



European Commission exploratory consultation: the future of the electronic communications sector and its infrastructure

ISFE contribution

May 2023

Transparency register ID: 20586492362-11

Executive summary

- ISFE believes that the introduction of network fees in the EU would not be of benefit to consumers and to the Internet ecosystem in general.
- In addition to many legal, technical and practical difficulties, the introduction of network fees in the European Union would be incompatible with the principle of net neutrality adopted in the Open Internet Regulation.
- ISFE disagrees with the assumption that Content and Application Providers (CAP's) free ride on connectivity infrastructure: Content generates demand for connectivity in a mutually reinforcing virtuous cycle, where competition in both markets is stimulated, to the ultimate benefit of consumers, CAPs and ISPs.
- Content and security updates for video games are distributed via the internet, some of which are required by the Digital Content Directive: network fees would effectively impose a burden on video game publishers to carry out a legal obligation.
- New technologies such as cloud have the potential to make a significant reduction in the carbon footprint generated by access/delivery of content such as video games. Its actual environmental impact is dependent on multiple variables outside the control of Content and Application Providers.

Introduction

ISFE welcomes the opportunity to voice its views on certain aspects concerning the future of connectivity in the European Union.

Our sector in Europe is mostly composed of SME's developing video games, and the introduction of network fees would send a concerning sign to aspiring innovative businesses which rely on internet connectivity to operate. Video game development in Europe has been recognised by the European Parliament as one of the key sectors to enhance and boost the digital economy in the EU and its global competitiveness.

ISFE and its members have been attentively following the debate around network fees in recent months, and welcome the opportunity to provide written feedback to the European Commission's Exploratory Consultation, beyond the constrictions set out in the Questionnaire in the Exploratory Consultation. ISFE's reply to the consultation's questionnaire is limited to a number of questions: given that the quantitative nature of certain questions render it impossible for an entity such as ISFE to

answer those, and certain questions are simply not targeted to content providers such as ISFE's members.

Section 4 represents the part in which ISFE was able to provide the most responses: we are concerned by the calls from large telecom companies for direct contributions from large bandwidth users, including over-the-top media services (OTTs) and creative content providers, to cover the cost of telecom infrastructure. BEREC's preliminary assessment of this matter, published in October 2022, concluded in this fashion, and we are of the opinion that the *status quo* has not changed. Such proposals not only erroneously correlate high-bandwidth with high profit margins but, more fundamentally, would pose a threat to the sustainability of European creative sectors such as video games, without bringing tangible benefits for consumers and business, quite likely the contrary.

ISFE's concerns around the introduction of a mandatory contribution stem from multiple points:

Not only there is no evidence of 'free riding' by content providers, nor has a market failure been identified in this regard, but **the introduction of network fees would effectively extinguish the possibility of maintaining net neutrality in the EU.**

Video games are subject to frequent updates, **some of them legally required, which represents legally mandated traffic.** Moreover, should network fees be introduced, **given the increasingly global nature of the digital economy, such measure would mainly penalise Europe, notably its consumers and businesses, with no real benefits.** Moreover, **investment in data centers and other types of network infrastructure** is already part of many of ISFE's members' *modus operandi*.

The environmental impact of network fees should also be considered, **as new technologies can make, and do make, substantial contributions to carbon intensity reduction**, and the introduction of these fees could very well have a chilling effect on this progress. Lastly, **consumer welfare is likely to be negatively impacted**, as network fees could lead to increased prices for consumers, alongside lower quality/diminished quantity of content.

We will subsequently expand on each of these points:

1. There is no evidence of 'free riding' by content providers

The assertion that creative content providers, such as video game providers, disproportionately enjoy the benefits of the internet ecosystem without contributing to it must be critically assessed.

Large European telecommunications operators argue that growing demand for content and applications is a problem - rather than an economic opportunity. This myth has tended to cloud the European policy debate and needs to be addressed. Creative content providers invest significantly in content to the benefit of consumers, but also to ISPs – the popularity of creative content services is the main driver of selling and upselling of internet access services. A possible introduction of network fees could have unintended consequences on the significant investments made by the sector in a wide range of diverse creative and cultural content.

