

# NETWORK NEUTRALITY

BEUC response to the European Commission's public consultation

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## Summary

Net neutrality is one of the fundamental principles of the Internet that has significantly enhanced citizens' participation in society and access to knowledge and diversity, while promoting innovation, economic growth and democratic participation.

The European Union and Member States have a special interest to ensure the openness of the Internet, cultural diversity and consumers' access to the content, services and applications of their choice.

The European Consumers' Organisation (BEUC) **calls for the recognition of net neutrality as a regulatory principle**. In light of the implementation by Member States of the new telecom rules and the emergence of different approaches towards net neutrality, **the European Commission should build on the ongoing work of the Body of European Regulators for Electronic Communications (BEREC) and adopt a binding instrument** that will ensure the coherent and effective protection of net neutrality across Europe.

In a neutral network, consumers:

1. Are entitled to an Internet connection of the speed and reliability advertised to them.
2. Are entitled to an Internet connection that enables them to:
  - a. send and receive content of their choice;
  - b. use services and run applications of their choice;
  - c. connect hardware and use software of their choice that do not harm the network.
3. Are entitled to an Internet connection that is free from discrimination with regard to type of application, service, or content or based on sender or receiver address.
4. Are entitled to competition among network, application, service, and content providers.
5. Are entitled to know what network management practices are deployed by their network providers.

## Introduction

Net neutrality is one of the fundamental principles of the internet and has significantly enhanced citizens' participation in society, access to knowledge and diversity, whilst promoting innovation, economic growth and democratic participation.

Consumers rely on Internet Service Providers to access this wealth of resources and applications. They expect Internet Service Providers (ISPs) will comply with the **fundamental principles of openness, inter-operability and neutrality** that constitute the founding of the internet architecture.

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3. **Are entitled to an internet connection that is free from discrimination with regard to type of application, service or content or based on sender or receiver address.**
4. **Are entitled to competition among network, application, service, and content providers.**
5. **Are entitled to know which network management practices are deployed by their network providers<sup>1</sup>.**

Nevertheless, the neutral architecture of the internet is currently being challenged by various parties, such as network operators providing end-users' connections. A number of examples will be presented to demonstrate that this threat is becoming a reality.

The European Union has missed the opportunity to safeguard net neutrality as a fundamental regulatory principle during the revision of telecom rules in 2009. Through the recognition of the possibility for network providers to engage in traffic management as a default rule, the EU has opened the door to potentially unfair and discriminatory traffic control on the internet. The adoption of transparency and information disclosure requirements cannot be the sole remedy, especially in a market where competition is seriously hampered by barriers to switching.

**BEUC supports a regulatory approach vis-à-vis net neutrality. Given the ongoing implementation by Member States of the new Telecoms package, we call upon the European Commission to recognise net neutrality as a**

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<sup>1</sup> Transatlantic Consumer Dialogue (TACD) Resolution on Net Neutrality, April 2010.

## **fundamental regulatory principle to ensure a coherent implementation across Europe.<sup>2</sup>.**

Otherwise, the risk of divergent rules across Europe is high. This is contrary to the objective of the Internal Market for Information Society services and the nature of the internet as a borderless environment. Europe cannot afford to miss a second chance to safeguard net neutrality to the detriment of freedom of expression, consumers' freedom of choice, innovation and competition. When considering policies which might affect the neutrality of the internet, the interests of consumers and users need to be safeguarded.

### **1. The open internet and the end-to-end principle**

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

Net neutrality interferences already occur in Europe. A number of cases have been reported where network operators have used their power as regards the control of the traffic in order to block the transmission of data, prioritise their own services at the expense of their competitors, restrict the use of certain applications or charge online service providers a premium to guarantee fast delivery of their content.

Access providers are in a position to **block** access to specific content, services or applications transmitted over their networks. Different motives exist, including competition reasons whereby access to a competitive service or an application is blocked thus allowing the access provider to gain a monopoly over its clients. In 2007, UK telecom operators Orange and Vodafone removed the Voice over the Internet Protocol (VoIP) of all Nokia N95 cell phones sold by them in the UK. In April 2009, Deutsche Telecom AG, the exclusive distributor of iPhone, announced its intention to block the use of Skype<sup>3</sup> on iPhone, blocking the VoIP connection.

Such practices also occur with mobile internet, where a number of sites and applications are unavailable to consumers with "unlimited internet" flat rates. French network operator SFR advertises the offer of "unlimited Internet", but in reality, access to peer-to-peer, voice over IP and news groups is blocked.

In some cases, access to specific content may be blocked due to 'alleged' high costs resulting from the high bandwidth use. An example is the case of BBC's multimedia and video platform iPlayer, which saw more than 42 million programmes accessed in the first three months, leading to complaints of network congestion by network operators and even threats to restrict access to the service<sup>4</sup>. In February 2010, the CEO of Telefónica stated that his company intends to charge search engines for the

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<sup>2</sup> Chile has enshrined the principle of net neutrality in a recently adopted law, proving that this is possible - approved by its Congress on 13 July, 2010 - Articles 15a and 15c are added to Act 19.496 on consumer protection.

