



Cable Europe

## **Cable Europe Answer to the Commission's public consultation on the Open Internet and Net Neutrality in Europe**

30 September 2010

Cable Europe is committed to delivering an open Internet where consumers can exercise choice. An open Internet should be underpinned and reinforced by:

- infrastructure competition,
- transparency,
- smart & managed networks, and
- innovation.

We believe in openness and transparency which permit consumers to access the services, applications, and content of their choice on the Internet, allowing them to use the Internet differently than in the past. However if the Internet is to remain open, traffic may need to be managed and freedom to negotiate between content providers and network operators must be preserved. The resultant growth in traffic on-going cannot take place without adapted traffic management. Traffic management practices used by operators ensure a robust and efficient functioning of the network and support the provision of innovative services in the interest of users. Our vision is to see Europe continue to benefit from a strong, competitive market that provides high quality services to the end-user.

Fruitful and non-emotive debate should take account of the necessity for reasonable traffic management as a basis for discussion. Traffic management, needed to get the most out of current and future networks, is a reality. Already today traffic and network management are therefore issues that should be at the core of the debate.

Anyone in the Internet value chain should be able to innovate and develop new business models, as long as they do not behave in an anti-competitive manner, hindering innovation by other players. Nevertheless, a clear distinction must be made between the "upstream market" – concerning the relationship between web companies/network access seekers and network operators, and the "downstream market" – concerning the relationship between Internet access providers and end-users. In the first case, it is crucial to leave a nascent market developing itself within the limits of the competition rules and the telecom package. In the second case, setting transparency standards regarding traffic management practices and defining certain QoS levels are foreseen in the revised telecom rules which correct implementation should be discussed. Enhancing transparency for consumers about traffic management is clearly a first step to be discussed with all stakeholders.

There is no evidence of market failure which would require regulators' intervention. Today's debate should address whether the tools of competition

law are sufficient to tackle any eventual problem that might emerge or whether ex-ante, rigid, pre-defined rules are to be established in anticipation of those problems.

Given that questions remain today about the way innovation will take place and how market players will evolve, Cable Europe believes that it is premature for the Commission or the regulators to resolve this debate in the short term by intervening in what should be left to commercial agreements. This debate cannot be held properly without taking a more profound consideration of the whole value chain of the Internet rather than seeking to categorize and single out different stakeholders.

**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?

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

If by net neutrality or openness problems we must understand actions such as blocking distribution of certain content, as far as the cable industry is concerned, we do not believe that such a problem exists. As key content distributors, continuously new and high quality content is vital to our business. We are constantly in partnership with content providers to develop our core business on an ongoing basis. We have absolutely nothing to gain from blocking content distribution as we want to be able to transmit content to our customers that keeps them coming back. Any sort of blocking of content runs counter to our goals.

In this context Cable Europe considers that the burden of proof of such problematic situations lie on those who consider that there is a problem (and they are expected to come with hard evidence in this case).

If the problem is considered to be about the various traffic management practices, we believe that this is a non-issue. Traffic management is a good and necessary tool. The need for network management is recognized by virtually all sides both in the US and EU debate. The EU legal framework recognises the need for network management and Commissioner Kroes has recognized on multiple occasions the value and necessity of network management to ensure quality in the network.

There are no concrete examples today of undue traffic management. It is crucial to allow the market to continue developing new business models, to let competition establish the benchmarks for "quality of service" and to evolve in a manner that keeps companies close to consumer needs. The Internet has always been a dynamic marketplace from which new business models originated. Market parties should remain free to experiment and invent new business models; regulation should not limit this potential. The only limit to this commercial freedom would be concern over an operator abusing its dominant position. This would however require an analysis on a case by case basis.

Problems with traffic management that potentially might arise in the future will occur under exceptional circumstances only in the event that a dominant provider abuses its position or an exclusive deal contrary to competition rules is signed, particularly between parties along the Internet value chain<sup>1</sup>.

