Response

QSC AG

BEREC Guidelines on Net Neutrality and Transparency: Best practices and recommended approaches

Cologne-based QSC AG offers small and mid-size enterprises an extensive range of ICT services - from telephony, data transfer, Housing and Hosting right through to IT Outsourcing and IT Consulting. With its subsidiaries INFO AG, a full-line provider of IT services headquartered in Hamburg, and IP Partner AG, a Housing and Hosting specialist headquartered in Nuremberg, the QSC Group numbers among the leading mid-size providers of ICT services in Germany. QSC offers custom-tailored Managed Services for individual ICT needs, as well as a comprehensive product portfolio for customers and marketing partners that can be modularly adapted to suit the communications and IT needs in question. QSC offers its services on the basis of its own Next Generation Networks (NGN) and operates an Open Access platform, which unites a wide range of broadband technologies. QSC AG employs a workforce of some 1,300 people and is listed on the TecDAX index.

QSC would like to comment on the BEREC Guidelines on Net Neutrality and Transparency.

There is no doubt that Net Neutrality is one of the most important principles in the market for internet access and services. Net Neutrality guarantees the accessibility of all servers connected to the Internet - and is by this way an expression of the freedom of non-discriminated communication.

Net Neutrality, the freedom of communication and its positive economic and political effects can only be guaranteed, if the end users can freely choose the service and provider which fits best to them. .This can only be guaranteed through effective competition on the access and service layers. For enabling end users to make informed choices, transparency of all necessary information is needed. To reduce competitive distortions the transparency requirement should be valid in the same way for all internet access products with no differentiation between fixed, mobile or cable products. But there can be some doubts if transparency has to be implemented the way BEREC suggests.

Chapter II – Major requirements for a net neutrality transparency policy

1. Direct/ indirect approach

The main body of information must be given by ISPs because they have the knowledge about the relevant data. The direct approach is the best method to ensure that the end users get correct and timely information. If the NRA determines which information must be part of the requirement also equality and comparability is warranted.

Nevertheless it is more than questionable if ISPs, which only have enterprises as customers, should fall under the same obligation than ISPs who offer their services to end users. Contracts with enterprises

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more often than not do not include general terms and conditions but rather individual arrangements. In this case no GTAC can be presented for example on the homepage, but the corporate users can and do already ask for individual information. In addition, corporate customers mostly use their access line for voice services and internal connectivity. Only a smaller part is reserved for internet access, whereas this is totally different for end users, esp. residential customers.

So it is quite difficult to make contract conditions transparent and comparable in an indirect approach, if they diverge for each separate customer. Third parties would have to evaluate each contract ever concluded and would have to present a large amount of information, which is quite useless as it is specific for a certain customer and its requirements. This procedure is certainly not practicable and raises the cost of providing transparency significantly without aiding in the least the necessary choices to be made by end users for their internet access (and not their access line).

Therefore BERECs conclusion that the indirect approach can provide end users with additional, also necessary information can be viewed with doubts. If an ISP offers several products to differentiate itself in a competitive market, it will not – as BEREC assumes- give insufficient information to some end users but rather it will create different documents for each product so that always all necessary informations are given. So a direct approach would lead to a more extensive clarification than the indirect approach would be able to, if it is centred on internet access services for end users and does not include a transparency requirement for customers with individual contracts (business/enterprise).

2. Common references

Common references may help the end users to compare the different offerings, services and their quality. In reality ISPs use several terms and definitions to describe the same service. Standardization would help to achieve transparency. BEREC´s proposal to use relevant standards instead of objective parameters may be helpful for end users to understand the background or rather the meaning of some information.

Nevertheless in most cases these are not an appropriate base for a comparison. For example the downloading time of a web page (site24) does not only depend on the available bandwidth of the specific access line (resp. mobile air link) but also on other elements like the capacity of the concentration network (simultaneous usage in cable or mobile networks), the capacity of the uplink and the hardware of the referenced server in the Internet and the performance of the hardware used by the end user.

