

Telecom Italia response

to the BEREC public consultation on

**“Guidelines on Net Neutrality and Transparency: Best practise
and recommended approaches” - BOR (11) 44**

(2 November 2011)

Introduction

Telecom Italia welcomes the opportunity to comment on BEREC draft guidelines on Net Neutrality and Transparency.

Telecom Italia shares the approach of the amended Universal Service Directive (USD) recognizing network management practises as a tool that operators can use, independently from network technologies, to ensure the provision of good quality and continuity of service to end users as well as to differentiate their commercial offers, based on different levels of quality.

In this regulatory context, Telecom Italia also agrees that customers must be guaranteed by an appropriate and proportionate level of new transparency requirements which can allow them to make well informed choices throughout the different stages of the commercial relationship and select the offers that best suit their needs.

Therefore, Telecom Italia maintains that the main objective of BEREC's guidelines under consultation is to strike the right balance between the level of information needed by the customers and the efforts required from the Operators to provide that piece of information.

In addition, we believe that it is important to look at transparency across the entire internet value chain. It is indeed important that all services offered to end-users are transparent and open about the way in which the services are offered; this is valid for services directly provided by the Operators as well as for services supplied by third parties on the Operators networks.

Considering that in the forthcoming months (and anyway by the end of 2011) BEREC intends to publish additional reports on specific issues regarding Net Neutrality (Quality of Service and Non Discrimination), we consider that the main focus of the current examination should be limited to the transparency of Internet access offers.

In particular, we believe that while specific commercial offers with explicit restrictions (i.e. cap and/or autonomous user-applications blocking) must be transparently communicated to customers, the specific technical mechanism used by Operators in their own network to implement such restrictions and to guarantee an adequate average quality of experience to all customers - which by the way usually evolve with technological innovation – should not be object of the guidelines since it is not of interest for end users. The way (real-time tools or other measures) to monitor the adherence of the service offered to specific commercial offers characteristics, should be dealt with in BEREC report on Quality of Service and commented by Operators in the related public consultation.

In addition, regarding the role of third parties in the provision of offer information, Telecom Italia suggests that ISPs are requested to provide all the identified information only to NRAs, in order to avoid the risk that uncontrolled third parties might deliver incorrect or obsolete information.

Regarding the tools to enable the customer to monitor their access, the NRA, along with ISPs, should define in advance the features of a certified measurement system as well as the possible accredited third parties in charge of the measures.

As last remark, Telecom Italia does not agree with the proposal of indicating whether an access package is more suitable for specific services/applications (e.g.: streaming video, HD, VPN, etc.) than others since the Operators which provide the network service can not guarantee the correct operation of other providers' applications.

Comments and contributions on specific BEREC issues and proposals

1. Direct and indirect approach

As correctly outlined in BEREC paper, information comprises a wide variety of aspects and it can be delivered in different ways, which are not always effective.

For the sake of transparency being useful for the customer, a thorough analysis on which of the five identified characteristics (accessibility, understandability, meaningfulness, comparability and accuracy) are to be emphasized, must be carried out. We agree that in some cases, to make information understandable, it might be that less information is better than more information.

In other words, customers often benefit more from simple and clear information on the basic characteristics of the offer (maximum speed, data caps, download limits, traffic management, availability of services/applications, etc.) than by being provided with a complete and detailed list of technical information (such as jitter, delay, packet loss, etc.), which could be hard to comprehend.

Generally, ISPs are in the best position to keep their customers informed about the characteristics of their own offers. As mentioned in BEREC guidelines though, the indirect approach could complement the direct approach and provide an added value to the customers, especially in the phase preceding the signature of the contract, when selecting the offer.

A technically expert third party would theoretically be in the position to gather technical and detailed information from all Operators and provide accurate, comparable and understandable benchmarks to the customers to help them make an informed choice.

The risk of this approach is that uncontrolled third parties might deliver information which is incorrect or obsolete, thus on the one hand misleading customers in their choices and on the other requiring a huge effort from operators to control the level of reliability of the information provided by each third party.

To avoid this situation, we suggest that NRAs be the sole interface for Operators and that ISPs be requested to provide all the identified information only to NRAs, either on a regular basis or each time there is a change in the offer, in order to ensure information is always updated.

