



**EUROPEAN COMMISSION**

***CONSULTATION / QUESTIONNAIRE ON OPEN INTERNET AND NET NEUTRALITY IN EUROPE***

***TALKTALK GROUP RESPONSE***

*September 2010*

1. This is TalkTalk Group's (TTG) response<sup>1</sup> to the European Commission's questionnaire for the consultation on the Open Internet and Net Neutrality in Europe. TalkTalk Group is the UK's second largest ISP and provides broadband to over 4 million residential and business customers under the TalkTalk, AOL, Opal and Pipex brands. We are the UK's biggest local loop unbundler and operate the UK's largest next generation network (NGN).
2. We welcome the opportunity to respond to this questionnaire / consultation - the issues raised are of critical importance to our customers and our business. We first set out an overall summary of our view of the need for regulation. We then answer the individual questions that have been posed.
3. The Internet has been an unparalleled success. Over the last ten years in particular there has been huge innovation and investment, high uptake and usage and consumers today enjoy a wide range of attractive access and content services.
4. This success has been because of lack of regulation that has allowed a significant and widespread differentiation in services and traffic which has provided consumers a wide choice of services (e.g. diversity of quality<sup>2</sup> levels), content providers an attractive suite of service to suit their differing needs (e.g. CDNs to bypass the congested parts of the Internet, managed services) and ISPs have been able to manage their networks efficiently. The markets for access and content are vibrant and working highly effectively with the discipline of competition ensuring that differentiation and this multi-tiered Internet works in the interests of consumers. The unregulated market has also ensured an 'open Internet' and ensured that the Internet has become a major tool for democratic participation and unhindered expression.
5. It is a myth that net neutrality exists today and it is another myth that net neutrality is good for innovation - a neutral net would be unequivocally bad for innovation. This differentiation will become increasingly important and necessary with the advent of new services such as IPTV that would be almost impossible in a world without differentiated service levels.
6. Therefore it is somewhat surprising that absent any evidence of harm that there are suggestions that there is a need for regulation to restrict innovation and constrain business models by limiting traffic management, imposing minimum QoS and/or inhibiting charging content providers for managed services. Provided that there is continued (or if necessary, improved) competition, easy migration and transparency there is absolutely no reason to believe that the market will not

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<sup>1</sup> If there are any questions regarding this submission please contact Andrew Heaney ([HeaneyA@talktalkgroup.com](mailto:HeaneyA@talktalkgroup.com) or 07979 657965).

<sup>2</sup> Quality can be include aspects such as speed, total capacity, latency, packet loss, jitter, guarantees

continue to foster huge innovation and ensure that consumer interests continue to be met.

7. Any net neutrality type regulation to restrict traffic management or inhibit charging of content providers for managed services or impose minimum QoS would have significant negative effects:

- Constrain the range of choice of ISP services that consumers will be offered
- Restrict the ability of content providers to select different quality services to meet the needs of the particular services they offer and their users want
- Force ISPs to (inefficiently) recover all their costs from consumers rather than recovering some costs from content providers
- Reduce allocative efficiency and the overall revenue available to access and content thereby reducing investment in new services and infrastructure
- Force ISPs to install inefficiently high levels of capacity

*Question 1: Is there currently a problem of net neutrality and the openness of the internet in Europe? If so, illustrate with concrete examples. Where are the bottlenecks, if any? Is the problem such that it cannot be solved by the existing degree of competition in fixed and mobile access markets?*

*Question 2: How might problems arise in future? Could these emerge in other parts of the internet value chain? What would the causes be?*

8. It is somewhat unclear by what is meant by the term ‘net neutrality’ and ‘open Internet’<sup>3</sup> but we take it to mean that all traffic is treated equally and there is no blocking. In our view there is not a problem with net neutrality as the Commission’s consultation implies. It is important to recognise that there is no net neutrality today. For example:

