

ecta response

TO THE PUBLIC CONSULTATION BY BEREC ON THE

DRAFT BEREC REPORT ON THE INTERNET ECOSYSTEM

22 JULY 2022



1. Introductory remarks

- 1. ecta, the european competitive telecommunications association, welcomes the opportunity to provide feedback on the "Draft Berec Report on the Internet Ecosystem" put to public consultation on 14 June 2022 (hereinafter "the Draft Report").
- 2. ecta represents those alternative operators who, relying on the pro-competitive EU legal framework that has created a free market for electronic communications, have helped overcome national monopolies to give EU citizens, businesses and public administrations quality and choice at affordable prices. ecta represents at large those operators who are driving the development of an accessible Gigabit society, who represent significant investments in fixed, mobile and fixed wireless access networks that qualify as Very High Capacity Networks (hereinafter "VHCN") and who demonstrate unique innovation capabilities.
- 3. ecta welcomes BEREC's initiative to elaborate a report on the internet ecosystem, which, even though not directly related to the core objectives and the mission of BEREC, appears relevant for ecta members who are:
 - i. Investing significant amounts of resources for contributing to EU digital compass connectivity targets through deployment of sustainable electronic communications networks and services (fixed, mobile, B2C, B2B, B2B2C, IoT).
 - ii. Players in the highly concentrated cloud services markets², who face the competitive challenges described by the draft BEREC report under consultation.
- 4. There are no doubts: the Electronic Communications Services (hereinafter "ECS"), Electronic Communications Networks (hereinafter "ECN") and Internet Access Services (hereinafter "IAS") markets still need vigilance and determined regulatory action of BEREC and NRAs to address Significant Market Power, remove market distortions and ensure progress towards effective competition. Despite the regulatory framework in place, those markets are still subject to severe competition problems and even more so in the business markets that remain highly concentrated in all Members States. As recognized by BEREC3 those problems will likely be exacerbated, with the fixed-mobile convergence process in due course. A positive development is that there is a steady trend that sees the market entrance by the ECS, ECN and IAS providers into the cloud and cloud computing service markets. However, as

¹ https://www.ectaportal.com/about-ecta

² Namely Infrastructure as a Service (hereinafter "IaaS"), Platform as a Service (hereinafter "Paas") and Software as a Service (hereinafter "SaaS")

³ See page 46 of the Draft Report "In the last ten years, there has been a trend towards bundled offers with fixed and mobile services, also including other services, which may have increased switching barriers, and thereby created lock-in effects. These dynamics make it more difficult for new market entrants to compete in the convergent market and to win new customers".



clearly emerges from the Draft Report⁴, **these markets are concentrated in the hands of very few and powerful players, and there are serious barriers to switching to new cloud offerings**. Finally, in the last few months, the IP Interconnection market has become (again) the focus of regulatory and institutional discussions in the framework of demands for contribution of the 'OTT' players to network investment in the context of the EU digital Compass 2030 connectivity targets.

- 5. ecta therefore considers this BEREC initiative appropriate and is happy to submit its considerations and constructive proposals on the Draft Report. Our focus is on BEREC's analysis and proposed actions specifically related to above listed key issues and on the re-emerging topic of IP Interconnection which needs special consideration.
- 6. In Sections 3 through 4 below, ecta addresses the most relevant points of the Draft Report, following the order of the chapters of the Draft Report. Before doing so, ecta presents key considerations (Section 2). Section 5 contains ecta's comments on the future work indicated in BEREC's Draft Report, and Section 6 constitutes ecta's own concluding remarks.

2. Key ecta considerations

- 7. In today's world, information and communications technologies totally permeate economic and social life. The internet has changed the way people and businesses transact and behave, disrupted certain industries and created new ones.
- 8. ecta appreciates the Draft Report as it provides an analytical and pragmatic overview of the internet ecosystem, its main components and players, some competitive dynamics and related problems that can impact the end-users' experience.
- 9. It is important to specify that ecta and ecta members' core business is not based on providing services on the client and server sides of the internet ecosystem, but is fundamentally the provision of the underlying connectivity and services.
- 10. Some of the ecta members offer, directly, and/or through agreements or partnerships, OTT content services in their connectivity and communications service bouquet, some others are active in the B2B NI-ICS services at the client side and some are active in hosting, CDN and cloud markets at the server side. Some members also offer Internet of Things (IoT) connectivity and related IT solutions, both nationally and a pan-EU (and even global) basis. For most ecta members, those OTT content/cloud/IoT activities are strongly rooted in the connectivity core business. Therefore, ecta and ecta members are looking at those markets with broadly the same knowledge as BEREC which prepared the Draft Report, and, do not have the level of insight and detailed information that the players operating their core business at the client and server side (i.e. Alphabet, Meta, Apple, Microsoft, Amazon, Netflix) do have.

⁴ See the pages 4, 5 and 31 of the Draft Report.



