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COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

The open internet and net neutrality in Europe

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1. INTRODUCTION

When concluding the 2009 EU telecoms reform package, the European Commission set out in a declaration[1] its commitment to "preserving the open and neutral character of the internet, taking full account of the will of the co-legislators now to enshrine net neutrality as a policy objective and regulatory principle to be promoted by national regulatory authorities". According to this declaration, in addition to monitoring implementation of the relevant provisions relating to net freedoms, the Commission would "monitor the impact of market and technological developments on net freedoms reporting to the European Parliament and the Council before the end of 2010 on whether additional guidance is required". This Communication hereby seeks to fulfil this commitment, which was recalled in the Digital Agenda for Europe Communication[2], setting out what the Commission has learned as a result of its consultation and fact-finding processes and drawing the appropriate conclusions.

Process

In order to provide an evidence base for its Communication, the Commission launched a public consultation on "The open internet and net neutrality in Europe", conducted between 30 June and 30 September 2010. The consultation attracted over 300 responses from a wide range of stakeholders, including network operators, internet content providers, Member States, consumer and civil society organisations as well as a number of individuals. The full list of respondents together with the non-confidential responses was published on the Commission's dedicated website,[3] accompanied by a report providing a concise, non-exhaustive overview. In addition, the Commission and the Parliament organised a joint summit on 11 November 2010[4], which gave a wide range of stakeholders the opportunity to present and discuss their views on net neutrality in an open and public forum.

2. THE NET NEUTRALITY DEBATE

Evolution of the internet

The internet has assumed the dimensions of a global phenomenon at an exceptional pace. In 15 years, the internet connectivity market has grown from almost zero to a multi-billion euro business. The blossoming of the internet has facilitated cross-border trade through e-commerce, helping to further develop the internal market and contributing to the erosion of barriers between Member States. The internet is at the core of the global economy. It has been responsible for an unprecedented level of innovation.

The internet owes much of its success to the fact that it is open and easily accessible, provided that the user has an internet connection. In order to provide content or services, save for some basic technical requirements, an individual or a company does not currently face high entry costs or other barriers that are characteristic of many other entrenched network industries.

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1 OJ L 337, 18 December 2009.

2 COM(2010)245

3 http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/net_neutrality/index_en.htm

4 http://ec.europa.eu/information_society/policy/ecomm/library/public_consult/net_neutrality/index_en.htm

Indeed it is the absence of these barriers that has enabled many of the applications that are now household names to take off.

At its inception, access to the internet was achieved through dial-up on the telephone, but with the proliferation of attractive applications – made accessible through ever-increasing speeds of broadband connections – the internet has become much more than a mere telephone line. It is the "network of networks" that has transformed the way we communicate and do business, the way we work, opening up great opportunities in education, culture, communication, social interaction, as well as enabling advancements in science and technology and more broadly encouraging freedom of expression and media plurality.

Billions of Euros have been invested in upgrading the infrastructure to provide better services to consumers at lower prices. This, in combination with the EU model of pro-competitive wholesale access regulation and the application of EU competition rules, has spurred downstream competition, giving rise to a competitive offering of broadband access packages which, combined with an enticing array of content and services, has driven consumer demand. More investment will be required to keep up with the explosion of data traffic. According to some traffic projections, traffic is set to increase by 35% year on year for fixed networks and by 107% year on year for mobile. The internet has become a very precious good in today's society. Its full potential remains untapped.

Parameters of the net neutrality debate

Although there is no set definition of 'net neutrality', **Article 8 (§4) (g) of the Framework Directive[5] requires national regulatory authorities to promote the interests of the citizens of the European Union by promoting the ability of end-users to access and distribute information or run applications and services** of their choice**.** This is naturally subject to applicable law and thus without prejudice to EU or national measures taken to counter illegal activities, notably the fight against crime.