So there is no suitable single measure useful to describe the "true" state of the internet access of the end user. .

Chapter III – Contents of a net neutrality transparency policy

1. Scope and content of the offer

a. Availability of services

Indeed, it may be useful to use a common reference framework to ensure that also new products and services are covered when they can be subsumed under the reference. Also the proposal of the BEREC

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to list the services which are explicitly excluded may help the end users to recognize which services are included. But it would go beyond the scope of this exercise and its usefulness if all services that are not included were demanded to be listed.. This will certainly deter innovative products and services to be implemented in the future.

b. Terminology

Like said above a commonly used terminology is an appropriate method to increase the transparency and comparability towards the end users.

c. Actual speed

Indeed there is a difference between actual and advertised speeds. Caused by topography, net utilization (incl. interference), the actual technical state of the specific access line and other circumstances the actual speed varies not only between different lines but also at the same line from time to time, day to day and may also change over time (in case of increasing interference from neighbouring copper lines). Even if it were possible to identify the typical or average speed referring to the whole net, it would be almost impossible to determine the typical or average speed referring to one certain line.

Nevertheless there will be complaints of the end users when their actual speed falls below the given typical speed, even if the cause it not within the sphere of the provider. As a conclusion the presenting of an average speed instead of the achievable speed would not solve the problem, but create more customer complaints and consumer court cases with wildly differing court decisions interpreting the transparency requirements.

d. Transparency on minimum QoS offered

Although it is interesting for the end users which minimum quality of service they can achieve and whether there are different degrees this information should not be part of the necessary information. On the one hand this information is often highly technical so that the average end user is not able to understand and valuate it. On the other hand end users will be confused because they may think that the ISPs are only obligated to provide the minimum QoS (in terms of line speed etc.) and that they will only receive this quality level most of the time. In reality it will be different, as ISPs would need to be most cautious not to publish higher QoS, because they cannot achieve them all of the time. Nevertheless end users will receive a much better service most of the time. Only in terms of network management tools like "suppression of peer-to-peer", traffic caps or blocking of certain application (VoIP, video streaming, web TV) can transparency of minimum QoS work.

2. General limitations of the offer

There is no doubt that it is necessary for the end user to know about data caps and download limits to be able to act in accordance with these limitations (and direct its purchasing decisions accordingly)..These conditions can be listed in service descriptions or GTAC.

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In our opinion it is not necessary to provide the customers with special tools for measuring their data consumption. That would mean centrally provided standardized software had to be installed on the equipment (router, CPE) of the end user so that he could check his consumption there. That would not only lead to higher costs regarding the ISP but also the difficulty to check if the software is correctly installed and well functioning. The better method which is already current practice is to offer customers the opportunity to control their consumption at their own online-databank allocated by the ISP. But this is only possible, if the user has not subscribed to a flat rate model. In the later case, the ISPs is not allowed to gather and store the necessary data, as it is not required for billing purposes.

An email or SMS notification might be a possibility to make the end users aware of exceeding the limits. These notifications also lead to additional costs so that their use must be restricted. As there is currently no market analysis for the SMS termination market, an SMS requirement will strengthen the market position of horizontally integrated providers (include mobile operations) as they have access to SMS termination at marginal cost. For example notifications only should happen when a special limit of additional costs is achieved. It also has to be determined that after a first notification the ISP has not to send an unlimited amount of notifications if the customer continues his consumption.

If the notifications have to be combined with information it will be difficult to list each individual consequence because they can vary depending on the product or tariff. It would be a disproportional effort if the ISPs had to list the precise and individual consequences. It has to be enough to hint at the danger of additional costs.