To constrain such undue actions, whatever form they might take, policymakers and regulators should focus on securing competition, since competition raises the stakes for those actors, including network operators that consider taking actions that might be perceived by customers as undue. Traffic management takes place, in most instances, at infrastructure level. With intense competition, especially infrastructure-based competition, operators using undue traffic management will be substituted. Infrastructure-based competition appears therefore to be much more effective in its defense of net neutrality than service-based competition.

If, in any case, network operators would act in a way that is detrimental to competition or that run counter to contracts with users (despite the risks of doing so in face of fierce infrastructure-based competition), competition law may provide the tools to tackle the problem without having to set up a costly ex ante regulation based on future hypothetical situations and which could have the effect of hampering positive market developments.

Cable Europe trusts that the revised telecoms Regulatory Framework and competition policy together are able to entirely resolve any specific problem that might then appear.

**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?

Traffic management is necessary not only from an operator's point of view but is also important as it is the optimum environment in which new business models are most likely to emerge.

To ensure consumers and business can access the content and services of their choice, it is essential that networks apply traffic management techniques intelligently. Internet traffic is growing exponentially, driven by trends for new high-bandwidth services, consumer-driven content and increasing connectivity. Against this background, there is now a broad acceptance of the need for smart, managed networks to provide users with a continued quality of service experience across all network technologies.

Management of internet traffic has to all intents and purposes always been employed in some form or another. Differentiation of QoS already exists for instance for business applications and industry needs to have the possibility to further experiment with these techniques. Network management can often mitigate the need for expensive bandwidth expansion to handle peaks of traffic at certain times of the day. Moreover, it can assist in reducing the cost of consumer internet access products by enabling providers to maximise the efficient use of their networks.

Smart broadband networks provide the essential infrastructure and functionality for innovation, underpinning the success of future business

---

<sup>1</sup> See in particular the recently approved COMMISSION REGULATION (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices.

models. Already today, a wide range of services and applications have specific quality requirements, such as real time interactive IP TV, e-health services (e.g., assisted living), emergency calls, high definition video conferencing and real-time multimedia services such as e-education.

With growing diversity of services, it is increasingly important that networks have the network management capabilities to deliver services to consumers according to their individual requirements and in order to provide efficient competition in the market. Also in this respect, smart networks are critical in allowing the Internet to evolve and remain successful. PacketCable Multimedia is an example of an application-independent Quality of Service architecture that is based on DOCSIS specifications and that can be used to manage and prioritize traffic for a wide range of real-time IP-based services.

Traffic management can be considered as bandwidth management by which criteria are applied that a network must meet for a specified customer or service. These criteria include: guaranteed bandwidth, packet loss, latency, and jitter. Guaranteed bandwidth, or throughput, can include minimum, average and peak guarantees of bandwidth availability. Packet loss is the number or percentage of packets sent but not received, or received in error. Latency refers to the end-to-end delay of packets, and jitter is the delay variation for consecutive packets.

A situation in which no control or management of the traffic flowing over the Internet took place would arguably result in a customer experience that was markedly inferior to that prevailing in circumstances in which traffic flows and congestion were carefully managed. Traffic management is a necessary means to an end in delivering a positive customer experience. It constitutes a necessary and vital tool in ensuring that customers continue to receive an acceptable level of service, providing the services that they expect and ensuring a fair allocation of resources. A so called "truly neutral" internet or a situation in which traffic flows were completely unchecked would not, in our view, deliver the customer experience that certain proponents of the concept envisage. In this regard, the concept of a "neutral" internet is misunderstood by certain stakeholders. Without traffic management, factors such as unconstrained congestion and excessive usage by individuals would result in end users effectively being subject to a bandwidth lottery at times of peak usage – and at the extreme could result in customers being unable to access or use their chosen content and services. The concept of a 'truly neutral' internet, as advocated by some stakeholders in the net neutrality debate (i.e. the complete absence of traffic management) would therefore, ironically, in all likelihood lead to a far inferior customer experience compared to that which exists today.