The essence of net neutrality and the issues underpinning the debate concern first and foremost how best to preserve the openness of this platform and to ensure that it can continue to provide high-quality services to all and to allow innovation to flourish, while contributing to enjoyment of and respect for fundamental rights, such as freedom of expression and freedom to conduct business.

Much of the net neutrality debate centers around traffic management and what constitutes reasonable traffic management. It is widely accepted that network operators need to adopt some traffic management practices to ensure an efficient use of their networks and that certain IP services, such as for instance real-time IPTV and video conferencing, may require special traffic management to ensure a predefined high quality of service. However, the fact that some operators, for reasons unrelated to traffic management, may block or degrade legal services (in particular Voice over IP services) which compete with their own services can be considered to run against the open character of the Internet. Transparency is also an essential part of the net neutrality debate. Obtaining adequate information on possible limitations or traffic management enables consumers to make informed choices. These issues of traffic management, blocking and degradation, quality of service and transparency need to be addressed.

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[5] Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 (Framework Directive).

3. NET NEUTRALITY PROVISIONS OF THE EU REGULATORY FRAMEWORK

3.1. The principles of competition

The EU regulatory framework aims at promoting effective competition, which is considered the best way to deliver high-quality goods and services at affordable prices to consumers. For competition to work, consumers must be able to choose between a variety of competing offerings on the basis of clear and meaningful information. Consumers must also be effectively able to switch to a new provider where a better quality of service and/or a lower price is offered, or where they are not satisfied with the service they are receiving, e.g. where their current provider imposes restrictions on particular services or applications. In a competitive environment this acts as a stimulus to operators to adapt their pricing and abstain from restrictions on applications that prove popular with users, as is the case with voice over IP (VoIP) services.

The significance of the types of problems arising in the net-neutrality debate is therefore correlated to the degree of competition existing in the market.

In Europe, the regulatory framework has facilitated competition by requiring network operators with significant market power to provide wholesale access and by allocating spectrum in a pro-competitive manner. Wholesale access to mobile networks has been [largely?] deregulated on the basis of evidence that such access is offered on commercial terms to mobile virtual network operators, who add to the range of offerings at retail level. Enforced in parallel to the ex ante regulatory framework, competition law has contributed to efficient market entry by tackling abuses of dominant position by regulated operators. As a result, retail pricing of fixed and wireless internet access is not regulated in the EU and consumers benefit from a variety of services at different price points adapted to their needs (e.g. in terms of volume, bandwidth).

At the same time, the adequacy of the competitive environment as a guarantor of the openness of the internet can be affected by the possible existence of market failures, of oligopolistic practices, of bottlenecks to the provision of high quality services to consumers and of information asymmetry.

3.2. The amended Telecommunications framework

The amended telecoms framework adopted in 2009 favours the preservation of the open and neutral character of the internet. Under the revised rules, national telecoms regulatory authorities are required to promote '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).

This is supported by new transparency requirements vis-à-vis consumers (Article 21 of the Universal Service Directive). More specifically, when subscribing to a service and in case of any changes thereafter, consumers will be informed about:

– conditions limiting access to and/or use of services and applications, in conformity with Union law; and

– procedures put in place by the provider in order to measure and shape traffic so as to avoid filling or overfilling a network link, and how these may impact on service quality.

These transparency requirements are necessary to inform consumers of the service quality they can expect.

As regards switching, consumers will be able to **switch operators** and keep their numbers within one working day. Moreover, operators must offer users the possibility to subscribe to a contract with a maximum duration of 12 months. The new rules also make sure that conditions and procedures for contract termination do not act as a disincentive against changing service provider (Article 30(6) of the Universal Service Directive).

In addition, national regulators – after consulting the Commission - have the power to intervene by setting minimum quality of service requirements for network transmission services (Article 22(3) of the Universal Service Directive) and so guarantee a robust level of quality of service.

All these provisions, contained in the revised EU regulatory framework, will have to be transposed by the Member States by 25 May 2011.

