

European VOD Coalition’s reply to European Commission’s exploratory consultation on “The future of the electronic communications sector and its infrastructure”

Introduction

The [European VOD Coalition](#) (“the Coalition”) brings together video-on-demand (“VOD”) and digital entertainment companies that share common values and invest in and distribute audiovisual content in Europe as their core commercial activity. We promote high quality, diverse European content to wider global audiences and believe in supporting an innovative and sustainable European audiovisual sector, so as to give consumers greater choice in accessing content. VOD services typically operate in a competitive entertainment market, which incentivizes content providers to continuously improve the value of their products by investing in quality and experience.

The Coalition members are governed by the Audiovisual Media Services Directive (AVMSD), which sets the framework for all audiovisual media services in the EU. Under the AVMSD, we are subject to obligations that require, among others, significant financial investment in the form of either cultural levies or investment obligations.

We welcome the opportunity to provide input to the European Commission’s exploratory consultation on “The future of the electronic communications sector and its infrastructure”.

As VOD services, we have always supported a well-functioning telecommunications infrastructure and connectivity in Europe. Having sustainable networks is vital to be able to distribute our content to European consumers. The Coalition members firmly believe that the existing Open Internet framework is not only the best solution for the present, but also for the future of European connectivity. This framework has already enabled high investment, affordable prices, and a diversity of services and connectivity offerings for the benefit of all Europeans.

In our submission we will elaborate how the Coalition members, as Content and Application Providers (CAPs), already cooperate with Internet providers across Europe and have a symbiotic and mutually beneficial relationship. Our content supports ISPs in retaining customer subscriptions and even increasing demand for premium high bandwidth subscriptions. On the other hand, without ISP networks we would not be able to deliver our content to European consumers. We thus do not think that this equilibrium should be endangered via unnecessary changes to the framework and/or to the relationship between content and Internet providers.



CAPs and ISPs have complementary roles in the Internet ecosystem: CAPs and especially video on demand drive demand for next generation networks

ISPs and CAPs do not compete with each other, but have a vested interest in each other's success. Comparing the relative success of CAPs and ISPs makes little sense as CAPs range from all sorts of industries, from entertainment to logistics to stock trading. Consumers buy Internet bundles for a variety of reasons - to telework, to study online and also to watch/stream/listen to content, making it clear that higher traffic is actually what drives up the demand for Internet subscriptions. While video streaming has indeed represented a large share of how consumers are using their Internet connection and forecasts indicate it might remain so, it is a testament to the value of video content and it being a reason for users to purchase an Internet connection in the first place. We observe that Internet users that are customers of subscription VOD services are more likely to subscribe to higher broadband speeds or next generation networks. GSMA also indicates that demand for mobile traffic is “driven by a combination of factors, including video streaming and online gaming”.¹

CAPs invest billions of Euros to develop and acquire content that European consumers value. In fact CAPs and ISPs have long created mutually beneficial commercial partnerships², and ISPs often advertise³ the availability of high quality entertainment to sell faster connectivity, more generous data packages or additional premium options.

The challenge for the spread of the next-generation networks is adoption. When examining current and projected next-generation networks adoption rates in the EU, we observe a gap between the availability of said networks and their adoption by subscribers.⁴ The FTTH Council predicts that uptake for FTTH in the EU in 2027 will reach only 62%. The EU 5G Observatory reports that 72% of the EU population is covered by at least one 5G network, but there is only around 1% uptake.⁵ As demand for next generation networks is driven in part by online entertainment and streaming we recommend policymakers favour policies that will stimulate such demand, and not have the unintended consequence of reducing the quality or affordability of content.

CAPs and ISPs are already incentivized to cooperate and make content delivery efficient

Because of this symbiotic relationship, both CAPs and ISPs have a vested interest in achieving a great experience for their customers, and designing their interconnections efficiently to achieve that goal.

The Coalition members already invest massively to ensure that their content is delivered to the end-customer in an efficient and seamless way. This includes making sure that latency is reduced and quality improved, for instance via technologies such as Content Delivery Networks (CDNs), which help bring content closer to the users, and relieve backbone networks in cooperation with ISPs. CAPs similarly invest in innovative technology such as versatile video coding and variable bitrate to more efficiently transfer video across networks. Technology efficiencies and investments ensure that growing demand from end users can be handled sustainably without increasing network costs over time.⁶

¹ GSMA, The Mobile Economy, 2023

² [Viaplay/Solcon \(Netherlands\)](#); [Viaplay/Telia \(Sweden\)](#); [Viaplay/Deutsche Telekom](#)

³ [Orange France](#); [Telefonica Spain](#); [Vodafone Italia](#); [Deutsche Telekom](#); [TIM Italia](#)

⁴ The FTTH Council for Europe

⁵ EU 5G Observatory, 2022

⁶ Analysys Mason, 2022; Vodafone, 2022 (p. 38)

The market for interconnection functions well

The Coalition members believe that the interconnection market is working well. This is confirmed also by large telecommunication companies.⁷ We observe that CAPs, including the largest ones, offer open, non-discriminatory conditions following the ‘bill & keep’ principle to all networks regardless of size. On the other hand, a few large ISPs enforce ‘selective’ peering policies (i.e. Deutsche Telekom, Orange, Telefonica). In any case, disputes are rare in the interconnection market and have been quickly resolved as all parties have an interest in cooperating for the benefit of their customers.⁸ Before any regulatory changes are made, we would recommend to task BEREC with researching in-depth the interconnection market and practices of large ISPs.

