1. Introduction

The Computer & Communications Industry Association (CCIA Europe) would like to thank BEREC for the opportunity to comment on its Draft Internet Ecosystem Report, we appreciated the ability to present our views in the run up to this Report. CCIA Europe represents a wide range of companies in this ecosystem, including providers of online content and application, as well as hosting and content and delivery network services.

The BEREC's Report provides a timely analysis of the internet ecosystem, some of which can be very valuable as the European Commission considers whether to introduce internet traffic usage fees to the benefit of Internet Service Providers (ISPs). In this respect, we generally concur with BEREC's assessment of the competition and openness dynamics in the IP interconnection markets, in particular the role and behaviour of incumbent ISPs vis-a-vis Content Application Providers (CAPs) of all sizes, smaller ISPs, and users. In this respect, CCIA Europe strongly cautions against such rules which would further encourage incumbent ISPs to exploit their termination monopoly.

CCIA Europe looks forward to the finalisation of this Report, and stands ready to assist BEREC on its forthcoming analysis on the IP interconnection market and the impact of the “sender pays” principles on end-users and competition.

CCIA Europe's comments focus on the areas where it believes its input can be most helpful. The absence of comments on other sections of the Draft Report should not necessarily be construed as endorsement.

2. Analysis of competition dynamics within the Internet ecosystem (Chapter 6)

(a) General Comments

The Draft Report focuses on platforms’ “role in connecting end-users with business users”, and assesses “the strategies and behaviours (e.g. disintermediation, envelopment, refusal to interoperate, discrimination, etc.) of the players affecting inter-platform and/or intra-platform competition.” This focus on potential harms to contestability and strategies that may negatively impact some competitors, could be improved by incorporating a greater acknowledgement of the ways in which platforms create new value, increase output, and attract new users and demand, thus growing the economic pie.¹

As the Competition Appeals Tribunal of the UK recently stated, an authority seeking further intervention “should undertake a ‘cross-check’ in relation to its conclusions” and assess not only what is the perceived harm justifying

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¹ Oxera “How platforms create value for their users” (12 May 2021), available [here](https://www.oxera.com/upload/How Plattforms Create Value for Their Users.pdf).
intervention, “but also ‘what are the disbenefits of intervention’” recognising that “intervening where it is unnecessary, where the statutory tests may not be met, can be as damaging [as failing to intervene where justified].” 2 (emphasis in original). There is a risk that a one-sided focus on protecting competitors, or intervention that disregards the ways in which platforms create value for their users, could decrease demand overall, reduce economic growth and vibrancy in the digital sector, and consequently harm all stakeholders in the value chain.

(b) IP Interconnection (Section 6.2.5)

Paragraph 1: “For the time being, transit and interconnection players do not seem to pose major difficulties to competition. Nevertheless, other large players, such as CAPs, are increasingly entering the IP interconnection market, investing in dedicated capacity, when economies of scale and scope justify a “make” rather than “buy” strategy. Bypass transit providers will eventually affect competition. As mentioned in chapter 5, CAPs like Google or Meta invest in backbone submarine cable infrastructures. This trend has taken on greater prominence in the last 3-4 years. On the other hand, smaller players typically cannot benefit from sufficient economies of scale and scope, thereby making it more reasonable for them to use shared capacity from third party intermediaries such as commercial CDNs or internet exchange points.”

CCIA Europe generally agrees with BEREC that “transit and interconnection players do not seem to pose major difficulties to competition”.

The Draft Report also observes that large CAPs are increasingly entering the IP interconnection market, and notes that “bypass[ing] transit providers will eventually affect competition.”

In this respect, CCIA Europe invites BEREC to consider how these investments in transport, delivery and hosting infrastructures, combined with settlement-free peering agreements, are resulting in net positive competition effects in the IP interconnection market. Indeed, large CAPs’ investments provide an additional vehicle for smaller Internet Service Providers (ISPs) and CAPs to deliver online content and services efficiently to their customers.

Those investments add up to other interconnection arrangements and practices (e.g. on-net peering via 3rd party commercial CDN, public peering with IXPs, or private peering or transit with ISPs) and allow smaller CAPs and competitive ISPs to deliver their traffic efficiently without having to subject themselves to restrictive peering policies from some incumbent ISPs, the kind of which that either forces CAPs and smaller to ISPs to buy something they do not need (transit agreement only) or may result in poorer end-user quality of service.