<sup>3</sup> Skype is a popular VoIP technology. VoIP, short for Voice over the Internet Protocol is a transmission technology that allows voice telephone calls through the internet.

<sup>4</sup> EU study, Legal Analysis of a Single Market for the Information Society - New Rules for a New Age? prepared by DLA Piper, October 2009

use of their network, adding that Telefónica will seek to push its own content<sup>5</sup>. Telefónica has also recently stated that it intends to end flat tariffs for mobile internet on the basis of an alleged saturation of networks and adopt a traffic management policy based on prioritisation of specific services<sup>6</sup>.

Another form of net neutrality interference is evidenced by network operators considerably **slowing down the access speed** to content or applications to the point of preventing their use. Access degradation is particularly relevant for time-sensitive content, services and applications which require real-time delivery, such as VoIP, real-time video streaming, television services delivered over the IP network etc.

Such practices may be due to competition concerns or to traffic congestion. In the Netherlands, the network provider UPC<sup>7</sup> announced a new system in which its customers would pay more to access certain services and providers. However, the new system to run from noon to midnight will affect bandwidth availability for the rest for consumers who have not opted for this option, cutting their bandwidth by two thirds when accessing bandwidth-intensive services during peak traffic levels.

Degradation may be combined with **prioritisation** of specific content. For instance, an internet service provider who also supplies telephony might degrade or block the services of a VoIP provider. Similarly, an internet service provider who also provides video distribution services has incentives to dynamically allocate greater bandwidth to its own services at the expense of potentially competing internet applications<sup>8</sup>.

Access providers may also impose **unjustified restrictions on the use of certain applications and/or equipment** by its users. Such restrictions may be applied either by placing a cap on the maximum amount of application related data to be transferred over the network<sup>9</sup> or through contractual terms<sup>10</sup>.

**Net neutrality is far from being guaranteed in Europe and the examples given above demonstrate the inefficiency of the current regulatory framework to ensure users will have non-discriminatory access to content, services and applications of their choice.**

EU competition rules could prove to be helpful in sanctioning net neutrality interferences which eliminate or reduce competition. Nevertheless, application of EU competition rules only allows for *ex post* intervention, thus failing to prevent interferences to the detriment of competitors and end-users. In addition, although

<sup>5</sup> <http://www.eitb.com/news/technology/detail/350113/spanish-telefonica-to-charge-google-yahoo-bing/>

<sup>6</sup> <http://www.adslzone.net/article4483-telefonica-contra-la-neutralidad-de-la-red-no-se-eliminaran-las-tarifas-planas-pero-se-priorizara-la-red.html>

<sup>7</sup> <http://www.v3.co.uk/v3/news/2248371/dutch-isp-set-first-europe-net>

<sup>8</sup> TACD Resolution on net neutrality, April 2010.

<sup>9</sup> Such an approach has, for example, been suggested as a possible action against the BBC iPlayer video platform [www.independent.co.uk/news/business/news/Internet-groups-warn-bbc-over-iplayer-plans-461167.html](http://www.independent.co.uk/news/business/news/Internet-groups-warn-bbc-over-iplayer-plans-461167.html)

<sup>10</sup> Several telecom operators specify in the terms and conditions for mobile phone data subscriptions, that users are prohibited from using their mobile phone as a device to connect their personal computer to the internet (so-called 'tethering') because such use would strain the network and would undermine the attractiveness of dedicated internet connection subscriptions for personal computers. Telecom operators have already prepared their legal conditions for such a move, and the software of some devices (such as Apple's iPhone) only allows tethering for certain telecom operators that have pre-approved tethering on their network. *EU study, Legal analysis of a Single Market for the Information Society - New Rules for a New Age?, prepared by DLA Piper, October 2009.*

competition law can be used to deal with the situation in which a dominant undertaking would block or degrade data traffic from a specific content provider in order to favour an affiliated content provider, it is less clear whether it will apply when an entire class of data, such as VoIP traffic is blocked or degraded<sup>11</sup>. Furthermore, competition law takes effect only in cases where a company is proven to have abused its significant market power (SMP) and relies on a narrow definition and interpretation of the relevant market in which such power arises; however, in the complex and fast evolving ICT market, it is difficult to define the appropriate market.

For competition to be effective, it is essential that consumers are able to switch operators if they do not like the way a certain provider manages network traffic. However, **switching is often not easy**; either because of the significant costs involved or due to the contractual restrictions as is the case of bundled services. Switching costs include contract cancellation fees, costs related to setting up the new network and installation costs, as well as the ones related to inform third parties of the new contact information<sup>12</sup>. Our Belgian member, Test-Achats, receives numerous complaints about internet switches, which can take several weeks, while the lack of offers further hinders switching<sup>13</sup>. Furthermore, switching may not be possible for customers who are confronted with limited choice as regards the choice of operator in a specific area.

