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PRS for Music Response to Ofcom's Net Neutrality Discussion Document

Introduction to PRS for Music

- *PRS for Music* is responsible for the licensing and administration of rights in musical works for the 70,000 songwriters, composers and music publisher members of the two collecting societies, PRS and MCPS, and international repertoire mandated from rightsholders and collecting societies around the world. *PRS for Music* is one of the world's most efficient music licensing operations, offering its members more money, more often, at less cost and its customers the most efficient means by which they can use music.
- *PRS for Music* has played a pivotal role in provided legal solutions for music online for over a decade. The first ever Joint Online Licence was issued in 2002, long before the launch of iTunes or the Pirate Bay¹. Since then, *PRS for Music* has been at the heart of enabling the legal online music marketplace through our licensing deals. To date, we have issued online licences to 35 major music services and in total to 1,200 online services using music in 2009 (up from only 400 in 2006). Through our licensing contacts with businesses we also educate new entrants to the market about copyright and music licensing solutions.
- *PRS for Music* has been engaged with the ISP community in relation to the broader net neutrality debate since as far back as 2006. Several economic analysis papers have been published that consider a range of issues relevant to this discussion.² We welcome the opportunity to work with Ofcom and inform future discussions.

Summary Position

- On just about every measure, the 'black market' for music online is larger than the legal one. One example is to highlight is the lesser known P2P site Mininova, which celebrated its 10 billionth download three months before the globally renowned iTunes music store celebrated theirs. Recent BPI research³ also suggests that a quarter of adults online access unlicensed content, whereas only one-in-ten have made a legal digital purchase.

¹ Joint Online Licence combining the communication to the public rights administered by PRS and reproduction rights administered by MCPS in a single global licence.

² *PRS for Music* published the report 'Is the price of recorded music heading towards zero?' which offered the first real economic insight into the problem of online copyright infringement. One of the most notable contributions to date is the now-famous Radiohead 'In Rainbows, On Torrents' case study which showed that illegal free was more popular than the legal free offering. Two further publications, titled 'Shadow Pricing P2Ps Economic Impact' and 'Moving Digital Britain Forward, Without Leaving Creative Britain Behind' have offered original contributions to the Net Neutrality and Digital Economy debates, with the objective being market solutions to market problems. See: <http://www.prsformusic.com/creators/news/research/Pages/default.aspx>

³ BPI Statistical Yearbook and monthly trade surveys

- We believe that the veil of neutrality over search results and networks gives illegal content the same positioning in distribution channels as their legal equivalents. We believe this is wrong and see this Consultation as a platform to argue that net neutrality is neither true historically nor desirable in the future. Policy decisions should support a direction which leads to greater investment in networks and high quality services on those networks, without compromising access to core internet services for all consumers. We believe that ex-ante Net Neutrality regulation would confuse the market and lead to artificial imbalances in business models.
- The Consultation outlines some hypothetical scenarios where anti-competitive discrimination may occur. We believe that these can be monitored under existing anti-competitive legislation and/or by extending existing equivalence principles to cover new network assets.
- Instead of ex-ante regulation on the wider net neutrality issue, we would like to see Ofcom focus investigation on some of the key issues that the Consultation raises. Transparency over traffic management policies is important as part of a wider requirement to educate consumers on how networks work and why they might be slow sometimes. Traffic management can help tackle online threats by blocking them outright or by warning users of dangerous payloads and it has a key role to play protecting our rights holders from theft.
- The current misperception which surrounds the net neutrality debate makes it difficult for consumers to compare the access and content services available to them, which hinders the market's ability to find an efficient way forward. We therefore completely support Ofcom's interest in exploring further transparency for consumers. An uninformed debate sets unrealistic expectations and obscures many of the reasons why users may experience poor network performance. If consumers are to use the market to address such issues, it is essential that they have a better understanding of how the internet works.
- This consultation discussion document presents an opportunity for Ofcom to clarify some of the confusion over traffic management. These critical issues cannot be sensibly discussed while there is a principled belief that the net should be neutral. Traffic management and packet inspection are central to the efficient evolution of the internet and this has always been the case. It is time for the shadow overhanging their use to be removed so the markets can be allowed to evolve and function as effectively as possible.
- Traffic management is already used by ISPs and network operators for delivering services. E commerce laws impose traffic management for child protection and copyright infringement, in certain situations. Rather than debate the wider topic of net neutrality, we should be asking how the same traffic management tools can be used to collect and present information to make markets work more efficiently. These tools can also be deployed to protect users from harmful content and rights holders from theft. Ofcom has a role to help nudge the market toward it's own solution by legitimising traffic management in principle and bringing together network providers, search engines, aggregators, rights holders to deliver the benefits from this technology.
- The music industry has a responsibility under the Digital Economy Act to lead the education efforts over what is legal and what is illegal. It is important for us to have the cooperation of industry and the regulator as we seek to achieve this. Working with digital music experts Music Ally, *PRS for Music* carried out research into how illegal and legal music content

ranks on some popular search engines in the UK. A series of searches based around music, varying the keywords to gauge the prevalence of infringing links on the four search engines were conducted. The findings highlight that some search engines (significantly) prioritise illegal content more than others, which signifies greater scope for technology players in the value chain to signpost consumers toward legal offerings.