Moreover. EU law[6] offers protection to individuals regarding the processing of personal data, including when decisions significantly affecting individuals are taken on the basis of automated processing of their personal data. Any activity related to blocking or management of traffic on such a basis will therefore have to comply with the data protection requirements.

Finally, Member States must comply with the Charter of Fundamental Rights of the EU when implementing EU law and this also applies to the implementation of the revised telecommunications framework, which could affect the exercise of a number of such rights.

4. FINDINGS TO DATE

4.1. Blocking

Blocking or throttling of lawful traffic was one of the main issues raised during the public consultation and net neutrality summit. Blocking can take the form of either making it difficult to access or outright restricting certain services or websites on the internet. A classic example of this would be mobile internet operators, blocking voice over internet protocol (VoIP). Throttling, which is a technique employed to manage traffic and minimize congestion, may be used to degrade (e.g. slow down) certain type of traffic and so affect the quality of content, such as video streaming provided to consumers by a competitor.

At European level, the Body of European Regulators for Electronic Communications (BEREC) conducted a survey among its members in early 2010 to assess the state of play in the different Member States. In addition, at national level, prior to the launch of the Commission's public consultation, both ARCEP[7] and OFCOM[8] , respectively the French and United Kingdom national regulatory authorities, launched their own consultations.

In its response to the public consultation, BEREC noted that there have been instances of unequal treatment of data by certain operators. Indeed, BEREC reported some concerns voiced by both users and content providers:

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6 For example, the Data Protection Directive (95/46/EC) and the e-Privacy Directive (2002/58/EC)

7 http://stakeholders.ofcom.org.uk/consultations/net-neutrality/?showResponses=true

8 http://www.arcep.fr/uploads/tx_gspublication/net-neutralite-orientations-sept2010-eng.pdf

– Limits on the speed ('throttling') of peer-to-peer (P2P) file-sharing or video streaming by certain providers in France, Greece, Hungary, Lithuania, Poland and the United Kingdom;

– Blocking or charging extra for the provision of voice over internet protocol (VoIP) services in mobile networks by certain mobile operators in Austria, Germany, Italy, the Netherlands, Portugal and Romania.

BEREC however, did not distinguish the instances of outright blocking from those where operators are offering the service but requiring additional payments, and did not indicate the economic significance of these payments. These are essential issues which need to be clarified further. It will therefore be important to get a clear view of the situation across the EU in a more exhaustive fact-finding exercise. Consumer and civil society organisations also referred to a number of alleged instances of blocking or throttling. BEREC findings show that many of these issues were solved voluntarily, often through intervention by the NRA or pressure created by adverse media coverage.

Concerns were raised that blocking, though currently limited mainly to VoIP, could be extended in the future to other services, such as television broadcasting via the internet. Other potential issues highlighted by respondents to the consultation include the risk that charging structures would favour big players who may afford to pay for prioritisation while new entrants would be constrained to the slow lane and hence limiting the incentives for innovation. Reference has also been made to the risk that, if different operators block or degrade different services, consumers could have difficulty in accessing the services of their choice through a single internet subscription.

The Commission does not have evidence to conclude that these concerns are justified at this stage but this should be borne in mind in a more exhaustive fact-finding exercise.

4.2. Traffic management

The growing demands placed on broadband networks as well as different services and applications which require continuous data exchange mean that traffic management is required to ensure that the end user's experience is not disrupted by network congestion.
There are different types of traffic management techniques:

– Packet **differentiation** allows different classes of traffic to be treated differently, for example for services which require real-time communication such as live streaming of audio or video events and VoIP. This differentiation guarantees a certain minimum quality of service to end-users.

– IP **routing** allows ISPs to route packets via different communication paths to avoid congestion or provide better services. For example, an Internet Service Provider may route packets towards a server that contains a copy of the requested information which is located either in its network or somewhere close.