- 11. Consequently, even though ecta generally agrees with BEREC's analysis and findings on competitive dynamics and openness analysis in relation to the markets located at the server and client side of the internet ecosystem, ecta will refrain from providing further and deeper comments on those components, related markets and competition analysis.
- 12. ECS, ECN and IAS markets, in which the ecta members are operating their core business, constitute the network layer of the internet ecosystem. Without the ECS, ECN and IAS used by all other layers (devices, OS, Apps, content) the internet ecosystem would not exist. Therefore ECS, ECN and IAS are an essential and extremely relevant part of the ecosystem.
- 13. Moreover, as specified by the Draft Report: "the internet experience for users is affected by many different elements, such as devices, OSs, and application stores. These elements are not directly within NRAs and BEREC's regulatory realm but can still have an impact on ECN and ECSs which are subject to NRA's monitoring and regulation⁵" (ecta emphasis added).
- 14. ecta agrees with the approach BEREC seems to have taken in the above statement in relation to the different elements of the internet ecosystem.
- 15. ecta would like to underline that those elements and the competition dynamics encountered in their reference markets should be analysed in function of their impact on ECN, ECS and IAS as they are subject to regulatory remit of BEREC and NRAs.
- 16. ecta firmly believes that it is relevant for BEREC to continue to play a key and proactive role especially in the ECS, ECN and IAS markets: not only are they under the direct regulatory competence of NRAs and BEREC, but they still are characterized by competition problems and therefore need the full attention of BEREC and NRAs.
- 17. ecta consequently highlights that the Draft Report, while acknowledging somehow the importance and centrality of the ECS, ECN and IAS markets, does not seems to give them sufficient attention: the section dedicated to the Electronic Communications Providers (Chapter 5.6) is quite simple and generic, does not make any description of ECN/ECS/IAS providers' role in the internet ecosystem, and seems to suggest (by contrast to the description of other layers) that 'all is well' in these markets.
- 18. More specifically, ecta notes that the Draft Report does not contain a proper analysis of the competition dynamics for IAS, ECS and ECN markets. The two latter are simply mentioned in chapter 6.2.3 in function of the IAS services: "IAS competition may be affected differently depending on the type of infrastructure considered". For example, the competitive problems and potential competition risks, such as the discriminatory practices encountered by the ALTNETs in accessing the network of the operators with Significant Market Power, and, the competition risk that the migration from legacy to VHC networks pose for

⁵ See page 6 of the Draft Report



ATLNETs are not mentioned. In absence of the European pro-competitive access regulation framework in place, or, should such frameworks be relaxed due to the review of the Access Recommendations, currently in course, those problems would be substantially exacerbated and competitive distortion risk would increase. Moreover, ecta notes that the Draft Report does not provide any evidence on the differences between competition dynamics existing in different Member States and on how less than complete implementation of the regulatory framework has promoted or restrained competition.

- 19. ecta therefore kindly invites BEREC to amend the final text of the Report and to add at chapter 6 a more detailed analysis for ECN, ECS and IAS by including a proper description of the competitive dynamics, problems, and risks for these markets.
- 20. ecta also believes that it is equally relevant for BEREC to take a shaping and leading role in the cloud services markets that are strongly and directly related to ECS, ECN and IAS and present considerable competition issues.
- 21. In relation to the cloud services markets, ecta agrees where BEREC itself underlines that BEREC's contribution to the Draft Data Act can be valuable. ecta believes that policy actions can significantly facilitate switching, interoperability and data portability in cloud markets, just like facilitating IAS switching and number portability have been key in the traditional markets for ECSs.
- 22. Finally, ecta acknowledges the current debate in Europe, centred around the question whether the 'OTTs' should contribute to the ECN Providers' investments in very high- capacity networks on which it reserves its opinion at the time of answering to the BEREC consultation.
- 23. However, ecta is of the strong opinion that the OTT fair share debate is totally independent from the ECN/ECS market structure and its underlying regulation. ecta recalls that it is the competitive pressure that pushes market players to invest in VHCN networks and in service-layer innovation, including for instance cloud services. The comparison of market dynamics between France and Germany is the best evidence of this. France is one of the most competitive EU Member States where, thanks to the high competition on the fixed and mobile consumer markets, very high fibre and 5G network deployment, high speed broadband take-up, and a great variety and choice and product bundles with competitive prices are a market reality for many years. Furthermore, in 2021, for the 7th year in a row, investments continued to soar to reach (excluding spending on 5G spectrum) 14.9 billion euros, which marks a more than 10% increase YoY (10,9%) thanks to the competitive pressure⁶. On the contrary, ecta does not observe a similar dynamic in Germany. The main difference relates to the extent of competitive pressure. Less competitive pressure translates to less coverage, poor service quality, service homogeneity and resistance to innovation, and indeed lessened investment intensity. This is now, very belatedly, being recognized in Germany, although it has not yet resulted in the necessary changes to tangible regulation. The example of

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 $^{^6}$ See ARCEP's investment data $\underline{\text{https://en.arcep.fr/news/press-releases/view/n/french-telecoms-market-240522.html}$



the German mobile market is illuminating. The 3 MNOs share (comfortably) the market and despite the absence of substantive wholesale access regulation, it is not possible to encounter better coverage, better service, more innovation, or higher investments. This represents strong evidence that deregulating and reducing the competitive pressure does not lead to higher investments. This is even more the case because the heavy investment cycle in fibre and 5G requires a long-term vision for the industry and does not match stock markets' expectations for short-term cash generation.

