

MPA comments to draft BEREC Report on the IP Interconnection ecosystem

On behalf of the Motion Picture Association (MPA), please find below our comments on the draft BEREC Report on the IP Interconnection ecosystem. The MPA represents the interests of major international producers and distributors of film and television content. Our members include Netflix, Paramount Pictures Corporation, Sony Pictures Entertainment Inc, Universal City Studios LLC, Walt Disney Studios Motion Pictures and Warner Bros. Discovery. We serve as the global voice and advocate of the international film, television, and streaming industry. MPA member companies have been an integral part of Europe's cultural ecology for a hundred years; contributing to it greatly, and amplifying European Culture within and beyond the borders of the European Union.

We welcome the opportunity to submit our observations on the draft BEREC Report on the IP Interconnection ecosystem. MPA understands and supports the importance of a strong network infrastructure and availability of high-speed internet access, facilitated through a well-functioning IP interconnection market, which allows for the high-quality distribution of content to a wide and diverse audience.

In particular, we welcome the following findings in the draft report:

- Due to competition and technological progress, there is currently no indication that the internet will not continue to cope with traffic growth and more accentuated peak traffic, and prices and costs for IP-IC services continue to exhibit a downwards trend.
- The problematic practices of some incumbent ISPs that try to extract additional rents from CAPs for traffic termination by offering uncongested alternative routes with sufficient capacity, in return for payments from CAPs without any alternatives, constitute a violation of the Open Internet Regulations.
- The IP-IC ecosystem still driven by functioning market dynamics and by the cooperative behaviour of market players, and there is no need for regulatory intervention, nor is it generally called for by stakeholders in the few cases where disputes take place.
- There is a mutual interdependence between CAPs and IAS providers.

Please see below our comments on a number of sections of the report, including on the above conclusions.

Section 3: Traffic developments & Section 4: Pricing and cost developments

We welcome the finding in Section 3 that due to competition and technological progress, there is currently no indication that the internet will not continue to cope with traffic growth and more accentuated peak traffic, as well as the finding in Section 4 that due to the same reasons, marginal network costs are observed to have declined to the point that they outweigh any increased costs associated with increased network use.

MPA members help contribute to this technological progress, by investing significantly in delivery networks (CDNs), compression technology, caching, peering and other measures to improve the efficiency and sustainability of networks' backbone infrastructure. These actions and investments are made to maximise consumers' experience by ensuring that content is delivered to them smoothly, in the best quality for their use, and without delays. Caching content closer to IAS providers' end users has substantial benefits in terms of efficiency and quality improvements, which benefits CAPs, ECNs and end

users^{1,2}. These contributions are generally not recognized in the wider policy discussion, and should not be taken for granted.

Efficiencies and investments by CAPs lead to growing demand from users being handled sustainably without increasing long term costs. Operators themselves consistently report that they have been able to handle growth in network traffic without growth in energy consumption^{3,4} or costs⁵, and have generally exhibited stable capex intensity despite steadily growing traffic in the last decade.

It is noted in the draft report that traffic growth continues to be mostly driven by video traffic, including the growing availability of UHD streaming content.⁶ MPA members are constantly working to improve the efficiency of content delivery. This improves costs and performance, not only benefitting CAPs but also end-users. This is done through significant investments in technological developments, such as those noted above on CDNs, etc., and innovation in codecs. As noted in the draft report, the internet has managed to cope with traffic growth and more accentuated peak traffic since its creation, and due to such investments and developments, we agree that this will continue to be the case in relation to video streaming.

