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European Commission

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Telenor response to EC Consultation on Open Internet and Net Neutrality in Europe

Dear Sir/Madam,

Telenor welcomes the opportunity to respond to this consultation on the Open Internet and Net Neutrality in Europe. We support the approach so far advocated by the Commission and the Commissioner on preserving the openness of the Internet.

The Internet has in short time evolved from a network used primarily by scientists to an incredibly rich multimedia medium. Unanimously fixed and mobile network operators have warned that additional pre-emptive net neutrality regulation will reduce network investment and stifle innovation in Europe. Telenor concur with Commissioner Kroes who has repeatedly stressed the need for a regulatory framework that promotes private investment in next generation networks characterised by high speed and high quality. Investments in such smart broadband networks crucially depend in network operators' freedom to innovate and develop new business models in the market in line with competition rules and consumer protection rules.

On the Internet users and consumed services are normally being in different networks (i.e. traffic is mainly off-net). Thus, openness and quality of internet based services are in most cases dependent on both network operators' and internet players' behaviour. Any analysis of internet openness therefore has to take into view the internet eco-system as a whole, not isolated parts of it. A common set of principles of openness, transparency and competition should apply to all commercial actors on the Internet.

Telenor fully supports the objective laid down in Article 8 of the revised Framework directive, which require that NRA's "...promoting the ability of end users to access and distribute information or run applications and services of their choice". Although such user rights can be formulated and supported in various ways, the Norwegian industry guidelines (code of conduct) agreed by most market players in the Norwegian market may serve as a relevant example for promoting this objective. For Telenor openness is a crucial part of the value proposition for broadband access that we provide to our fixed and mobile broadband customers.

In Telenor's view, competition between Internet access providers is sufficient to ensure the openness of the Internet in the network layer part of the Internet value system. The existing regulatory framework and competition law are well designed to handle competition issues.

Telenor supports an approach that would retain the opportunity for innovation in business models and preserve choice for users while at the same time address remaining legitimate concerns about safeguarding the existing internet and potential leveraging and discrimination.¹ In short:

- Network operators should continue to provide best-efforts internet to users who want it without imposing charges on the upstream internet. Regulators have reserve power to define minimum quality levels in exceptional circumstances.
- Network operators should be free to offer different grades of service at different prices, both to end-users and to the other internet players. This would supplement, but not replace the best effort service.
- On the retail side, this may take the form of data tariffs where users obtain price discounts in return for accepting reduced functionality. On the wholesale side, this may take the form of options where internet players pay more for additional functionality. Or vice versa.
- Operators must be allowed freedom for network management for allocating scarce resources between competing uses. Competition decides and allocates resources to match the underlying demands of users. Allowing customers to be in charge requires disclosure, transparency and choice to enable the pricing signals to work properly. The ability of broadband providers to provide managed services is key for the successful development of broadband Internet and for fulfilling customer expectations and should not be limited by regulatory constraints other than those foreseen by the EU telecoms framework and competition law. In the future, innovative services which require a managed QoS environment will complement the best effort Internet access offer for consumers and business users.
- Competition will ensure quality of service for end-users as any significant degradation of best-effort Internet quality will be sanctioned. Regulators should not consider minimum QoS intervention before having explored consumer transparency. Telenor is committed to contribute to developing clear explanations on how the internet connection is managed and about limitations or conditions, if any, on our products.
- Policies towards the Internet should favour fundamental rights and maintain policies towards Internet intermediaries and not attribute network operators a controlling role with respect to the content of electronic communications.

Telenor believes Europe should give effect to such a joint position on Internet openness and sees no need for further legislative change. Additional regulation will only have adverse impact on investment in networks and to the future development of the Internet.

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

¹ Telenor believes many intelligent proposals are already provided in this debate, e.g. proposal by Vodafone (“The middle way on net neutrality” – June 2010).

RESPONSE TO THE INDIVIDUAL QUESTIONS:

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? If so, illustrate with concrete examples. Where are the bottlenecks, if any? Is the problem such that it cannot be solved by the existing degree of competition in fixed and mobile access markets?