- 24. ecta regrets that no real holistic **independent** study has been performed by policy makers or NRAs since the liberalisation of the telecom markets to understand the financial performances of the sector. Therefore, ecta recommends BEREC to perform an in-depth study of the performance of the ECN/ECS markets in terms of Return on Capital Employed (ROCE). BEREC is best placed to perform such a study as NRAs have acquired significant data through their extensive cost modelling for access and termination remedies. Such a study should include:
 - i. How the legacy, inherited from the monopoly times and built with taxpayers' money, has been and is still included in the asset base of the incumbents.
 - ii. How those legacy assets influence the ROCE calculation.
 - iii. What was the impact of the M&A activities of the concerned operators and how M&A created or destroyed value.
 - iv. Evaluation of the performance of the sector in the light of the risk level separately for fixed and mobile assets and on a per project basis.
 - v. How inefficiencies (included over loaded cost structures) are impacting the ROCE.
 - vi. How commercial co-investment projects (independent from ECCC article 76) have improved the ROCE.
 - vii. How wholesale rents from access products have been reinvested by the incumbent operators knowing that some incumbent operators have lower CAPEX than their wholesale revenues. What are the plowback ratios and how have they evolved over time? Also, copper-based access products have included a notion that tended to foresee a "perpetual" existence of the access lines co-financed by the access seekers. In a period where copper migration to fibre-based networks is gaining in importance, the question on how access seekers will benefit from their "co-investment" contribution for the last two decades is more relevant than ever.
 - viii. Comparison of investor types and their expected return and how this would be aligned with the risk profiles.



- 25. In the same vein, ecta would like to emphasise that the report commissioned by GSMA to Kearney: "The Internet Value Chain20227" clearly mentioned that some revenue decline in the sector comes from the business markets when they mention: "First, enterprises are replacing high margin MPLS and VPN services with more basic internet access services, resulting in an overall loss of revenue and margin for the operators". Here again, one cannot blame regulation or competition, as the business markets remain highly concentred in the hands of the incumbents in all Member states.
- 26. ecta's approach, in dealing with all policy issues, since its very foundation, has consisted in assessing clearly the existence of the problems through evidence-based analysis and reflection before arriving to conclusions and before proposing associated solutions.
- 27. In this light, ecta welcomes the initial BEREC analysis on IP interconnection markets and appreciates BEREC's announcement at the BEREC debriefing held on 14th June 2022, of a new work item assessing the IP interconnection ecosystem and impact of potentially adopting a sending party pays principle ("OTT fair share") on this ecosystem and on end users.
- 28. ecta notes with concern that BEREC does not intend to perform a public consultation on the draft opinion of its assessment of the IP interconnection ecosystem and impact of the sending party pays principle ("OTT fair share") on this ecosystem and on end users before publishing the final text. BEREC would rather intend to organize only some meetings with some selected stakeholders to gather opinions before drafting the related opinion.
- 29. ecta calls on BEREC to provide the sector with the possibility to express their views and to put the draft opinion to public consultation. ecta would like to highlight that even though this is an opinion, given the extreme relevance of this new topic, it would be necessary and appropriate for BEREC to consult adequately all involved parties.
- 30. In relation to the future work of BEREC proposed in the Draft Report, ecta notes that there are a great number of work items that BEREC proposes to deal with.
- 31. ecta kindly suggests BEREC to give priority, in its future work on the internet ecosystem, to the items demonstrably connecting it to the competition problems encountered by ECN, ECS and IAS providers. Those items include, in the descending order of importance:
 - i. Cloud and edge computing services, as well as their interaction with ECSs. In particular, assessing how cloud computing providers are competing and collaborating with traditional ECN and ECS providers in the provision of new innovative services. In particular, analysing the switching, interoperability and data portability issues in light of the forthcoming Data Act (which is being discussed currently in the co-legislative procedure),

⁷ https://www.gsma.com/publicpolicy/resources/internet-value-chain



would in ecta's opinion, be the most important item for BEREC's future work.

- ii. The internet interconnection architecture appears also to be a relevant topic for further analysis. As highlighted by the Draft Report, there are bargaining asymmetries between smaller players (ISPs or CAPs) and big players. The analysis of such asymmetries and the potential impact of interconnection architectures on openness are definitely to be considered a relevant work item at a time when new internet-based services, which are sensitive to quality of service or data-intensive, are being developed. ecta agrees with BEREC when BEREC states that their potential could in fact be affected by an interconnection that is too restricted.
- iii. The impact of the growing investment of the OTTs in electronic communications infrastructures on the competitive landscape for IP interconnection and ECSs would be another related important work item.
- 32. Machine-to-machine, Internet of Things, and connected cars are increasingly becoming multinational, pan-European and even global. Hence, they represent a strong opportunity to promote the internal market with innovative services. However, their multi-country characteristic makes them more vulnerable to partial market failure as any issue in only one Member State (even the smallest) can jeopardize the efficiency and competitiveness of the internal market. The experience of the last years has, unfortunately, confirmed those problems, with for example access refusal to 4G networks in some member states for pan-European services. Also, there is no mobile operator operating a network in all the 27 Member States. Hence competition is at risk of the very few biggest market players pre-empting the market, jeopardizing the internal market and holding back the innovation potential of machine-to-machine, Internet of Things, and connected cars services.
- 33. ecta therefore considers of utmost importance that the final BEREC Report:
 - i. Provides more substantive insight on the role of electronic communications networks and services inside the internet ecosystem.
 - ii. Integrates the analysis performed for ECN, ECS and IAS in the report by focusing more on the enduring competition problems and on the need of keeping in place the ex-ante regulatory framework for electronic communications and NRAs actively working on removing bottlenecks, ensuring that Significant Market Power is properly addressed with remedied that enable progress towards effective competition, etc.
 - iii. Prioritizes the future work as suggested by ecta in paragraph 33 above.
 - iv. Puts the greatest emphasis, in such prioritization of future work, on the cloud services markets that are strongly and directly related to ECS, ECN and IAS and present considerable competition issues.



