

Public consultation on specific aspects of transparency, traffic management and switching in an Open Internet

Questionnaire

General information

Question 1:

I answer as:

-single choice reply-(**compulsory**)

h) Other

Please specify: -open reply-(**compulsory**)

Umbrella association of privacy and civil rights organisations.

Question 2:

a) Please provide the full name and a brief description of your organisation and describe your interest in open Internet issues.

-open reply-(**compulsory**)

European Digital Rights was founded in June 2002. Currently 32 privacy and civil rights organisations have EDRI membership. They are based or have offices in 20 different countries in Europe. Members of European Digital Rights have joined forces to defend civil rights in the information society. The need for cooperation among organizations active in Europe is increasing as more regulation regarding the internet, copyright and privacy is originating from European institutions, or from International institutions with strong impact in Europe.

b) If your organisation is registered in the Transparency Register, please indicate your Register ID number. -open reply-(**optional**)

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c) Please provide the postal and e-mail address of your organisation and, if you wish, the name of a contact person (including telephone number and e-mail address) for any questions on your contribution. -open reply-(**compulsory**)

European Digital Rights (EDRi) 20 Rue Belliard 1040 Bruxelles Belgium Tel: +32 2 274 25 70 Email: brussels@edri.org

d) In which Member State(s) are you established and where do you perform your activity?

-open reply-(**compulsory**)

Belgium

Does your answer to this question contain confidential information? -single choice reply-(**compulsory**)

No

1. Traffic management

1.1. Traffic management and differentiation

Question 3:

Please explain **briefly** which traffic management techniques are usually applied by network operators or ISPs and how they are technically implemented.

-open reply-(**optional**)

The opening paragraph of your paragraph 1 suggests a clear bias on the part of the Commission. You start by saying that "traffic management" is "a wide range of technical practices" and conclude that they can all be treated as if they were just one phenomenon, which is "a" legitimate tool. If the Commission believes that anti-competitive traffic management is functionally identical to undertaking an urgent security measure then it is, quite simply, not competent to be running this consultation. One of the most enduring features of the internet's architecture is the reliance on TCP's "flow-rate" fairness. The Transmission Control Protocol (TCP) is one of the key internet protocols and has traditionally been responsible for managing end-to-end connections across the networks. Since the very beginnings of

the internet and still today, the TCP remains one of the most important congestion management mechanisms. Nowadays, diverse traffic management techniques have developed, such as volume capping, usage-based pricing, application-agnostic, application-specific management, and Deep Packet Inspection. All these techniques represent significant deviations from TCP fairness in terms of how resources are allocated during periods of congestion. The use of some of these techniques raises serious concerns about the potential for abuse of market power, for threats to privacy and the openness and neutrality of the internet. These, in turn, raise doubts about regulators' ability to maintain the openness that is the core of the Internet's economic and social success. Operators currently have the means and the motive to exercise far-reaching control over the internet traffic they transport. They also have the technology to make a distinction between various types of traffic is becoming increasingly sophisticated, thus giving ISPs the means to throttle and block internet traffic, often in ways which are very difficult to detect. As unequivocally demonstrated by BEREC's investigations and subsequent report (BoR 12 30): European network operators are indeed implementing blocking, degrading and the throttling of services, applications and content. This has also been highlighted in a map which visualises net neutrality violations and uses data from Glasnost tests: <http://netneutralitymap.org/>. The Commission's reaction of obfuscation, delay and distraction is incomprehensible faced with such abuses. Therefore, we recommend that rules on net neutrality should be based on the following major six principles: 1. The Internet must be kept and open. Reachability between all end points connected to the Internet, without any form of restriction must be maintained. 2. All forms of discriminatory traffic management, such as blocking or throttling should be prohibited. 3. Traffic management should only be allowed as narrowly tailored deviations from the rule. This must be either technically necessary or to address a transient network management problem which cannot otherwise be addressed. 4. Use of deep packet inspection (and re-use of associated data) should be reviewed by national data protection regulators to assess compliance with the EU's data protection and fundamental rights framework. By default, only header information should be use for traffic management. 5. Accessible, complete information on traffic management practices and justifications must be published. 6. Non-neutral treatment of traffic for "voluntary" law enforcement by intermediaries' purposes must be prohibited unless there is a legal basis in the country where the restriction is being implemented. Failure to require this would be a breach of Article 52 of the Charter of Fundamental Rights.

