INTUG

Public Consultation on Network Neutrality in Europe

Response from
The International Telecommunications Users Group (INTUG)

Executive Summary

INTUG welcomes this opportunity to respond to BEREC's public consultation on Network Neutrality, on behalf of business users of communications, and follows INTUG's response to the earlier consultation by the European Commission. INTUG regrets that the BEREC consultation does not reference submissions made by organisations other than operators, but assumes that those submissions were taken into account.

This response document addresses the following three BEREC consultation documents
- Differentiation practices and related competition issues in the scope of Net Neutrality
- Guidelines for Quality of Service Guidelines in the scope of Net Neutrality
- An assessment of IP-interconnection in the context of Net Neutrality

INTUG's earlier submission to the European Commission noted that economic growth and social inclusion within the EU will depend significantly on open access to the Internet and ubiquitous use of content, applications and services. Absolute neutrality, in terms of ICT, means that any choice of communications service or information technology component does not reduce other choices available to the user for different services or components. This includes all devices, services, management tools, content, applications and any other ICT elements, such as sender or receiver address. Whilst this cannot always be fully achievable, given the step change nature of technical progress, and the need for affordable migration, the principle should be maintained as an objective, and attempts made to minimize and mitigate, if not eliminate, the impact on existing investments.

The logic applies equally to simultaneous supply of ICT elements by different providers. The choice of one provider, or one ICT element, should not restrict the choices available elsewhere in the ICT landscape. Connecting directly or indirectly to any item of ICT, from any provider, should not in an ideal world impact on past, current, or future choices for similar elements in a different place, or for a different purpose, or on other elements that must interwork with it. The key objective here is seamless, timeless interoperability. This extends to, but is not limited to: functionality, operability, total quality, information content, display capability, or any other characteristic of the connected technology. Indirect connection refers to a piece of technology, which is connected further away, via one or more intermediate devices, and which must also not have its capabilities affected by the choice of a piece of technology anywhere in the connection chain.

These are the fundamental functional issues which underpin user requirements for public and private sector enterprises, SMEs and mass market end consumers, and these need to be considered carefully when considering all network neutrality policy issues. The BEREC documents give examples of conditional neutrality, for example where applicable only up to data cap limits even if application agnostic, and application specific, for example for Facebook, which do not conform to the overall principle.

Exceptions for network security and integrity, for example to block spam, may be more justifiable. Conversely, the exclusion of a specific application from data caps where an operator's partner provides the application is positive discrimination, and is unacceptable.

INTUG continues to be concerned that the overall industry debate on network neutrality is being unduly dominated by the representations of the intellectual property movement and its legal functions, and by the entertainment media content industry, with inadequate attention being directed towards the very real issues associated with the impact on business use of the Internet, for the purposes of economic growth and job creation.

INTUG recognises that one of the driving forces behind introducing traffic prioritisation is the need for an improved quality of service for the Internet beyond "best efforts', and this is acknowledged as necessary for business users and therefore welcomed. The balancing act to be performed successfully by regulators is achievement of this desirable objective, without sacrificing open access and a competitive market. One potential loophole in this respect is for Connection Providers (ECPs) to segment their topology either permanently or during periods of congestion, reserving higher speed transmission routes for favoured content or application providers (possibly the ECP's partners or subsidiaries) without any need for traffic prioritisation for example via deep packet inspection. These higher-level interconnection points, described in the BEREC paper as the "doughnut" architecture, rather then the traditional tiered architecture, present a potential threat to net neutrality.

One important issue which is of specific relevance to the business user market, rather than the mass market end-user, concerns ease of switching, which is identified by BEREC as an effective market measure to protect against discriminatory non-neutrality. The difficulty and cost of switching supplier is an order or magnitude greater for a business user than for a single device end user. This factor has been largely overlooked when assessing entry barriers for new entrants seeking business customers. Switching connection provider, in order to preserve access to content or an application, is simply not an option in many cases for a business user working in an extended supply chain with other partners.

A further issue which INTUG raised early in the network neutrality debate was the remedial action taken by ECPs in response to illegal usage of content, for example to preserve IPR, or in response to illegal content itself, for example for the purposes of child protection. Proposals were put forward and briefly considered by some Member States, in which the ECP was obliged to not only block such content, but also to disconnect the end user.

Whilst this might be deemed appropriate and proportionate for an individual mass-market user, such action is clearly unacceptable and disproportionate for business users, whose connection will be used simultaneously for business critical processes by hundreds, or even thousands, of other users not involved in the illegality. INTUG believes that remedial action must be directed ex-post, and solely at the specific user committing the illegality.

Whilst the focus of the BEREC reports are naturally on net neutrality during live operation, other forms of more subtle discrimination should not be overlooked, although they are much harder to measure quantitatively. These include for example, the period of advance notification before launching new higher speed or improved function connection services.

They also include the depth of availability of information provided regarding hardware and software interfaces necessary for planning and implementing migration to higher speed and/or more advanced connection services. Paragraphs 113-130 of the Competition report note that the impact on users may be direct and immediate or indirect and longer term, for example by damaging business performance of the end user's service providers.

The Competition report also addresses the issue of market definition, which is crucial to maintaining appropriate segmentation within a vertical stack of services, if there is to be clear prevention of discrimination through vertical integration. This has the indirect benefit of recognising the importance of demand aggregation, and single or dual supplier strategy, as mechanisms for business users to optimise contract arrangements, minimise cost and simplify operational administration through leveraging economies of scale.