NRAs will then transmit all information to third parties, accredited and certified by the same NRAs. These certified third parties will be the main reference in the market.

Even if ISPs cannot prevent any stakeholder, be it a consumer organization or a third party comparison website, from independently gathering information from ISP websites and providing benchmarks to the public (as it already happens), a certified third party would guarantee the legitimacy of the proceeding.

Similarly, possible certified performance measuring tools should be developed under the supervision of NRAs. Third parties measuring tools should not be backed by regulators since they could be not reliable and comparable.

The certified measurement system should be able to measure only the actual performances of ISP network and not the performance of the whole international public Internet as the tools provided by non-certified websites generally do.

Telecom Italia considers not efficient in terms of transparency a scenario with different autonomous entities that produce independent measurements software tools and systems for end users with a legal and/or regulatory value: in fact in that scenario the comparability of measures cannot be ensured and the operators can not do any assessment on correctness of the results coming from the different software tools.

In order to grant meaningfulness and comparability, the measurements have to take into considerations a plurality of factors which are influenced by: the location and characteristics of measurement server, the configuration of the client application inside the end user PCs or terminal equipments, PC configuration and its operating system and concurrent running programs etc.

For instance, if the measurement server is located in a point far from the ISP network, as it is common for existing measurement tools that are available in Internet websites, the tool will measure the public Internet (also named Big Internet) performance and not the ISP own network one.

This is confirmed by the fact that when the regulators want to impose national ISPs minimum QoS values, the performance levels are referred only to ISP own network components and not to the Big Internet. In fact, the Big Internet is an aggregation of

single ISP networks, generally with best effort quality, and international IP carriers which, as a whole, do not provide end-to-end QoS and availability levels.

In conclusion, Telecom Italia believes that the NRA, along with ISPs, should define in advance the features of a certified measurement system as well as the possible accredited third parties in charge of the measures.

The way ISPs are requested to provide the information to the NRAs must also be object of a careful analysis: the proportionality principle requires that the measures should be implemented in a way requiring the minimum effort (especially in term of costs) from the operators.

An interface based on queries, for example, would require operators to modify their systems to provide real-time information in the format required by the NRA, thus calling for relevant costs.

As an example, in Italy, there is a third party comparison website (“Super Money”), certified by AGCom, which compares the rates of the operators. Operators are obliged to communicate every new offer and any modification of the available offers. The information is sent with a format developed in collaboration with ISPs and approved by AGCom. The format is defined in a way to be the closest possible to formats currently used by ISPs, as to minimize their internal costs. An important aspect of the Italian experience is that the cost of the service is not borne by operators, as Super Money is self-funded with the advertising shown on the website providing the tariff comparison service.

2. Traffic management and perceptible QoS performances

The New Regulatory Framework recognizes the value for Operators of managing their own network resources to provide the expected quality and availability level. Regarding the specific commercial offers conditions, it highlights the importance of informing end users on possible procedures put in place by ISPs to measure and shape the traffic so as to avoid network congestion, and on how these procedures could impact service quality. Information should be provided, in particular, for commercial offers that have some explicit restrictions on provided data rates (i.e. cap) and/or user-operated applications which shape or block data traffic.

Telecom Italia believes that the provision of this set of information to the end user should be considered sufficient to ensure end user transparency and avoid any discrimination problem.

We deem the possible provision of real time information and measurements to the end user to monitor whether and how a network management is applied is not useful to the end users. In our view the focus should be on QoS performance parameters that

are recognizable and understandable by end users. Therefore few and simple understandable QoS parameters are adequate to inform the customer about the network performance, as also stated in USD art. 21 and 22 and related Annex III.

The implementation of real time monitoring tools would not be a proportioned measure as it would need considerable investments by ISPs. The customers are not interested in the tools used by the ISPs for network management but, rather, in the assurance of an acceptable level of average quality which the network management techniques guarantee. Traffic management tools should not be considered as to be the main issue. BEREC guidelines should rather focus on allowing the customer to check whether the service provision respects the expected performances and characteristics of the commercial offer.

We agree with the BEREC statement that *“given that highly technical information on QoS parameters may be of limited value for the average customer (and even problematic with regards to understand ability), it may be more desirable to inform customers about the implications for the service experience they may typically expect when subscribing to a package with specific QoS characteristics.”*¹

Indeed, traffic management in itself shouldn't be the object to compare offers upon; rather it should be the mean to reach/maintain the contractual performances for the all end users.