Does your answer to this question contain confidential information? -single choice reply- (compulsory)	No
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Question 4:

Congestion management is one of the reasons for applying traffic management measures.

a) Please describe **briefly** how congestion management normally works.

-open reply-(optional)

One of the most enduring features of the internet 's architecture is the reliance on TCP's "flow-rate" fairness. The Transmission Control Protocol (TCP) TCP-based congestion management moderates individual flows of traffic and is one of the key internet protocols and has traditionally been responsible for managing end-to-end connections across the networks. Since the very beginnings of the internet and still today, it is still the principal mechanism for managing congestion on the best-effort Internet over short time periods.

b) If possible, please provide a **definition** and **examples** of genuine congestion management measures, i.e. measures which are **necessary** to avoid or tackle network congestion, as opposed to measures which may be called congestion management but actually pursue other purposes.

-open reply-(optional)

Legitimate network management may take the form of blocking content harmful to the network, such as viruses and denial of service attacks. Legitimate network management is limited to the purposes of maintaining the technical quality of the network, preventing abuse, compliance with legal requirements, and acting in accordance with users' wishes. Measures that pursue other purposes are for example the blocking and throttling for anti-competitive reasons. Operators are increasingly (vertically) integrated, also offering television, telephony and internet (content) services. They consequently have a motive to block or degrade internet traffic which directly competes with the services they are offering. In addition, operators have an incentive to block indirect competition, for example by charging money from one service provider, promising to degrade the traffic of a downstream competitor. Traffic management measures that pursue other purposes than the technical maintenance of networks should be clearly prohibited since they are socially harmful, undermine the functioning of the online marketplace and lead to undermine citizens' fundamental rights.

Does your answer to this question (a or b) contain confidential information? -single choice reply-(compulsory)	No
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Question 5:	problematic
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Please provide your views on the following ways/situations where traffic management may be applied by ISPs.

Are traffic management measures:

a) applied to deliver managed services (e.g. to ensure a guaranteed quality of service for a specific content/applications)

-single choice reply-(optional)

Please explain your response

-open reply-(compulsory)

In the open and neutral internet, citizens should have the right to attach devices of their choice and to provide or access content, services and applications of their choice. Moreover, in a neutral and open internet, citizens have the ability to use these rights without discrimination according to source, destination, content, type of content, service and application. These rights mean that operators are prohibited to prioritise, block, throttle or discriminate against certain kinds of data, content, services, applications or devices. Network management can only be justified with technical intentions for preservation of network stability. As a consequence, traffic management measures to deliver managed services is are problematic and a threat to the openness and neutrality of the internet, to innovation and competition as well as to citizens' exercise of fundamental freedoms and rights. It should be remembered that the Internet has been vastly successful in the absence of guaranteed QoS. Therefore, the push from certain parts of the telecommunications industry on this point is, broadly, seeking to solve a problem that does not exist... at a price.

b) taking into account the sensitivity of the service to delay or packet loss

problematic

-single choice reply-(optional)

Please explain your response

-open reply-(compulsory)

Operators need to ensure the quality of the broadband or mobile service, by eliminating delay, jitter or other technical aberrations. Regarding services that are bandwidth intensive, this means that a carrier concerned about bandwidth consumption would need to invest in bandwidth usage, instead of in blocking or throttling techniques of individual applications. Users interested in using bandwidth intensive services would then simply need to choose a service provider that can offer more bandwidth – and not be sold a sub-standard, restricted service in place of Internet access.

c) used to implement or manage compliance with the explicit contractual restrictions (e.g. on P2P or VoIP) of the Internet access product accepted by the user

problematic

-single choice reply-(optional)

Please explain your response

-open reply-(compulsory)

Explicit contractual restrictions go against Recital 28, USD and Article 8(4)(g) FD which recognises that NRAs should promote the interests of citizens by, inter alia, “promoting the ability of end-users to access and distribute information or run applications and services of their choice”. Such violations of the open and neutral internet on the basis of such contractual restrictions are frequent throughout Europe, since the USD does not explicitly prohibit such contract terms. The telecommunications industry has a long and miserable history of relying on obscure contract terms and questionable claims in order to compete in a market that appears to be allergic to competition. As an example, just one major UK internet service provider has had 25 different advertisements banned in the past year for being misleading in the past 18 months. What were the users explicitly accepting before the regulators caught up with the ISP in those cases – what was offered or what was delivered? See <http://www.bbc.co.uk/news/uk-19911432>

d) targeting types/classes of traffic contributing most to congestion

problematic

-single choice reply-(optional)