Section 5: Market developments in IP-IC & Section 6: Generic structure of IP-IC issues

In section 6 of the draft report, BEREC finds that some incumbents try to extract additional rents from CAPs for traffic termination by offering uncongested alternative routes with sufficient capacity, in return for payments from CAPs. The draft report also notes that the few IP-IC disputes that did arise stemmed from vertically integrated IAS providers attempting to leverage their termination monopoly into the transit/peering market and to introduce (higher) fees for IP-IC directly from CAPs.⁷ We welcome the recognition of such practices and would like to underline that such practices result in market distortion and present a real risk to the preservation of unconstrained user access to the content of their choice. We agree that these practices constitute a violation of the Open Internet Rules. We also agree with the assessment by stakeholders that regulatory intervention is not necessary, but that such practices should be dealt with on a case-by-case assessment.⁸

¹ An [Analysis Mason study found](https://www.analysismason.com/contentassets/b891ca583e084468baa0b829ced38799/main-report---infra-investment-2022.pdf) that in total CAPs invested over 120 billion Euros (in networks) between 2018 and 2021, resulting in a cost reduction for the global telecom industry of between 5 and 6.4 billion Euros. Abecassis, D., Kende, M., Osman, S., Spence, R. and Choi, N. (2022). "The impact of tech companies' network investment on the economics of broadband". Analysis Mason. October 2022 [online] Available at: <https://www.analysismason.com/contentassets/b891ca583e084468baa0b829ced38799/main-report---infra-investment-2022.pdf>

² Analysis Mason (2022) "Netflix's Open Connect program and codec optimisation helped ISPs save over USD1 billion globally in 2021". 14 July 2022 [online]. Available at: <https://www.analysismason.com/contentassets/ef8295594cc54285bf554b05daa06431/modelling-the-impact-of-netflix-traffic-and-open-connect-on-isp-traffic-dependent-costs---2022-07-14.pdf>

³ Carbon Trust (2021). Carbon impact of video streaming. [online] Available at: <https://www.carbontrust.com/our-work-and-impact/guides-reports-and-tools/carbon-impact-of-video-streaming>.

⁴ Vodafone (2021) "Investor Briefing", June 2021 [online]. Available at: <https://investors.vodafone.com/sites/vodafone-ir/files/2021-06/vodafone-technology-investor-briefing-presentation.pdf>

⁵ McRae, N.J. (2018) "Scaling for Ultrafast, G.FAST, FTTP, 5G and the Cloud" BT. 2018 [online]. Available at: <https://indico.uknof.org.uk/event/42/contributions/555/attachments/752/924/UKNOF40-MCRAE-WEBSITE.pdf>

⁶ BEREC, *Draft BEREC Report on the IP Interconnection ecosystem*, June 2024, page 9.

⁷ BEREC, *Draft BEREC Report on the IP Interconnection ecosystem*, June 2024, page 30.

⁸ BEREC, *Draft BEREC Report on the IP Interconnection ecosystem*, June 2024, page 30.

CAPs of all sizes and the vast majority of IAS providers in the EU interconnection market cooperatively and efficiently follow the 'bill & keep' principle, through private interconnections and/or public internet exchange points.⁹ This is noted in the draft report, which shows that across all IAS providers (settlement-free peering is by far the dominant form of peering, regardless of the volume of traffic the IAS provider deals with. However, a key risk to the competitiveness of the interconnection market is large ECN providers leveraging their position to extract fees. As recognized in the report, large IAS providers, with large retail market share and/or vertical integration with Tier 1 global transit networks, sometimes attempt to enforce restrictive interconnection policies, demanding fees for uncongested access to their network from CAPs and smaller IAS providers. Indeed, some incumbent providers of ECNs do not accept offers from content providers for on-net CDNs.¹⁰ Seeking payments for access to one's network, or paid peering (as opposed to providing transit to other networks), while not forbidden in and of itself, is highly unusual and most often represents a net neutrality violation. This is noted in Section 8 of the draft report, which finds that such practices by IAS providers can constitute a violation of the Open Internet Regulation (OIR), as ensuring the effectiveness of the OIR also entails a responsibility for IAS providers to abstain from any conduct that has the effect of compromising the provision of open internet to end-users. For example, customers of the ECN provider will receive poor performance on any content or service not directly connected to the ECN provider, despite paying for access to the entire Internet, and the only alternative for a CAP will be to either pay a termination fee or suffer congestion and quality degradation.