- Ofcom's current approach to the value chain does not separate out the rights holders in creative content which are used by services and content distributors. We think it is important to differentiate them because they have separate interests in terms of economics, remedies and value. They may also have different preferences in terms of business models (for instance music rights holders favour licensing to multiple content suppliers versus the exclusive access model of sports rights holders). This points to the need to recognise a multi-sided market where values and impacts on the creators are assessed separately from the producers, aggregators and distributors. We would encourage Ofcom to conduct further analysis regarding such a significant aspect and emphasise the importance of acknowledging the impacts of these policies on copyright owners (and industry).
- Our input is organised into three sections: the first is broadly about the **transparency of consumer information** and maps to Ofcom's questions 5.1 **vii) – xi)**; and the second concerns inefficiencies in internet services which relate to the question of **traffic management** and this broadly maps to Ofcom's questions in A5.1 **i), iii) and iv)**. The final third section explores some recent data on search and raises new ideas for Ofcom to consider.

1. What questions could/should the consumer ask about access, and how does the presence of net neutrality affect the answers they get?

- The broad aim is to enable customers to make more informed choices between different suppliers of a "broadband connection". Questions which consumers are likely to ask include: What am I getting for my money? Can I get more of what I want from a competitor? Which access provider is best for me?
- Net neutrality's aim is to prevent discrimination of one service over another – making X better than Y so that X is more attractive to users than Y. "To draw a simple example, take two content providers such as the Verizon website and the University of California website. If net neutrality were upheld, both entities would pay their monthly fees to the network provider and if all else were held equal, any bit of information from the Verizon website will make the same trek as one from say the UC Berkeley website."⁴
- The problem is that above all else, the speed of connection to two competing content providers varies wildly based on where those content servers physically are.⁵ Even on a neutral internet, a connection to two competing providers would not be the same. If you can experience four times the difference by contacting two competing providers on a neutral internet, the resultant question which may be posed is: what does neutrality add?

⁴ UC Berkeley, What is Net Neutrality, retrieved 21st August 2010, <http://www.ocf.berkeley.edu/~raylin/whatisnetneutrality.htm>

⁵ Google and Bing are two search engines competing for UK consumers. Using Traceroute tools, you can see that one of these site is 8 hops and 25ms away while the other is 14+ hops and 100+ms away

- We believe that the conceptual debate surrounding net neutrality is actually impeding efforts to educate consumers about how the internet actually works. We believe it is leading to unrealistic expectations of their internet connection and the content they are entitled to access. The fear is that the present network neutrality discussion leads consumers to reach flawed conclusions about poor speeds by creating a misplaced narrative upon in which problems might be defined as: “my ISP is throttling me”. We believe that the market would work more efficiently if the other (more likely) causes we not hidden from view by such an evocative and simplistic ideology.
- We believe that consumers should be examining factors like how long their line is, how many other users their ISP has on their exchange and how much backhaul capacity these all share. They should be able to see their connection’s performance at various times of day by application used and they should be able to compare this to what they would get from a competitor. They should look at where their content is physically hosted and should be encouraged to understand that closer means faster.
- In reality, even two neutral networks would perform differently. Architecture, equipment used, backhaul capacity, peering, CDN and transit connections may each be different from one provider to the next and will cause differences in the performance of the same download job on two different networks. There is no suggestion that any of these differences could be construed a neutrality violation, yet they lead to very different performance results. In which case, one has to question, what is ‘neutrality’ really measuring?
- By increasing the transparency of consumer information surrounding traffic management, it’s possible for consumers to view their connection speeds and make informed decisions about whether they are happy with their broadband internet or whether there is a better choice somewhere else. This starts to approach the questions raised by Ofcom in question xi) about the minimum quality of service, by providing consumers with the information needed to asses their quality of service. The sort of questions which might be posed by an consumer might then be more focused on the problem at hand (poor or variable performance) and how traffic could be better managed to solve it, such as:
 - How long is my access circuit? Is it copper, coax or fibre? What does that mean the top speed should be? How many people share this capacity with me?
 - Do you have equipment at my local exchange, or do you rent from BT (or someone else)?
 - How many other customers do you / BT have on the same equipment at my exchange? How much backhaul do all these customers share?
 - Where else in your network do you experience congestion and at what times? (peak 5 min average >90% circuit / port capacity?)
 - How you decide what gets through when there is a traffic jam?
 - How much am I allowed to use and when? How do I know how much I have used? How can I control how much I use?
- There are several questions which consumers could ask their access providers. The answers are important if the market is to perform an effective evaluation of the services it offers but under the shadow of neutrality these answers are likely to be misinterpreted or viewed with suspicion. We therefore conclude that the market will continue to experience inefficiencies for as long as consumers are led to believe in a neutral internet.