- Different customers can purchase a range of different access products that provide different speed, capacity and bandwidth caps. Business customers, for instance, use products that prioritise their traffic. Such innovation and choice has allowed new services to develop and has driven broadband uptake
- Content providers purchase products (to link their services to the Internet) with a range of different speeds and capabilities. Some content providers also buy CDNs to bypass some of the more congested parts of the Internet or link direct to ISPs to ensure their services and users a better experience
- Almost all ISPs prioritise and discriminate between traffic on their network e.g. blocking VoIP, shaping P2P / streaming, prioritising voice in NGN or in order to provide better services and manage costs efficiently
- Charging content providers (though not widespread today) is a legitimate and efficient business practice that allows lower prices to consumers and can

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<sup>3</sup> We consider that it would be useful for the EC to be much clearer and precise about what it means by ‘net neutrality’ and ‘open Internet’. It is difficult to have a well-informed debate when the central issues are not well defined

increase uptake and economic efficiency. This so-called 'two-sided' market approach is widely used in newspapers, TV distribution and the AppStore

9. There is no evidence that this multi-tiered Internet has harmful effects. In fact the contrary is true - this innovation, differentiation and diversity, (i.e. a non-neutral net) provides substantial choice and benefits to consumers and content providers alike.
10. Regarding the 'open Internet' concept it is important to recognise that the market has meant that fixed ISP users generally get unrestricted access to content and there is little blocking (except in very limited cases to prevent harm<sup>4</sup> or where it is selected by the user e.g. parental controls). Therefore, there are no problems or concerns today regarding the open Internet and freedom of expression. If a fixed ISP did start blocking content and this practice was against consumer interests then it would result in consumers moving ISP this rendering any blocking unprofitable - it is notable that even small incidences of blocking are raised on blogs and forums quickly.
11. There is some limited blocking of certain services such as VoIP on mobile. However, this is (certainly in the UK) fairly transparent and so consumers can change provider if they so wish. Thus it is not clear there is any harm.
12. We consider that the citizens interests as laid out in the Directives are well met under the current arrangement. The underlying objectives is to:  
*'promote the interests of the citizens of the European Union by inter alia: ... promoting the ability of end users to access and distribute information or run applications and services of their choice'* (Article 8(4)(g) of the Framework Directive).
13. This provision does not in our view mean that every single ISP should provide access to all information, applications or services that are available but rather than the market as a whole delivers this choice. The market does deliver this choice today. There is no need to regulate to meet this objective.
14. There is no reason to believe that (provided continued competition, transparency, easy migrations) that problems of consumer or citizen harm will arise in the future. Competition and effective markets are the most effective tools for preventing consumer harm - for instance, if an ISP degrades service in a way that consumers dislike they can move ISP. If an ISP does not respond to customers' preferences then they will lose business. It is far superior that consumers decide what is acceptable and what is not. There is no good reason for regulators to intervene to impose their view on customers thereby denying consumers the choice they deserve.

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<sup>4</sup> For example, blocking of sites hosting child abuse images under the IWF scheme in the UK.

*Question 3: Is the regulatory framework capable of dealing with the issues identified, including in relation to monitoring/assessment and subsequent enforcement?*

15. Provided that there is effective competition in the retail ISP market<sup>5</sup>, easy migrations and transparency then we believe there is no need for any form of regulation to restrict traffic management and charging. We consider that the current regulatory framework is wholly adequate to ensure competition, migrations and transparency. In particular, competition can be ensured (if necessary) through the Market Review framework and easy migrations and transparency can be ensured (if necessary) through consumer protection regulation.
16. There is no reason to believe that there will be any market failure or consumer harm provided these three aspects are delivered.