Please explain your response

-open reply-(compulsory)

Operators need to ensure the quality of the broadband or mobile service, by eliminating delay, jitter or other technical aberrations. Regarding services that are bandwidth intensive, this means that a carrier concerned about bandwidth consumption would need to invest in bandwidth usage, instead of in blocking or throttling techniques of individual applications. Users interested in using bandwidth intensive services would then simply need to buy more bandwidth – and not permission to use a given application.

e) targeting heavy users whose use is excessive to the extent that it impacts on other users
-single choice reply-(optional) **problematic**

Please explain your response
-open reply-(compulsory)

In an open and neutral internet, citizens should at all times be able to independently choose which applications they want to use and what size of bandwidth they want to have access to - without interference from network providers and without discrimination according to source, destination, content, type of content, service and application. The internet's high capacity to contribute to innovation and growth is based on the non-discrimination of its participants. Differentiation between different types of uses is traditionally managed by offering different access volumes and not within the networks. Service providers that want to impose service-agnostic volume limits are already free to do so.

f) applied during busy times and places, when and where congestion occurs
-single choice reply-(optional) **problematic**

Please explain your response
-open reply-(compulsory)

Illegitimate traffic management measures should be prohibited except in truly exceptional circumstances in order to ensure the technical maintenance of networks. If internet providers should be required to only offer services that they can actually deliver.

g) affecting all applications/content providers in the same way (application-agnostic)
-single choice reply-(optional) **appropriate**

Please explain your response
-open reply-(compulsory)

As long as it is guaranteed that all traffic is treated equally, regardless of sender, recipient and content, application-agnostic network management can be considered as unproblematic. Moreover, if this is coupled with the principle of user-choice, it gives network operators the tools they need to maintain the quality of the Internet experience for all users, even during times of congestion, while preserving the application-blindness of the network.

h) affecting (similar) applications/content providers of the same category in the same way
-single choice reply-(optional) **problematic**

Please explain your response
-open reply-(compulsory)

This question suggests unawareness of the functioning of the telecoms market on the part of the Commission. Treating applications of the same category in the same way can have significant anti-competitive effects. This is most obvious in the way that mobile operators have traditionally treated all VoIP providers equally badly, in order to protect their own GSM voice products. In the open and neutral internet, citizens should have the right to attach devices of their choice and to provide or access content, services and applications of their choice. Moreover, citizens should have the ability to use these rights without discrimination according to source, destination, content, type of content, service and application. Therefore, the differentiation between applications/content providers of the same category in the same way should be equally banned. Discrimination among categories of applications will often harm applications in the categories that receive the “worse” treatment, even if the different categories are not alike. Moreover, such treatment negatively affects several of the factors that have fostered application innovation in the past. It removes the application-blindness of the network and gives operators discretion to decide which applications are of the same category. As a consequence this would allow operators to distort competition among applications or categories of applications/content providers.

i) used, without other grounds, against services **problematic**

competing with the ISP's own services -single choice reply-(optional)	
Please explain your response -open reply-(compulsory)	
It is unclear, apart from feeling the need to ask enough questions to make this seem like a legitimate consultation exercise, why the Commission feels the need to ask this question. As explained above, discriminatory measures for anti-competitive purposes are highly problematic and should, quite obviously, be prohibited.	
j) implemented at the full discretion of the ISP -single choice reply-(optional)	problematic
Please explain your response -open reply-(compulsory)	
Operators currently have the means and the motive to exercise far-reaching control over the internet traffic they transport. They have the technology to make a distinction between various types of traffic which is becoming increasingly sophisticated, thus giving operators the means to throttle and block internet traffic, often in ways which are very difficult to detect.	
k) other differentiation criteria (please specify) -open reply-(optional)	
Please explain your response. -open reply-(compulsory)	
As demonstrated by BEREC's investigations and subsequent report (BoR 12 30), the respectmynet.eu platform, the results from the Glasnost tests (http://netneutralitymap.org/): European network operators are indeed implementing blocking, degrading and the throttling of services, applications and content. This clearly shows that we need further regulatory measures in order to ensure the open and neutral internet in Europe.	
Does your answer to this question (a, b, c, d, e, f, g, h, i, j or k) contain confidential information? -single choice reply-(compulsory)	No
Question 6: The use of managed services may affect the Internet access service in some cases, due to the sharing of access resources. a) Please explain the impact of managed services on the standard Internet access service ("best effort") in terms of available bandwidth and quality of service. -open reply-(optional)	
The impact of managed services on shared resources is, by definition, unforeseen. It adds hidden and heterogeneous complexity far beyond the traditional and well established congestion control mechanisms. These mechanisms are published and documented as open standards. An open and non-discriminatory standardisation process perfectly takes the interests of all stakeholders into account while allowing implementation by anyone. A continuous process of development of new open internet standards helps addressing latency, bandwidth and quality of service issues in an agile way. This has been demonstrated by SPDY, just to name one very good example (see http://tools.ietf.org/html/draft-mbelshe-httpbis-spd-00 and http://dev.chromium.org/spdy/spdy-whitepaper). In order to promote innovation and a strictly non-discriminatory solution, this problem should therefore be addressed from a technical point of view by means of open internet standards instead of by additional non-transparent contractual overhead.	
b) Please explain whether it is possible to offer separate capacity for managed services and the standard Internet access service. If yes, please provide information on the circumstances (costs, technologies) of separating them. -open reply-(optional)	
Does your answer to this question (a or b) contain confidential information? -single choice reply-(compulsory)	No

