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BEREC PUBLIC CONSULTATION ON THE DRAFT REPORT ON ENTRY OF LARGE CONTENT AND APPLICATION PROVIDERS INTO THE MARKETS FOR ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES

CCIA Europe contribution to BEREC public consultation

April 2024

Executive summary

CCIA Europe (hereinafter "CCIA") welcomes the opportunity to participate in this BEREC public consultation on the Draft BEREC Report of entry of large content and application providers into the markets for electronic communications networks and services (the "Draft Report"). CCIA fully supports BEREC's numerous work-streams foreseen in the 2024 work plan. With specific regard to this Draft Report, CCIA welcomes the analysis provided by BEREC, but would like to point out some specifications.

In particular, CCIA would like to stress that the best way to describe the relationship between Large Content and Application Providers ("Large CAPs") and ECS/ECN operators is that of a symbiotic relationship between two separate sectors, where one benefits and depends on the other.
Large CAPs in fact provide services primarily for the benefit of their customers. These services in turn, drive demand for the services provided by telecommunication companies. This interaction explains the symbiotic nature of these two different sectors, which however remain separate and different from one another.

Secondly, Large CAPs' investments in additional services, such as CDNs and submarine cables, do not represent an insourcing of services formerly provided by telecommunications operators, but rather a required investment to fill in voids in the markets. Additionally, all these investments have had significant positive effects for ECS/ECN operators, both in terms of cost savings and support for Europe's connectivity. The direct consequence of this is that Large CAPs' activities have not led to losses, in terms or revenues or business opportunities, for telecom operators, but rather have indirectly increased their profits, business opportunities, partnerships, and reduced their operating costs.

Large CAPs are not "entering the market of ECS/ECN operators", and have no desire to do so, but rather have been investing in network infrastructure for the primary benefit of their customers, with significant and evident positive consequences for Europe's telecom operators, businesses and consumers.

As a final observation, CCIA notes that the term Large CAPs in the Draft Report includes a broad number of companies: grouping these stakeholders together overlooks a series of distinctions which, if taken into consideration, could allow for a more precise analysis of some issues.

Chapter 2 - Overview of large CAPs investments

CCIA welcomes BEREC's recognition of the significant investments that Large CAPs have been making in connectivity and network infrastructure. Indeed, Large CAPs recognise the value and importance of well functioning connectivity, and have thus invested massively in this area, to the benefit of their customers, telecom providers, and ultimately to the benefit of Europe's connectivity. As estimated by Analysys Mason in the study cited in the BEREC Draft Report, ISPs save nearly €1 billion per year in network and transit fees in the EU only, as a result of Large CAPs' investments. Over the last decade (2011-2021) Large CAPs' investment in solely European network infrastructure amounted to €183 billion, including hosting (e.g. data centres), transport (e.g. submarine and terrestrial cables), and content delivery networks (e.g. peering and caching). In the last five years, Large CAPs increased their annual investment by 50% compared to the 2014-2018 period, spending on average €22 billion per year on EU digital infrastructure.

CCIA thus disagrees with BEREC's statement that "large CAPs' investments have limited impact on the global network resilience." On the contrary, Large CAPs' investments have increasingly taken a role in ensuring the reliability and resilience of the digital ecosystem. Large CAPs' investments into network infrastructure, research and development, as well as partnerships with telecom operators, have created a highly functioning internet ecosystem, to the benefit of all European customers.

Furthermore, CCIA dissents with the statement provided in BEREC's Draft Report: Large CAPs "have deployed their own physical infrastructure such as CDNs and data centres, as well as submarine cables and satellite constellations and have thus insourced many services which were previously provided by ECN/ECS operators." With this statement, the Draft Report seems to imply that Large CAPs have assumed a role that was traditionally fulfilled by telecom operators. As a result, telecom operators would be facing adverse consequences due to the entry of Large CAPs into their market.

On the contrary, Large CAPs have, in most cases, started to provide services which were not provided at all by telecom operators, or provided at a scale which was not sufficient for the needs of Large CAPs, and this has led to significant positive consequences for telecom operators, in terms of cost savings, increased network resilience, business partnerships and better connectivity throughout the EU.
For example, Large CAPs who now have their own CDNs, previously used commercial CDN providers, and not telecoms' providers services. Similarly, before building their own data centres, most Large CAPs hosted their services in carrier neutral colocation facilities, generally not provided by telecom operators. In relation to subsea cables, indeed telecom operators used to provide this service, but to an extent which was unfit for the needs of Large CAPs, and often at not competitive prices, which made it economically rational for Large CAPs to build their own cables. All these investments of Large CAPs have yielded huge benefits for telecom operators, as shown above, in terms of cost savings, increased demand for their products, as well as partnerships and business opportunities.

Chapter 3 - Dynamics between large CAPs and ECS/ECN operators

The BEREC report defines the relationships between Large CAPs and ECS/ECN operators as: (i) complementary and interdependent, (ii) competitive and (iii) cooperative. In this respect, CCIA believes the best way to describe the relationship between the above-mentioned business sectors is that of complementarity and collaboration.

