



Vodafone Group response to the public consultation on the draft BEREC Report on the Internet Ecosystem, BoR (22) 87¹

21 July 2022

Summary

We welcome BEREC's focus on the internet ecosystem. We believe that a comprehensive and complete analysis of the internet ecosystem reveals a fundamental market failure that has a serious and detrimental effect on the operation of the IP interconnection market².

The key issue that we focus on in this response is that network operators are not in a position to charge the largest generators of internet traffic effective prices which reflect the true market value of the data conveyance services being provided.

These large internet players have acquired a level of market power which undermines a market outcome which could be normally expected from competitive commercial negotiation. In addition, the Open Internet Regulation (whose principles we fully support) prevents network operators from using conventional market mechanisms with these powerful companies as part of the standard commercial process.

This issue that is not limited to the distribution of value between different types of market players. This distortion has real effects that must be addressed. Networks are raising less revenue from the largest internet traffic generators than would be the case in an effective and competitive market. The result is that the ability of network operators to invest is reduced, as they cannot obtain a fair market value for their investment. Given the importance of delivering the EU's Digital Decade ambition, it is vital to address this market failure.

Addressing the causes of market failure would not require any changes to the EU's Open Internet Regulation because it would not result in any limitation of the Open Internet principles, and it would not result in dilution of the end-user rights under the Open Internet Regulation. Indeed, by securing a policy to achieve positive market outcomes in the interests of all European citizens and consumers, it would instead enhance the effectiveness and sustainability of the open internet in the EU.

¹ We will be happy to discuss these points with BEREC as part of its ongoing work in this area. Any questions or comments on any of the points set out in this response should be directed to Florian Kriegler (florian.kriegler@vodafone.com).

² For the purposes of this response, we have adopted the term 'IP interconnection market' as used in the draft BEREC report to refer to the relevant part of the Internet Ecosystem.



EU Policy context

The European Commission has articulated comprehensive public policy goals and targets as part of its Digital Decade strategy. The public benefits resulting from improving the reach and capability of digital communications networks are clear. Addressing these goals in policy making means unlocking a virtuous circle of additional investment which leads to better quality (speeds, data volumes, reach) and better pricing (value for money) for all internet users.

Indeed, we note that this has been recognised in the Digital Decade Declaration Commission proposal, which highlights the need to develop adequate frameworks so that “all market players benefiting from the digital transformation (...) make a fair and proportionate contribution to the costs of public goods, services and infrastructures”³

We further note the view of BEREC in its draft report that a “small number of digital platforms have reached a position allowing them to shape and restrict both the competition dynamics on different elements of the internet ecosystem and the relative openness under which content, services and information can be accessed and shared”.

We fully agree with this assessment. In this response, we set out the reasons for a market failure in the internet ecosystem that has led to underinvestment relative to what we would observe in a well-functioning market.

Absent an intervention to address this market failure and secure a fair contribution from the largest generators of traffic on the internet, the burden of additional investment will fall disproportionately on other participants in the internet ecosystem, most notably network operators. Furthermore, the overall level of funding raised will continue to fall short of what is required – likely short of what is needed to meet the EU’s digital decade goals⁴.

Market analysis

Two-sided markets

Analysis of the market failure at hand first requires an assessment of the nature of the market in question. In essence, the market is two-sided. This is because there is an intermediary (the network) which links two types of user groups – end-users seeking access to the internet on the one side, and generators of internet traffic seeking to deliver their content and application services on the other. In practice, the network generates economic value for both.

We believe that in a well-functioning two-sided market, networks would receive revenues from end-users seeking access to the internet, *and* from those companies that generate large amounts of internet traffic. This would drive efficiency and ensure optimal and (in this market) high levels of investment.

³ European Declaration of Digital Rights and Principles for the Digital Decade, COM(2022) 28 final, 26.1.2022

⁴ In particular, public funding commitments from EU Governments are significant but remain insufficient. Deloitte has calculated across 20 member states, that around 27% of the combined National Recovery and Resilience Plan (NRRP) budgets focus on digital transformation. The report identifies €154bn of digital investments including €131bn assigned to meet the specific Digital Decade targets. See ‘The contribution of National Recovery and Resilience Plans to achieving Europe’s Digital Decade ambition’, Deloitte LLP Report – June 2021, available [here](#).



Market failure

However, the current market dynamics vis-à-vis network operators and large internet traffic generators are not effective.

In general, when determining a fair and efficient price, service providers ordinarily rely on their ability to alter quantities (or qualities) if they are not satisfied with the price offered for their services and, in this way, an efficient equilibrium price is determined. However, as the EU's open internet provisions rightly prohibit network operators from refusing to carry such internet traffic, operators lose their 'normal' market bargaining power with large internet traffic generators and have no ability to enter into a meaningful negotiation regarding the service being provided.