Question 7:

a) Please give examples of "new business models" which could be developed on the basis of managed services by

(i) Network operators/ISPs:

-open reply-(optional)

(ii) Content providers (on the basis of agreements with ISPs):

-open reply-(optional)

b) How important are these innovative business models likely to become in the next three years? Please substantiate your view by means of available forecasts or studies.

-open reply-(optional)

c) What would be the expected benefits in terms of innovation and investment through new businesses (content or applications) benefitting from guaranteed levels of quality of delivery through managed services?

-open reply-(optional)

Does your answer to this question (a, b or c) contain confidential information? -single choice reply-(compulsory)

No

Question 8:

What are likely positive and negative effects of certain traffic management practices on the Internet ecosystem, in particular on innovation and investment, by (i) network operators/ISPs and (ii) content providers? Please explain your view and, if appropriate, distinguish between different traffic management practices.

-open reply-(optional)

The end-to-end principle is one of the central design principles of the internet. It has proved to be central to innovation, fundamental freedoms and competition. By contrast, a network which places a significant amount of application-specific functionality in the network's core, places primarily the network owners and internet access providers in a position to innovate, instead of its many users. As we have already argued in previous submissions to public consultations, transparency obligations, competition and minimum guarantees cannot safeguard an open internet. Waiting is not an option, as the examples of local loop unbundling and mobile roaming demonstrate. Narrowly-tailored regulatory EU measures should therefore safeguard the open internet and to allow it to continue to foster application innovation, preserve user choice or foster democratic discourse. Non-essential traffic management will have the following impacts: 1. Network operators/ISPs – will have less motivation to invest in their networks, focussing instead on the provision of closed services, either their own or from business partners. These operators have experience in minimising churn and will therefore work to reduce the need for innovation. Ultimately, the tendency will be towards the market structure of Minitel rather than the open Internet. 2. Content (and application... which are curiously not mentioned in the question) providers currently have a global market for any service they invent. In a restricted online network environment, this market will be decimated.

Does your answer to this question contain confidential information? -single choice reply-(compulsory)

No

1.2 Traffic management and privacy issues

Question 9:

It appears that the implementation of traffic management measures requires ISPs to analyse certain information about individual data packets, for instance by deep packet inspection (DPI) techniques. Please explain which type of information needs to be read by ISPs to implement the different traffic management measures. In which layer can this information normally be found?

-open reply-(optional)

The fact that the Commission is asking this raises concerns about its competence in this policy area. Internet routers generally only

analyse Layer 3 data to determine which network path a packet gets relayed down to. This layer handles the logical addressing and routing of data, based on soft-defined addresses. Internet Protocol headers are the Layer 3 data in a packet. The layer that is mainly used in deep packet inspection techniques to differentiate between applications, and therefore to discriminate, is Layer 7, the Application Layer. However, it should be noted that it is also possible that such inspection techniques also use the IP-Layer in order to recognise patterns for congestion management, such as Skype or BitTorrent (See for instance: Peter Renals and Grant A. Jacoby. 2009. Blocking Skype through Deep Packet Inspection. Paper read at 42nd International Conference on System Sciences, Hawaii).