The lack of effective competition affects particularly the **mobile internet**, where it is difficult, if not impossible, for consumers to find an operator that does not impose restrictions or block access to specific applications<sup>14</sup>.

Furthermore, mobile termination charges (MTRs) remain high, despite the Recommendation recently issued by the European Commission. The operators use the termination rates to reduce competition in the market, which limits consumer choice and hinders innovation. The high termination rates allow the bigger players in the market to keep their market share by offering very low rates for calls within their networks while imposing high rates for calls to other networks. At the same time, high MTR's lead to segmentation between fixed and mobile networks whereas the services on the networks are converging. On fixed networks there are offers combining unlimited calls to fixed networks, television and internet access, without including unlimited calls to mobile networks, as these are too expensive<sup>15</sup>.

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

BEUC is concerned that net neutrality interferences will continue to occur at the end-user level and will also expand to traffic management between operators.

<sup>11</sup> EU study, Legal Analysis of a Single Market for the Information Society- New Rules for a New Age?, prepared by DLA Piper, October 2009.

<sup>12</sup> For example, in Greece, Vodafone decided that there should be extra charges for using an iPhone for accessing the internet and blocked the service even for consumers whose contracts had not reached their expiry date, despite the fact that this service was free of charge according to the initial contract.

<sup>13</sup> For further information, see BEUC's response to the BEREC's report on best practices to facilitate switching, Ref: X/045/2010, 06/07/10.

<sup>14</sup> As is the case in France and Germany for example, where all mobile operators prohibit their internet service users from accessing VoIP and peer-to-peer services.

<sup>15</sup> BEUC comments to the public consultation on Mobile Termination Rates, Ref.: X/055/2008 - 15/09/08.

As regards **the end-users' level**, BEUC believes that cases of degradation and/or prioritisation will increase in the near future for a number of reasons. First, traffic over the internet is rapidly increasing and consumers are using the internet for applications that generate more traffic than before, such as graphics-heavy websites or High Definition Television downloads<sup>16</sup> and/or for time sensitive applications. Secondly, it is expected that mobile internet will increase significantly over the coming years. Thirdly, the nature of the applications is also changing, since consumers' use of time-sensitive applications is increasing. These increased constraints on performance could become more important when, as expected, new online social services which affect citizens' ability to participate in society are developed, such as e-health and e-government services.

BEUC is concerned that discrimination may also occur at the level of **traffic management between network providers and information service providers**. Given the complexity and multi-layer architecture of the internet, new systems for traffic exchange have emerged, such as paid peering<sup>17</sup> between the leading operators, particularly incumbent operators, and Internet Service Providers who are situated in different layers of the internet. Under such schemes, larger network providers can set the terms of interconnection outside the realm of normal competitive pricing constraints or refuse to provide peering to small networks. Such practices may distort competition and lead to discrimination to the benefit of service providers who are willing to pay more.

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

BEUC regrets the weak protection of net neutrality in the new European telecom legislation<sup>18</sup>. The focus of the new rules has been on enhancing transparency regarding restrictions imposed by network operators, rather than recognising net neutrality as a regulatory principle<sup>19</sup>. Simply informing consumers of restrictions is not enough when it is very difficult for consumers to change providers and/or to find providers who do not impose restrictions<sup>20</sup>.

Furthermore, the new rules establish as a default rule the possibility for ISPs to adopt traffic management practices, as long as they are notified to consumers<sup>21</sup>.

<sup>16</sup> Pyramid Research and Light Reading predict a rise in traffic for data and voice data by 131% between 2010 and 2013, [www.alcatel-lucent.com/](http://www.alcatel-lucent.com/): from a talk at the Mobile World Congress in Barcelona in February 2010.

<sup>17</sup> Peering consists of data interconnection agreements between two or more autonomous networks that interconnect directly with each other to exchange traffic. This is often done without charging for the interconnection or the traffic.

<sup>18</sup> The new rules were published in the Official Journal of the EU ON 18 December 2009 <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2009:337:SOM:EN:HTML> and Member States will have to transpose them into national laws by May 2011. The new rules will now need to be transposed into national laws of the 27 Member States by May 2011.

<sup>19</sup> Articles 20 and 21 of the amended Universal Service Directive 2002/22/EC.

<sup>20</sup> As is the case in France and Germany for example, where all mobile operators prohibit users of their internet access service from accessing VoIP and peer-to-peer services.

<sup>21</sup> Article 20.1.b.2 amended Universal Service Directive 2002/22/EC stipulates that consumers will receive "information on any other conditions limiting access to and/or use of services and applications, where such conditions are permitted under national law in accordance with Community law". Article 21.3.c stipulates that consumers will receive information about "any change to conditions

Operators are allowed to use procedures to measure and shape traffic on their networks in order to avoid congestion and poor performance in the provision of their services<sup>22</sup>. BEUC is concerned that the provisions may be used by network operators to impose restrictions while claiming that they simply deal with traffic management. The EU Institutions have failed to provide consumers with the necessary legal certainty and to safeguard the neutrality of the internet.