- v. Explicitly clarifies, for the important new work item on IP interconnection and the impact of potentially adopting a sending-party-pays principle ("OTT fair share") on the internet ecosystem, end-users and competition, that irrespectively from the type of the final BEREC document, be it an opinion or a study, a fully-fledged public consultation will be performed by BEREC for gathering comments on the draft text of such opinion in line with the administrative transparency principle foreseen by the EECC⁸.
- 3. Comments on Chapter 5.6 of the Draft BEREC Report (Main Actors of the Internet Ecosystem Electronic Communications Providers)
- 34. The Draft Report (correctly) states that: "Electronic communications service providers have typically a national footprint. However, some operators are providing ECS in many different countries (e.g.: Vodafone, Orange or Telefónica). The largest ones own and operate their network infrastructure, nationally and also sometimes internationally. In general, ECS providers are focused on ECSs, providing IAS and some of them (the largest ones with own infrastructure) also providing interconnection for other ISPs and CAPs. The electronic communications services market is very fragmented in comparison to the markets on the server and the client side where some actors are key players not only in all of Europe but worldwide" (ecta emphasis added).
- 35. ecta believes that this description should be expanded substantially, referring also to the presence of alternative operators, competition, the issues at stake in electronic communications regulation, etc. In addition, ecta asks BEREC to recognize that alternative operators were instrumental in creating the physical infrastructure making the development of the internet possible in Europe. We refer to ecta members such as Colt and Lumen (former Level 3), which entered the market in the 1990s and created the metropolitan fibre and backbone networks enabling high-quality intra-city, inter-city and pan-European and transatlantic connectivity supporting the boom in data flows, including the transport layer for the internet, Today, these companies, and many others, e.g. our members 1&1 Versatel (Germany), Fastweb (Italy), Eurofiber (multi-country) and many others, connect essentially all data centres within a geographic footprint that is either national, multi-country or indeed pan-European and global. These and other ECN connectivity providers that are members of ecta also actively support connectivity from business premises to various cloud platforms, including those of the hyperscalers in cloud computing and related services.
- 36. However, ecta regrets that no consideration, argument and reflection is put forward by BEREC when it comes to:

⁸ See in particular, Recital 79 and Art. 23 of the EECC.



- i. Providing a more detailed and insightful analysis on the relationship between ECS providers and the global undertakings operating at client and server layers (Alphabet, Meta, Apple, Amazon, Microsoft and Netflix).
- ii. Questioning and analysing the reasons of the Electronic Communication Providers' absence at the other layers of the internet ecosystem.
- 37. In fact, the Draft Report, mentions the relations between the electronic communications providers and undertakings operating at the different layers: "ECS providers compete with actors providing OTT interpersonal communications services (voice calls and instant messaging), such as Meta (via WhatsApp, Messenger), and to a lesser degree with other actors for content services, such as TV and video services. Cloud computing providers can partner and/or compete with electronic communications service providers, providing new services combining connectivity with their own cloud services". But it does not spend a word on the reasons why the ECS providers did not enter into the business of the other layers of internet ecosystem (or the difficulties and obstacles encountered by those who try to do so).
- 38. Moreover, there is **no analysis on whether there have been cases of ECS providers who attempted to extend their business to the client and server layers or not**. Such kind of real case analysis would help to explain why such attempts, notably by incumbent operators, did not give the expected outcomes and especially would provide crucial information on whether the unsuccessful attempts were due to competition problems or not. Note that some alternative operators, such as ecta member 1&1/United Internet have in fact managed to develop meaningful market positions in hosted e-mail, web and application hosting, digital identity, and cloud services.
- 39. ecta recalls the relevance of such analysis in the overall Draft Report and underlines that the **final BEREC Report should include more detailed and insightful analysis on the relationship between ECS providers and the other undertakings operating at the server and client layers**. ecta also requests that BEREC includes this aspect much more prominently in its proposals regarding future work in particular with respect to the cloud services markets analysis.
- 40. Specifically, ecta asks BEREC to supplement its report with regard to ECNS providers expansion into cloud services markets, which are hampered by competition problems.
- 4. Comments on Chapters 6 and 7 of the Draft BEREC Report (Analysis of Competition Dynamics and Analysis of Openness)
- 41. ecta notes that the Draft Report analyses the competition dynamics and the level of openness of each element of the internet ecosystem in two separate chapters, respectively chapter 6 and chapter 7. However, ecta underlines that those two analyses should go hand in hand and should not be provided in "self-contained areas". ecta therefore submits its comments to those two separate chapters in a holistic manner in the following paragraphs.