In addition, without traffic management new services demanding guaranteed bandwidth might not be provided at all, even if providers and users of these services are willing to pay for such guarantees. This would lead to a suboptimal situation from an economic and competition viewpoint: users are deprived of new services they are willing to pay for and consumer choice is inefficiently restricted. Moreover, competition will be negatively affected as barriers to entry might be raised as a result of ill-understood neutrality and network "democracy".

**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?

The number of commercial content delivery models is virtually limitless. Given the advent of new "apps" or applications being constantly developed, the market is ever changing and the offer for consumers constantly renewed. The focus is on the end users. End users will decide what kind of service, quality and best effort products they want. It is in the interest of ISPs to have all the services from the different sectors available to their customers so nothing suggests that there will be a problem. There is no "sectoral" bad behaviour. Any situation will be dealt on a case by case basis and will, in most cases, be solved by competition law. We certainly consider that the provision of transparent information will benefit the customer. We are happy to discuss how such transparency can be achieved.

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

As explained above, the number of commercial content delivery models is virtually limitless. It can be broadly broken down between fixed and wireless but we believe that at a high level, traffic management practices and policies are needed on a technology neutral basis. No separated approach for mobile networks is necessary and required. E-communications service providers should be permitted to continue using traffic management practices as long as they are reasonable given the competitive and ever-developing nature of fixed and mobile high speed broadband services. It is crucial to continue encouraging both innovation and investment to develop further the broadband infrastructure and provide high quality services to end users.

**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?

Prioritization is one of the necessary and legal traffic management practices. Nothing is new and nothing is wrong about prioritization as long as there is no abuse and prioritisation is done in a transparent way. This should be resolved on a case by case basis.

Existing business models on the Internet are mostly based on end-users paying for their Internet access subscriptions. Service and content providers pay their respective hosts for internet connectivity, usually on a per volume basis, or benefit from so-called peering arrangements themselves under which Internet traffic is exchanged without remuneration.

Although it is difficult to predict how and what kind of new business models will develop on the Internet, developments around micro payments for content, more targeted advertising models, revenue sharing or additional carrier fees based on quality of service are all likely to evolve with varying degrees of success. It is essential that network operators are equally free as content and service providers to differentiate their offers on both sides of the market, i.e. towards consumers and towards content and service providers and test new business models in the markets.

Content and web/search engines companies also prioritize their services: A new discussion about the 'search neutrality' has been developed recently.

Moreover, players in the network layer in Europe are subject to an ex-ante regulatory regime that is built on cost-based regulation, limiting returns in this field, whereas web companies face no such restrictions despite often high market shares in their respective markets.

Therefore, in addition to the current business model, commercial agreements should be allowed to emerge complementing the existing model. These new business models will strike a better balance between the different actors in the internet value chain and should in principle be best left to the market unless there is clear evidence of market failure.

**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?

To answer this question correctly and accurately, we require further explanation and contextualisation of what 'the same quality of service conditions' mean.

What we consider, however, is that different levels of service and different Service Levels Agreements can enhance the value of the offer for the consumer of both sides of the transaction. It has to be noted that guaranteed Quality of Service (QoS) only can be implemented on-net but is not yet realized across networks.

Then, if certain exclusive agreements become problematic it should be resolved *ex post* by competition law as explained above.

**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?

N/A

**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?

The Internet has been a phenomenal success so far with enormous and far-reaching social, cultural, economic and commercial implications and it is hard to imagine this will change in the future.

Therefore, we do think, as highlighted above, that commercial agreements that currently exist can enhance the value and the quality of the offer to the end-users and are therefore compatible with the ultimate goal of customers' satisfaction.

Furthermore, it is crucial that regulation does not force a static picture of the Internet. Evolution is what has made the success of the Internet and that is

what needs to be guaranteed in the future. Evolution can ensure investment leading to the emergence of new business models, innovation, more efficient distribution and cost reductions for businesses and civil society.

**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?

Cable Europe questions the need for further intervention by NRAs in this context. It is not clear whether min QoS imposed by NRAs is needed. Vigorous competition in the European market already forces operators to provide a minimum QoS in order to offer valuable services to their customers. The best means for ensuring that the situation remains stable and non-discriminatory would be by publishing transparency guidance.