*Question 4: To what extent is traffic management necessary from an operators' point of view? How is it carried out in practice? What technologies are used to carry out such traffic management?*

17. TalkTalk uses a range of traffic management techniques. We understand that traffic management is used extensively by most large ISPs - it is in our view a standard and beneficial business tool. If ISPs did not use traffic management then consumers would suffer either because:
  - Service quality on more critical services would suffer
  - ISPs would need to install additional capacity to maintain the same service level with the consequence that our costs and consumers prices would rise
18. The particular approach that TalkTalk uses is:
  - We deprioritise certain types of traffic during certain periods. The affected traffic is P2P applications such as Bittorrent and Minerva. We use DPI to identify these traffic types
  - We also prioritise voice traffic in our NGN core network to ensure a good QoS
  - If we provide IPTV services (such as YouView/Canvas) then we would likely provide a prioritised service for some of this traffic to ensure high quality

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<sup>5</sup> The relevant market in this case is the level in the value chain where traffic management occurs. For instance, ISPs who purchase IPStream (a bitstream product) are able to set their own traffic management approach

*Question 5: To what extent will net neutrality concerns be allayed by the provision of transparent information to end users, which distinguishes between managed services on the one hand and services offering access to the public internet on a 'best efforts' basis, on the other?*

19. Managed services are simply an evolution in the differentiation that already exists. We see no reason as to why transparency (combined with continued effective competition and migrations) cannot ensure consumer interests' continue to be met and harm avoided.

*Question 6: Should the principles governing traffic management be the same for fixed and mobile networks?*

20. The principles should be exactly the same irrespective of ISP - whether fixed or mobile, small or large. In particular transparency obligations must be exactly the same else there will be a competitive distortion between ISPs. For instance, if fixed operators are required to make traffic management policies / impacts transparent but mobile are not then it might lead to consumers moving to mobile based on the misconception that their traffic will not be shaped.

*Question 7: What other forms of prioritisation are taking place? Do content and application providers also try to prioritise their services? If so, how - and how does this prioritisation affect other players in the value chain?*

21. We understand that content and application providers prioritise their services / traffic in many ways in order to ensure better quality and so make their services more attractive. As we described above, such differentiation and innovation is a force for good that delivers substantial consumer benefits. Some of the practices they use to overcome congestion and ensure better quality include:
  - Buying higher capacity pipes onto the Internet
  - Peering at higher levels on the Internet
  - Using content delivery networks (CDNs) to cache and distribute content more directly to ISPs
  - Payment for traffic (e.g. Amazon Kindle pay for 3G traffic to deliver their e-books)
22. We anticipate that with the development of IPTV and other services / applications services the demand for and use of these and managed services will increase.

*Question 8: In the case of managed services, should the same quality of service conditions and parameters be available to all content/application/online service providers which are in the same situation? May exclusive agreements between network operators and content/application/online service providers create problems for achieving that objective?*

23. No
24. Given there is no current or impending market failure there is no sound reason for regulators to intervene in the evolving and complex relationship between ISPs and content providers. It is a perfectly normal, legitimate and economically efficient<sup>6</sup> business practice to differentiate the arrangements between different customers<sup>7</sup>. There is absolutely no reason (provided effective competition, easy migrations and transparency) for an arbitrary and unjustified constraint on the ability of content providers and ISPs to strike individual arrangements.

*Question 9: If the objective referred to in Question 8 is retained, are additional measures needed to achieve it? If so, should such measures have a voluntary nature (such as, for example, an industry code of conduct) or a regulatory one?*

25. Any regulation to attempt to impose a no differentiation requirement (i.e. same conditions for providers in same situation) would be a bureaucratic nightmare and probably be ineffective. The most obvious problem would be how to deem what is same situation - how would it deal with co-marketing deals, co-investment arrangements, long term versus short term arrangement, situations where the ISP will benefit from certain content more than other. It is highly unlikely that any regulation would be able to properly handle these realities and adapt quickly as circumstances change and therefore any regulation effectively would thus impose a 'one size fits all' arrangement on all commercial arrangements between ISPs and content providers. This would unquestionably restrict innovation and require significant and wasted cost to develop and monitor the regulation.