2. What inefficiencies could / should the market be able to solve, and how does neutrality help or hinder the market's ability to solve them.

- The internet has evolved reasonably well without neutrality obligations obscuring market take-up, which has enabled ISPs to build relatively efficient services. They have always prioritised some content and have, since 'dial-up' days, selectively filtered some content. This has led to increased performance and restricted access to (selected) illegitimate materials, bringing significant benefits.
- The selection of peering partners - who an ISP uses for transit connectivity - involved prioritising content. The aim was to get the lowest hop count⁶ to the biggest content providers. Of course, the users could still reach the less popular sites, but the popular sites were faster because of the priority ISPs placed on interconnecting with them. Rather than harming competition, this solved a major inefficiency. Before peering with your ISP, the big content player might have been the other side of the Atlantic on an expensive 80ms transit link. Once peered, response times were faster and costs lower.
- Internet content (e.g. USENET newsgroups) has been filtered by ISPs since the early 1990s. This limited the volume of traffic that they had to carry for cost reasons. Newsgroup traffic was cached inside the ISP's network but was inefficient as the long tail (that nobody wanted) grew. The solution was to filter some groups out, with the impact being saved capacity and a collateral beneficial impact on other services by making them cheaper and faster.
- We believe net neutrality is a flawed philosophy because it ignores scarcity and states that it is wrong to prioritise based on factors such as application or utility. We do not see how markets can work as effectively as possible, under the philosophy that the most valuable application must be treated equally to the least valuable use of the same asset. There is no reason to believe that the market cannot solve its own inefficiencies, once the veil of net neutrality is lifted. Bandwidth is a scarce resource, so the market needs to use it efficiently by recognising the relative utility of different applications.
- On the internet, with limited bandwidth or high jitter levels, some applications (e.g. VoIP and Video Conferencing) fail completely while others work fine, albeit more slowly (e.g. P2P). We assume there is nothing wrong with giving each application "enough" to work for the user, even though this is far from neutral at a packet level?
- An excellent New York Times⁷ article on the Google / Verizon position explains very well how the two companies may use local CDNs to achieve preferential speeds for their own content without breaking the net neutrality "rules". History would suggest that evolving the

⁶ <http://en.wikipedia.org/wiki/Hopcount>

Each time a packet is read by a router, there is a (small) delay. In the late 1990s this was 4ms. If you had 30 hops, you were adding 120ms to the time it takes light to get across the Atlantic Ocean (80ms). If you could reduce that to 5 hops, you could halve the round-trip-time.

⁷ A Net Game for Google? Cringeley. R. X., August 7, 2010
http://www.nytimes.com/2010/08/08/opinion/08cringeley.html?_r=4

network this way – serving content from closer thus making it faster and more reliable – is both a) normal and b) valuable. CDNs offer content providers higher performance at a premium and we believe that this two-sided solution is good for the market even though it leads to some content getting better performance than competing content from the wider internet.

- We believe that the market can continue to arrive at solutions if it is allowed to continue to operate normally. We do not believe that normal operation is possible under net neutrality obligations because traffic management and prioritisation is essential sometimes to ensure the efficient use of a scarce resource.
- In response to Ofcom's question vi) we believe that there is no need for ex ante regulation to prohibit traffic management and that regulation may in fact be harmful to the interests of consumers and the market.

3. Given these insights on (i) consumers and (ii) markets, where do creators and rights holders sit in this puzzle, and what scenarios would be good / bad to them?

- Consumers have limited knowledge of how they connect to other machines over the internet. Their ability to understand how their connection works, the types and relative sizes of content files and where they are getting them from are all crucial factors if they are to make an informed decision about which service offers them the best 'value for money'.
- ISPs should help consumers understand what they are using. Consumers need to understand where the bottlenecks are and how this information can be used to decide on an access provider. There needs to be granularity of information in order to explain why the same service gives very different performance in two different locations at different times of day. Moreover, ISPs should also be able to show customers how they manage their peak loads and explain the impact on certain users and applications at these times. PlusNet prove this can be done and this should be extended to provide exchange-by-exchange metrics and made simpler for non-technical people. The concept then needs to be copied widely, without the shadow of net neutrality, snooping or spying hanging over it.
- Our focus is on how the internet should continue to evolve. Markets should be allowed to arrive at technical and commercial solutions that ensure applications work as intended. What is clear is that traffic management has always existed on the internet and we believe that it has led to efficiencies, meaning cheaper and better services. We want Ofcom to explicitly accept this and allow traffic management to continue to evolve.
- Traffic management has a key role to play in promoting lawful over unlawful content. While industry is committed to educating the consumer where they can find legal content, but we believe that users can find it very difficult to tell whether the media they are accessing is licensed or not when the impression is that all content is equal. Our efforts to date to help them have only had limited success. We believe that neutrality is partly responsible for our difficulties because it suggests that all content is created equally and because it throws a cloud of suspicion over the use of traffic management to make legal content faster and more reliable. Illegal content should not be treated equally to legal content, and traffic management has an important role to play in making legal content relatively more accessible than unlicensed and P2P sources.