Paragraph 2: “Additionally, competition concerns may arise from restrictive peering policies that ISPs impose on small CAPs and hosting providers. To the extent that large ISP and CAP players are not present at internet exchanges (or only with low capacity), smaller players might end up being forced to use transit which leads to a lower control of data traffic

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and possibly a lower quality of service and experience, or to accept paid peering policies of ISPs instead of settlement free peering. As a result, the element could be getting more ‘closed’, making it harder for smaller CAPs to grow.”

CCIA Europe shares BEREC’s competition concerns with respect to ISPs’ restrictive peering policies upon smaller ISPs and CAPs. Incumbent ISPs enjoy a technical monopoly over all traffic flowing across their network, and experience shows that they are keen to leverage their monopoly to either push smaller ISPs and CAPs into paid-for transit agreements which they do not need to deliver traffic efficiently, or to impose paid-for peering conditions on them. Worse, smaller CAPs which cannot afford a transit and or paid-for private peering fee may see their traffic degraded.

For instance, Deutsche Telekom’s policy to allow peering only if CAPs and ISPs can meet a 1:1 strict traffic volume ratio has left many CAPs and ISPs no choice but to pay a hefty transit fee to Deutsche Telekom, even if they don’t need access to Deutsche Telekom’s entire network to deliver their traffic efficiently.3 Similarly, ACM’s 2021 IP interconnection market analysis study reports that ISPs’ peering policies in the Netherlands have become more restrictive since 2015.4

We note that in a case involving Init7 and Swisscom, the Swiss Federal Administrative Court found such practices, when conducted by an incumbent ISP which has a technical monopoly for access to its end customers, to be anticompetitive, that IP transit cannot be a substitute for peering, and that a traffic ratio of inbound and outbound traffic cannot be a price criterion.5

Unlike incumbent ISPs, large CAPs (i) neither hold a technical monopoly over end-users’ internet access (ii) nor force any ISPs to enter into any peering agreements to serve their respective customers. Indeed, large CAPs generally have open peering policies and are willing to work with both large and small ISPs to deliver content demanded by users, often improving performances and reducing costs for network operators to deliver the traffic demanded by their customers.

CCIA Europe strongly cautions against new rules allowing ISPs to charge an internet traffic usage fee which would further encourage ISPs to exploit their termination monopoly that may affect end-user’s rights and online experience.

3 WIK - Consult “Competitive conditions on transit and peering markets Implications for European digital sovereignty” (28 February 2022), available here.
4 Netherlands Authority for Consumers and Markets “IP interconnection study 2021” (13 July 2021) available here.
5 Federal Communications Commission, Case No: A-5235/2018 Init7 (Schweiz) AG v. Swisscom (Schweiz) AG (22 April 2020), available here.
The Draft Report focuses on the impact market participants can have on the end-users' “freedom of choice”. It is important in this respect to recognise that much of the value that platforms generate is through reducing the transaction costs of intermediation. This necessarily means sorting and organising information in a way that makes decision making easier for end-users. By preventing users from being bombarded with pop-ups, solicitations, or other channels of disintermediation, platforms engage in “beneficial gatekeeping” like a “digital butler” that aggregates, sorts, and presents choices more efficiently. That is core to the service that consumers seek, and attempts to increase “choice” for the benefit of competitors, may carry inherent anti-consumer impacts. It is therefore especially important that concerns regarding safety and security, fraud, and system integrity, are taken seriously.

For example platform and ecosystem operators are not “enticing [users] to stay in the same environment to benefit from cross-device services and better interoperability of devices”. Rather, users are demanding better cross-device services and interoperability and that is why ecosystem operators are expanding their product ranges, increasing product integrations, and integrating multiple functionalities within their ecosystem. It is questionable whether these kinds of integrated ecosystems can be created in a way that meets consumers’ expectations and demands in a way that sufficiently accommodates the demands of competitors. Regulatory interventions that require openness may inadvertently eliminate the benefits that caused consumers to choose more closed ecosystems, causing these more closed systems to disappear from the market. As noted by the European Commission’s Regulatory Scrutiny Board when analysing the Impact Assessment of the Digital Markets Act, interventions designed to increase contestability “should consider the negative consequences of curtailing the size advantages following from network economies and economies of scale for consumers.”

(b) IP Interconnection (section 7.2.5)

[Paragraph 1] “Even though the IP interconnection practices of ISPs are generally outside the scope of the OI Regulation and largely unregulated, issues at this level may have a significant impact on users’ internet experience.”

BEREC rightly points out that ISPs’ interconnection agreements may have a significant impact on users’ internet experience. Studies show that IP interconnection arrangements following the sender-pays regulatory principle for instance can have a significant impact on the quality of access to online content and services, the level of network infrastructure investments, the diversity of online content available, as well as prices that end users would have to pay for content or access to that content.