Regarding the symbiotic relationship between Large CAPs and ECS/ECN operators, CCIA generally concurs with BEREC's acknowledgment that these entities offer complementary services, but would like to stress that these services remain distinct between one another. Indeed, Large CAPs leverage the infrastructure of ECS/ECN operators to deliver content with increased speed and reliability, while ECS/ECN operators benefit from more demand generated by Large CAPs' content and application creation.

In relation to the competitive relationship between Large CAPS and ECS/ECN operators, CCIA would like to point out the lack of direct competition in most cases described in the Draft Report.
For example, in relation to the alleged competitive relationship between SMS and communication applications provided by Large CAPs, CCIA notes how these services are in fact not in competition, as consumers do not see these services as substitutable between one another.

In particular, the WIK report on The Economic and Societal Value of Rich Interaction Applications (May 2017) highlights that "consumers do not use Rich Interaction Applications (RIAs) and communications services as like-forlike substitutes". Rich Interaction Applications are defined in the report as "applications that enable consumers to interact in ways not possible through traditional communications channels, such as group chat, photo and video sharing" and provides examples such as "iMessage, Signal, Skype, Snapchat, Viber, WhatsApp". Actually, the report states that "RIA use has a substantial positive impact on telecommunications providers' business, as RIAs drive consumers' willingness to pay for Internet Access Services (IAS), giving telecommunications providers more opportunities to earn revenue and finance new infrastructure."
In conclusion, the relationship between Large CAPS and ECS/ECN operators is best described as cooperative and of a symbiotic nature, rather than of competitive nature.

Chapter 4 - Case study 1: Content delivery networks

With regard to BEREC's analysis of the CDN market, CCIA would like to express two main remarks: (i) the CDN market is a competitive ecosystem, less concentrated than what the BEREC Draft Report suggests; (ii) CDN provision by Large CAPs is not harmful to telecom operators, but rather has positive effects on their business model.

On the competitiveness of the CDN market: the Draft Report mentions that "the commercial CDN services market in Europe currently appears to be concentrated around few players". However, CCIA wishes to highlight that the CDN market is a dynamic and competitive ecosystem, less concentrated than how indicated in the Draft Report. Indeed, a variety of stakeholders offer CDN services, including companies like Cloudflare, Akamai, Edgio, Fastly, and Edgecast, as well as major players such as Amazon, Microsoft, and Google. Despite BEREC's perceptions of high concentration, data show an increasing trend of businesses adopting multi-CDN strategies. This approach enables users to compare CDN services, selecting both the most cost-effective option and the provider best suited to their specific needs.
Overall, Large CAPs and smaller CDN providers both operate in the CDN ecosystem, with a resulting competitive and healthy ecosystem, which allows for innovation and high consumers' choice.

Furthermore, CCIA would like to stress that the Draft Report seems not to acknowledge the significant benefits that ECN/ECS operators derive from the

investments in CDNs made by Large CAPs. Indeed, private CDNs save telecom companies a huge amount of costs, improve network performances and reduce potential network congestions. A quantification of these savings is for example provided by Analysys Mason's study on Netflix's investment in CDNs, which reports that Netflix's CDNs' alone save ECS/ECN providers between $1bn and $1.25bn per year in network costs. Overall, CCIA believes that Large CAPs' CDN self-provision should not be seen as a source of concern for ECS/ECNs operators, but rather as a positive complement to their business model, other than a means to reduce their costs.

Chapter 5 - Case study 2: Submarine cables

CCIA welcomes BEREC's analysis of the current landscape of subsea cables, as well as the recognition of their fundamental importance for Europe's connectivity.

However, CCIA disagrees with the statement that: "with large CAPs increasingly building their own transport networks (including submarine cables), a relevant part of the traffic originating these revenues is being internalised by CAPs, which significantly impacts the business model of carriers/traditional ISPs who have to reorganise their position in the market."

In this regard, CCIA notes that while traditional ECN/ECS operators were originally providing undersea connectivity, they did so at higher prices than market standards, and with low capacity capabilities, which did not meet the necessities of Large CAPs. It is thus natural that, in a competitive market which did not provide the required offer, Large CAPs started deploying their own undersea cables. Based on the above, it seems not accurate to infer that Large CAPs have internalised revenues which were previously of ECN/ECS operators, as the services and products required by Large CAPs did not exist and were not offered by ECN/ENS operators. In addition, CCIA would like to clarify that Large CAPs deploying undersea cables does not come to the detriment of ECS/ECN operators. On the opposite: many submarine cables are built in consortia and partnerships between Large CAPs and telecom operators, with obvious benefits for both parties.

Chapter 9 - Future work

CCIA welcomes BEREC's continued fact based analysis on these issues, and recommends taking a fine-grained analytical approach, to ensure that all regulatory

analysis reflects the differences and specific characteristics of the services under scrutiny.