3. Specific limitations of the offer

a. Application of traffic management techniques

The end users should be interested in possible special limitations so it can be claimed that ISPs have to inform about how they handle congestion situations, blockings etc. If this information is presented in an indirect approach it must be ensured that the consumers get to know if these restrictions are really necessary or problematic because they are for example used selectively against certain services or service providers or if they are used indiscriminately in a state of network overload. But it is also important to establish the correct environment, in which these limitations occur. In our view, only limitations concerning internet access deviate from net neutrality. For example IP TV or VOIP receive preferential treatment in the IP access network to guarantee the customer the necessary QoS for these services and to make the customer experience of these services comparable to the legacy services "TV" and "PSTN" formerly provided over separate access networks. . To make them functioning in the same manner over a shared IP access network together with other applications like internet access, they need a certain QoS. It is important to reflect these differences in the transparency requirements which are concerned about internet access.

b. Provision of specific tools

In our opinion the provision of specific tools enabling the customers to monitor their access service are not the right method to improve transparency and in effect net neutrality. Like mentioned above it is possible under certain assumptions to show the customer his daily consumption. With significantly more

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effort it would also be possible to calculate the daily down- and upload-speed regarding each access line. The really difficult element will be the differentiation in speed/volume between the different applications on the common IP access line (internet access (incl. web TV), VoIP, IP-TV, smart metering, smart home applications etc.).

But this monitoring is not helpful to assess the traffic management policies used or to evaluate if the right broadband package has been chosen.

Like BEREC correctly states, there are many factors which have an influence on the actual speed besides the traffic management techniques and on the amount of data transported. Force majeure can reduce the traffic, the usage by other consumers, even reasons caused by the end user himself. To check which traffic management policies have applied on a certain period the tool would have to be able to detect which circumstances have appeared in this time, if they had influence on the download- or uploadtime and if yes, which percentage each had. This is not feasible with a software tool, which in itself, even if centrally provided by the NRA, would present security risks for the computer/equipment of the end user.

At the end the tool would only show if enough data are transported in the right time or if the customer needs a product with other bandwidth or additional services. Therefore, a special centrally provided or authorized tool is not necessary. Controlling the published network management policies can be achieved through the (internet) public with an additional backup through the NRA, which can sanction ISPs which violate their own published policies (for instance through throttling certain types of traffic though they did not publish any throttling policy)..

Chapter IV- Ensuring transparency

1. Who transmits the information?

The ISPs are the right ones to offer all the correct and relevant information. They also can evaluate the best way which information is really meaningful in a certain case and which is not necessary.

Besides that it may be a good idea to offer a consumer portal dedicated to end user requirements with general information, key aspects, definition and FAQs so that it is easier to compare the actual offerings of ISPs. This website may be created and maintained by the NRA, other government agencies or third parties. In case of some third parties NRAs still need to maintain a certain vigilance to prevent those websites from becoming indirect marketing tools of certain providers.

Like we said at the beginning of our comment the publishing of all the basic information of each ISP and the comparison is perhaps possible when the end users of the concerned ISPs are exclusively consumers or the ISP offers only unitary services based perhaps on GTAC. In this case it is easy to collect all basic and necessary information. But there are also ISPs with individual arranged services and contracts, so that the products and data cannot be compared. The NRA or Third parties would have to list thousands of possibilities because one of these services/products could fit. This is not practicable so that transparency concerning internet access should be concentrated towards the more vulnerable end users with GTAC.

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This approach also significantly reduces the expenditure for set-up and continued operation of the web portal. To create and offer a website with general information is not such a big effort as the regular update is more infrequent. This website would also really fit to the NRAs which present already themes of consumer protection on their websites.

The creation of a website which includes all necessary information about several services and products of each ISP requires a lot of financing. The information has to be collected, evaluated, listed and regularly upgraded. There are already a lot of comparing websites online like for example *teltarif* regarding the telecommunication tariffs and *Verivox* regarding the electricity sector..