- 42. ecta agrees with the overall contextualisation of the competition dynamics analysis and of openness by BEREC and in particular with BEREC proposal to analyse the level of competition dynamics in the internet ecosystem for each of the elements according to: "1) whether the element market is concentrated and 2) the existence of barriers to entry or expansion (either technical, legal or resulting from economic features), as well as 3) the strategies and behaviours (e.g. disintermediation, envelopment, refusal to interoperate, discrimination, etc.) of the players affecting inter-platform and/or intra-platform competition."
- 43. However, ecta underlines that the competitive analysis of the internet ecosystem would not be fully and properly assessed if the assessment was not undertaken at a major level of detail for the ECS, ECN and IAS markets. BEREC should not be focusing all attention on the other layers such as the enabling and discovery layers, the device layers and the attention-intensive application layer. This would mean taking too narrow a view.
- 44. For ecta, the ECS, ECN and IAS are a very crucial part of the internet ecosystem and there are already important competitive interactions between ECS/ECN and IAS providers with undertakings operating at the other layers (such as cloud computing IaaS, PaaS and cloud services-SaaS).
- 45. ecta therefore kindly invites BEREC to perform a more detailed competition analysis on ECS, ECN and IAS taking into account the elements ecta provides in the following paragraphs.
- 46. In relation to the openness analysis performed by the Draft Report, ecta agrees with the approach undertaken by BEREC which consists in analysing the internet ecosystems openness by taking as the reference the Open Internet Regulation for the IAS element and for adjacent services when offered together with the IAS (e.g. default DNS resolvers).
- 47. ecta wishes to underline that such approach, while needing a readaptation for the elements which structurally show great differences with respect to IAS (such as enabling and discovery layers, devices layers and attention intensive applications) fits very well for the element of IP interconnection which currently is at the centre of European political and regulatory debate.
- 48. In the following paragraphs, ecta submits considerations in relation to the elements directly related to the ECS, ECN and IAS: IP interconnection, cloud computing and cloud services.
 - 4.1. Comments on Chapter 6.2.3. and on Chapter 7.2.3 Internet Access Service



- 49. ecta notes that the Draft Report states: "The IAS market is characterised by economies of scale and scope, capacity constraints and sunk costs, resulting typically in asymmetric conditions among providers. Nevertheless, the IAS market is nowadays mostly dynamic, thanks, among other factors, to the regulation that has been imposed, in most countries, in order to ensure a more diversified offer at lower prices to the users."
- 50. When it comes to IAS competition, BEREC also proposes a distinction between fixed and mobile infrastructure: "In fixed networks, there are high barriers to entry, due to high investment costs necessary for rolling out a network. In this context, new entrants mainly use regulated or commercial wholesale access, including passive infrastructures, to enter into the IAS market. In many countries, wholesale access has also been essential to improve the national coverage for alternative operators, mainly in areas that are not profitable to cover". While for mobile infrastructure, BEREC goes on saying "there are four main ways for market entry: i) spectrum assignment combined with network rollout, ii) network rollout combined with network sharing98, iii) MVNO agreements (which might be regulated for example through access obligations in mobile licenses or concluded on a commercial basis), or iv) network design, software development for network equipment and/or network supervision (all those tasks can be handled by a single third party, i.e. potentially a new entrant for the open Radio Access Network (RAN) architecture)".
- 51. Finally, BEREC concludes the competition dynamic analysis by affirming that: "In the last ten years, there has been a trend towards bundled offers with fixed and mobile services, also including other services, which may have increased switching barriers, and thereby created lock-in effects. These dynamics make it more difficult for new market entrants to compete in the convergent market and to win new customers" (ecta emphasis added).
- 52. BEREC also underlines that switching barriers for consumers are lower in the mobile market compared to the fixed market, partially due to regulation, such as number portability. Switching of fixed broadband and related multi-product bundles is supported by number portability as well but requires additional attention to ensure that customer choice is not curtailed.
- 53. ecta agrees in general terms with this analysis by BEREC which recognizes the increase of difficulty for the new entrants to compete and to win new customers in light of the convergence trends on the market, but at the same time ecta wishes to underline that once again, the devil is in detail and the analysis put forward by BEREC does not provide any details on the statements it puts forward.
- 54. ecta considers that BEREC should not only describe the retail IAS market dynamics as done in the Draft Report, but in addition explicitly recognize and reflect in the final text of the Report that regulatory intervention addressing Significant Market Power on underlying wholesale markets for civil engineering access, physical access and active access have been essential to improve the functioning of retail IAS markets. ecta calls upon BEREC to clarify the retail and wholesale dimensions, to avoid creating the impression that markets are