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7 To that effect, see the consequence of the South Korean Sender Pays rules in:
(i) Analysys Mason “IP interconnection on the internet: a white paper” (21 May 2020), available here;
(ii) WIK - Consult “Competitive conditions on transit and peering markets Implications for European digital sovereignty” (28 February 2022), available here;
(iii) Internet Society "Internet Impact Brief: South Korea's Interconnection Rules" (11 May 2022) available here.
While CCIA Europe agrees that the Open Internet Regulation (OIR) primarily focuses on Internet Access Services (IAS), we believe that the protection of end-users’ rights under OIR extends to any commercial practices of IAS providers, including interconnection practices at wholesale level, insofar as they could undermine the essence of the end-users’ rights, consistent with Recital 7 IOR and paragraph 6 of BEREC guidelines on Net Neutrality.

CCIA Europe looks forward to the upcoming work of BEREC on IP interconnection practices in the context of net neutrality.

Paragraph 6: “Despite this incentive structure for the respective players, it should be noted that there is a mutual interdependence between CAPs and ISPs. On the one hand, CAPs are interested in providing their content to as many users as possible. This requires high-performance networks. Otherwise, their content will not reach the user or not be delivered at the required quality level. On the other hand, the value of a network for users increases in parallel with the quantity and quality of content it can give access to. But the actual experience shows that the market is affected by the differences in bargaining power.”

CCIA Europe agrees with BEREC that CAPs and ISPs have a symbiotic relationship and a mutual interest in serving quality online services, including access to those services.

As explained in section 6.2.5, experience has shown that incumbent ISPs leverage their technical monopoly over end-user internet access to either push CAPs into paid-for transit agreements (which they do not necessarily need to deliver traffic efficiently), or to impose paid-for peering conditions on them. Conversely, large CAPs do not hold stronger bargaining power since they (i) neither hold a technical monopoly over end-users’ internet access (ii) nor force any ISPs to enter into any peering agreements to serve their customers.

As WIK puts it, “the significant investment of CAPs in their own network infrastructure has not changed the ISPs’ access monopoly for their end-users”, and “it has also made the relationship between CAPs and ISPs more cooperative.”

Paragraph 9: “Since large CAPs increasingly use dedicated, private capacity functioning as a backbone in parallel to the shared internet infrastructure, this may lead to a situation where small CAPs are not able to provide the same quality of service to their internet-based services. Users expect a relatively fast response of their services, otherwise they switch to faster services. This leads to problems for innovative start-ups that compete with large CAPs that are able to invest in dedicated capacity and run faster services.”

CCIA Europe agrees with BEREC’s assessment of users’ expectations on the quality of services, including access to those services.

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8 WIK - Consult “Competitive conditions on transit and peering markets Implications for European digital sovereignty” (28 February 2022), available here.
However, we invite BEREC to clarify that the primary reason why small CAPs might not be able to provide the same quality of service [as large CAPs] is driven by incumbent ISPs’ restrictive interconnection practices. As explained earlier, experience shows that incumbent ISPs are keen to leverage their internet access monopoly to either push smaller CAPs into paid-for transit agreements which they do not need to deliver traffic efficiently, or to impose paid-for peering conditions on them. Worse, smaller CAPs which cannot afford a transit and or paid-for private peering fee may see their traffic degraded.

In addition, we invite BEREC to consider how small CAPs benefit from large CAPs’ investments when using their hosting, transport and delivery capabilities. The capacity freed up on core and backbone networks as a result of this investment by large CAPs helps ensure that all content, including that from small CAPs, gets a better quality of experience for users. Furthermore, commercial CDN platforms are available to CAPs of all sizes - and one CDN even offers a "free tier" - so it should not be considered that small CAPs are necessarily at a disadvantage in Internet content delivery. The use of peering and CDN platforms improves the quality of experience for everyone.

4. BEREC’s future work (Chapter 8)

Paragraph 6: “In addition, the evolution of the internet interconnection architecture also appears to be a relevant topic for further analysis. This report highlights the bargaining asymmetries between smaller players (ISPs or CAPs) and big players. Moreover, the potential impact of interconnection architectures on openness should also be considered at a time when new internet-based services, which are sensitive to quality of service or data-intensive, are being developed and are therefore affected by an interconnection that is too restricted.”

CCIA Europe supports BEREC’s further analysis of incumbent ISPs’ increasingly restrictive interconnection practices and their effects on competition across the Internet value chain, internet openness and traffic delivery efficiencies. We believe this analysis to be crucial to determine the extent to which introducing the Sender-Party-Pays principle in law would exacerbate competition and openness concerns.