Does your answer to this question contain confidential information? -single choice reply- (compulsory) No

Question 10:

a) Are there any privacy risks arising from the use of DPI for traffic management purposes, and, if so, what are the implications for transparency and consumer protection?

-open reply-(optional)

The fact that the Commission is asking this raises concerns about its competence in this policy area. There are a number of privacy risks arising from the use of DPI for traffic management purposes. In its opinion on net neutrality, the European Data Protection Supervisor (EDPS) warns that deep packet inspection techniques «based on IP headers and more particularly those based on packet inspection involve the monitoring and filtering of these data and have serious implications in terms of privacy and data protection. They can also be in conflict with the right to confidentiality of communications. » Moreover, he states that “looking into individuals' communications has, in itself, serious privacy and data protection implications. ” DPI enables a level of surveillance and monitoring of networks that is dangerous both for human rights as well as the neutral architecture of the internet. Technology that enables the use of DPI has recently been used in repressive regimes in order to allow network operators to inspect, track and target content from users of the internet and mobile phones. For instance, the Boeing-owned firm Narus provided Egypt Telecom with DPI equipment during the uprisings in 2011.

b) Are there alternative techniques for traffic management that do not involve deep packet inspection? Please provide examples and explain your response. Please compare those alternative techniques with deep packet inspection, in particular in terms of their effectiveness, potential impact on privacy and costs for operators.

-open reply-(optional)

As explained in our answers to 9 and 10a. Deep Packet Inspection poses serious threats to fundamental rights and to the end-to-end principle of the internet. DPI is therefore not a necessary congestion management technique.

Does your answer to this question (a or b) contain confidential information? -single choice reply-(compulsory) No

Question 11:

Where the user's consent is required for traffic management measures, particularly where such measures might entail access to and analysis of certain personal data by ISPs, please explain how (e.g. in which format) this consent should be sought by the ISP, what prior information needs to be provided by the ISP to the user, and how the user consent should be given, in order to optimise user awareness and user convenience.

-open reply-(optional)

Traffic management measures should only be applied to pursue the purpose of technical maintenance of networks without discrimination according to source, destination, content, type of content, service and application. As a consequence, there should be no need to entail access to and analysis of certain personal data.

Does your answer to this question contain confidential information? -single choice reply- (compulsory) No

2. Transparency and switching (consumer choice)

2.1 Transparency and general characteristics of the Internet access offer

Question 12:

In order to allow consumers to make informed choices, on the basis of clear, meaningful, and comparable information, which elements should be communicated to consumers?

- Elements related to traffic management practices:

a) Contractual restrictions (blocking, throttling, other restrictions on application use)

-single choice reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

This question is illegitimate, as it assumes that it is possible and appropriate for consumers to be given clear, meaningful and comparable information to choose whether to accept clearly unacceptable practices.

b) Traffic management policy applied to prioritise certain traffic in specific circumstances

-single choice reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

This question is illegitimate because it is too vague.

c) Whether and to what extent managed services may affect the quality of the best effort Internet (e.g. the possibility of the Internet connection being affected when watching IP-TV or when using other managed services)

-multiple choices reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

This question is illegitimate because it seems to be asking to what extent operators should have the opportunity to coerce their users into managed services by restricting their access to services such as IP-TV

d) Other restrictions, please specify:

-open reply-(optional)

e) Data allowances (caps), download limits

important

-single choice reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

How could it not be important to tell consumers about data allowance and download limits?

f) What these data allowances enable customers to do in practice (download x hours of video; upload y photos etc.)

-single choice reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

This is an absurd question. Is the Commission really of the view that consumers are going to read through pages of terms of service about the number of photos (is there a standardised size of photo that the Commission is aware of), video (is there a standard video size, that means that all video will)... and presumably e-mails, VoIP conversations, instant messaging, news websites... etc that they will be

allowed to access every month?

Elements related to speed and quality:

a) Average speed, typical speed ranges and speed at peak times (upload and download)

-multiple choices reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

The Commission should already have done the research that would show that these average values would be of very little use.

b) Respect of guaranteed minimum speed (if applicable)

-multiple choices reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

c) What these speeds allow customers to do in practice (video-streaming, audio-download, video-conferences etc.)