We, therefore, believe that information on possible network management techniques, provided to the customer at the contract signing (and afterwards should there be any changes) is sufficient to allow the customer to make an informed choice.

Although we understand that traffic management and its impact on Quality of Service will be the object of a separate report, we would like to underline the fact that QoS issue, indeed independently from Net Neutrality and traffic management, is already dealt with in art. 21 of USD, through the definition of standard performance indicators (Annex III).

Telecom Italia considers such prescriptions already appropriate and more than sufficient to solve any potential Net Neutrality issues.

Some NRAs have defined specific national activities on that subject. For instance, in Italy, AGCom has defined a unique national QoS measurement system for all the main fixed network ISPs. They are required to measure the QoS of their two best-selling offers. The measurements are performed in 20 cities, corresponding to the regional capitals of the country. As of today the activities have started in 7 cities and they will

¹ BEREC “Guidelines on Net Neutrality and Transparency: Best practise and recommended approaches, page 29.

soon be extended to the others. For all operators the measurements are carried out under the same conditions (the measurements are taken with a certified software installed on all PCs located in a same place) and under the supervision of a third party. In addition, end users can measure the QoS of their internet connections, by means of certified software, downloadable from a website.

Finally, in Italy, there is an ongoing project which aims at measuring the QoS of the connections to the Internet from mobile networks. Beginning from 2012, drive-test campaigns will be conducted in the 20 regional capitals. The drive-tests will be repeated every six months. The costs of these projects are borne by ISPs.

3. Different types of networks and technologies

Telecom Italia agrees on the technological neutrality principle and that the principle of net neutrality should generally apply to all Internet access offers.

Nevertheless, it is indisputable that important differences exist between fixed, wireless and mobile networks, which require an appropriate flexibility when applying regulatory principles, also to avoid the risk of non feasible or not sustainable obligations. We indeed challenge BEREC statement according to which “mobile network operators and fixed network operators are faced with the same technical problems when administering the operative networks”²

On one side the sharing of limited resources (spectrum) among different users and on the other side the mobility of the users, which makes it almost impossible to predict the number of customers present at one location (one cell) in a given time, make it more complex to ensure the expected QoS and availability performance in the mobile networks. At the same time these constraints limit the ability of ISPs to provide pre-defined quality levels or the availability of certain – bandwidth hungry - services (e.g. VOD). As a consequence, the use of network management techniques is more important for mobile networks than for fixed networks.

Although we believe these differences among technologies will be further and better examined in the forthcoming report on Quality of Service, their consequences on transparency shouldn't be underestimated.

It is indeed difficult, if not impossible, for Operators to provide exact information on the available bandwidth at a specific place and at a certain point of time, and any information provided on availability of certain services, as proposed by BEREC (also see

² BEREC “Guidelines on Net Neutrality and Transparency: Best practise and recommended approaches, page 20.

Section 6.2. on “Visual representation of the services’ features”) would risk to be incorrect.

Besides, the QoS measurement tools for mobile Internet offers are, indeed, more challenging and complex than for fixed offers. According to art. 22 of USD and ETSI standards of Annex III, in the mobile environment, as in the fixed one, the possible definition of a national QoS measurement system should be based on the average measures.

4. Data caps

As far as commercial offers with explicit restrictions are concerned, for instance data caps, the focus should be on the effective application of the related contractual conditions and not on the traffic management tools used to reach the goal.

Customers could be notified by a system of alerts, either by SMS or by other means, when approaching or reaching the pre-defined data cap.

5. Common terms of reference

One of the greatest enemies of comparability and understandability is the lack of common terms of reference, not only with regards to the description of the services (for which the definition of a “common language” is key) but also with reference to the measurement tools.

The uniqueness and standardization of measurement system is a requirement for any regulatory activity on this matter. Indeed, also the European Regulatory Framework identifies a specific ETSI standard in the Annex III of USD as the basis for QoS measurement and comparability. That should be strictly considered by BEREC in the draft report and also in the forthcoming report on QoS, independently from Net Neutrality or other issues.