Contrary to developments in other countries<sup>23</sup>, the new EU rules on telecoms do not require operators to justify and prove every intervention on their networks.

According to the new rules, operators will be allowed to engage in traffic management in line with national rules. Nevertheless, no EU Member State has so far enacted specific legislation targeted at enforcing net neutrality. In some countries, such as Norway and Sweden, the Regulatory Authorities have only opted for the adoption of guidelines, whereas regulatory authorities in other EU Member States<sup>24</sup> are currently examining the issue of net neutrality, but no specific legislation has been adopted.

BEUC has serious concerns that given the legal uncertainty of the new telecom rules, together with the lack of guidance by the European Commission, national regulators will adopt significantly divergent approaches when implementing the relevant provisions. The ongoing work of BEREC on net neutrality should feed in the work of the European Commission towards a regulatory approach with the aim of alleviating the risk of divergent implementation at national level. It will also establish a clear set of rules within which competition will be able to function.

National Regulatory Authorities need to monitor regularly the traffic management policies of network operators and impose the required enforcement measures when necessary. The European Commission will have to closely monitor the implementation procedure by EU Member States to ensure consistency across the board.

Furthermore, private enforcement is necessary as a complementary tool to action by regulatory authorities. In addition to the development of rapid and consumer friendly complaint handling mechanisms, the European Union must adopt a binding instrument for judicial collective redress that would allow consumers to exercise their right to be compensated for the damage they have suffered. In particular when it comes to anti-competitive behaviour by network operators, the introduction of a system providing for private damages actions by victims of competition infringement, both consumers and competitors will also act as a deterrent and provide an incentive to companies to abide by the law.

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*limiting access to and/or use of services and applications, where such conditions are permitted under national law in accordance with Community law*".

<sup>22</sup> Recital 34 of the Universal Service Directive 2002/22/EC.

<sup>23</sup> See decision adopted by the Canadian Radio-Television and Telecommunications Commission, <http://www.crtc.gc.ca/eng/archive/2009/2009-657.htm>

<sup>24</sup> In France, ARCEP has published discussion points and initial policy guidelines on internet and network neutrality, May 2010. In the UK, OFCOM has published a discussion document on traffic management and "net neutrality", 24 June 2010.

## 2. Traffic management/discrimination

**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?

Network management practices are being used by Internet Service Providers to a large extent and for a variety of reasons. A distinction needs to be made between practices which constitute legitimate and reasonable traffic management and those that amount to discriminatory actions due to anti-competitive behaviour or commercial reasons.

BEUC recognises that traffic management may be necessary in specific cases in order to ensure the proper functioning of the network. For instance, control of traffic in extraordinary cases of **temporary network congestion** can legitimately be prioritised over other traffic in order to ensure the continued operation of the network<sup>25</sup>. Likewise, traffic control should be permitted when the **security of the network** is threatened.

Reasonable network management should be distinguished from efforts to comply with legal obligations such as orders from courts, governmental agencies and law enforcement authorities, as well as efforts to curtail unlawful transfers of content. **Measures taken under specific legal obligations** will have specific policy rationales different from the technical reasons motivating network management. Voluntary efforts against unlawful transfers of content should not serve as a pretext for discrimination or promote discriminatory effects<sup>26</sup>.

**Internet Service Providers should bear the burden of proof that there is conclusive evidence of congestion or that this is an imperative necessity for the functioning of the network.** Similar claims should be carefully scrutinised by regulatory authorities, in line with the principles of transparency, proportionality and non-discrimination. In particular:

- **Transparency:** Traffic management practices should be disclosed to consumers in an appropriate way;
- **Proportionality:** The measures in place should have the minimum possible impact on the network operation and be proportionate to the problem encountered;
- **Non-discrimination:** Streams with comparable technical properties should be treated in an equivalent manner<sup>27</sup> and access providers should not discriminate between providers of the same content or service.

In order to shape traffic management, network operators may use **Deep Packet Inspection**<sup>28</sup> (DPI) technology that allows for the identification of the data transmitted over their networks and its content. Such technology allows operators to

<sup>25</sup> TACD Resolution on Network Neutrality, April 2010.

<sup>26</sup> TACD Resolution on Network Neutrality, April 2010.

<sup>27</sup> Discussion points and initial policy guidelines on internet and network neutrality, ARCEP, May 2010.

<sup>28</sup> Deep Packet Inspection refers to the use of network equipment to intercept, modify, examine, restrict, or copy the content of data communications (definition from [www.nodpi.org](http://www.nodpi.org)).

prioritise, block or slow down different types of traffic, such as Peer-to-Peer, video, internet telephony etc.

The argument put forward by operators that DPI technology is necessary to prevent network congestion and ensure equitable network distribution to all their customers fails to respond to net neutrality concerns. It also overlooks the real problem which is the need for operators to invest in bandwidth and better networks rather than investing in the control of the data transferred through their pipes. Furthermore, DPI technology may be used for tracking the online behaviour of users and their profiling, thus allowing for additional revenues from advertising.