-single choice reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

d) Latency/network responsiveness (a measure of traffic delay) and which services would be affected thereby (e.g. certain applications such as IP-TV or videoconferencing would be more seriously impacted by higher traffic delays in the network of the provider)

-multiple choices reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

e) Jitter (a measure of the variability over time of latency) and which services would be affected thereby (e.g. echoing in VoIP calls)

-multiple choices reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

f) Packet loss rate (share of packets lost in the network) and which services would be affected thereby (e.g. VoIP)

-multiple choices reply-(optional)

Please provide reasons for your answer:

-open reply-(optional)

g) Reliability of the service (network accessibility and

retainability), i.e. measure for successful start and completion of data sessions -multiple choices reply-(optional)	
Please provide reasons for your answer: -open reply-(optional)	
h) Quality parameters for (mobile) voice telephony (call setup success rate, dropped calls, speech quality, other) -multiple choices reply-(optional)	
Please provide reasons for your answer: -open reply-(optional)	
i) Other, please specify: -open reply-(optional)	
<p>In the open and neutral internet, citizens should have the right to attach devices of their choice and to provide or access content, services and applications of their choice. Moreover, in a neutral and open internet, citizens have the ability to use these rights without discrimination according to source, destination, content, type of content, service and application. These rights mean that operators are prohibited to prioritise, block, throttle or discriminate against certain kinds of data, content, services, applications or devices. Network management can only be justified with technical intentions for preservation of network stability. In its response to the BEREC consultation on net neutrality and transparency, we have explained that transparency on service restrictions will lead neither to sufficient protection nor to empowerment of end users. In the light of numerous transparent and non-transparent violations of the principle of net neutrality, we expressed our deep concerns about the Guidelines' apparent acceptance of restricted offers that provide limited access to the Internet. This questionnaire seems to take a similar approach. However, relying solely on transparency requirements and on market forces will lead to the development of a multiple-tier Internet, to the detriment of citizens' rights and the competitive online marketplace. Few would be able to access premium managed services and many would be left in the slow lane with a low quality and restricted access to the Internet.</p>	
Does your answer to question 12 (or to any of its sub-questions) contain confidential information? -single choice reply-(compulsory)	No
Question 13: Some ISPs currently apply 'fair use policies', which give them wide discretion to apply restrictions on traffic generated by users whose usage they consider excessive. Do you consider that, in case of contractual restrictions of data consumption, quantified data allowances (e.g. monthly caps of x MB or GB) are more transparent for consumers than discretionary fair use clauses? -single choice reply-(optional)	Yes
Please provide reasons for your answer. -open reply-(compulsory)	
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Does your answer to this question contain confidential information? -single choice reply-(compulsory)	No
Question 14:	before signing the contract - regularly updated during the contract

<p>a) When should the elements of information referred to in question 12 be provided to the consumer by the ISP? -multiple choices reply-(optional)</p>	<p>period - during the contract period if changes occur - other</p>
<p>Please specify: -open reply-(compulsory)</p>	
<p>This should be only applicable to traffic management measures in exceptional circumstances, measures such as 12 a) or 12 b) for instance do not respect the openness and neutrality of the internet and should be prohibited. The French regulator ARCEP recommends that “the traffic management practices that ISPs employ to ensure Internet access remain exceptional and comply with the general principles of relevance, proportionality, efficiency, transparency and non discrimination.” This questionnaire however is not based on the same premise – that illegitimate traffic management should be prohibited except in truly exceptional circumstances.</p>	
<p>b) Which format (e.g. contract, general terms and conditions, separate and specific information, other (please specify)) do you consider appropriate to communicate this information to consumers? -open reply-(optional)</p>	
<p>Does your answer to this question contain confidential information? -single choice reply-(compulsory)</p>	<p>No</p>
<p>Question 15: What would be the (additional) costs for ISPs to (i) collect the various data mentioned in the table in question 12 (e.g. measuring of average speed, jitter, delay etc.) and (ii) communicate the information to their customers. Please provide an estimate of the above costs for your own company or an ISP of your choice explaining your assumptions and methodology, and details about the technical tools used to collect the various data. If possible, please provide a breakdown of the costs. -open reply-(optional)</p>	
<p>Does your answer to this question contain confidential information? -single choice reply-(compulsory)</p>	<p>No</p>
<p>Question 16: a) In order to promote transparency and consumer choice, do you consider it necessary that comparable data on the Internet access provided by ISPs is collected and published by NRAs or another independent organisation? -single choice reply-(optional)</p>	<p>Yes</p>
<p>Please explain your response. -open reply-(compulsory)</p>	
<p>We consider it necessary that comparable data on the Internet access provided by ISPs is collected and published by NRAs or other independent organisations.</p>	
<p>Do you think this information should be broken down by geographic areas or different data plans? -open reply-(optional)</p>	
<p>b) What are the advantages and corresponding costs of this data collection and publication being undertaken by NRAs or by another type of organisation (please specify which one). Please provide an estimate at EU-level or for an EU Member State of your choice. -open reply-(optional)</p>	
<p>Does your answer to this question (a or b) contain confidential information? -single choice</p>	<p>No</p>