- Artists need their producers and aggregators to be able to charge fair market value if they are themselves to get paid. As legal businesses, aggregators should have advantages over illegal alternatives to support a market in which this can occur efficiently. We are concerned that these advantages do not appear to be available to an aggregator under net neutrality.
 - Product: Legitimate aggregators should be able to compete against illegal alternatives by offering a better product – eg SpyWare Free. While the aggregator can claim this today, without net neutrality fears, it would be easier to develop solutions with ISPs to certify the aggregator’s claim.
 - Price: Illegal products are generally cheaper than legal alternatives but in an efficient market, there is a cost of getting caught breaking the law. On the internet, the cost to the infringer caught stealing or promoting illegal copyright content is currently too low and the cost of preventing this too high for ISPs, aggregators and rights holders. We see traffic management as a key tool to rebalance this and enable the ISPs to meet their obligations under the Digital Economy Act in a cost-effective way.
 - Place: It is currently far too easy to reach the places where illegal content can be obtained on the internet today. While CDNs are physically moving the place of distribution for some legal content closer to the customer, we believe that traffic management is another important tool for making sure that consumer access to legal content is faster and more reliable than an illegal alternative.
 - Promotion: In the case study provided: *“Does the market nudge to legitimate content? Not always it seems”* the signposting of legal and illegal music sites has been considered. Working with digital music experts Music Ally, *PRS for Music* carried out research into how (illegal / legal) music content ranks on some popular search engines in the UK. A series of searches based around music, varying the keywords to gauge the prevalence of infringing links on the four search engines were conducted. The findings highlight that some search engines prioritise illegal content much more than others.

Case Study: Does the market nudge to legitimate content? Not always it seems

A pressing matter to consider is whether the search engines could be doing more to direct users towards legal music purchases, rather than towards illegal downloads.

Working with digital music experts Music Ally, *PRS for Music* carried out research into how illegal and legal music content ranks on some popular search engines in the UK. A series of searches based around music using ‘artist + songtitle’ and varying the keywords to gauge the prevalence of infringing links on four search engines were conducted. The findings highlighted that there is considerable discrepancy in results.

In a simple search illegal sites are on the first page of search results 78% of the time, dropping to 0% for one (i.e. legal sites were always the first link offered). On another search ‘artist + songtitle + mp3’ the first illegal site came up above the first legal one between 89% and 100% times, dropping to 44% and 67% on another and between 22% and 11% on a third. The disparity between the four sites shows that there is considerable scope to reduce the prominence of illegal results.

Conclusions

- We can see clear evidence that the lack of neutrality has historically allowed the market to evolve quickly and effectively. In recent years the operation of the market has been obstructed to a degree by consumer confusion. Those which have benefited have included those parties seeking to protect the availability of illegitimate content. Other parties have compounded consumer confusion regarding legitimate content.
- We believe that no further action is necessary on the wider topic of net neutrality. We believe that the dangers highlighted in the consultation are already regulated by anti-competitive legislation and equivalence principles.
- There is too much wrapped in “Net Neutrality” for a proper debate on the real issues. While we see some positive principles in the concept, other elements are either damaging or out of touch with reality. We believe it would be helpful to put the wider concept aside, accepting that current neutrality ideology is neither desirable nor attainable. In its place, we would like to see Ofcom focus investigation into the individual issues currently wrapped up in net neutrality. Accordingly, we would expect Ofcom to conduct further research to offer supporting analysis in the following areas:
 1. What information can be gathered from traffic management systems to show performance? How can traffic management policies be explained?
 2. How can traffic management protect users from Child pornography, Viruses, Trojans, Malware, Bot-nets, Hackers, Phishing & ID Fraud? How can traffic management protect content rights?
 3. How can traffic management help the music industry make users aware of the legal status of the services they use? What cooperation with search providers and ISPs is necessary to achieve this?
 4. How are vertically integrated access / content providers monitored to prevent the abuse of their market position? To what extent are cross-subsidies allowed?