In addition to net neutrality, the use of Deep Packet Inspection techniques raises serious **privacy concerns**, given that it runs contrary to the fundamental right to the confidentiality of communications<sup>29</sup>.

**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 and services offering access to the public internet on a 'best efforts' basis?

BEUC is concerned that the European Commission considers transparency and information about managed services as the sole problem of concern. Regretfully, Question 5 fails to consider the possible impact that the promotion of managed services might have on 'public' internet.

BEUC is concerned that the promotion of managed services by ISPs might result in more of the network being allocated for such services to the detriment of the 'public' internet, thus bypassing net neutrality to the detriment of consumers. BEUC believes that the promotion of managed services should not affect consumers' ability to use the internet. The choice of managed services or quality of service measures by a consumer should affect only that consumer's connection to the internet. Such services can supplement, but should not replace, free and open internet access, while it needs to be ensured that ample bandwidth exists for all internet users. The development of such services needs to be closely monitored with the aim of mitigating the risks to net neutrality.

As a matter of principle, consumers are entitled to receive clear, precise, complete and accurate information on the ISPs' policies and procedures on network management, and how they affect access to particular content, services, applications, or the ability to attach particular devices.

Consumers must be informed about the technical properties of their internet access, so that they can know the resources that have been assigned to them and the performance they can expect under normal conditions. Information on the way in which internet access potentially shares available connectivity resources with other services, particularly when it comes to bundled broadband services, where contractual terms must specify how use of the television, for instance, affects the quality of the internet connection<sup>30</sup>. Contracts must also stipulate the specific technical characteristics that may be necessary for the provision of particular types of services.

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<sup>29</sup> Article 8 of the European Convention of Human Rights.

<sup>30</sup> Discussion points and initial policy guidelines on internet and network neutrality, ARCEP, May 2010.

However, as indicated above (Question 3), transparency and disclosure of traffic management practices to consumers cannot and should not be the sole remedy against traffic management practices. Instead, a regulatory approach is needed.

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

As demonstrated above, discriminatory traffic management on mobile internet is already a reality, with VoIP and peer-to-peer services being blocked or throttled by mobile networks, while VoIP functionality is removed from mobile handsets.

BEUC supports the establishment of net neutrality rules that will cover all types of internet access. It is essential that the internet remains open, irrespective of the specific technical characteristics of mobile internet<sup>31</sup>.

**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?

Content and application providers are using different methods in order to prioritise the delivery of their services and prevent the quality of their services being impacted by traffic congestion.

First of all, content providers may distribute their content through Content Delivery Networks (CDNs)<sup>32</sup> that allow for the delivery of content closer to the end-user and prevent the quality of service being affected by traffic congestion. Nevertheless, CDNs are not neutral; on the contrary they are commercial services, the availability and quality of which is only guaranteed to those that are willing to pay for them.

Another form of prioritisation consists of exclusive supply agreements between content providers and network operators. Such agreements result in integrated providers that can prioritise the delivery of their own content at the expense of that of their competitors. Exclusive agreements link both layers<sup>33</sup> of the internet by guaranteeing specific features to content service providers such as reliability rate, minimal latency<sup>34</sup>, jitter<sup>35</sup>, guaranteed bandwidth and security levels.

When the application of such features to one or some content service providers creates a gap in terms of service quality as compared to service providers non members of the exclusive agreement, there is the risk that the latter be excluded from a certain content market resulting in a violation of competition rules.

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<sup>31</sup> The Norwegian communications regulator (NPT) in the recent evaluation of the inter-industry guidelines on net neutrality noted that the guidelines were also applicable for mobile broadband.

<sup>32</sup> A content delivery network or content distribution network (CDN) is a system of computers containing copies of data, placed at various points in a network so as to maximize bandwidth for access to the data from clients throughout the network.

<sup>33</sup> The internet is structured under layers with specific functions. In the 'upper layer', where the exchange of content and the interaction of users occur, we find the content service providers and in the 'lower layer', the network operators who are in charged of the management of the infrastructure to provide access and transport the content provided by the content service providers.

<sup>34</sup> In a network, latency (a synonym for delay), is an expression of how much time it takes for a packet data to get from one designated point to another.

<sup>35</sup> Jitter is the time between packets arriving, caused by network congestion or route changes.

Such agreements have already attracted the attention of competition authorities. In France, the national competition authority examined the agreement between Orange and Apple for the marketing of iPhone, as well as the agreement between Canal+ and Orange for Pay-TV services.

In the first case, the Authority found that the agreement would constitute a threat to competition in the mobile market, while entailing the risk of further increasing operator switching costs for mobile customers<sup>36</sup>. The second case, the decision of the French Competition Authority is still pending. However, in its preliminary Opinion, it has expressed concerns as regards the need for clear rules relating to the duration of the agreements during which the exclusivity of content transport would be tolerated, also stressing the need for the establishment of a veritable *ex ante* regulation of the wholesale pay-TV market<sup>37</sup>.