The proposals of ‘network fees’ will hurt the creative ecosystem and directly contradict net neutrality

Any proposal that introduces a direct payment mechanism based on traffic “usage” would severely hurt content providers in particular. More money paid in network fees would in fact mean less money to invest in European content, which in turn means less European content available and/or lower quality European content. This is especially true if you take into account the already significant content obligations and quotas that the Coalition members, regulated under the AVMSD have to comply with. Ultimately, this would also hurt European consumers, as they would not only have access to less (quality) content but less choice of content.

In addition, seeking payments for access to one’s network fundamentally contradicts the principles of the Open Internet. BEREC commented in 2012⁹ that this is “*fundamentally at odds with the principles of [...] networks underlying the success of the Internet to date, based on decentralisation and simplicity*” and ran the risk of “*inducing an abuse of market power by telecoms carriers*”. Establishing ISPs as gatekeepers for which content is available online and at which conditions through a network fee is indeed a clear violation of net neutrality, as noted by consumer and civil society organizations, internet experts and academics, industry, as well as Members of the European Parliament¹⁰.

South Korea is the only example today where interconnection is regulated by a “sender party network pays (SPNP)” system. This model has resulted in negative outcomes for CAPs, internet users, and the overall Korean internet ecosystem. The OECD reports¹¹ that Internet latency in Korea is the slowest of all developed countries; content websites have had to reduce the quality of video content because of the high costs of bandwidth.¹² Network use fees also reduce investments in Korea: by charging a high bandwidth fee in Korea, but then connecting for free with networks outside of Korea, Korean Tier 1 networks push content outside of the country.

⁷ [Telefonica, 2021](#)

⁸ [Cloudflare, 2023](#)

⁹ [BEREC's comments on the ETNO proposal for ITU/WCIT or similar initiatives along these lines](#)

¹⁰ [BEUC, 2023](#); [Epicenter works & others, 2022](#); [Komaitis & others, 2022](#); [MEPs letter, 2022](#); [Join statement \(industry, civil society, consumers\), 2023](#)

¹¹ [OECD \(fig. 16\)](#)

¹² [Twitch reducing video to 720p, Watcha unable to do 4K](#)

Public subsidies and/or funds need to be carefully considered

The EU Digital Decade targets¹³ recognize that connectivity is vital beyond entertainment, it is used for remote work, education, e-administration, healthcare and many other aspects of life. In rural or less densely populated areas, connectivity might not be achievable in a commercially viable way. To address this, the EU already makes a wide range of funding instruments available to improve connectivity across Member States, and cross subsidies (revenue from dense areas subsidising less dense areas) are already being implemented. Allocating additional public funds needs to be carefully considered, only after an actual investment gap is awarded and with sufficient guarantees that the funds will be used effectively on network expansion in remote areas.

When it comes to basing any funding mechanism on contributions from CAPs it is important to take into account that (i) internet services often change in popularity and sources of income, and therefore, are not a stable source of revenue (ii) this risks creating market distortion and discrimination (iii) in any case, such contributions should not be assessed on internet traffic, which would have the unintended effect of disproportionately affecting VOD services, reducing investment in creative content and the demand for broadband services.

Need for an evidence-based approach: the claims made by large telecom companies are flawed

Large telecom companies have long been asking for over-the-top (OTTs) services and/or CAPs to make a direct financial contribution to internet providers to “compensate” the “increase in data traffic they cause”. As it would be based on traffic usage, this financial contribution would effectively amount to an Internet tax. According to large telecom companies, there are major “imbalances in the internet ecosystem that need to be addressed”¹⁴, as not everyone is “paying their fair share”¹⁵ when it comes to the development of fixed and mobile networks. In their view, this results in an alleged investment gap of billions of euros. They thus think that a fairer allocation of network costs would be the only way to meet investment needs for the transition to 5G and FTTH networks, and to address the ever-increase in data traffic represented by future technologies such as IoT and metaverse.

The Coalition considers these statements to be incorrect, for the reasons explained below.

