

Response to the European Commission Consultation “How to master Europe’s digital infrastructure needs?”

Transparency Register ID: 20586492362-11

Executive summary

- Video Games Europe welcomes the significant progress made towards the Digital Decade targets. While traffic is expected to increase in coming years, it has been increasing for years already, and networks have shown a remarkable capacity for adaptation.
- We do not believe that a legal imposition of dispute resolution mechanism in the interconnection market would benefit consumers and businesses at large. 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.
- The majority of video game purchases today are digital. Therefore, the environmental impact of the plastic necessary for the production of game discs and cases is significantly reduced. Moreover, some titles are only available via cloud, due to file sizes.
- The existing regulatory regime in the EECC should remain intact for the purposes of regulating the core telecommunications services, and should not be extended to regulating distinct underlying technologies just because they help extend network functionality or services.

Introduction

1. Video Games Europe is the voice of the video game industry in Europe, representing major European and international video game companies and national trade associations across Europe.
2. Approximately 110.000 people are currently working in the video games sector in Europe, and game development 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.¹ In Europe the video game sector is mostly composed of SME’s developing video games, which are enjoyed worldwide across multiple services: consoles, PC and mobile.
3. Video Games Europe responded to the EC Exploratory consultation on the future of the electronic communications sector² in 2023. In it, we affirmed and explained our steadfast opposition to the introduction of network fees in the European Union, as these not only would represent a step backwards to achieving the Digital Single Market, but effectively end net neutrality.

¹ European Parliament resolution of 10/11/2022 on esports and video games (2022/2027(INI))

² Available [here](#)

4. We welcome the significant progress made towards the Digital Decade targets. The White Paper however acknowledges that the demand for very high capacity connections is still 'very low'.³ Based on this assessment, while Video Games Europe's members welcome (and often contribute to) the deployment of high-capacity digital infrastructure, it is important that this is done in a balanced manner, anchored in real - rather than aspirational - market perspectives. We believe that market realities should be kept in mind, and caution against an overly programmatic approach.
5. While re-evaluation of regulatory frameworks at regular intervals is relevant and prudent, the stability of the regulatory framework holds paramount importance as it underpins investment security. In recent years, the online sector in Europe has developed into a prosperous ecosystem. This ecosystem is characterised by labour, diversity of services and low-threshold access options, which should be preserved in Europe. Therefore, Video Games Europe remains apprehensive regarding indications in the Commission's White Paper suggesting a preference for broadening the scope of the current regulatory framework. Such policy scenarios must be considered with caution, as they could bear the risk of distorting the carefully balanced market dynamics, disrupting competition and user choice and experience. Video Games Europe strongly believes that considerations of preemptive regulation should be approached with great caution because of the burden it can place on European innovation and digital transformation, in particular as the European video game ecosystem is composed of many SMEs.
6. Our response covers the matters of supply and demand for connectivity in the EU, the measures taken by our sector to mitigate traffic, the relationship between ISPs and CAPs⁴, the risks of regulatory assimilation of telecom services and cloud, and the environmental impact of video game distribution.

Current connectivity supply and demand in the EU

7. The majority of video game purchases today are digital,⁵ meaning that most games are acquired online, associated with a player account on a given service, or accessed via mobile platforms as free-to-play with optional purchases. Importantly, this also means that the environmental impact of the plastic necessary for the production of game discs and cases is significantly reduced. Moreover, video games are subject to frequent online updates, some of them required under EU law, which represents legally mandated traffic.
8. Video games are generally not streamed, therefore the network impact during normal gameplay, including multiplayer mode, is low compared to video streaming services. Most video games can be played offline, and even when online, much of the gameplay occurs offline. The Internet traffic generated by online gameplay is modest compared to video streaming

³ White Paper - How to master Europe's digital infrastructure needs? p.6

⁴ Content and Application Providers (CAPs)

⁵ Video Games Europe – [Key Facts 2022](#), p. 15

services; for example, playing online multiplayer games like *GTA Online*, *Fortnite*, *Rocket League*, or *Minecraft* consume only a fraction of the data used by video streaming. The majority of games use no more than 60-80MB per hour, with higher-range estimates for some games reaching about 250-300MB per hour at most.⁶

9. For certain types of video game content, 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 around 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 approximately 25.000 Blu-ray discs for one “copy” of the game). Instead, cloud technology allows for smart delivery of data, where the game will download data from the cloud only related the in-game areas that the player will cross (instead of the full game).⁷

Traffic mitigation measures taken by the sector

10. During the mandated lockdowns due to the COVID-19 pandemic, BEREC stated that network operators were able to cope well with the increased traffic load.⁸
11. Video games companies worked hand in hand with their partners, the Internet service providers, the content delivery networks and the platforms to monitor traffic patterns and to address, early on, any network issues caused by releases or updates by implementing mitigation measures. Such measures were implemented to cause minimal friction with the gameplay experience.
12. To mitigate potential network issues due to game downloads during the Covid-19 crisis, video game publishers and services took measures⁹ such as installing slots (so-called ‘rolling-out schedules’) for downloads of new releases to ensure these happen late at night to early morning when the Internet usage is low, and this according to territories and time zones.

The relationship between CAPs and ISPs is one of interdependence and symbiosis

13. Several large European telecommunications operators have argued that the growing demand for content and applications is a problem - rather than an economic opportunity. This misrepresentation has clouded the European policy debate and should be addressed. Creative content providers invest significantly in content to the benefit of consumers and the European economy, but also to that of ISPs – the popularity of creative content services indubitably 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 a

⁶ [Source](#).

⁷ 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](#).