Exclusive agreements may also affect consumers both in terms of increased costs and/or limited choice. Exclusive agreements must always comply with the existing rules of competition law. Furthermore, **consumers should always be able to access and choose content without any restrictions or limitations raised by exclusive agreements** between content service providers and network operators.

**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?

Please see BEUC's response to Question 7.

**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?

The impact of an exclusive agreement on competition cannot be anticipated but can only be assessed *ex post* on a case-by-case basis. Therefore, BEUC would suggest the adoption of a two-fold approach, consisting of *ex-ante* regulation and *ex-post* evaluation.

➤ Ex-ante regulation

The **ex-ante approach** should be led by a set of general rules applicable to every agreement in order to prevent the exclusion of other content providers from a certain market by preventing access to the network or providing disproportionate quality features among different content service providers for a same service.

BEUC is concerned about the effectiveness of self-regulatory approaches through the adoption of a voluntary agreement between stakeholders. Given the multi-layer impact of such agreements, not only on competitors but also on media pluralism, the culture diversity and the freedom of expression, the adoption of a voluntary code of

<sup>36</sup>. Decision n° 08-MC-01 17 December 2008 on practices in the distribution of iPhones.

<sup>37</sup> Opinion No 09-A-42 of 7 July 2009.

conduct cannot be promoted as the sole solution. Network neutrality must be more formally regulated to ensure the internet continues its prevalent status as vital and innovative, while enabling the communication between consumers, businesses and public entities.

**BEUC favours the adoption of a regulatory approach.** The European Union and Member States have a special interest to preserve these values and should therefore take the lead in defining and safeguarding the regulatory principles that are necessary to ensure the openness of the internet, cultural diversity and consumers' access to the content, services and applications of their choice.

An interesting model of **co-regulation** has been applied in Norway, where a set of guidelines on net neutrality have been negotiated by the Norwegian Post and Telecommunications Authority and widely accepted by both industry and consumer advocates<sup>38</sup>. Under the model of co-regulation, guidelines and principles could be defined at European and national level to be later developed by the stakeholders in the form of a code of conduct or any others voluntary rules. Nevertheless, BEUC would like to stress that the adoption of the guidelines in Norway has been possible given the fact that competition functions well in the Norwegian market and the absence of incidents of internet discrimination.

➤ Ex-post evaluation

The **ex-post approach** would require the involvement of competition authorities, and the strengthening of their role in controlling and imposing sanctions against exclusive agreements that are detrimental to competition and have a negative impact on consumers.

### 3. Market structure

**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?

As already stated (Question 2), BEUC is concerned about the emerging models of interconnection between Internet Service Providers that are situated at different layers of the internet architecture and the impact such models may have on traffic discrimination and competition. Large ISPs, including traditional incumbent operators have the market power to refuse to carry the traffic of smaller/competitive ISPs or to condition the carriage of this traffic on agreement to particular discriminatory policies. Such practices constitute discriminatory commercial behaviour at the level of the internet core and therefore need to be addressed by the competent authorities.

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<sup>38</sup> <http://www.npt.no/ikbViewer/Content/109604/Guidelines%20for%20network%20neutrality.pdf>

#### 4. Consumers – quality of service

**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?

BEUC welcomes the new telecom rules that provide National Regulatory Authorities the power to impose minimum quality of service powers on undertakings providing public communications services<sup>39</sup>. Considering that net neutrality interferences already occur in Europe (Question 1) and more are to be expected (Question 2), minimum quality of service needs to be safeguarded.

Quality of service guarantees are particularly important for real-time streaming multimedia applications such as voice over IP and IP-TV, since these often require fixed bit rate and are delay sensitive. Similarly, online games that allow for the simultaneous interaction of multiple players and/or use heavy graphics, as well as video streaming, peer to peer, video teleconferencing and safety-critical applications (as in the case of remote surgery) are examples of instances that require regulatory intervention.

Nevertheless, the promotion of guaranteed services raises a number of concerns from the consumer point of view. Firstly, ISPs may have incentives to degrade standard service in order to make consumers start paying for a premium service. Secondly, unless strict monitoring mechanisms are in place, consumers will have no knowledge as to whether they are getting what they have paid for<sup>40</sup>.

Moreover, the promotion of quality of service should not be considered as an alternative to investments in network capacity that ISPs need to undertake. BEUC considers further investment in network capacity as the most appropriate mechanism in safeguarding the openness of the internet and in promoting innovation. It is equally important to ensure that those consumers who cannot afford to subscribe to premium services are still able to access essential content and services online.

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

In order to ensure that the quality of service requirements correspond to the specificities of different services and applications, while satisfying consumers' needs and expectations, different solutions could be envisaged, including the development of standards using existing quality of service specifications for different services and applications, as well as the gathering of statistical data and technical analysis as the basis for the development of indicators.