– **Filtering** allows an Internet Service Provider to distinguish between "safe" and "harmful" traffic and block the latter before it reaches its intended destination.

A consumer's experience is not affected if an email reaches him a few seconds after it has been sent, whereas a similar delay to a voice communication would cause it to be significantly degraded, if not rendered entirely useless.

Much of the net neutrality debate centers around traffic management and what constitutes reasonable traffic management. Traffic management is considered necessary to ensure the smooth flow of traffic, particularly at times when networks become congested.

Several respondents to the public consultation agreed that traffic management was not new in the field of electronic communications. For example operators prioritised voice traffic, particularly in the case of mobile. Properly used, some respondents argue that such traffic management techniques should enhance consumer experience.Even those respondents in the public consultation that alluded to blocking of peer-to-peer or VoIP services argued that traffic management was a necessary and essential part of the operation of an efficient internet. They agreed that its use for the purposes of addressing congestion and security issues was entirely legitimate and not contrary to the principles of net neutrality.

A number of respondents raised concerns about potential abuse of traffic management, for example, for the purposes of granting preferential treatment to one service over another, a practice that they would not consider justifiable if the services were similar in nature.

There was broad consensus that operators and ISPs should be allowed to determine their own business models and commercial arrangements, subject to all applicable laws. Some respondents called on National Regulatory Authorities and operators to work together to ensure that transparency to consumers as regards traffic management practices was meaningful and effective.

Several respondents considered that traffic management should apply to both fixed and mobile networks, in line with the principle of technology neutrality that underlies the electronic communications framework in the EU.

The Commission, together with BEREC, will continue monitoring this issue to allow for reasonable and transparent traffic management, which will support the objectives of the EU Telecommunication framework.

4.3. Consumers and quality of service

Transparency is a key part of the net neutrality debate. Obtaining adequate information on possible limitations or traffic management enables consumers to make informed choices.

According to BEREC, the majority of NRAs received complaints from consumers concerning the **discrepancy between advertised and actual delivery speeds** for an internet connection. There was consensus that transparency on the quality of the service is essential. Given the complexity and technical nature of the multiplicity of internet offerings from the consumer perspective, according to many respondents, a balance needs to be struck between simplicity and the provision of meaningful and appropriately detailed information.

Some stakeholders pointed to the fact that safeguards for preserving the open and neutral character of the internet are already provided for in the regulatory framework and that NRAs should avail themselves of the provisions under Article 22(3) of the Universal Service Directive and set appropriate minimum quality of service requirements, where they are made aware of degradation of service, hindering or slowing down of traffic over networks.

In the course of the summit of November 2010, Members of the European Parliament urged more work to be done on quality of service indicators and would look to BEREC for the best way to proceed.

4.4. The international context

A number of issues – such as whether internet providers can prioritise one kind of content over another, whether mobile and fixed networks should be subject to different rules – have generated much discussion and no little controversy in a number of countries outside the EU.

In the **United States**, the Federal Communications Commission (FCC) has regularly declared its commitment to preserving the openness of the internet. To this end, the FCC adopted in 2005 four key principles allowing internet consumers to use the content, applications, services and devices of their choice, and promoting competition among network, service and content providers. These ideas correspond largely to the 'open internet' principle enshrined in the revised EU telecoms framework.

In December 2010, the FCC issued an order which introduced new rules on transparency as well as clarification as to the types of blocking permitted for fixed and mobile broadband. In principle, fixed broadband providers may not block lawful content, services, non-harmful devices and applications, including those competing with their own voice or video telephony services. The approach to mobile broadband is incremental, at this time providers are only specifically prevented from blocking lawful websites and VoIP or video-telephony applications that compete with their own voice or video telephony services.

Other countries have adopted non-binding guidelines on net neutrality. In **Norway**, the Norwegian Post and Telecommunications Authority (NPT), in collaboration with a range of stakeholders, adopted a voluntary agreement in February 2009 entitling users to an internet connection (i) with a predefined capacity and quality; (ii) that enables them to use the content, services and applications of their choice; and (iii) that is free of discrimination with regard to type of application, service or content.

