



Computer & Communications Industry Association (CCIA) Response to the EU's call for evidence to update its definition of Relevant Market 16 February 2022

1. Introduction

The Computer and Communications Industry Association (CCIA) welcomes the opportunity to submit comments to the European Commission (Commission) in response to its call for evidence in relation to “updating its Market Definition Notice”.¹

CCIA is an international, not-for-profit trade association representing a broad cross section of communications and technology firms.² For over fifty years, CCIA has promoted open markets, open systems, and open networks.³

Market definition in digitally enabled markets requires careful assessment.⁴ In particular, CCIA agrees with the purpose of the review, and the necessity of updating the Commission’s assessment of overlaps and competitive constraints which may have an impact on the scope of the relevant product and geographic market in light of the development of the digital economy. The focus of this contribution is on the assessment of the relationship between market definition and market power.

2. The Relationship between Market Definition and Market Power

Defining markets should not be an end in itself, and must be recognised as “only a first step in the assessment”.⁵ Market definition is “a tool for the competitive assessment, not a substitute for it.”⁶ Digital products and services represent particular challenges for the traditional market definition tool. With digital products and services, the boundaries of the market are blurred and innovation often makes it difficult to understand where one market ends and where another one begins. The Crémer Report notes that “it should be remembered that the importance of market definition, and

¹ DG Comp “Call For Evidence For An Initiative (without an impact assessment)” (19 January 2022), available [here](#).

² A complete list of CCIA’s members can be found here: <http://www.ccianet.org/about/members/>.

³ CCIA’s mission statement can be found here: <http://www.ccianet.org/about/ccias-mission/>.

⁴ Digitally enabled markets include the wide range of economic activities facilitated by digital technologies.

⁵ European Commission, “Commission Staff Working Document Evaluation of the Commission Notice on the definition of relevant market for the purposes of Community competition law of 9 December 1997” (12 July 2021), hereinafter referred to as the “Staff Working Document”, available [here](#), pg. 6 .

⁶ M. Monti “Policy Market Definition As A Cornerstone of EU Competition Policy” (5 October 2001), available [here](#).

the methodologies developed for identifying it, were built for standard goods and services. In the digital world, it is less clear that we can identify well-defined markets.”⁷

Since 1997 there has been a rise in technological convergence which has seen “originally unrelated technologies, products and services becoming more closely integrated and even unified, such as watches, telephones, computers and social media platforms.”⁸ Additionally, there has also been a rise in digital ecosystems “consisting of smartphones, operating systems and apps” which has led to an evolution of the nature of competition in relation to individual products and services within such ecosystems.⁹ As expertly explained by OECD Chairman Jenny in a recent article, “the competition analysis tools which work satisfactorily for the rest of the economy do not perform well in the digital world.”¹⁰

The failure to properly assess market dynamics and competitive constraints in such new technological environments could lead to both Type I and Type II errors in both competition law enforcement decisions and merger control assessment. In this respect, CCIA welcomes the Commission’s ongoing efforts to address the shortcomings of an approach focused on strict product and service market definitions more appropriate for the industrial-era competition in which they arose. CCIA further supports the Commission’s move towards a more thorough

⁷ J. Crémer, Y.-A. de Montjoye, H. Schweitzer “Competition Policy for the Digital Era” (2019), available [here](#) (hereinafter referred to as the “Crémer Report”), pg. 46. See also J. Furman “Unlocking Digital Competition” (March 2019), available [here](#) (“Furman Report”), pg. 24 (“While intuitively simple, arriving at an agreed market definition is a matter of serious consideration in competition casework. It is hard to be definitive on what is in or out of scope without detailed work.”) Stigler Center “Committee on Digital Platforms, Final Report” (2019), available [here](#) (“Stigler Report”), pg. 91 (“Pinpointing the locus of competition and therefore the relevant market in which technology platforms compete can also be challenging because the markets are multisided and are often ones with which economists and lawyers have little experience. This complexity can make market definition another hurdle to effective enforcement. ... The problems are compounded by the facts that technologies surrounding the products’ functions in digital markets are continually changing and changes in quality-adjusted prices are difficult to observe.”)

⁸ European Commission, “Commission Staff Working Document Evaluation of the Commission Notice on the definition of relevant market for the purposes of Community competition law of 9 December 1997” (12 July 2021) at pg. 14; OECD (2016) [Digital convergence and beyond](#).

⁹ European Commission, “Commission Staff Working Document Evaluation of the Commission Notice on the definition of relevant market for the purposes of Community competition law of 9 December 1997” (12 July 2021) at pg. 14; Crémer, J., de Montjoye, Y., and Schweitzer H., ‘Competition Policy for the Digital Era’, Report for the European Commission, 2019.

