



ETNO draft response to consultation on Draft BEREC Report on the Internet Ecosystem (BoR (22) 87)

July 2022

ETNO (European Telecommunications Network Operators' Association) represents the main telecommunications operators of Europe. Our members deploy and operate fixed and mobile connectivity.

General

ETNO welcomes the initiative of BEREC to provide an overview of the internet ecosystem, which is especially relevant as market players adopt new business models and expand into new services, and as the regulatory framework for the digital economy is changing, with the forthcoming entry into force of major regulations for the internet ecosystem, most notably the Digital Markets Act and the Digital Services Act.

We have long welcomed BEREC's efforts to analyse digital platforms and to monitor the effects of the internet value chain. Taking into account NRAs' practical experience of implementing the regulatory framework for telecommunications, their expertise in designing, enforcing and monitoring remedies can be a valuable input on how to define a balanced and effective digital markets regulatory framework.

Unfortunately, looking at the ongoing debate at EU level, the draft report does not provide any analysis regarding the topic of relation between service provision costs and value creation. Alongside the openness of the internet ecosystem, fair market conditions should be ensured, allowing for the sustainability of business models across the whole value chain. Without it, the report is missing a very important aspect that should impact the whole assessment of competitive issues.

We also notice that BEREC seems to underestimate or outrightly dismiss possible competition issues arising from all actors of the internet ecosystem but ISPs (e.g. DNS/DoH resolver), while at the same time hinting at additional areas of concern with regard to ISPs, even when these have already been addressed in adopted legislation (e.g. bundled services and the EECC).

Market evolution

According to recent data from the European Central Bank ([The digital economy and the euro area \(europa.eu\)](https://www.ecb.europa.eu/press/pr/20220707-digital-economy)), the digital economy now represents 4-9% of the GDP in European countries. However, as indicated in a recent study conducted by Axon for ETNO (footnote), the real GDP impact driven by digitisation is likely higher than these figures, as most economic activities have a high degree of reliance on digital infrastructure. The same study points to the fact that, in recent years, data traffic consumption has been growing at an extremely high rate, which has been supported by a shift from copper and 3G-based networks to Very High-Capacity Networks ('VHCN'), including FTTH and 5G.

As illustrated in the Axon study, the internet ecosystem is highly complex and interrelated, with the various elements across the value chain (IAS, DNS, IP interconnection, hosting, CDN, NI-ICS) with complementary roles of the players involved. This market is seeing considerable changes, as some main actors of the internet ecosystem, whose purview had to-date been limited to the client and

server sides of the internet ecosystem, are increasingly investing in and rolling-out submarine cable and related backbones, virtualized network services, CDNs. While investment by OTTs are contributing on digital infrastructure in Europe is valuable, at present, the level of investment is not comparable to that of the telecom sector with every EUR 1 invested by OTTs being matched by EUR 10 invested by telcos¹. This should be reflected in the BEREC report, also taking into account that network operators ensure the most expensive part of the network, namely the aggregation, local loop and terminating segment, without mentioning the investment into mobile networks and spectrum licenses It is also to be mentioned that the operator's investment in networks favours competition, particularly in the field of content provision providing massive number of contents in various and large number of networks.

This is of particular importance, as recognised by BEREC, since the shifting dynamics in adjacent and closely related markets to ECN/ECS can have significant impacts on these markets, while not being directly subject to the regulation of those markets, or within the remit of BEREC activities.

Another element to signal is that the flourishing digital market does not equally benefit all players of the internet chain, indicating a structural problem in the current model. This is reflected in the greater financial power of the Internet players compared with the telecom operators: as indicated in the Axon study, the market capitalization of the Big Tech firms represents more than ten times that of the main European telecommunications operators.

Internet access service

The draft report mentions several cases of degradation, but does not mention the QoS degradation due to the use of free peering by large CAPs, entering in telcos' networks through interconnection gates that are not properly designed for such extra traffic, leading to congestion.

IP interconnection

IP interconnection markets have shown tremendous changes over last years with an exponential increase in data traffic that has led to significant asymmetries in this space. The asymmetry is largely due to the negotiating power of the large OTT content providers and the operators. OTTs have the possibility to bypass an operator if they disagree with the terms of a contract. They can reroute their traffic through any telco's peering agreement, instead of negotiating directly a commercial relationship at a fee with the telco in question.² ETNO believes this is not sufficiently reflected in the report, as it generally refers to a possible "suboptimal situation" leading to impairment in the experience of openness for end users and producer of contents, without mentioning the impact on the sustainability of ISPs. The differences in bargaining power of CAPs and ISPs are acknowledged by BEREC without further delving into the topic.