We fear that setting minimum QoS could have a perverse effect if it is used as a remedy when there is no market failure. Moreover it runs the risk of creating a far too static framework for the Internet; QoS definitions can be easily outdated by rapid technological developments and act as barriers for innovation. Furthermore, we are emphatic in warning that the setting of a minimum QoS requirement should not be used as a backdoor tool to require other things from operators.

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

As stated above, setting minimum QoS does not seem to be necessary and can have a perverse effect on the market. Furthermore, we think that setting minimum QoS will not necessarily prevent or regress discrimination, on the contrary it can help it growing when one sector has some obligations to observe when another does not, or it could establish a 'floor' above which discrimination could still conceivably take place.

Moreover, it seems that setting minimum QoS will be a very difficult practice to define and to manage by both operators and NRAs. We also question how an NRA could concretely impose on an operator the need to comply with minimum QoS when traffic management policies can be rather dynamic and helpful to the market.

**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?

BEREC is best placed to answer this question.

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

Transparency and consumer understanding is key and is critical in ensuring that end users are sufficiently informed in order to be able to make their own choices about the type/level/quality of service they require. However, it must be considered in a wider context. Transparency needs to be wider than

just focussing on traffic management – the aim should be to establish a greater understanding and appreciation of broadband performance in general. We refer here, for example, to the recently published Ofcom Broadband Speeds Research<sup>2</sup> which examines UK broadband speeds, broadband performance and advertised speeds. It suggests that greater transparency and understanding of broadband throughput speeds (and the constraints on them) are important to help consumers make more informed choices. Such information must be accurate and honest. In addition to improving consumers' overall perception of internet access products, a broader approach to transparency which takes account of the overall end user experience would, we believe, greatly improve understanding of traffic management practices specifically. For example, quality of the overall end user experience can be considered as a competition parameter; it can also be used by network operators to compete with other operators. Network operators which do not offer sufficient quality of service will be disciplined by end-users who will cancel their subscriptions and switch to other operators.

Transparency should not necessarily mean a larger volume of information or greater detail because consumers sometimes do not even know what to do with it. Too much information can be as meaningless as too little. It should instead be aimed at increasing understanding and awareness. A 'one size fits all' approach is not appropriate (i.e. the technically aware will likely require a greater level of detail than the average consumer) and transparency rules should not in any case limit new business opportunities for network operators, as it would likely have the reverse effect. Consumers might risk missing out on qualitative services as operators will slow down investing to developing new networks allowing high bandwidth and new products. Consumers will then lose choice and will not be able to experience the great potential of the Internet.

Transparency obligations are already incorporated in the revised EU telecom package. Generally, Cable Europe believes that the EU telecom package adequately responds to the open internet issue. But we consider that it might be worth creating an industry-wide forum to discuss how to improve transparency information for European end users. Indeed, it would probably be useful to adopt very high level principles on transparency and be best to leave the specific approach to national NRAs taking into account differences in competition in the different Member States.

**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?

Network operators are committed to protecting the freedom of speech and do not engage in censorship. Network management practices are carried out in respect of EU and Member State laws, including constitutional law.

---

<sup>2</sup> OFCOM's Research Report on UK Broadband speeds, May 2010:  
Ofcom Announcement: <http://consumers.ofcom.org.uk/2010/07/increase-in-uk%e2%80%99s-average-actual-broadband-speed/>;  
Full Research Document: <http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/bbspeeds2010/bbspeeds2010.pdf>;  
Chart Pack: <http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/bbspeeds2010/bbchartpack.pdf>

Moreover, as long as network management and differentiation of services are offered in a transparent way, end-users can decide themselves what kind of services they want to subscribe to.

It is worth noting that the primary role of network management practices is to serve the consumer as the end user will get greater access to content and information by freeing up congestion and where possible to increase – not decrease – the flow of content.

The discussion should not go beyond traffic management. Other regulations already exist such as the Audiovisual Media Services Directive and other means exist than the internet to protect media pluralism and culture diversity such as the public TV, the newspapers etc.