reply-(compulsory)	
Question 17: a) Do you consider it necessary to regulate the labelling as "Internet access" of subscriptions that restrict access to some Internet services, content or applications? -single choice reply-(optional)	Yes
Please reason your answer. -open reply-(compulsory)	
Restricted access to selected applications, services and content should never be labelled "Internet access".	
b) If yes, which restrictions would be acceptable before a subscription could no longer be marketed, without qualification, as an "Internet access" product? -open reply-(optional)	
c) What would be the consequences (including the cost) for ISPs if they were not allowed to market as 'Internet access' an offer with certain restrictions, or if such marketing was subject to mandatory qualification? Please provide quantification for your own company or an ISP of your choice explaining your assumptions and methodology. -open reply-(optional)	
Does your answer to this question (a, b or c) contain confidential information? -single choice reply-(compulsory)	No
<h2><u>2.2 Switching</u></h2>	
Question 18: a) Please explain what barriers to switching ISPs still exist (if any) and how they can be overcome. Please mention in your reply all direct and indirect factors dissuading consumers from switching (e.g. obstacles linked to the terminal equipment, burden of proof regarding a possible breach of contract, etc.) -open reply-(optional)	
b) How should an ISP inform consumers of changes to their packages? -open reply-(optional)	
c) What actions by an ISP would constitute a breach of contract or modifications to the contractual conditions which would enable a consumer to be released from a contract? -open reply-(optional)	
d) Should customers be able to easily opt out from certain contractual restrictions (up to a completely unrestricted offer) by the same operator? -single choice reply-(optional)	
Please explain your response. -open reply-(optional)	
e) Do you think that a customer should be allowed to switch to another operator within a reduced contract	

<p>termination period in case his/her current operator does <u>not</u> at all offer an <u>unrestricted Internet access</u> product or does not allow switching to such unrestricted offer?</p> <p>-single choice reply-(optional)</p>	
<p>Does your answer to this question (a, b, c, d or e) contain confidential information? -single choice reply-(compulsory)</p>	No
<p>Question 19: While there may be valid (technical) reasons why consumers do not always get the advertised service speed or quality, should there be a limit on the discrepancy between advertised and actual service parameters (e.g. speed)?</p> <p>-single choice reply-(optional)</p>	
<p>Does your answer to this question contain confidential information? -single choice reply-(compulsory)</p>	No
<p>Question 20: Pursuant to Article 30 (6) of the Universal Service Directive conditions and procedures for contract termination shall not act as a disincentive against changing service providers. How could changing of operators be facilitated? Please provide examples and explain your response.</p> <p>-open reply-(optional)</p>	
<p>Does your answer to this question contain confidential information? -single choice reply-(compulsory)</p>	No
<p>Question 21: How could the transparency of bundles (packages including telephony, Internet, TV) be improved for consumers and how could switching be facilitated in the presence of bundles?</p> <p>-open reply-(optional)</p>	
<p>Does your answer to this question contain confidential information? -single choice reply-(compulsory)</p>	No
<p>Question 22: a) How important would be the benefits for end-users of improved transparency and facilitated switching?</p> <p>-single choice reply-(optional)</p>	slightly important
<p>Please explain your response.</p> <p>-open reply-(compulsory)</p>	
<p>As explained in our response to BEREC's consultation on net neutrality and transparency, it is false to assume that transparency and switching are major tools to achieve the regulatory objective of maintaining an open and competitive Internet. Transparency policies do not provide all the necessary guarantees for a neutral and competitive Internet, which implies the necessity to support immediate regulation and to promote net neutrality as an objective for regulatory authorities. Full transparency should only be necessary in the case of legitimate traffic management in order to deal with temporary, unforeseeable and exceptional congestion or network security threats. Acceptance of other traffic management will damage free speech, competition and the elements of the Internet that are of most value for</p>	