⁸ [BEREC report on the status of internet capacity](#)

⁹ [Video Games Europe statement](#) of 31/03/2020

wide range of diverse creative and cultural content sectors. As recognised by the White Paper, the interconnection market generally functions well,¹⁰ and Video Games Europe does not believe that the legal imposition of obscure dispute resolution mechanisms should be a course of action.

14. One of the underlying assumptions of ISP claims for payments from large CAPs is that the latter are ‘free-riding’ on ISP infrastructures. Thus, under this misconception, CAPs would use this infrastructure without ISPs being (fully or partially) compensated for it and therefore, costs incurred by ISPs would not be covered. An attentive look shows that there is no evidence of “free-riding” along the value chain: ISPs’ customers (consumers and businesses alike) purchase/subscribe Internet connectivity and pay for sending and receiving traffic. Costs for deploying and upgrading the access networks and respective infrastructure are typically covered by payments from ISPs’ customers. Particularly, providers of video game content, which rely on high Internet speeds, already make significant additional payments to ISPs for such upload capacity.
15. Moreover, CAPs do invest in infrastructure, via elements such as CDNs or data centres, and purchase enhanced 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. The interdependence is reinforced by the notion that, while CAPs increasingly invest in infrastructure, there is still the need for traffic termination to end-users, which can only be provided by ISPs.¹¹
16. Overall, we wish 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. This is the same understanding set out by BEREC.¹²

Telecoms and cloud are different services, their convergence is arguably overestimated, and assimilating them can create adverse unintended consequences

17. The Commission, in the White Paper assumes that there is a convergence taking place between telecommunication and cloud markets necessitating a common regulatory regime. Such assumption is arguably overestimated. While cloud and telecommunication markets complement each other, the notion of a convergence taking place to such a large extent that

¹⁰ White Paper, p. 26

¹¹ [Draft BEREC Report on the entry of large content and application providers into the markets for electronic communications networks and services](#) (p. 16)

¹² Ibid. “(...) Since no online content and applications could be consumed without connectivity, and no connectivity would be required without any online content and applications, there is an interdependence between CAPs and ECS/ECN operators (...)”

regulatory uniformity would be warranted, would need to be substantiated much more specifically than is presently the case in the White Paper.

18. There has not been a convergence between telecommunications service providers and IT companies providing cloud-based services in terms of the relevant underlying technologies, which remain distinct, and thus, should be treated differently. Cloud providers are to be seen as suppliers to telecommunications providers, in the same way as network equipment vendors or tower companies are suppliers to them. Therefore, aiming to regulate cloud via the European Electronic Communications Code (EECC) would be as inappropriate as applying the EECC to regulate traditional network equipment vendors serving the telecommunications sector. Similarly, even if some cloud or edge-based computing services are engineered to provide some functions traditionally provided by telecommunications providers, the fact remains that such services are not and should not be viewed as equal “replacement options” for the underlying core telecommunications network infrastructure, particularly the last-mile, that will always be necessary for complementary innovations such as cloud or edge-based computing services to function. Therefore, the existing regulatory regime should remain intact for the purposes of regulating the core telecommunications services - which are its focus - and should not be extended to regulating distinct underlying technologies just because they help extend network functionality or services.

The environmental impact of different types of game distribution

19. New technologies, such as cloud services, 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 adequate Internet connection, cloud services allow 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.
20. Energy consumption and emissions of data centres have not grown apace despite increasing traffic. This is a result traceable to efficiency gains and greater use of renewable energy. According to BEREC,¹³ 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.
21. Lastly, consumer welfare is likely to be negatively impacted, as network fees could conceivably lead to increased prices for consumers, alongside lower quality/diminished quantity of content, not only within our sector, but across all Internet-access reliant services. Moreover,

¹³ BEREC 2022 Sustainability Report. Available [here](#)

based on the experience in South Korea, where consumers have been experiencing deteriorated service quality, which has driven significant players to abandon the market.¹⁴

Conclusion

22. Video Games Europe recognises the importance of ensuring connectivity in the EU, but warns against the introduction of network fees or equivalent mechanisms in the EU, especially without a careful and thorough impact assessment process. As per BEREC's assessment, these potential fees are both unnecessary, and would endanger the entire digital economy, and could ultimately entail the demise of not only net neutrality, but also of the sustainability of the Internet ecosystem as we know it, seriously hamstringing Europe's competitiveness in the field of video games.
23. Video Games Europe welcomes the European Commission's intent to promote infrastructure deployment and upgrades. This should be driven by actual and foreseeable market demand. We acknowledge the Commission's own understanding that the interconnection market generally functions well, and caution against any imposition of stringent measures that would disrupt the existing balance in that market.

Brussels, June 2024

About Video Games Europe:

Since 1998, Video Games Europe has ensured that the voice of a responsible games ecosystem is heard and understood. We represent 19 European and international video game companies and 13 national trade associations across the continent. Europe's video games sector is worth approximately €24.5bn, and 53% of Europeans are video game players. We publish a [yearly Key Facts](#) report with the latest data on Europe's video games sector.

Contacts: www.videogameseurope.eu

Ann Becker
SVP Policy & Public Affairs | Video Games Europe
ann.becker@videogameseurope.eu

Dr. Anselm Rodenhausen
VP Legal & Policy | Video Games Europe
anselm.rodenhausen@videogameseurope.eu

Manuel Fragoso Mendes
Senior Manager – Legal and Policy | Video Games Europe
manuel.mendes@videogameseurope.eu

¹⁴ See for example [Twitch](#)—the popular interactive livestreaming website—announced that because of the cost of “termination fees” it would shut down its service in South Korea at the end of February 2024