On the contrary, the report states that: "Additionally, competition concerns may arise from restrictive peering policies that ISPs impose on small CAPs and hosting providers. To the extent that large ISP and CAP players are not present at internet exchanges (or only with low capacity), smaller players might end up being forced to use transit which leads to a lower control of data traffic and possibly a lower quality of service and experience, or to accept paid peering policies of ISPs instead of settlement free peering. As a result, the element could be getting more 'closed', making it harder for smaller CAPs to

¹<https://www.analysismason.com/contentassets/8f975fb4e2b34ca18f31825ce38df24a/infrastructure-investment-by-online-service-providers---20-dec-2018---web.pdf>

² The risk of such situations has been expressly acknowledged by some competition authorities in the past (e.g. Decision 12-D-18 of the French Competition Authority of 20 September 2012 on practices concerning reciprocal interconnection services in the area of Internet connectivity).

grow.” This comment derives from a study based on practices in one particular national situation, and is not well documented nor studied, with a sufficiently relevant scope to draw conclusions. As a consequence the BEREC report should withhold from drawing unsubstantiated consequences in this regard. BEREC only focuses on possible disadvantages for small CAPs (having to pay for transit), while totally disregarding the issues for ISPs stemming from large CAPs having access to free peering even when the ISP requirements (i.e. traffic ratios) cannot be met. This aspect should be included in the report and further assessed in BEREC future work on IP interconnection.

Future work

We welcome the initiative of BEREC to gain a holistic picture of the internet ecosystem and understand the current activities of market players in an evolving market. Nevertheless, some of the elements for future work raised by BEREC are better explored by other institutions and bodies, which have a clearer mandate to explore the issues in depth. For example, a detailed exploration of the architecture of the internet, and notably the evolution from ‘web architecture’ to ‘app architecture’ and the impact on governance, competition and security, does not fall strictly within BEREC’s remit, and could benefit from expertise from other bodies, e.g. ENISA, competition authorities and the European Commission.

A possible area for future work raised by BEREC on intersection between ECS services and other elements of the internet ecosystem (including unilateral implementation of some practices, such as the redirection of traffic to their own services) could be an opportunity to explore innovations by some market players which could hamper the ability of ECN/ECS providers to fulfil their obligations under EU law, especially those which limit the possibility for operators to understand traffic patterns or undertake lawful blocking of URLs mandated by court order.

In this context, it must also be borne in mind that standardisation is of great importance here. BEREC should, where appropriate, promote new standards and innovations, especially those which deal with the encryption of internet traffic. Such sensitive matters should be based on agreed standards.

Comments on specific points raised in the BEREC report

Following some specific comments regarding IAS, DNS and IP interconnection.

IAS

The trend towards bundled offers by ISPs is reported to have increased switching barriers, making it more difficult for new market entrants to compete, but BEREC fails to mention that this issue has already been addressed by the legislator in the European Electronic Communications Code (EECC) (cf. BEREC draft report paragraph 6.2.3).

We also question BEREC’s negative assessment of ISPs imposing specified equipment (as an exception to the general rule) when technically justified, as this is aimed at ensuring the performance levels for the end-user, and has been acknowledged and permitted by the regulation (cf. BEREC draft report paragraph 7.2.2).

Domain Name Systems (DNS)

BEREC dismisses possible competitive issues arising from DNS provided by entities other than ISPs not being subject to any regulation, even highlighting possible positive impacts on openness and convenience, while maintaining that the openness of the DNS provided by ISPs is ensured because it

is subject to the Open Internet Regulation (cf. BEREC draft report paragraphs 6.2.4 and 7.2.4). It is not clear why BEREC believes that DNS deserves a different regulatory treatment depending on the provider.

Furthermore, no consideration is made on the impact of DNS over HTTPS (DoH) resolvers on the ability of ECN/ECS providers to fulfil their obligations under EU law.

IP interconnection

In assessing the bargaining power within the IP interconnection market, ETNO welcomes BEREC's acknowledgement that ISPs fall into the category of small players, alongside small CAPs (cf. BEREC draft report paragraph 8), while in the previous paragraphs ISPs are depicted as those who can impose their peering policies (cf. BEREC draft report paragraphs 6.2.5 and 7.2.5), which does not reflect the market reality.

For further questions, please contact:

- Maarit PALOVIRTA, Senior Director of Regulatory Affairs: palovirta@etno.eu
- Ross CREELMAN, Public Policy Manager: creelman@etno.eu