One of the underlying assumptions of the ISP claims for payments from large Content and Application Providers (CAPs) is that the latter are "free-riding" on ISP infrastructures. Thus, CAPs would use this infrastructure without ISPs being (fully or partially) compensated for it and, therefore, costs incurred by ISPs would not be covered. A closer look suggests that there is no evidence of "free-riding" along the value chain. ISPs' customers (consumers and businesses alike) buy internet connectivity and pay for sending and receiving traffic: Costs for deploying and upgrading the access networks are typically

covered by payments from ISPs' customers. Particularly, providers of content such as video games, which rely on high internet speeds, already make additional payments to ISPs for such increased capacity.

Moreover, Content Application Providers do not free-ride, but rather invest in infrastructure, such as CDN or data centres, purchase network services and have developed bandwidth-efficient applications. The fallacious premise upon which the telecommunications operators build this argument could be reversed: the telecommunications sector only sells internet connections in such large scale because of the availability of content, yet CAPs do not request contributions from the telecommunications sector because of this.

Overall ISFE wishes to stress that **the relationship between ISPs and CAPs such as video game publishers is symbiotic**: demand for content drives demand for internet access and this in turn facilitates online content delivery, resulting in a virtuous cycle that ensures that the demand for both Internet access and online content continues. The current dynamic promotes competition in both markets, to the benefit of consumers at large.

2. Risks to Net Neutrality

The introduction of network fees will endanger the equal treatment of all Internet traffic and could favor or discriminate against traffic coming from certain providers, hence undermining the fundamental principle of net neutrality enshrined in the [Open Internet Regulation's](#) Article 3(3):

“Providers of internet access services shall treat all traffic equally, when providing internet access services, without discrimination, restriction or interference, and irrespective of the sender and receiver, the content accessed or distributed, the applications or services used or provided, or the terminal equipment used.”

The opposition to the introduction of network fees comes not only from the content provider side, but also from civil society - an open letter signed by 34 NGOs from 17 EU countries warned that such a levy “appeared to aim at drastically altering the regulatory framework underpinning the free and open internet”.¹ In another letter, 54 MEPs² stressed that “European citizens rely on a free and open internet” and underlined that “adopting a model that allows for or mandates access fees would be a disastrous return to the economic model for telephony, where telecom companies and countries leveraged their termination access monopolies to make communication expensive.”

A free and fair Digital Single Market must be underpinned by net neutrality, a cornerstone of the EU's regulatory framework for electronic communications, with which ISFE believes the introduction of network fees is incompatible.

3. Additional burden on existing legal requirements

Video games today are products which undergo numerous updates, patches and fixes throughout their lifecycle, be these for basic functioning, optimisation, security, or additional content. [The Digital Content Directive](#) requires providers of services such as video games to provide some of these updates

¹ Reuters, June 8th 2022. Available [here](#).

² Full letter available [here](#).

and, consequentially, a non-negligible part of the traffic generated by video games relates to compliance with EU legislation.

Were network fees to be introduced in the EU, it would almost certainly require deep packet inspection on a vast scale to determine which traffic is counted towards said network fees and which is not, with all the many complications and challenges this entails, from traffic slowdowns to increased potential for denial-of-service attacks and malware threats.

The introduction of such **network fees would effectively represent an additional financial burden for a video game publisher to carry out their legal obligation to consumers**, in addition to creating **artificial hurdles for game developers and publishers to release additional new content or upgrades to games that a consumer has already paid for**.

4. Content providers innovate and invest in connectivity technology and infrastructure

Providers of creative content such as video games already significantly invest in the internet ecosystem, through measures such as content delivery networks (CDNs), compression technology, data centre deployment, caching, and other measures that improve the efficiency and sustainability of network infrastructure, all of which serve to reduce traffic-related costs for ISPs.

The European Commission should acknowledge that costs are not ballooning because of data growth: for fixed access they are low and declining on a unit basis, whilst for mobile access they are higher but nevertheless declining on a unit basis.

Moreover, claims that tech companies do not contribute to the costs of telecom infrastructure are unfounded. As reported by the BEREC “[i]n recent years, [tech companies] have invested increasingly in telecom infrastructure and have been providing additional services related to the network and ECS markets.” Examples include virtualised network services, content delivery networks (CDN) and data centres, hosting the game experiences throughout Europe, closer to users, reducing usage on network ISPs' long-distance network capacity.

CAPs have an interest in ensuring that their traffic is optimised for smoother delivery and access by consumers, and to that end, as stated above, investments in traffic efficiency and capacity, at multiple levels, is already taking place. Consequently, **ISFE objects to the notion that only the telecommunications sector invests in network infrastructure and improves network efficiency**.