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

The Internet, a network of networks, has grown tremendously over the last two decades. It comprises more than 35 000 networks with active routing domains (Autonomous System Numbers), has more than 193 million web domains and over 1,8 billion users. Organic growth has been fundamental to the Internet's success, enabling it to adapt to the many new demands that are being placed upon it, as companies and individuals conceive innovative new services, business models and access mechanisms. The important role of the Internet to society is acknowledged by policy makers in Europe as it has become business critical for users, regarded a vehicle for economic growth and a means for social cohesion at national and regional levels.

Telenor does not think openness or net neutrality is at risk in Europe. As rightly described in the Background section of the consultation document the regulatory framework and the degree of competition in the local access markets is a guarantee for Openness. Consumers also seem to value openness and have choice due to the vast number of service providers in the market.

Telenor believes that further development of commercial arrangements between the actors should be left to the market - unless clear evidence of market failure is documented and the remedy being much targeted. In that case EU competition law should be utilized.

The openness of the public Internet is one of its fundamental strengths. Telenor supports putting the consumer and his or her informed choice at the heart of the debate. Openness and consumer choice should remain the main building blocks of the EU approach to internet policy.

Telenor advocates a holistic view of internet openness, covering three dimensions:

Internet openness is best served by competition

- *users should be able to access any lawful content on the internet and access services and applications of their choice*

Both the fixed- and mobile services market is highly competitive in most of Europe, partly due to the regulatory framework already in place. Internet users are generally very attentive as regards restrictions on their access to internet services, and many declare that they would switch providers in case of restrictions on their subscription. Transparency requirements as introduced in the revised

regulatory framework will further strengthen the positive effects of competition. Telenor is committed to providing transparent, meaningful information to consumers on their access to internet services, applications and content.

Empowering users through increased choice

- *users should be able to benefit from differentiated offers in line with their individual preferences*

Consumers should be provided with the broadest possible range of options for accessing and using the internet to respond to their individual demand and needs. Rules that would distort the functioning of the market in responding to individual demand and thereby restrict choice would be detrimental to innovation and undermine the long-term development of the internet.

Product differentiation in broadband access services is already a reality with regards to bandwidth or to data bundles allowing for different volumes of usage over time (for example 1GB/month cap). With the increasing importance of quality of service and related features, which allow the provision of new services and of existing services at better quality, with higher security standards etc., product differentiation will increasingly extend to guaranteed quality of service. Services with specific quality requirements include, for example, distant healthcare applications, video conferencing or cloud computing.

Product differentiation according to quality of service can also enable lower-priced offers for internet access which provide access to certain internet-based services at a basic quality, while other, more expensive packages provide for a superior quality. For example, a subscriber who would accept lower quality access to specific traffic-intensive services at ‘peak hours’ would contribute to lowering the costs of the network operator, allowing the operator to offer such a package at a discounted rate. Tailored solutions are generally beneficial to customers as only those who wish to, for example, use specific services with superior quality will have to pay for the associated extra costs, not burdening other customers who are interested in basic services. This is sound and basic economics, but not always sufficiently understood.

Telenor experienced in the Norwegian debate leading to the Norwegian guidelines on Net Neutrality that this view on the merits of product differentiation was very easily misinterpreted as compromising with the principle of best effort Internet access and therefore dismissed as leading to unwanted discrimination by certain stakeholders. Most surprisingly, consumer authorities took the position that “one-size-fits-all” best effort broadband offers were the only non-discriminatory solution and most “consumer friendly”. The debate has moved on since then, and it is very helpful that the Commission has taken a firm position allowing differentiation as long as transparency is taken care of.

Openness in other parts of the Internet

- *openness, transparency and competition should be adhered to by all players in the internet value chain*

The debate on internet openness should not be limited to network operators active on the ‘network layer’ in the internet. Key elements for users’ unrestricted access to information, content and services are located on other layers of the internet value, such as internet search or content and service platforms. Accordingly, regulatory standards to ensure data protection, openness, such as transparency requirements, should as far as possible apply symmetrically and equally across the whole internet. A level playing field also implies that potentially anti-competitive behaviour of undertakings with market power on other layers of the value chain than the network/connectivity layer is adequately addressed (different from the electronic communications sector, the internet is not subject to an ex ante regulatory regime). As a general principle all industry players should contribute fairly to the funding of network capacities used.