our society and the economy. The current regulatory framework cannot rely on transparency and competition. While both have roles in protecting consumers, they do not effectively prevent operators from adopting non-neutral practices. If transparency and competition failed to protect consumers in relation to mobile roaming, for example, there is no reason for this approach to work on net neutrality. Even if it is assumed that switching barriers from one provider to another are negligible, the openness of the Internet will be diminished if only transparency obligations are imposed – a choice between the lesser of two evils is not a choice that European citizens should face. It is notoriously difficult to assess the veracity of ISP claims (as shown by the years-long problem of inaccurate claims regarding connection speeds) and places a significant enforcement burden on NRAs to detect discriminatory practices. Therefore, a narrow regulation of net neutrality from the outset is essential. Relying on transparency solely would create a loophole for operators to introduce restrictions as long as they inform their customers.

b) What would be the expected benefits in terms of innovation by new businesses (content or applications) as a consequence of improved consumer choice and increased competition between ISPs?

-open reply-(optional)

Does your answer to this question (a or b) contain confidential information? -single choice reply-(compulsory)

No

Question 23:

Would the facilitation of switching for consumers trigger any (administrative) costs for ISPs?

-single choice reply-(optional)

Does your answer to this question contain confidential information? -single choice reply-(compulsory)

No

3. IP interconnection issues

Question 24:

a) In your view, are there any problems regarding IP interconnection arrangements (between network operators, ISPs, transit providers and/or content providers) that could have an impact on the quality of the best effort Internet?

-single choice reply-(optional)

Please explain your response. -open reply-(optional)

b) Are there any specific issues related to the vertical integration of ISPs and transit providers?

-single choice reply-(optional)

Please explain your response. -open reply-(optional)

Does your answer to this question contain confidential information? -single choice reply-(compulsory)

No

Question 25:

Direct peering, Content Delivery Networks (CDN) or Quality of Service Interconnection (between ISPs and content providers) are being developed to propose an enhanced quality of service for content providers and end users.

a) What role can they play in reducing the risk of network congestion?

-open reply-(optional)

b) What opportunities and threats do they constitute for:

- (i) ISPs,
- (ii) content providers,
- (iii) transit providers and
- (iv) end users?

-open reply-(optional)

c) Are there any barriers of a regulatory, technical or business nature that prevent market players other than ISPs from playing a more important role in reducing the risk of network congestion?

-single choice reply-(optional)

Does your answer to this question (a, b or c) contain confidential information? -single choice reply-(compulsory)

No

4. Process

Question 26:

a) Do you consider that intervention by public authorities is necessary at this stage?

-single choice reply-(optional)

Yes

If so, what would be the appropriate level of such intervention? -open reply-(optional)

b) What would be the consequences of divergent interventions by public authorities in the EU Member States?

-open reply-(optional)

Does your answer to this question (a or b) contain confidential information? -single choice reply-(compulsory)

No

Question 27:

a) Have you made use of the dispute resolution powers under the Framework Directive[1] in relation to a dispute about traffic management practices?

[1] See in particular Article 20 of Directive 2002/21/EC (Framework Directive) which allows either party to request a binding decision by the NRA to resolve a dispute within the shortest possible time frame and normally within four months.

-single choice reply-(optional)

b) Have you also made use of these dispute resolution powers also in relation to disputes between an ISP and a content provider?

-single choice reply-(optional)

c) If you have made use, please explain under which circumstances. If you have not made use, please explain whether you consider that these dispute resolution powers would be an appropriate tool for such Internet traffic management disputes?

-open reply-(optional)

Does your answer to this question (a, b or c) contain confidential information? -single choice reply-(compulsory)

No

Question 28:

Do you consider that regulators should monitor interconnection agreements between providers?

-single choice reply-(optional)

Please explain your view.

-open reply-(optional)

Does your answer to this question contain confidential information? -single choice reply-(compulsory)

No

Question 29:

Under article 22(3) USD NRAs have the power to set minimum quality of service requirements on undertakings providing public communications networks. In a scenario where in a given MemberState no unrestricted offer is available (for instance because all operators actually block VoIP), do you consider that the "minimum quality of service tool" should be applied by the NRA to require operators to provide certain unrestricted offers?

-single choice reply-(optional)

Yes

Please explain your response.

-open reply-(compulsory)

It should be obvious to the Commission that such a scenario should not be allowed to develop in the first place.

Does your answer to this question contain confidential information? -single choice reply-(compulsory)

No