Meanwhile in **Canada**, the Canada Radio-television and Telecommunications Commission (CRTC) issued in October 2009 a new framework on net neutrality that subjects internet providers to increased transparency requirements and allows them to employ traffic-management techniques only as a last resort.

Chile appears to be the first country to address directly the principle of net neutrality in its legislation. In August 2010, its parliament adopted a new law on net neutrality, which essentially restricts the rights of internet providers to manage content, while increasing protection for content providers and internet users.

The Commission is following these international developments closely and will continue to take them into account in its own thinking on possible approaches to net neutrality.

5. CONCLUSION

The importance of maintaining the open internet, underlined in the Commission Declaration, received large endorsement in the public consultation and joint Commission-Parliament summit. The Commission remains committed to this objective, and to ensuring that the maintenance of a robust best-efforts internet to which everyone has access.

The Commission is of the opinion that the rules on transparency, switching and quality of service that form part of the revised EU electronic communications framework should contribute to producing competitive outcomes.

Given that Member States are still transposing the revised EU electronic communications framework into national law, it is important to allow sufficient time for these provisions to be implemented and to see how they will operate in practice.

Moreover, as stated above the data obtained from the public consultation was incomplete or imprecise in many aspects that are essential to understand the current state of play in the European Union. For this reason, the Commission, with BEREC, is currently looking into a number of issues that surfaced in the course of the consultation process, in particular, barriers to switching (for example, after how long, on average, a customer is permitted to break a post-paid contract, and what if any are the penalties), practices of blocking, throttling and commercial practices with equivalent effect, transparency and quality of service as well as the competition issues relating to net neutrality (e.g. discriminatory practices by a dominant player).

In this regard, the Commission reserves its right to assess under Articles 101 and 102 of the TFEU any behaviour related to traffic management that may restrict or distort competition.

The way forward

The Commission will publish, by the end of the year, the evidence that will come to light from BEREC's investigations, including any instance of blocking or throttling certain types of traffic.

On the basis of the evidence and the implementation of the telecom framework provisions, the Commission will decide, as a matter of priority, on the issue of **additional guidance** on net neutrality.

If significant and persistent problems are substantiated, and the system as a whole - comprising multiple operators - is not ensuring that consumers are easily able to access and distribute content, services and applications of their choice via a single internet subscription, the Commission will assess the need for **more stringent measures** to achieve competition and the choice consumers deserve. Transparency and ease of switching are key elements for consumers when choosing or changing internet service provider but they may not be adequate tools to deal with generalised restrictions of lawful services or applications.

Such additional measures may take the form of guidance or general legislative measures to enhance competition and consumer choice, such as by further facilitating consumer switching, or if this should prove to be insufficient, by for example imposing specific obligations regarding unjustified traffic differentiation on the internet applicable to all ISPs irrespective of market power. This could include the prohibition of the blocking of lawful services.

Net neutrality touches on a number of rights and principles enshrined in the EU Charter of Fundamental Rights, in particular the respect for private and family life, the protection of personal data and freedom of expression and information. For this reason, any legislative proposals in this area will be subject to an in-depth assessment of their impact on fundamental rights and of their compliance with the Charter of Fundamental Rights of the EU[9].

[9] In line with the "Strategy for the effective implementation of the Charter of Fundamental Rights COM(2010)573 final of 19.10.2010

Any additional regulation should avoid deterring investment, or innovative business models, lead to a more efficient use of the networks and to creating new business opportunities at different levels of the internet value chain while preserving for consumers the advantages of a choice of internet access products tailored to their needs.

In parallel, the Commission will continue its dialogue with Member States and stakeholders to ensure the rapid development of broadband, which would reduce the pressure on data traffic.