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

Europe (EEA region) possesses a sound framework for ensuring internet openness. In particular, the revised EU regulatory framework for electronic communications fully responds to net neutrality concerns as regards the ‘network layer’ of the internet. Furthermore a robust competition law and enforcement is the key to dealing with any issue of customer detriment or harm.

There exist a dynamic and competitive market for fixed and mobile broadband in the countries Telenor has a footprint in the region. Competition is underpinned by the ex ante regulatory regime that imposes access, non-discrimination and price control obligations on network operators with significant market power.

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?

To ensure consumers and businesses can access the content and services of their choice with a quality of service which meets their expectations, it is essential that network operators manage their networks in an adequate manner.

Firstly, traffic management is needed in the context of network congestion. Congestion is a real and serious concern already today for mobile networks and some fixed networks. It occurs at peak hours in some fixed networks and in case of a ‘cell overload’ due to many users in a given cell (area covered by a mobile antenna) in mobile. Thus, the threat of congestion affects the various market players differently depending on their network capacities and ability to continue investments in faster and smarter networks. Secondly, product and service differentiation can help to limit congestion by informing consumers of their actual use of capacity. Different products and services, with respective different pricing levels, are already available for consumers. It is worth pointing out that customers looking for high bandwidth have clearly defined offers and are aware that more bandwidth comes with a premium price tag.²

² However, consumers are not generally aware of the data volume that some of the content or services they access entails.

Latest estimates predict a surge in IP data traffic volumes over the next years especially due to the growing demand for video. This growth of IP traffic can no longer be supported by additional roll-out and upgrades of infrastructure, i.e., additional network capacity alone. While network operators will continue to invest in their networks and improve performance, network management helps to mitigate the need for expensive bandwidth expansion to handle, for example, peaks of traffic at certain times of the day.

Network capacity planning and having sufficient spectrum at hand is partly the answer, but there is no simple trade-off between investment in more capacity and network management. In the face of congestion, simply making investments to increase capacity would not be efficient. In the absence of pressure on efficient use of the capacity, extra-capacity would be consumed 'in a snapshot' by bandwidth-hungry applications. This is especially the case if 'non-cooperative' behaviour in case of congestion by those sending traffic over networks is de facto rewarded: for instance a video service may increase its traffic emission by multiplying redundant bits in case of congestion, to maximise its probability that enough bits go through the network for the video to be re-elaborated at the other end. Network management allows operators to optimize the use of the network and investment should be aimed at efficient solutions. In the face of congestion, an operator must therefore rely on a combination of those two options. Every operator needs to calculate very carefully to what extent investments into capacity can be justified and consider the timeframe over which they can be recouped. These decisions also need to consider the end user's expectation in regard to quality of the network.

As mentioned above, all forms of traffic management are an effort to best satisfy different customer demand by identifying the different types of services (e.g. voice call, Email, video, etc.) flowing across networks and making sure that transmission parameters are set to assure the functioning of the service according to the consumer's expectations. Network management is therefore a very broad term describing the tasks that every operator of a network has to perform in order to ensure continuous operation of its network, including the best use of available resources in a network to keep performance at the highest levels while seeking to reduce congestion as much as possible.

Technically, traffic management involves the differentiated treatment of different types of internet traffic. It ensures that the network operator can maintain an appropriate level of quality of service for the large majority of internet services and for a large majority of users during periods of peak internet usage. It should also be mentioned that network management is explicitly demanded by business customers in order to provide the service quality for which the customer contracts. As such, traffic can be managed upon the customers's request as part of a service.

Examples of practices in need for traffic management in the Business segment:

- Blocking a distributed denial of service attack
- Implementing new file compression techniques
- Adding bandwidth to distressed links
- Facilitating seamless video and interactive conference solutions
- Providing VPNs
- Delivering enterprise wide voice services.

For consumers, for instance:

- Blocking spam or phishing emails
- Parental control tools to protect minors from inappropriate content

- Enable real-time home medical monitoring
- Facilitate multi-player interactive gaming
- Delivering the highest quality video and IPTV experiences.