This means that networks do not have the typical levers they would have available to obtain a fair price for the services they are providing. The largest generators of traffic on the internet can simply refuse to pay a fair price. Networks are forbidden from denying or restricting the corresponding service, as this would be inconsistent with entirely legitimate requirements to ensure the availability and accessibility of content.

This is further exacerbated by the market power of the largest generators of traffic on the internet. What we observe in the context of the internet ecosystem (as recognised by BEREC in its draft report) is the presence of large internet traffic generators that have control over key content, applications, and services to a degree that end-users are not able to migrate to other services in response to changes in market conditions.

These two factors combined mean that network operators do not receive the revenues that they would obtain in a competitive market.

The specific characteristics of IP interconnection markets

The prevailing ex ante approach to analysing markets is focused on addressing SMP by providers of electronic communications networks and services regarding wholesale internet connectivity, not on addressing the market power of the largest generators of traffic on the internet. The focus of ex ante regulation has been to ensure that, where required, network access is provided on specific terms – which would not be the case absent regulation. The remedies are imposed on SMP providers and benefit other providers of electronic communications networks and services.

IP interconnection markets display different characteristics in the sense that actors sitting at different levels in the internet ecosystem are involved – i.e., providers of electronic networks and services, generators of internet traffic, transit providers - and different services are also provided e.g., transit, peering and content delivery networks.

We are aware that there is often an assertion made that IP interconnection markets are working well. For example, in Section 6.2.5 of the draft BEREC Report on the Internet Ecosystem, it is stated that “[f]or the time being, transit and interconnection players do not seem to pose major difficulties for competition”. However, the real detriment comes not from transit and interconnection players, but from the largest generators of internet traffic, who are able to procure these services without paying prices that reflect their true cost and value.

Therefore, this market cannot be described as working well, and consideration of IP interconnection markets cannot be seen through the narrow prism of whether traffic flows from large generators of internet traffic to end-users. On the contrary, a broader consideration across the internet ecosystem



shows serious imbalances in the contribution from different users, and distortions to price signals. This, and the consequent underinvestment, are features of a market that is not working well.

The current arrangements will not yield the investment that is required

It has been observed that there has been investment in networks by the largest generators of internet traffic, and that this is driven by their desire to improve the quality of content delivery to their customers. This investment has included spend on content delivery networks.

However, this observation leads to flawed conclusions being drawn about the healthy functioning of the market. Such activities are insufficient to guarantee adequate investments in network connectivity. In this context, we note that the largest internet traffic generators have not contributed towards investment in access networks. Yet extended reach and capacity of access networks have represented the bulk of internet access service investment, made necessary, to a large degree, by the increased capacity required by the growth in network utilisation by the largest internet traffic generators.

Proposed Remedy

At a high level, an intervention requires a new regulatory framework that enables network operators to receive appropriate remuneration from the largest generators of internet traffic, so that all relevant parties contribute their fair share of the commercial cost of investing in digital networks. Such a remedy would lead to an efficient use of network infrastructure by the largest traffic generators by attaching actually a positive price to the conveyance of data. This would introduce an incentive for efficient generation and conveyance of data when designing and delivering internet services.

While this would ensure that the largest generators of traffic make fair contributions, it would not impact or dilute the rights end-users have under the open internet regulation. It would not limit the content made available and accessible on the internet or introduce any restriction on how this is delivered or accessed.

The uplift in investment from this intervention, would in fact lead to an internet ecosystem that is more sustainable for all market participants. As just one example, the European Digital SME Alliance (a network of 45,000 SMEs in the ICT sector) has recently issued a statement⁵ highlighting that they support an evaluation of the need for big tech companies to adequately contribute to investment in network roll-out and that “a balanced, fair and equitable internet ecosystem is essential to support a thriving digital ecosystem and to ensure that small and medium-sized companies get a fair shot at innovating and growing”.

Some claim that such remedy could lead to reductions in quality (with vague references to the situation in South Korea), but the opposite is the case. In fact, one of the key benefits of such an intervention would be that it mandates efficient pricing and therefore improves incentives to invest at adequate levels and to route traffic efficiently and effectively. As the required intervention would be focused on addressing identified market distortions, it would help to ensure a healthy competitive dynamic in the European internet ecosystem, in the interests of all European citizens and consumers.

⁵ <https://www.digitalsme.eu/digital-smes-call-for-measures-to-make-the-european-internet-ecosystem-fairer-and-stronger/>