Firstly, we would like to highlight that **there is no evidence to support the idea that the internet ecosystem is ‘unsustainable’** as the incumbent European telecom companies are claiming. The foreseeable demand for online entertainment services is not expected to outgrow the capabilities of the Open Internet. When Covid-19 hit, and while all Europeans were stuck at home with only the Internet to work, learn and play, networks held up remarkably well¹⁶ without congestion issues. The pandemic proved that the current policy regime and market dynamics have successfully led to a robust European Internet. As an example, a high quality HD stream

¹³ Digital decade targets 2030

¹⁴ <https://etno.eu/news/all-news/8-news/762-etno-welcomes-the-eu-consultation-and-the-connectivity-package.html>

¹⁵ <https://etno.eu/library/reports/105-eu-internet-ecosystem.html>

¹⁶ [European Commission, 2023](#)

nowadays requires less than 5Mbps of stable bandwidth. Mobile HD streams require far less. ISPs these days market more than 100Mbps FTTH connection - that would be 20 simultaneous HD streams. While customers sometimes choose to upgrade their connections, the Coalition members do not require a FTTH or 5G connection to watch video streams.

Furthermore, any potential **'investment gap' needs to be carefully assessed**. European telcos have successfully upgraded their fixed networks, and are continuing to do so, using a mix of private capital and public funds. Many of the companies currently asking for a network tax have healthy balance sheets and do not appear to lack the money to invest.¹⁷ BEREC also notes that, a number of studies indicate that the provision of telecom access infrastructures is a profitable business with a relatively attractive risk return¹⁸.

Other claims made on incorrect premises include the following:

- **“ISPs’ costs are directly proportional to the increase in traffic driven by CAPs”**: The notion that CAPs “generate traffic” on ISP networks is incorrect as CAPs merely respond to the requests of ISPs’ customers that want to access their services or content. Consumers are the ones who generate demand for traffic, not (streaming) companies. Besides the fundamental flaw of such a proposition, it is also factually incorrect. The vast majority of an ISP’s network costs are concentrated in the access network (or ‘last mile’) that provides the final connection to the home. Access network costs grow proportionate to the number of subscribers, not traffic. Traffic sensitive costs for a fiber-based broadband network account for a small minority of network costs.¹⁹ In a nutshell, growing usage of the Internet by consumers can be managed without proportionate increases in network costs as a consequence of: 1) network costs are mainly linked to last mile access and fiber that exist regardless of usage, 2) the constant technological improvement and efficiencies in networking equipment technologies and 3) the joint work by CAPs and ISPs to efficiently deliver content.
- **“The increase in traffic is leading to excessive energy consumption for networks, and is becoming unsustainable”**: network-related electricity consumption, like costs, is not expected to grow with internet traffic and internet infrastructure companies are incentivized to be resource efficient. Research conducted using ETNO members²⁰ data as well as IEA²¹ confirm that while internet traffic has grown fast and is expected to continue doing so, the electricity consumption and resulting emissions from networks do not grow. Internet infrastructure companies, whether in the cloud, data center or network industry, are already heavily incentivized to optimize for energy efficiency as they optimize for cost efficiency.

Regulators²² have also reported the same dynamics over the past decades, and operators

¹⁷[Telefonica](#), [Orange](#), [Deutsche Telekom](#)

¹⁸ BEREC points to a [study](#) prepared for the European Commission on “Investing in local and regional Gigabit broadband deployment: Opportunities and challenges for market investors in the EU”, and the [GSMA](#), “The Internet Value Chain 2022” (May 2022), p. 33

¹⁹ [BEREC, 2022](#)

²⁰ [Electricity Consumption and Operational Carbon Emissions of European Telecom Network Operators, fig. 12](#)

²¹ [IEA, 2022](#)

²² [BEREC, 2022](#), [Ofcom, 2023](#)

themselves have consistently reported that they have been able to handle growth in network traffic without growing either their costs²³ or energy consumption.²⁴

- **“Content providers constitute large traffic generators (LTGs)”**: The concept of “LTG” fails to account for the vast diversity of data flows over the Internet and their relative size. Traffic on the Internet is largely encrypted, dynamically routed and hosted: this means that there is technically no way to accurately identify the network traffic belonging to CAP or another, considering that CAPs can host their services in a multitude of cloud or CDN service providers, as most the Coalition members do. Taking into consideration the end-to-end encryption on the Internet, it is unclear how Internet content traffic can be accounted for accurately.

Moreover, network traffic also does not correlate to revenues: many Internet-based businesses generate large revenues with little traffic (eg. e-commerce or stock trading), or conversely little revenue with sizable traffic.

Lastly, it is relevant to note that **traffic to illicit content amounts to a significant part of the total internet traffic** which is unjustifiably omitted from the statistics used by the ISPs public debate on network fees. Last year, Film and TV Piracy Report²⁵ measured 215 billion global visits to piracy websites in 2022, with over 80% of piracy in the EU delivered via streaming in 2020.²⁶ A recent study by DataProt suggests that the illegal downloading of copyright materials takes up 24% of global bandwidth.²⁷

²³ [BT, 2018 \(p9\), Vodafone, 2022 \(p38\)](#)

²⁴ [Telefonica, 2022, T Mobile, 2021 \(p56\) Deutsche Telekom, 2023; GSMA, 2020](#)

²⁵ <https://www.cinematography.world/the-film-and-tv-piracy-report-2022/>

²⁶ [EUIPO](#)

²⁷ <https://dataprot.net/statistics/piracy-statistics/>