- competitive sui generis. The reality is that intervention at the wholesale level, below that of the IAS, is what has enabled competition.
- 55. Today the European ECS, ECN and IAS markets, although the regulatory framework applied in EU Member States, are far from being really competitive at fixed and at mobile segments, with some limited exceptions⁹.
- 56. As to the first element of analysis proposed by BEREC (whether the element market is concentrated) as revealed by the last DESI report, the ECS, ECN and IAS markets, as far as the fixed segment is concerned, are still concentrated in the hands of the national incumbents¹⁰. This is a strong indicator if one considers that the regulation in European markets has been introduced almost two decades ago.
- 57. In relation to the mobile segment, ecta recognizes that mobile number portability has decreased the switching costs and had a very positive impact on the competition dynamics. However, ecta also notes that the crucial factor making a real difference on mobile competition dynamics is the presence of a strong fourth infrastructured mobile operator (hereinafter "MNO") in the market.
- 58. In markets such as France, Italy and Spain, where such 4th MNOs exist, real competition dynamics have emerged by bringing greater choice, innovation, investments and competitive offers to the end users and economy. Such presence appears to be an enabling factor also for the competitiveness of mobile virtual network operators. If the 4th MNO exists and is strong, the MVNOs can count on the presence of greater number of MNOs offering them a greater and competitive wholesale choice which allows them to compete efficiently and effectively on downstream retail markets.
- 59. In relation to the second analysis element used by BEREC, the barriers to entry and expansion, ecta agrees with the BEREC statement where the convergence of fixed and mobile markets increases the difficulty for new entrants to compete and win new customers. ecta calls on BEREC to provide more detailed insight on this real and relevant problem, including the access to spectrum (below 1Ghz) in the final text of the Report
- 60. Finally concerning the third element of analysis, the strategies and behaviours such as discrimination, ecta would like to highlight that in ECN, ECS and IAS markets, despite regulation in place, the discrimination between the SMPOs' self-

⁹ For instance, France is one of the most competitive EU Member States where, thanks to the high competition on the fixed and mobile consumer markets, very high fibre and 5G network deployment, high speed broadband take-up, and a great variety and choice and product bundles with competitive prices are a market reality for many years. Furthermore, in 2021, for the 7th year in a row, investments continued to soar to reach (excluding spending on 5G spectrum) 14.9 billion euros, which marks a more than 10% increase YoY (10,9%) thanks to the competitive pressure. See ARCEP's investment data https://en.arcep.fr/news/press-releases/view/n/french-telecoms-market-240522.html.

¹⁰ DESI 2021 shows that 2 decades after the introduction of the EU Regulatory Framework, the incumbents in EU, hold on average 40% of the fixed broadband subscriptions. Only in 10 Member States out of 27, the incumbents do have a market share below 40% (in any case, except in Romania, Czech Republic, Bulgaria and Poland) they keep a market share always above 30% (DESI Figure 35, page 37).



supply and provision of wholesale services to ALTNETs continues to be one of the most critical issues. The infringement of non-discrimination obligations by the SMPOs is a core frequent problem for both NRAs and competition authorities¹¹. Those problems, should the ex-ante regulation be relaxed or withdrawn (or if BEREC and NRAs choose to focus on markets other than the ones they are mandated to address), will be even more severe. Irrespectively from the ex-ante regulation changes, there is a concrete risk that the copper to VHC networks migration process can, in absence of adequate regulatory measures, give the incumbent operators the opportunity and ability to leverage on their market power from the copper network in a way to extend it to the VHC network. It is therefore imperative that BEREC explicitly mentions those issues in the final Report.

- 61. ecta respectfully asks BEREC to amend chapter 6.2.3. in light of the above considerations.
- 62. ecta agrees with the analysis of openness performed by the Draft Report for the IAS market. It is true that: "by exerting technical control over the internet access, providers of IAS have the ability to influence an important part of the network layer. However, users are safeguarded by the OI Regulation, as this regulation prevents restrictions or limitations to access not only to the services, content and applications over the IAS, but also to the provision of the internet-based services".
- 63. In fact, the OI regulation has prohibited the ISPs from discriminating between internet traffic, applications, protocols, or providers of internet-based services. ecta underlines those ongoing debates on the so-called 'OTT Fair Share', irrespectively from their outcome (which at the moment is uncertain), should not alter or undermine the OI Regulation which provided greater choice, innovation and competition to European consumers and businesses.
 - 4.2. Comments on Chapter 6.2.5. and on Chapter 7.2.5. IP Interconnection
- 64. The Draft Report, in relation to the competition dynamics between the transit operators and CAPs in the context of IP interconnection, states that: "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".
- 65. The Draft Report, on the other hand, underlines that: "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. Additionally, competition concerns

¹¹ See for instance, decisions by ACM, Boete KPN 0T2010, 23.1.2014, here; BNetzA, BK2-19-032, 2.9.2020, Beschluss zur Einleitung eines Missbrauchsverfahrens here; Italian NCA AGCM's decision against against TIM here; European Commission, AT.39523 — Slovak Telekom, 15.10.2014; Autorité de la concurrence, Communications électroniques / marché des entreprises, 17.12.2015 here



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 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".