The potential characterisation of the Internet as a two sided market in which there are content, application and service providers on one side, and end users on the other side, represents an over simplification. Additionally, even if partly applicable, it ignores more balanced enterprise to enterprise use of the Internet by business users, including their use of the Internet for communication and information sharing between functional units within their own organisations. Such usage is characterised by different traffic profiles, greater balance between upstream and downstream traffic volumes and immediate financial impact in the event of breaks in connection. These may require complex restart and resynchronisation activity, generating additional traffic associated with recovery.

The use of bundles to obscure discrimination is a further challenge for national regulatory authorities to identify, given that in some cases this may be indirect positive discrimination, where the bundle includes bought in, or separately supplied services or devices. General fair trade regulation, preventing linked sales and below cost service subsidisation, may be adequate to prevent such practice.

The BEREC report on the IP network aspects of network neutrality correctly identifies the clarity of vertical separation between transport and services (also described as network and applications), which is facilitated by IP. This reinforces achievability of the required flexibility, where a customer has a clear competitive choice for service and transport providers independently. The other basic principle of the Internet concerns the charging mechanism where the carrier bears transit costs and bills the customer for the cost of termination. This principle of Bill and Keep overcomes the difficulties experienced in other markets, for example international mobile roaming charges and mobile termination rates.

IP Quality of Service transport classes do however introduce the technical potential for implementation of discrimination contravening network neutrality principles.

The generic term Content and Application User (CAU) in the report, to describe an end user, fails to identify or recognise the differences between mass-market single device or single address end users and the multisite, often multinational small, medium and large enterprise users, for whom IP connectivity needs are different and more complex.

The network neutrality principles for users can therefore be summarised as differentiation, discrimination and transparency and the key questions to be addressed are:

- in what circumstances is it acceptable, and possibly desirable, for an element within the ICT landscape to be provided on a differentiated basis to different customers, and/or at different times, and/or in different places, and/or based on different contractual terms?

- in what circumstances is it acceptable, if ever, for a service provider to discriminate in the provision of a communications service or technology component, in terms of availability, functionality, performance, quality and/or manageability, between business partners and/or customers, and/or other service providers?

- how transparent will the differentiation as defined above, and discrimination (if allowed) be, in advance, at the time, and after the event, in terms of specific information provided to business partners, customers, competitors, regulators, investors and/or government?

In addressing these key questions, it is important to recognise that full recognition is given to the different and distinct needs of private and public enterprise customers, compared to those of the mass-market consumer. The assessment of whether or not a problem exists must not be confined to analysis of individual site connections in single Member States.

The multi-site, multinational connectivity requirements of enterprises demand a greater level of Network Neutrality. End-to-end connectivity must not be subject to denial of application use, or blockage of content, due to the actions of one service provider within the connectivity chain. Mission critical business processes cannot tolerate the impact of such differentiation or discrimination in the same way that an individual consumer can, since the latter can use a competitive retail market to change supplier, whereas an enterprise customer cannot, in such circumstances.

The term “traffic management” is used to justify actions taken by service providers who deal with traffic selectively, to achieve desired performance outcomes, particularly during periods of congestion where bandwidth is inadequate, or where unacceptable latency would result. Consumers experience traffic management in everyday life, for example on high speed roads, where variable speed limits are applied, lanes are closed or reserved for public transport (or dignitaries during the Olympics), and traffic calming measures are implemented through speed bumps and chicanes. Fuses disconnect equipment to protect overload in electrical systems. These processes are transparent and visibly implemented.

However, restricted lanes for certain makes of car would not be tolerated. Circuit breakers triggered by the brand name of an electrical appliance would be unacceptable. But this kind of non-neutrality exists on the Internet today. The blocking of certain applications and content is not acceptable, unless it is demonstrable that they can be clearly classified by type of application or content, and not by the supplier or service provider. The key is to have an agreed definition and classification system for applications and content, which is consistently applied. This would not group together all peer-to-peer applications and block them all, when only some threaten critical latency or service integrity. It would allow traffic management be used acceptably, without becoming anti-competitive discrimination.

Discriminatory non-neutrality must not be allowed by disguising it as operational traffic management in situations of transient technical overload, emergency or security breach.

One final point must be stressed in terms of the risk of inappropriate traffic management, and that concerns remedies in the event of breach of intellectual property rights. These can in some situations become in conflict with user rights of access. This controversial issue threatened to obstruct final agreement on the Framework review, requiring difficult compromises between the Council of Ministers, the Commission and Regulators.

This issue also highlighted a significant difference between what might be an appropriate approach for a single site Internet user and an enterprise customer or Internet service provider. Summary disconnection as a remedy, for example following repeated illicit file sharing, would be wholly inappropriate, disproportionate, unworkable and unacceptable for enterprise customers and ISPs, who cannot control the behaviour of individual transient users connected to their networks. In this instance, net neutrality is non-negotiable.

In terms of the European Union, it is essential, if a Single Market in ICT is to be created effectively, that the approach to net neutrality should be the same in all Member States. Current levels of fragmentation and dysfunctionality guarantee that, for most enterprise customers, the present situation provides neither an Open Internet nor Net Neutrality.

International Telecommunications Users Group (INTUG)

The International Telecommunications Users Group (INTUG) represents the interests of business users of telecommunications. These include some of the world's largest financial institutions, car manufacturers, pharmaceutical companies, fast moving consumer goods enterprises, retail and distribution companies, and small and medium enterprises (SMEs).

The INTUG community includes user associations in many European countries including Belgium, Denmark, France, Germany, Netherlands, Norway, Spain, Sweden, Switzerland and the UK, and the multinational user group EVUA. Each group represents public and private sector customers of communications service providers.

Confidentiality and Contact information

Nothing in this submission is confidential, and the entire contents can be considered to be in the public domain. The submission will be made available on the INTUG web site at www.intug.org.

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