2. Methods and tools for providing information transparency

BEREC examines several methods of information. In our opinion a tiered approach is the best way to give end users the information really necessary. General facts which are important for choice can be seen at once, more specific information by a deeper link. Although the end user may have to consult more than one website to fulfil its more advanced information needsthis is no big effort. The ISPs already offer this basic information on their own websites so that transparency can be ensured in a short time and

The visual representations may be a good method to simplify the comparison. It is common usage to present important information with symbols, for example the blue angel for eco-friendliness or the skull for poison. But these symbols only can help to create transparency when all end users are aware of them. If the visual representations have to be explained before, perhaps with technical terms there is no sense to use them because the end users would need too much time to understand the information given. Using for example the traffic light system might be appropriate because the consumers are used to this. But it must be flexible to allow prevention of circumvention. As we are in a market society, circumvention will be attempted resp. every operator will attempt to get an "all green" for its offers with the least possible cost. For example one has to be aware of the fact that almost every fridge is now marketed with an A in energy efficiency, so the differentiation in the market now runs along A, A+ and A++, which is less effective from a consumer point of view.

On the other hand, the traffic light model may limit the amount of innovative products in the market, as each new offering must somehow fit into this scheme to be able to survive in the market.

Real time information tools offer individual and in principle accurate data. Like stated above it is nevertheless difficult to evaluate in which percentage circumstances not under control of the provider influence the results. Because of that they can only help to evaluate the services of a specific ISP if a huge number of measurements are taken and analyzed. This can only be undertaken by the NRA.

Beyond that the measurement must have happened over a longer period. Because of permanent changes either of external circumstances or of technical features they may otherwise not be significant enough to further consequences.

3. Considerations for ensuring transparency

Common references may help to create transparency if they are just as appropriate to describe the service as the actual terms used. The obligation to use common references is not allowed to lead to

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changes in services or the tariffs. BEREC hints that some ISPs calculate volume of data used over a month, other over periods of hours. This decision is part of the tariff authority and cannot be constricted by the obligation of transparency. Is has to be sufficient that the end users can compare these tariffs by being able to make the necessary calculations in accordance with their individual usage.

Beyond that the obligation to use common references is only useful where comparison is really possible. So it has to be reduced to the basic information each ISP can give. ISPs who can present no unitary basic information because of individual arranged contracts should not be obligated to use these common references as they are meaningless for their customers.

If common references are to be determined and implemented, this should not be the business of the NRA alone but should be done by the ISPs perhaps supported by the NRA.

The ISPs will also be more willing to fulfil the obligations of a self-regulatory standard which they have worked out themselves than of a required approach of the NRA as they know which information can be gathered with appropriate cost.

To ensure transparency it is important to verify the information given by the ISPs. Some information- like the average speed- can only reflect the past and can change in the future. Therefore this is no meaningful information.

Chapter V- Practical examples, outlooks and conclusions

1. Recommendations for developing an optimal transparency policy

BEREC lists three requirements useful initiatives could include: the development of common terms, the availability of appropriate real-time tools and methods that simplify the communication with end users. Whereas the first and third requirements are useful and appropriate to increase transparency the usage of real-time tools neither is adequate nor providing enough relevant information in relation to cost as described before. Also these tools so not enable end users to become active participant of the transparency design process because the data calculated by such a tool are difficult to understand and analyse so that the end users cannot get advantage from them. Nevertheless end users can be participants by voicing their requests, desires, complaints and suggestions.

2. Role of NRAs and possible future initiatives for BEREC.

The ISPs themselves should find the right transparency solutions in collaboration with the NRA. The ISPs will be more willing to fulfil obligations if they have been part of the effort. The NRA should also be part of it to control the compliance with the legal requirements. Beyond that it has to be ensured that the transparency obligations have to be followed by all ISPs (fixed as well as mobile and cable) and can be sanctioned in case of infringement.

Recommendations of BEREC or the Commission are appropriate to achieve a Europe-wide level of transparency regarding for example the visual representations. On the other hand recommendations

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shall not include issues that vary from country to country because of national differences in market preferences or technological facilities like for example minimum QoS.

Beyond that a recommendation referring to transparency should be established which does not only cover transparency concerning end user products but wholesale access services. Only if regulated wholesale offers include transparent information for access users those will be able to fulfil their transparency obligations concerning their end users as well.

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