- 66. ecta firmly believes, in light of those BEREC considerations that the new work item launched on 15th June 2022 during BEREC Debriefing is timely, appropriate and useful. BEREC's opinion on this topic will have a strategic value and will contribute to better decision making by the European Institutions which are aiming to legiferate on the issue of 'OTT Fair Share' which is related to the IP interconnection market and its competitive dynamics.
- 67.It is therefore crucial that irrespective of the type of document and the related outcome that will be released by BEREC at the end of the proceeding, all interested parties are consulted transparently and effectively by providing them adequate time and by putting into public consultation the draft text of the BEREC Opinion.
- 68. In relation to the initial BEREC considerations put forward in chapter 6.2.5, ecta appreciates the approach taken by BEREC, which focuses in a transparent manner on the different competitive issues that can arise between the transit operators and CAPs.
- 69. BEREC, in its analysis, underlines that the IP-interconnection ecosystem reflects that different players (CAPs, ISPs) apply different strategies (use of peering, transit, direct interconnection, CDNs, "make or buy", etc.). This shows the complexity of the analysis that European policy-makers should make in the context of the "OTT fair share" debate.
- 70. BEREC also clearly exposes the 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 will 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. BEREC concludes that the actual experience shows that the market is affected by the differences in bargaining power. As BEREC states, the issue is about: "bargaining asymmetries between smaller players (ISPs or CAPs) and big players".
- 71. In relation instead to the BEREC openness analysis on IP interconnection, ecta does not fully agree with BEREC when it states: "Even though the IP interconnection practices of ISPs are generally outside the scope of the OI Regulation ..." insofar as, in ecta's opinion, it is not completely true that the IP interconnection practices of ISPs are generally outside the scope of OI Regulation. Today this market is unregulated and, as from the findings of WIK¹², the market presents an adequate

¹² See the WIK Report on Competitive conditions on transit and peering markets here



level of competitive dynamics. Should the ISPs deny access to the CAPs on the basis of the alleged unfair IP transit fees, this could well have significant impacts on the end-user experience and on the rule that prohibits the discrimination by the ISPs between internet traffic, or providers of internet-based services .In light of the above considerations a the potential impacts on the internet ecosystem and on the end-users' experience, ecta considers it necessary to perform an extensive impact analysis, including the sustainability dimension, beyond the opinion that BEREC is starting to draft.

- 4.3. Comments on Chapters 6.2.6., 7.2.6. (Hosting, CDN and cloud computing IaaS and PaaS) and on Chapters 6.2.8.3. (Software as a Service (SaaS)
- 72. ecta notes that the Draft Report proposes a structure for the competitive analysis of cloud services that distinguishes on the one hand, between cloud computing (IaaS and Paas) which is being analysed together with Hosting and CDN services and on the other hand, software as a service (SaaS).
- 73. Even though understanding the underlying systemic reason, ecta does not agree with this approach because the competition and openness analysis of those three types of cloud services (IasS, PaaS and SaaS) should go hand in hand given the characteristics of the market.
- 74. As correctly stated by BEREC; "While hosting, CDN, IaaS and PaaS cover many different types of services with different purposes, users have greater control regarding the design of services, for example regarding OS, storage capacities and interfaces. SaaS on the other hand provides integrated applications to users and it has highest relevance regarding revenues among IaaS, PaaS and SaaS".
- 75. However, ecta would like to highlight that SaaS services are often provided bundled with IaaS, and that it is clear leverage to cloud services occurs from market positions in desktop and mobile OSs, office suites, etc.
- 76. Moreover, Iaas and Paas and Saas markets are highly concentrated in hands of few global players vertically integrated along the whole value chain.
- 77. In light of these facts, ecta will provide its consideration to the cloud computing and services markets in the following paragraphs.
- 78. ecta would firstly like to highlight that, today, several ecta members operate in IaaS markets as they can actively rely on their know-how and expertise in ECN provision for offering infrastructure based services including the hardware (racks and servers) and location (data centers). In order to offer competitive IaaS services and making those services attractive for the businesses, they often rely on partnerships with very few global SaaS operators that dominate the market (in particular Microsoft).



- 79. As recognized by the Draft Report: "The provision of "productivity software" (e.g. office suites) together with widely used desktop OSs may bring advantages for the provider when bundling these with cloud services. Thus, vertically integrated service providers would theoretically be able to leverage other markets and profit from scale economies".
- 80. The Draft Report also provides three striking examples: "AWS profited from first-mover advantages from offering laaS first, and introduced PaaS and SaaS later. Microsoft leveraged its dominance with Windows and the Office suite to introduce a range of complementary SaaS (e.g. Office 365), to PaaS and laaS (e.g. Azure) offerings. Google competes by offering advanced machine learning and data analytics applications. Additionally, there are dependencies of customers on the services of a few large cloud service providers, since the switching costs are high. For competitors providing cloud services, it may be hard to compete with the level and speed of innovation of these three companies".
- 81. ecta underlines that the leverage action that BEREC assumes in a theoretical manner is a reality in cloud services markets where the ECN providers are new entrant as IaaS providers and they necessarily need to offer their service bundled with SaaS.
- 82. In this specific competitive context, ecta welcomes the Draft Data Act proposed by the European Commission which is currently being discussed at the colegislation stage. ecta agrees with BEREC where it states in the Draft Report: "Concerning cloud services, the European Commission's proposal for a Data Act aims to facilitate switching and data portability. BEREC's contribution in this context may be valuable".
- 83. The Draft Data Act foresees the obligation on cloud service providers to provide data portability¹³. ecta fully agrees with this provision.
- 84. However, ecta would like to highlight that in order to be really effective in fostering the competitive dynamics in the cloud services markets, great attention should be paid by the Draft Data Act to licensing policies adopted by vertically integrated (data processing and software) and global undertakings¹⁴ that can nullify the pro-competitive effects of data portability and free switching rules proposes. In order to avoid such anti-competitive behaviours, software license holders in the data portability, should not discriminate in any way customers that decide to run their licensed software on third-party data processing services and in particular:
 - i. The "bring your own license" principle should operate also when the customer switches from the vertically integrated provider to a different data processing provider (more in general, lock-in clauses should be prohibited);