Section 7: Bargaining situation (in particular) between CAPs and IAS providers

MPA welcomes the recognition in the draft report that there is a mutual interdependence between CAPs and IAS providers. Content and application providers (CAPs) and electronic communication networks (ECN) providers have traditionally had a symbiotic relationship within the internet infrastructure. This relationship creates a virtuous cycle that fuels innovation and economic growth in the sector.

As noted in the draft report, the demand from IAS providers customers for content drives demand for broadband access and the availability of broadband access drives demand for content.¹¹ Demand for access to content provided by CAPs, including high-quality Video on Demand (VOD) services, is an important factor in fueling the uptake of higher-end internet services as consumers look for faster connectivity or more generous data packages to consume such content.^{12,13} This demand-driving effect leads to important benefits for the EU's digital network infrastructure. For ECN providers, it brings additional revenue due to the take up of higher-end packages. It also leads to increased uptake of higher

⁹ European Commission, *White Paper "How to master Europe's digital infrastructure needs?"*, Page 27.

¹⁰ WIK Consult study paragraph 16, 'Competitive conditions on transit and peering markets, Implications for European digital sovereignty'. 28 February 2022 [online]. Available at: https://www.bundesnetzagentur.de/EN/Areas/Telecommunications/Companies/Digitisation/Peering/download.pdf?__blob=publicationFile&v=1

¹¹ BEREC, *Draft BEREC Report on the IP Interconnection ecosystem*, June 2024, page 31.

¹² As an example of the symbiotic relationship in creating demand for services, some MPA members have individual commercial partnerships (in the space of resale and bundles for example) with ECN providers in the EU. Examples include Voo and Orange in Belgium, Vodafone in Greece, Vodafone in Ireland, and more.

¹³ The report *"The role of Video on Demand in stimulating broadband adoption"* finds that VOD services have been a key contributor to the increase of broadband connectivity, and are associated with a gradual increase in the purchasing of broadband higher speed plans. Katz, 2024, [online] available at: <https://www.sciencedirect.com/science/article/abs/pii/S030859612400048X>

levels of connectivity by consumers, which according to many recent reports is still lower than the high coverage levels achieved in Europe.^{14,15}

Conclusion

In summary, we welcome the findings in the draft report that the IP-interconnection market is still well-functioning and that the internet continues to cope with traffic growth, due to technological progress in part driven by CAPs.

We welcome the recognition of the problematic practices of some incumbent IAS providers that try to extract additional rents from CAPs for traffic termination by offering uncongested alternative routes with sufficient capacity, in return for payments from CAPs. We also agree that regulatory intervention is not necessary, but that such practices should be dealt with on a case-by-case assessment.

We are also pleased to read BEREC's finding that there is mutual interdependence between CAPs and IAS providers. In particular, we note that demand for access to content provided by CAPs, including high-quality Video on Demand (VOD) services, is an important factor in fueling the uptake of higher-end ECN services as consumers look for faster connectivity or more generous data packages to consume such content.

¹⁴ Take up of fibre networks is lagging behind, with the report "FTTH Adoption: A Key Policy Challenge for Europe" (February 2023) noting that the take-up rate in Europe of fibre networks is yet to reach the 50% mark. [Online] Available at: <https://www.ftthcouncil.eu/resources/all-publications-and-assets/1670/position-paper-ftth-b-take-up-a-key-policy-challenge-for-europe>

¹⁵ In terms of wireless networks, the European Commission's 5G observatory reported that while 72% of the EU population is covered by at least one 5G network in 2022, only 31 million people have subscribed, resulting in a take-up rate of approximately 1%. European Commission, Directorate-General for Communications Networks, Content and Technology (2022) "5G Observatory Quarterly Report 17 October 2022". [Online] Available at: <https://5gobservatory.eu/wp-content/uploads/2022/10/QR-17-Final-v3-CLEAN.pdf>