5. The role of technology in reducing carbon footprint

a) On the environmental impact of future network technologies

New technologies such as cloud, encourage the development of innovative business models in the video games industry (i.e. cloud services such as PlayStation Now, or the Xbox Game Pass), and are beneficial in the long-term optimisation of energy consumption. With a proper internet connection, cloud allows players to launch video games on devices which would otherwise not have been able to run these games due to a lack of computing power, because the calculation and processing of in-game interactions originate from the servers on which the video game is hosted and not from local capabilities. Such less powerful devices tend to consume less energy than high-end PCs for instance, and the availability of video games on cloud services actually allows users to enjoy the latest content without the need to buy more powerful devices, or more data storage equipment, both of which

would very likely consume more energy than going through high-efficient data centers or data networking.

In addition, cloud technology allows players to experience video games without having to download them, therefore limiting the amount of data transferred rather than expanding it. A good example is *Microsoft Flight Simulator* (Asobo Studio, Microsoft, 2020), which features 37,000 airports, 2 million cities, 1.5 billion buildings, 2 trillion trees, and 117 million lakes, originating from satellite imagery which altogether represent more than 2.5 petabytes of data. Should the game not rely on cloud, each player would have to download it portion by portion, or to buy it in a physical format containing all the data (Equivalent to 25.000 Blu-Rays for one “copy” of the game). Instead, cloud technology allows for smart delivery of data, where the game will download from the cloud only the in-game areas that the player will cross (instead of the full game)³.

Based on the two abovementioned elements, it is clear that new technologies have the potential to reduce, rather than increase the overall energy consumption from ICT devices. **Imposing pecuniary contributions from content producers based on the amount of data transferred when using their services could lead to the unintended consequence of encouraging such producers to favour physical deliveries of their product, which would prove to have a detrimental impact not just in term of energy usage, but also in terms of resource use (as more Blu-Rays, or high-end computing devices would need to be produced) and, consequently, waste.**

b) On the environmental impact of increased data traffic

While much attention has been paid to the energy consumption and emissions of data centers, they have not grown apace despite increasing traffic, a result traceable to efficiency gains and greater use of renewable energy. According to BEREC,⁴ the energy efficiency gains made by digital infrastructures over the last decade did limit the increase of GHG emissions associated with data centres and networks despite the rise of data traffic.

This can be illustrated by this [report](#) gathering data from ETNO operators, showing that electricity consumption remained nearly constant (+1%) between 2015 & 2018, while data traffic increased by a factor of 3. Within this period, electricity consumption per subscription remained quite stable, below 30 kWh/subscription despite substantial data traffic growth (x12). According to its data set for 2010–2018, electricity consumption grew 8%. During the initial phases of the COVID-19 pandemic, data traffic grew by an additional +95%, while electricity consumption decreased slightly.

Conclusion

Overall, while ISFE recognises the importance of ensuring connectivity in the EU, and how it is key to its members’ digital future, **it cautions against the introduction of network fees in the EU**. Network fees predicated on traffic volume is not only unnecessary, per BEREC’s assessment, **but would also endanger the entire digital economy and could ultimately entail the demise of the sustainability of the Internet ecosystem as we know it, seriously hamstringing Europe’s competitiveness in the world stage in the field of video games.**

In light of this, ISFE respectfully submits its responses to the European Commissions’ exploratory consultation, and looks forward to contributing to constructive discussions to ensure and enhance Europe’s digital future.

³ For more information on the benefits of cloud technologies on energy use and carbon footprint, please refer to the study “The Carbon Benefits of Cloud Computing: A Study on the Microsoft Cloud”, done in collaboration between Microsoft and the WSP USA. Available [here](#).

⁴ BEREC 2022 Sustainability Report. Available [here](#).

The [Interactive Software Federation of Europe](#) (ISFE) represents the video games industry in Europe. ISFE's membership is comprised of 19 major publishers and national trade associations in 15 countries throughout Europe. Our national associations in turn represent hundreds of games companies across Europe that produce and publish interactive entertainment and educational software for use on personal computers, game consoles, portable devices, smartphones and the Internet. The video games sector represents one of Europe's most compelling economic success stories: In terms of consumer spending, the European video games market was worth an estimated €23bn in 2021. The industry now includes over 5,100 European game developer studios and publishers that enjoy an estimated combined annual turnover of €12bn and employs over 90.000 people across the continent.

Contact

Ann Becker – Head of Public Policy and Public Affairs (ann.becker@isfe.eu)

Manuel Mendes – Senior Policy Manager (manuel.mendes@isfe.eu)