6. Methods and tools for providing information transparently

We appreciate the effort BEREC made to propose concrete actions that could be implemented to increase the level of information transparency for the end users awareness of commercial offers.

Nevertheless, in order to make sure the proportionality principle is maintained, a thorough impact assessment on implementation costs for Operators should be carried out before undertaking any further action

Some comments on the proposed initiatives are proposed in the following.

6.1. A tiered approach

We agree with this approach, which is currently used by Operators.

6.2. Visual representation of the services' features

Telecom Italia believes that the definition of a common language is very important to make offers comparable. Nevertheless, once the minimum set of information needed by all ISPs to make available to their customers has been defined (either by the NRA or by Industry consensus), Operators should have the freedom to determine the way they want to represent this information, as this has an important role in their marketing strategy.

We therefore object to the imposition of a pre-defined “nutrition label” which would limit Operators in independently determining their communication strategy. We also agree with BEREC that, as features rapidly evolve, it would be a significant burden to constantly have to adapt symbols and agree on new standardized representation of new features.

Moreover, we would like to underline the critical issues related to the proposal of indicating whether an access package is more suitable for specific services/applications (e.g.: streaming video, HD, VPN, etc.) than others (in particular when these information services are provided by third parties). The Operators which provide the network service can not guarantee the correct operation of other providers' applications.

Indeed, especially if information and comparisons are provided by autonomous third parties, this information will be generally highly misleading and/or not comparable with other similar evaluations with a great confusion for end users.

6.3. Real-time information tools

As said before, real-time information is likely to be not useful and, in some case, not viable, when aimed at measuring traffic management performance. We consider that the possible performance measures should be limited to the end users perceptible indicators listed in the Annex III of USD. It is not useful to induce the users to check whether the operator is using traffic managements tools, since traffic and network managements mechanism have a positive effect on performance of all end users in a geographical area; BEREC should refer to the approach based on average measures defined by ETSI and imposed in Art. 22 and Annex III of USD.

An end user measurement tool based on ETSI QoS indicators can be defined and provided directly by NRA or through an accredited third party, as it was made in Italy. In our view this is the adequate response to the user needs, since end users are interested in concrete QoS and not on internal possible network management mechanisms.

6.4. Providing various levels of details to different sorts of users

While we agree that different categories of users could be interested in different kind of information and different level of details, we deem it would be rather complex for ISPs to provide a wide range of information to various stakeholders.

As already outlined (see Section 1 on “Direct and indirect approach”), to limit the burden on ISPs, they should have a unique interface and provide data only to the NRA, who will be in charge of then transmitting the information to certified third parties.

Indeed, it is likely to be impossible for Operators to directly assess each independent entity that wants to publish offers comparison, with a great risk to increase confusion for end users. Therefore, should third parties be involved by NRAs, it would be necessary for NRA to identify a few accredited entities that are enabled to assume the role of commercial offers comparison, with a clear responsibility of NRAs to guarantee the correctness of the provided information.

We share BEREC view on the fact that the type of provided information could be different between residential and business customers.

7. NRA approach

According to Telecom Italia, NRAs should define, in consultation with industry and consumer groups, how information should be made transparent and transmitted. NRAs could also regulate the expectations on the comparability and verifiability of the information provided to customers. In the Italian experience, AGCom has directly specified the set of minimum information that ISPs must deliver to customers about the characteristics and limitations of their offers.

8. The role of BEREC

Telecom Italia deems BEREC’s current guidelines on transparency a very useful tool to engage in a constructive debate with NRAs with regards to:

- (a) the definition of an effective transparency strategy;

- (b) the construction of a “common language” to make offers “more comparable”;
- (c) the identification of the minimum set of information to be made available to customers and
- (d) how to best represent them.

We have identified some aspects of the indirect approach (risk of obsolete and incorrect information) and the use of real-time instruments (costs, not consumer’s interests) to monitor traffic management as the main critical points of the current guidelines. It will be important to further investigate these issues (especially real time traffic monitoring) when BEREC will have completed its assessment of all aspects of the Net Neutrality and has released the reports on Quality of Service and Non Discrimination.

Nevertheless, we maintain that the final version of the Guidelines on transparency should remain, as currently are, a high level guidance and that practical implementation should be addressed at a national level by NRAs, in co-operation with ISPs and other stakeholders.