The promotion of a co-regulatory approach, as suggested by the French Regulatory Authority (ARCEP), whereby operators will collaborate with consumer associations in setting minimum quality service parameters for internet access is worth exploring. However, regulatory authorities will have to establish a clear framework of rules and

<sup>39</sup> Article 22 of the revised Universal Service Directive 2002/22/EC.

<sup>40</sup> 'A nice way to get network quality of service?' article by Andy Oram summarising the research by Internet2 Quality of Service Working Group.

conditions, within which all parties can cooperate in the most efficient manner. A very specific timeline will also need to be defined in order to prevent delays in the definition of the minimum quality requirements.

The establishment of monitoring mechanisms is of paramount importance in order to ensure that ISPs comply with the minimum quality of service requirement. BEUC believes that it should be for the National Regulatory Authorities to collect information on ISPs practices on a regular basis and to intervene when necessary. This information should be accessible to consumers. For instance, a model of summary box information that would provide essential information to consumers in a standardised form with a link to more detailed terms and conditions would enable consumers to make informed choices and is worth exploring<sup>41</sup>. In addition, the information provided should be linked with the quality of experience, for example 10 GB will enable unlimited surfing, receiving 6000 emails, 5 hours of streaming and so on. The information summary box should be presented in plain language with the minimum of technical jargon.

Furthermore, information about the minimum quality of service should be clearly displayed in the consumers' contracts, allowing end-users to know the resources that have assigned to them and the performance they can expect.

**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?

Establishing a common framework at pan-European level is essential to ensure the achievement of an Internal Market for the Information Society and reflects the nature of the Internet as a borderless environment.

The risk of divergence in national approaches when implementing the new rules is significant and therefore calls for an **immediate intervention by the European Commission to provide guidance to Member States** with the aim of avoiding regulatory fragmentation across Europe. As a follow-up mechanism, the European Commission should closely assess the implementation by Member States and take further action if necessary.

Furthermore, BEUC **favours closer co-operation between national regulatory authorities**. The establishment of the European Regulators Group for electronic communications networks (BEREC) is a positive step in ensuring more consistency and coordination.

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

Consumers must always receive fair, accurate and complete information on ISPs' policies and procedures regarding network management and how these may affect access to content, services, application, or the ability to attach particular devices<sup>42</sup>.

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<sup>41</sup> Such a model has been used for financial services in the UK.

<sup>42</sup> TACD Resolution on Network Neutrality, April 2010.

BEUC is concerned that ISPs currently fail to satisfy the transparency requirements regarding their traffic management policies. In addition to blocking access to services and/or applications without informing the end-users<sup>43</sup>, ISPs do not provide accurate and complete information to consumers. For instance, offers for internet subscriptions often advertise “unlimited internet access” flat rates, whereas in reality a number of applications are blocked. Likewise, ISPs may impose broadband caps or subject usage to a “fair usage policy”<sup>44</sup> which is contrary to consumers’ expectations of unlimited access. Furthermore, ISPs may inform consumers about the usage allowance (for instance 10MGB), but no explanation of what this means in terms of user experience is provided.

In addition to fairness concerns, consumers are not to be expected to understand technical terms included in the terms and conditions of the contracts. As demonstrated by Ofcom, terms such as “contention ratio” or “fair usage policy” are not understandable by consumers<sup>45</sup>.

BEUC welcomes the increased transparency requirements of the new EU telecom rules. The new rules strengthen the information obligations to which electronic communications operators are subjected in their service contracts and when any change is made to the terms and conditions after the consumer has signed the contract<sup>46</sup>.

Nevertheless, BEUC believes that the transparency provisions should be further strengthened and specified, in light of their implementation by Member States. Consumers must receive clear and accurate information about:

- Traffic management practices, the reasons and the circumstances that might justify their introduction, as well as the type of traffic to be affected and the impact on internet experience, including in terms of speed;
- The list of services, applications and content that cannot be accessed via the retail offers, especially for mobile networks;
- The capacity and quality of the internet connection;
- The application of a minimum quality of service for applications and services;
- The application of ‘fair usage’ policies;
- Pricing information for traffic management practices, such as monthly bit caps limits and the costs for exceeding them;
- Real-time information about their consumption and notification when close to exceeding the cap;
- Any change in their traffic management policies and the impact on consumers’ experience;
- Contact details for technical support and complaint handling mechanisms;
- Contact details of the regulatory authorities.

It is equally important that ISPs publish the levels of quality of service they provide to end-users and that regulatory authorities develop mechanisms that will provide reliable and comparable information to consumers regarding the services provided by different providers, thus allowing them to make an informed purchasing choice.

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<sup>43</sup> In France, Neuf Telecom had decided unilaterally to block the access of its customers to Dailymotion.

<sup>44</sup> A fair usage policy will usually request that between the peak hours, end-users do not use their internet connection for any data intensive tasks.