In the backbone network of a network operator, traffic management is carried out through IP routers that can identify which type of IP traffic packet is passing through them (for example peer-to-peer traffic, email, web browsing etc.) and that can prioritise certain types of internet traffic over others during periods of peak demand. For example, certain non-time sensitive applications may be de-prioritised vis-à-vis time-critical application such as voice to ensure an adequate delivery of, in this case, the voice service.

General network management practices are:

Traffic shaping is generally referred to as the practice of analysing different kinds of data packages to ensure that time-sensitive data such as voice gets priority over less time-sensitive data such as an email where a two to three second delay is negligible to the end user.

Throttling is the practice of applying a general brake on streams of data in order to help limiting network congestion and server crashes. Bandwidth throttling will usually continue to allow write requests (such as a user submitting a form) and transmission requests, unless the bandwidth continues to fail to return to an acceptable level.

Traffic management is also important as a means for product and service differentiation (quality tiering). It can be employed to create new services which depend on a guaranteed quality of service and to offer differentiated internet access services which help to limit congestion by setting economic incentives for a more efficient use of the network by end-users and/or internet content and application providers generating large amounts of IP traffic (s. below, Q5, Q10).

In addition also more general practices like 1) Content caching which allows popular content to be stored on local servers and not downloaded from the original web site (e.g. Akamai servers) 2) Content control and filtering (e.g. child porn filters or blocking of sites carrying child sexual abuse content) and 3) Active monitoring used to increase the customer experience or comply with legal requirements (e.g. viruses, legal interception) may also be regarded traffic management in the broader sense.

Question 5: To what extent will net neutrality concerns be allayed by the provision of transparent information to end users, which distinguishes between managed services on the one hand and services offering access to the public internet on a 'best efforts' basis, on the other?

Telenor agrees that transparent consumer information will be a key building block of an open internet. Transparency can address the concerns about openness and competition on the internet by empowering consumers and businesses to make choices according to their individual preferences.

The question distinguishes between information regarding managed services and regarding the 'best effort' internet. Managed services, which we understand as services for which the network operator guarantees a certain quality of service on its network as opposed to best effort provisioning, will

often be part of the offer made to the end-user, for example, as is the case today for the IPTV of the network operator. The terms and conditions for, as well as the technical features of, these offers will be part of the information provided to end-users.

Transparency also extends to the characteristics of the best effort services. Transparency requirements under the revised Universal Service Directive would moreover extend to traffic management and limitations to access to services and applications (Art. 21 (3) lit. c and d Directive 2002/22/EC).

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

The EU regulatory framework for electronic communications does not distinguish between fixed and mobile networks and the mobile internet is not a different internet from that accessible via the fixed network. General competition rules equally apply to both fixed and mobile network operators.

It is, however, important to accept that fixed and mobile networks have different characteristics and that in mobile networks the traffic that can be carried at any one time is limited by the finite amount of spectrum available to the mobile operator. Devices accessing the Internet via a mobile base station have to share the available spectrum with other devices in the same area. Many more devices are now being equipped with mobile connectivity enabling them to access the Internet. Examples of such devices include laptops, netbooks, electronic readers, photo-frames, smart meters, environmental sensors, health monitors, navigation systems and cameras. The main message is that over time we expect more people and machines to be accessing the internet through mobile devices and laptops than PCs. It could well be the situation that the usage of the network, the capacity limitations and the mobility of the users make network management even more important for mobile to run efficient networks.

This does not mean that traffic management should be treated differently in fixed and mobile networks (principles should be technology neutral), but our message is that traffic management will be more critical for mobile networks.

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?

Already today, many internet content and application providers enter into commercial agreements with third parties to benefit from better delivery of their services. Content delivery networks (CDNs) run by companies, such as Akamai and Edge3 who own a large number of servers around the world, offer to store internet content at points in the network close to the end-user, thereby improving content delivery for the content provider and the Internet service provider.³ Equally, large internet content and application providers, such as Google and Yahoo, operate own content delivery networks to bring their content as close as possible to the end-user.

