competitively and/or earn supernormal returns through paid-for traffic prioritisation, and that there would be little incentive for investment to ensure that consumer demand can be met through the open internet.

## **6. Insufficient to rely on transparency**

In the light of the above discussion, we consider that Ofcom's current position – which seems to favour self-regulation by industry, supported only by a requirement for transparency – is insufficient to deliver optimal outcomes for citizens and consumers.

Although we recognise that further steps need to be taken in order to ensure that consumer transparency is maximised, we believe that Ofcom's proposed approach would not maximise investment incentives, unless Ofcom also makes clear that it is willing to take the regulatory steps needed to preserve the open internet. We consider that Ofcom's position risks the creation and perpetuation of a situation in which it is permissible to undermine the open internet, provided that attempts are made to inform consumers of the steps being taken. This position ignores the fact that it is likely to be very challenging to communicate the plethora of traffic management policies to consumers, and it also does not acknowledge the fact that the barriers to switching created by a bundled/triple-play environment are likely to mean that transparency may not be enough to ensure the prevention of adverse consumer outcomes.

In contrast, we believe that the position as outlined in earlier sections of this submission could be communicated accurately to the general public. Specifically, consumers could be made aware of the general presumption in favour of the open internet, and of their ability to access any legal content of their choosing. This would also promote competition, as it would provide a clear baseline against which access providers could compete. Moreover, consumers could be made aware of Ofcom's clear intention to step in to preserve the open internet in the event that such regulatory action becomes necessary.

In any case, under a pure self-regulatory model, it is not clear that transparency can be easily achieved. For instance, in a non-neutral world in which content and access providers are free to sign bandwidth agreements on a service by service basis, the market would rapidly become too complex and dynamic for consumers to interpret when making purchasing decisions. In such a world, it is not clear what the basis for competition between broadband suppliers would be – for instance, would ISPs compete on the basis of the fastest open internet speed, or on their use (or otherwise) of traffic prioritisation and management? It is not clear that the complexity of these issues would be fully grasped by consumers.

Therefore, while we accept that transparency is critical to delivering consumer benefit, such consumer transparency needs to be supported by clarity that Ofcom is willing to take the regulatory steps needed to preserve the neutral net. In particular, we believe that Ofcom needs to make its position clear now so that the broadband market does not develop in a manner which would prove impossible to undo at a later stage. In this context, we believe that Ofcom's discussion document does not go far enough, and that Ofcom should be willing to take further steps to secure the open internet for the longer term.