<sup>45</sup> [http://www.ofcom.org.uk/research/telecoms/reports/broadband\\_speeds/broadband\\_speeds/annex\\_6.pdf](http://www.ofcom.org.uk/research/telecoms/reports/broadband_speeds/broadband_speeds/annex_6.pdf)

<sup>46</sup> Articles 20 and 21 of the amended Universal Service Directive 2002/22/EC.

## 5. The political, cultural and social dimension

**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?

Digital information technologies and the emergence of new services, although beneficial to consumers, also represent a major challenge to consumers' fundamental rights of privacy and protection of personal data. The internet has evolved into a pervasive platform that is used for a variety of purposes, resulting in consumers' privacy and protection of personal data being at risk<sup>47</sup>, while measures for the enforcement of Intellectual Property Rights may violate consumers' fundamental rights and freedoms.

BEUC is particularly concerned about ongoing policy discussions at national, European and multi-lateral level that aim to strengthen enforcement measures for IPR infringements. National governments, under the pressure of rights holders and on the basis of non-reliable and non-independent data, are ready to compromise users' fundamental rights. Enforcement measures that fail to distinguish between criminal entities running for profit and individual consumers, and foresee the cut-off of individual users from the internet due to an alleged violation of copyright, are disproportionate and raise serious doubts as to its compliance with the European Charter of Human Rights<sup>48</sup> and the interpretation of the European Court of Justice<sup>49</sup>.

The Anti-Counterfeiting Trade Agreement (ACTA), currently under negotiation, will significantly change the nature and structure of the internet. Internet Service Providers will be required to adopt preventive measures and use filters in order to monitor and eventually block content and even disconnect users from the internet<sup>50</sup>. The provisions of ACTA are in direct conflict with the Community *acquis*, particularly the e-commerce Directive. In addition, the prevention and termination of IPR infringements will be subject to a decision by an administrative authority. Such a provision jeopardises users' fundamental rights to a fair trial and the presumption of innocence. Judicial authorities are the only ones that should have the competence for applying such measures in respect of the proportionality principle.

<sup>47</sup> See BEUC Discussion Paper on data collection, targeting and profiling of consumers online, Reference X/010/2010 – 15/02/2010, as well as BEUC response to the consultation on the revision of the EU general data protection framework, Reference X/106/2009 – 31/12/2009.

<sup>48</sup> Charter of Fundamental Rights of the European Union, C 364/1, 18.12.2000.

<sup>49</sup> Case C-275/06 *Productores de Música de España v Telefónica de España SAU* (29 January 2008)

<sup>50</sup> Under Article 2.18, Option 1 reads "*the application of the provisions of subparagraph (a) will be conditioned on meeting the following requirements: (i) an online service provider adopting and reasonably implementing a policy to address the unauthorized storage or transmission of materials protected by copyright or related rights [ except that no Party may condition the limitations in subparagraph (a) on the online service provider's monitoring its services or affirmatively seeking facts indicating that infringing activity is occurring.*" Option 2 reads "*Paragraph 3(a) shall not affect the possibility for a judicial or administrative authority, in accordance with the Parties legal system, requiring the service provider to terminate or prevent an infringement, nor does it affect the possibility of the parties establishing procedures governing the removal or disabling of access to information. The Parties shall not impose a general monitoring requirement on providers when acting in accordance with this paragraph*".

**IPR Enforcement measures of copyright need to respect fundamental rights, such as the right to the presumption of innocence, the right to a fair trial, the right to privacy and the right to the confidentiality of communications.**

Instead of focusing on the adoption of unfair and disproportionate enforcement measures, the **European Union should adopt a coherent and forward looking copyright agenda.**

With countless new opportunities arising from the ways content is accessed and distributed, the need to rethink the European legal framework has arisen with the aim of achieving a fair balance between the different stakeholders, promoting innovation and cultural diversity. Copyright rules must evolve as the technologies that are used to create and distribute them evolve.

However, the current copyright framework fails to keep pace with rapid digital developments. Digital technologies have fundamentally transformed and have called into question the 'traditional' distribution systems of the content and information industries while laying bare their inefficiency and incapacity to adapt to the challenges of the Digital Era.

Copyright law should aim to establish a fair balance by recognising both the interests of creators and the interests of consumers. Just as copyright holders own some core rights and interests, consumers also hold a set of clear rights to use and disseminate protected works. A dynamically developing market requires a flexible legal framework that allows new and socially valuable uses to develop without the copyright owners' permission as long as they do not affect the normal use of copyright works.

The establishment of a harmonised, consumer-friendly and forward looking copyright framework is needed with a view to create more certainty and remove unrealistic constraints on the use of creative content by consumers<sup>51</sup>.

Access to knowledge can become the 5th freedom of the EU; but the EU needs to demonstrate the political will and determination to make the necessary reforms and create a copyright regime that will be fit for the 21st century, by allowing consumer access to information and knowledge. Knowledge cannot and should not be locked in.

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<sup>51</sup> For further information, please see BEUC's response to the Reflection Paper on creative content online, Reference X/003/2010 - 05/01/10.