Even if content delivery networks do not provide for guaranteed end-to-end quality of service, they offer a delivery of content of better quality to the end-user for remuneration, i.e., on a commercial

³ Eg. Akamai claims to carry approximately 25% of the worlds' web traffic.

basis. Content delivery on the internet therefore is not ‘neutral’, as it is often claimed in the net neutrality debate, and entry barriers for firms setting up an internet business exist already today. Furthermore, strategies to secure better and more reliable access to specific content/applications (eg game-server parks) for the end customers may result in “content –IC agreements/paid peering” between network operators (Q10).

Other means of prioritisation in this part of the value network may also be done via pre-installing specific applications on an end-user device. As such internet search is a prioritisation process.

To our knowledge, “bad practice” in the market place is absent. This is not really surprising. Stated simply, all providers are disciplined by the competitive market. Flexible commercial arrangements between broadband providers and content and application providers should be supported.

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?

Telenor’s opinion is that exclusive arrangements should be allowed, as in all other markets, as long as the arrangement is compliant to competition law. This means that if, e.g. a network owner enters an exclusive arrangement on IPTV, the network owner and the IPTV provider are responsible to consider the effect in the TV market, and that the agreement is not in breach of articles 101 and 102 of the EC Treaty. The same would be for any service, e.g. voice, banking or gaming, for which two parties want to enter into exclusive arrangements.

Many managed services are often already subject to separate regulation. A precise definition of managed services are lacking, but could be understood as “quality of service guaranteed” service offers.

For the subset of managed services, which is targeted by the question, namely offers for guaranteed quality of service over networks offered to third content/application and online service providers, Telenor expects these to be offered in a non-exclusive manner to all interested parties, subject to technical feasibility and capacity constraints (we understand this to be the objective referred to in both Q8 and Q9). In Telenor’s view however the interesting question should be phrased differently. Content and application providers and Internet service providers will sometimes work together to optimise their network to deliver specific services demanded by their customers. What would be the effect upon incentives to do so if non-discrimination / open access policies meant without additional remuneration one way or the other?

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?

Telenor has already entered into a voluntary industry agreement to respect Neutrality principles in Norway. We acknowledge that national codes of conduct on Net neutrality will not work for all, but generally, we think that it is definitely better than hard law, and in some cases, probably better than a

pure market solution given that a voluntary code of conduct is believed to prevent conflict and risk of regulatory intervention. Our specific experience from the Norwegian process was that the process as such has disciplined and educated the stakeholders.

As explained in response to Question 8, Telenor believes a ban on discrimination or exclusivity per se is not warranted from an economic perspective and if adequate under the EU legal framework it is dealt with already.

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?

Current arrangements governing the transport of internet traffic are the Interconnection arrangements between network operators and between network operators and application and content providers. Telenor welcomes that the net neutrality debate takes into view the economics of this Internet traffic exchange and the efficiency and the sustainability of current economic model of the Internet.

Historically, there have been two main types of commercial agreement to pay for the Internet traffic flows between different networks: IP-transit (mainly to pay to so-called “Tier 1” operators and when there is a great imbalance in traffic flows between the networks); and peering (when the traffic exchange between networks is more balanced or among the Tier 1 operators themselves). To date these agreements have contributed to the successful development of Internet. However, the emergence in recent years of extremely successful players providing popular applications and content (especially based on video) is resulting in an increasing imbalance in traffic flows (upstream and downstream flows) for which peering agreements are no longer adequate (content IC – agreements / paid peering).

The internet has the characteristics of a two-sided market -- with end users on one side and the providers of content, applications and services on the other side making use of the net as a ‘platform’ to enter into transactions. Currently, network operators bear the entire burden of network upgrades and modernisation in the face of exponentially increasing traffic flows. They recoup network costs mostly from one side, namely end users with a price structure mainly based on flat rates. In view of traffic growth, this market structure suffers from a number of inefficiencies:

- First, internet content and applications providers have very limited incentives to use the network in an efficient way since their cost structure is unrelated to traffic;
- Secondly, access costs are only paid by end users who currently do not have sufficient knowledge to control traffic (as they initiate the transaction without knowing download sizes) and, in the presence of flat rates, have no incentive to control their traffic.