¹³ See Art.23 of the Draft Act, available <u>here</u>.

¹⁴ Namely Microsoft, Amazon and Google.



- ii. License portability should not be accompanied with retaliations versus customers or alternative providers (e.g. service level degradation);
- iii. License conditions should be transparent, fair and non-discriminatory (e.g. no extra costs in case of use of the software on an independent data processing service).
- iv. Lastly, where switching costs are charged by the old provider to the customer (i.e. art. 25 of the Draft) and/or to the new provider, such costs should be not only "directly linked to the switching process concerned" (i.e. justified) but should also mirror an efficient service provision process (i.e. inefficiencies of the old provider should not result in extra charges for other subjects).
- 85. ecta firmly believes that such amendments are extremely relevant to improve the overall positive impact of Draft Data Act. ecta therefore respectfully asks for the final BEREC Report to integrate those competitive issues and the related proposals in the competitive and openness analysis regarding the cloud services.
- 86. For the sake of transparency, ecta would like to highlight that it is taking the necessary steps to contribute proactively to the Data Act co-legislation proceeding in due course with the aim of supporting, at the best of its capacities, the European Parliament and Council, in the European Institutions' ambitious objective of regulating such a new and relevant business field.

5. Comments on Chapter 8 of the Draft BEREC Report (Future Work)

- 87. In relation to the future BEREC workstream on the internet ecosystem, ecta believes that BEREC proposes numerous topics to analyse.
- 88. Given the limited resources and time, and the direct regulatory remit of BEREC on ECS, ECN and IAS markets, ecta strongly suggests that the final BEREC Report prioritizes the proposed future work items.
- 89. ecta finds of great interest, among the topics proposed by BEREC:
 - i. Cloud and edge computing services and their interaction with ECSs and the identification of policy actions that can facilitate switching, interoperability and/or data portability are key, just like facilitating IAS switching and number portability are key in the traditional markets for ECSs. BEREC itself underlines that BEREC's contribution to the Draft Data Act can be valuable.
 - ii. 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.
 - iii. 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.

- 90. ecta therefore kindly suggests BEREC to give priority, in its future work on the internet ecosystem, to the items directly related to the competition problems encountered by ECN, ECS and IAS providers as listed in the previous paragraph.
- 91. In addition, ecta finds it necessary to analyse the competition problems in the Internet of Things markets that are increasingly becoming multinational, pan-European and even global. Hence, they represent a strong opportunity to promote the internal market with innovative services. However, their multi-country characteristic makes them more vulnerable to partial market failure as any issue in only one Member State (even the smallest) can jeopardize the efficiency and competitiveness of the internal market.

6. ecta Concluding Remarks

- 92. In the light of the previous observations, evidence and considerations, ecta respectfully invites BEREC to amend and augment the final Report to:
 - i. Provide more substantive insight on the role of electronic communications networks and services in the internet ecosystem, also by including the more detailed information and analysis on the competition dynamics encountered in those markets.
 - ii. Put emphasis on evidence regarding the strategic importance and positive contribution of ECS, ECN and IAS as an enabler of client and server layers of the internet ecosystem.
 - iii. Give priority in the future work related to the internet ecosystem to the:
 - a. Cloud services markets that are strongly and directly related to ECN, ECS and IAS and present considerable competition issues. Reflect on ways to improve the draft Data Act that is being discussed in the co-legislative procedure, given the fact that BEREC can give a valuable contribution to such proposal on the basis of its know-how in regulating the ECS, ECN and IAS markets.
 - b. The internet interconnection architecture and to the potential impact of the interconnection architectures on openness.
 - c. Competition problems in the Internet of Things markets and their impact on the internal market.
 - iv. Explicitly clarify that the new BEREC workstream regarding IP interconnection and the impact of the potential introduction of a 'sending-party-pays' principle will be accompanied by a fully-fledged public



consultation on the draft BEREC opinion in line with transparency principle where all interested parties can submit their views on the proposed BEREC opinion.

In case of questions or requests for clarification regarding this contribution, BEREC is welcome to contact Mr Luc Hindryckx, ecta Director General, or Ms Pinar Serdengecti, ecta Regulation and Competition Affairs Director.