EU Net Neutrality Consultation Submission

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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?

   There is no, and has never been, a need for net neutrality in the narrow sense of the definition. Current traffic management practices are still in their infancy, but will continue to improve as more research and development is devoted to the technology. This will in turn increase the efficiency of existing networks, and improve the functioning of next generation networks with which operators are now seeking to upgrade their networks.

   The broadband market is highly competitive in most European countries, with network operators exploring different technologies and business practices to find what works best for businesses and consumers. While some ISPs are planning to implement traffic management practices on their networks, others are not. This experimentation and competition will allow consumers to decide what services they wish to pay for, as well as how they want their broadband experience to look like.

   The current environment is competitive enough for the benefits and risks of net neutrality to be assessed in the market, and illustrates that implementing policy prematurely could have a ruinous impact on the state of the ICT market.

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

   As I outlined in my study of the economics of net neutrality ("The Economics of Net Neutrality Revisited", Jena Economic Research Paper, 2008-80)[1], operators do not stand to benefit from limiting access to sites or favoring one service over another.

   Arguments maintaining this hypothetical scenario ignore the realities of traffic management practices. Managing the influx of data will mean that operators prioritize traffic according to the quality of service sensitivity of the requests on their networks (i.e. VoIP versus email). This does not mean that applications/websites will not function, but rather they will be limited in the bandwidth allotted to them. In other words, data will be transmitted in such a way as to limit the degradation of service that would result from congestion.

[1] http://zs.thulb.uni-jena.de/receive/jportal_jparticle_00138336

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

   There is no doubt that the Commission has the capability and authority to address abuse in traffic management practices. As illustrated by numerous proceedings and intervention against anti-competitive practices (including Microsoft, Intel, and the current investigation into Google's market dominance), the Commission is well prepared to address any issues that may arise.

   In addition, existing transparency regulations related to informing consumers about ISP practices and speeds will allow consumers to make informed decisions regarding from whom they wish to receive broadband access, and how they expect that access to be managed.

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?

   It is vital. Without having the ability to manage traffic on their networks (which they have built with their own capital, and therefore own as much as an individual owns the home they built with their own two hands), congestion could increase to the point that next generation networks are unable to guarantee sufficient quality of quality sensitive services. Even if there was a constant upgrade of the infrastructure to allow for more and more data to stream unencumbered, this would not be a guarantee for sufficient service quality, especially in mobile applications.

   Traffic management technology will function as a supplement to the development of next generation networks, complimenting the high value and cost of the infrastructure with the efficient management of the data that will flow through them. In this way, operators will be assured that their investments in the networks will have a reasonable rate of return, while providing the necessary bandwidth that users and businesses require.

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?

   This is fundamental to the growth in broadband adoption and fostering a competitive ICT market. Network operators are not seeking to "fool" consumers when implementing these technologies, nor do they seek to limit their abilities to access the content of their choice. Rather, they seek to provide the best experience for the users, content/application providers, and businesses that they can.

This can be carried out in innumerable ways, as there is no defined business strategy for this emerging technology. Therefore, it is in the interest of operators and consumers alike for traffic management practices to be explored and tested in the markets, so operators and consumers can decide what works best.

Thus, consumers must be made aware of what they can expect in terms of quality of service, download and upload speeds, how traffic is being managed by the ISPs, etc.

6. Should the principles governing traffic management be the same for fixed and mobile networks?

   Yes. Though operators will handle the two networks differently (as mobile congestion has increased exponentially with the growth in smart phones and the subsequent increase in data usage), the fundamental principles of market-driven traffic management and self-regulation should apply to both mobile and fixed networks mediums. Since a single cell can only handle a certain amount of data at a time, network management is even more important in mobile applications.

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 prioritization affect other players in the value chain?

   Search engines, Google in particular, illustrate how prioritization can be critical to service quality. However, this cannot be compared to the prioritization that is envisaged through the implementation of traffic management.

   Search prioritization has tremendous impact on businesses' visibility, as well as the visibility of their services. While Google states that their search algorithm does this based on historical data and on the relevance of a service or business to a particular query, their services are nonetheless displayed above all others, regardless of user preference. As a result, Google's services are ideally placed to attract users' attention over that given to competing services.

   This has resulted in a decrease of traffic competing sites.

   As Google enjoys a dominant position in online advertising (as the French competition authority recently declared), this prioritization has a tremendous impact on businesses and services.

   This does not, however, compare to the prioritization being proposed by network operators through traffic management. Network operators rarely, if ever, offer content, focusing instead exclusively on access. Google, in comparison, started out as an "access provider" (by aggregating all the information on the internet), but has since expanded to developing content which competes with some of their advertising clients.

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?

   It must be reiterated that no service provider proposes to degrade services. What network operators are seeking to do is improve the quality of service by allowing for the prioritization of services (i.e. gaming, live broadcasting, telemedicine) that require priority in order to function properly. In other words, a request for content from a service that does pay for prioritization would be assured that its content would arrive quickly and without degradation of service. Other traffic would flow as quickly or slowly as it is able to within the remaining bandwidth (of which there would be a large amount).

   Exclusive agreements are legitimate in their own right, as the network operators own the networks that they themselves constructed and manage. These agreements would ensure that the contents included under these agreements would be given prioritization, not that competing services would be degraded. Should degradation result from such an agreement, this would be a clear case of anti-competitive behavior, and can be addressed through existing competition law.

9. 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?

   If there is a sufficient level of competition among ISPs (and between content providers), there are no such circumstances likely to arise. The simple economics of the broadband market make minimum quality of service requirements an unnecessary regulatory burden on an industry which is entirely dependent on maintaining minimum quality of service standards that would very likely exceed those imposed by government.

   Only if there is a lack in competition, i.e. just one incumbent dominating the market for internet services, there might be a problem of "exploiting" consumers and content providers. However, in such cases, competition law and antitrust regulation (both, national and EU) will address such problems effectively.

   Network operators must be allowed to deploy their infrastructure far and wide, laying the groundwork for any subsequent upgrades and/or next generation networks. Operators will only deploy such infrastructure if the minimum quality of service they can offer will be useful to users and businesses alike. Otherwise, they will be developing a service that no one will want, much less pay for.

And yet, if regulation is introduced that increases the cost of this infrastructure deployment, and therefore the subscription costs that users will have to pay in order to use the service, individuals will be less likely to subscribe.

10. How should quality of service requirements be determined, and how could they be monitored?

    Policy makers should not mandate what is effectively a technical engineering issue that is best left to network operators. National governments and authorities as well as the EC should rather take care about a decent level of competition on every level of the value chain in internet businesses.

11. What should transparency for consumers consist of? Should the standards currently applied be further improved?

    Average up- and download speeds, according to differing hours of service (peak hours versus off-peak hours, for instance) should be displayed. This will ensure that existing customers and any future customers are fully informed of what speeds they can expect at any given moment on the network.

    Prices and tariffs should also be provided, as well as any additional fees that may be assessed against a subscriber.

    It is in the network operators' best interests to provide all relevant information, as a competitive market will allow each operator to offer what individual consumers may want. Lower prices for lower speeds, higher prices for guaranteed high speeds, or networks that specialize in particular types of Internet traffic such as telemedicine, gaming, etc.