These inefficiencies could ultimately put at risk the quality of the entire Internet. The expected efficiency improvements in backbone transmission technologies might not be able to follow the expected growth in traffic and current technologies in the access networks are not capable to cope with higher speeds without significant investments. The resultant need for major investments coincides with stagnating revenues for network operators. Flexibility to test new business models –

on both sides of the market - is therefore essential to maintain a healthy internet ecosystem, including new models of payments between internet content and application providers and network operators which create incentives for investment and for a more efficient use of network resources.

It is too early to predict which business models will strike a fair balance between the different actors in the internet value chain. However, to allow for efficient outcomes of negotiations between market players, policy makers and regulators should as far as possible aim for a level playing for all actors in the internet value chain.

Generally speaking, in a dynamic and complex ecosystem like the internet, it is important that business models can continue to evolve. Currently, internet services and applications are funded by a wide variety of business models, most of which are based on advertising and/or subscriptions and one-off payments. Many web-based services and content are free, either funded entirely by advertising or cross-financed by an offline product or service. In some cases, the content provider enters into commercial arrangements with network operators to provide a simpler product to the end-user (e.g., the purchase of electronic books). Payment flows between the end user and an internet content and application provider are already common (e.g., in gaming or for video-on-demand (VoD)) and quality of service-based offers by network operators will soon become reality.

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

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?

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

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?

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

Currently it is difficult to determine QoS any requirements and how to measure them. Telenor believes that an increased effort to agree on reference models to measure performance is needed. Industry associations (e.g. GSMA / ETNO) may also play a role in the standardisation of effective metrics for monitoring QoS in fixed and mobile networks.

The revised regulatory framework introduces in Article 22, paragraph 3 of the Universal Service Directive a competence for national regulatory authorities (NRAs) to apply minimum quality of service requirements to services provided by an undertaking or undertakings.

This possible imposition of minimum quality of service requirements should, however, be subsidiary to the implementation of rules on transparency and competition by NRAs and other competent authorities. In this vein, Telenor supports the preliminary view of Ofcom (U.K. Office of Communications). Minimum QoS requirements should be last resort intervention as it may distort competition.

Furthermore QoS in the Internet depends on various aspects which are influenced on different levels. Network operators have a strong own interest to maintain a high-quality best effort internet which continues to offer access to all lawful content on the web. To support this objective, arrangements that increase efficiency of IP traffic transmission on the net should be facilitated and the development of new business models should remain unrestricted.

Furthermore, as transparency is key to customers making informed choices industry should be committed to develop clear explanations of how the internet connection is managed. Any limitations, restrictions or conditions should also be communicated. Telenor is aware of an industry initiative within GSMA to develop industry guidelines and would support delivering such information on our products.

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?

Freedom of speech and an uncensored and pluralistic internet are often and rightly referred to as key elements of “openness”.

Telenor is committed not to engage in any kind of censorship and to not favour or disfavour any type or form of internet because of the views expressed therein.

Preserving such fundamental rights should be distinguished from the issue of traffic management and competition. For a time, for instance, during revision of the Telecom directives, the network management debate was indeed linked to such societal and political issues. However, traffic management policies in the network neutrality context are principally concerned with the way service is delivered, not the nature of the actual content of the data carried over the network. Screening or filtering of the content transported over the network to comply with legal requirements is a very separate issue. The important fundamental rights debates should be undertaken with the entire Internet ecosystem in mind, but should not be confused or intermingled with the debate around network management.

In view of maintaining an internet environment that fosters free speech, collaboration



and civic engagement, the EU should maintain current policies towards internet intermediaries and not attribute network operators a controlling role with respect to the content of electronic communications. The passing of any obligations to restrict access to certain content (eg in order to counter-acting digital piracy) must always be legally based.

INPUT ON ANY OTHER ISSUE

N.A.

About Telenor Group

Telenor Group is a global provider of electronic communications networks and services. We have a leading position as an integrated operator in Norway, Sweden, Denmark and a strong mobile position in Hungary, Serbia and Montenegro. Telenor also has a strong presence in Asia. Telenor offers a variety of services on all platforms, including mobile voice and data communications services throughout our footprint, and telephony, broadband as well as television distribution services over digital terrestrial, cable and satellite networks in the Nordics.

For more information about the Telenor Group, please visit: www.telenor.com