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<sup>6</sup> To prohibit or restrict charging would inhibit the market from working efficiently and force all costs to be recovered from customers. It is important to recognise that charging content providers as well as customers does not (in a competitive market) result in excess profits since the additional revenues from content providers will be competed away through lower retail prices to consumers. Furthermore, ISPs cannot extract excessive rents from content providers since content providers have countervailing buying power and can withdraw their content thereby diminishing the attractiveness of the ISPs service

<sup>7</sup> In this situation the ISP is a supplier of managed service and the content provider the customer

*Question 10: Are the commercial arrangements that currently govern the provision of access to the internet adequate, in order to ensure that the internet remains open and that infrastructure investment is maintained? If not, how should they change?*

26. We consider that the market is today working effectively with an efficient level of investment in content as well as network and infrastructure.

*Question 11: What instances could trigger intervention by national regulatory authorities in setting minimum quality of service requirements on an undertaking or undertakings providing public communications services?*

27. Setting a minimum QoS inhibits/distorts the ability of an ISP to offer managed services (i.e. charging content providers for a certain quality of service) and/or manage traffic. It effectively forces all operators to provide a particular service rather than allowing the market to respond to differing needs. As we described above both of these practices are beneficial to consumers (provided effective competition, easy migrations and transparency) and should not be hindered. For this reason setting a minimum QoS level would be damaging in the situation where there was effective competition, easy migrations and transparency.
28. Minimum QoS should only be introduced where the market (because of inadequate competition, transparency, migration) is failing and will continue to fail to meet consumer interests. It must not be introduced on the irrelevant and spurious grounds (as implied by the Commission<sup>8</sup>) that the 'net neutrality principle is at risk'.

*Question 12: How should quality of service requirements be determined, and how could they be monitored?*

*Question 13: In the case where NRAs find it necessary to intervene to impose minimum quality of service requirements, what form should they take, and to what extent should there be co-operation between NRAs to arrive at a common approach?*

29. We think that it would only be necessary to set minimum QoS requirements in the case where there was insufficient competition to ensure that consumer interests were met. In the case where a minimum QoS is proven as necessary and given that the broad objective of any regulation is to mimic a competitive market, the minimum QoS should be set with reference to the minimum QoS level that is set in

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<sup>8</sup> Page 4 of the Consultation says: "*The 2009 reforms also strengthened the powers of national regulators to intervene where they consider that the manner in which operators handle the flow of traffic over their networks may put the net neutrality principle at risk, by degrading the quality of service available to subscribers.*"

competitive markets (such as the UK). We cannot envision any other approach that could be used that would not be simply arbitrary.

*Question 14: What should transparency for consumers consist of? Should the standards currently applied be further improved?*

30. Transparency is not an end in itself but rather a means to empower consumers to make informed choices about which services best meet their individual preferences. Ideally the information provided should allow a consumer to assess the impact on them of different traffic management policies. However, this is not a simple task since determining the impact is technically complex and depends on individual circumstances. However, we have no doubt that it is achievable.
31. We note that today there is relatively little demand for such information (even though in the UK we provide such information as part of the voluntary code of practice on broadband speeds). However, we anticipate that transparency will become more important.
32. We also note that for transparency and switching to be an effective discipline on the behaviour of ISPs does not require all customers to understand the impact of traffic management and/or switch in response to a harmful practice. In reality, if only a small number of customers respond to a particular traffic management practice by leaving the ISP then it will render that practice unprofitable.

*Question 15: Besides the traffic management issues discussed above, are there any other concerns affecting freedom of expression, media pluralism and cultural diversity on the internet? If so, what further measures would be needed to safeguard those values?*

33. We believe that a competitive market has been and will continue to be highly effective at meeting these other objectives. For instance, the success of the Internet (resulting from lack of regulation and huge innovation and investment) has allowed for many more citizens to both make their voice heard and also hear the views of others thereby promoting freedom of expression, media pluralism and cultural diversity. The market (not regulation) can and should continue to be the central means to meet these objectives. If there is a need for any regulation to ensure, for instance, freedom of expression it is critical that it is done (if possible) without damaging the underlying competition and innovation that has been so successful in meeting these objectives in the first place.