¹⁰ F. Jenny “Competition Law and Digital Ecosystems: Learning To Walk Before We Run” (Industrial and Corporate Change, Volume 30, Issue 5, October 2021, Pages 1143–1167), available [here](#), and on SSRN [here](#), pg. 34. See also at pg. 3 (“Most of the tools of analysis used in traditional competition law enforcement rest on strong hypotheses about the organization of economic activities. First, hierarchical firms are supposed to operate on predefined markets for goods or services where they meet consumers. Second, those firms are considered to operate on markets where other firms are competing with them by offering substitutable products or services to those that they offer. Thus, a market is the locus of competition. Third, those firms sell their products or services for a price to consumers. Their goal is to maximize their profits on the markets on which they sell the product or services they supply by producing up to the point where their marginal revenue and their marginal cost are equal. Also, because they seek to maximize profits, firms will never choose to charge a price which is below their average variable cost. Their marginal revenue and ultimately the price they charge is therefore a function of the intensity of competition they have on the market and the goal of antitrust is to ensure that the price of those products or services remains competitive. An individual firm may have market power if it has a large share of the market and is protected by barriers to entry and/or if consumers are unable to switch to a different supplier.” The paper goes on to explain how these assumptions do not hold in the digital economy).

assessment of competitive dynamics, and related changes identified in the Staff Working Document. While demand-side substitution should continue to be the starting point for market definition generally,¹¹ CCIA submits that the Commission's assessments could be improved in particular by a more balanced approach to demand-side and supply-side substitution in respect of digital products and services.

a. Demand-side substitution in digital

In industrial-era competition, and as correctly noted by the existing market definition notice, demand-side substitution is the primary and dominating avenue of inquiry for the identification of competitive constraints.¹² It is furthermore understandable that assessment of demand-side substitution would begin with "analysis of the product characteristics and its intended use".¹³ However, in digitally-enabled markets, an excessive focus on demand-side characteristics can lead to static market definitions that fail to properly account for the degree of competitive constraints that digitally-enabled firms face.

It is encouraging that the Commission will continue to take out-of-market constraints into account in the competitive assessment. Nevertheless, imperfect substitutes should still be considered within the same product and service market definition, even though they may exhibit varying characteristics. Competitive assessments would benefit from a more holistic understanding of the consumer demand that a particular digital good fulfills, i.e. the "job to be done".

For example, CCIA recently made this point in comments it submitted as part of the United Kingdom's Competition and Markets Authority investigation into Amazon's acquisition of a minority stake in Deliveroo.¹⁴ CCIA noted that for the vast majority of customers of online food delivery intermediaries, competitively significant substitutes include direct delivery (via telephone or online options), personal shopper services (like Beelivery), driving to the restaurant or grocery for pick-up (or walking, cycling or taking public transportation), and (in the case of restaurant delivery) cooking at home or heating a ready-made meal.¹⁵ This was the case even though this included substitutes which were not perfectly identical to the Deliveroo business model. Similarly, in the mobility sector, digital technologies enable a wide and multi-modal range of options to fulfill consumers' transportation needs, including car, bike and scooter sharing, car-hailing, car-pooling, alongside the more traditional cycling, public transport and vehicle ownership. These intermediaries compete with providers of transportation services, both active online and offline.

¹¹ Staff Working Document, available [here](#), pg. 8.

¹² Notice on the relevant market for the purposes of Community competition law, Official Journal of the European Communities, C 372, 9.12.1997, available [here](#), para. 13 ("From an economic point of view, for the definition of the relevant market, demand substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product, in particular in relation to their pricing decisions.")

¹³ *Ibid*, para. 36.

¹⁴ CCIA "CCIA's submission to the UK Competition & Markets Authority on the CMA's provisional findings in Amazon / Deliveroo" (11 May 2020), available [here](#).

¹⁵ CCIA "CCIA's submission to the UK Competition & Markets Authority on the CMA's provisional findings in Amazon / Deliveroo" (11 May 2020), available [here](#), Section 2a.

This market reality led to the Crémer Report acknowledging that “demand for cars is turning into a broader demand for mobility.”¹⁶ Similarly, many companies, including social media, search engines, video-streaming services, newspapers, TVs all compete for users’ time and attention, and could be described “as operating in the attention market, whereby they provide valued services in exchange for their users’ time and attention.”¹⁷ In retail, customers switch between online marketplaces, offline shopping malls and specialised stores, online specialised stores, and direct-to-consumer retail services.¹⁸

Recognising the broader ecosystem in which imperfect substitutes compete will help improve the accuracy of the Commission’s decisions. Assessing demand substitution should therefore focus on ‘effective alternatives’ and not ‘perfect substitutes’. This will represent a significant step in the right direction, but further work could be done to ensure that the competitive assessment takes into account all competitive constraints.

b. Supply-side substitution in digital

The Commission could do more to also acknowledge the importance of supply-side substitution in digitally-enabled markets. In particular, CCIA submits that the boundaries of digitally enabled markets should not be defined by reference to demand-side substitution alone.

Supply-side substitution has long been recognised as an important element of market definition and the assessment of competitive constraints.¹⁹ Supply-side substitution is particularly prevalent where products or services are software based. With software, it is comparably easy to add features or functionalities and compete with a wider range of substitutes. All this makes software-enabled markets particularly dynamic,²⁰ and is the reason that famed Silicon Valley investor Marc Andreessen has said that “software is eating the world.”²¹ Narrow market definitions that do not account for the ease with which software-based substitutes can emerge are prone to underappreciate competitive constraints. CCIA submits that the Commission should consider more closely the competitive constraint of supply-side substitution in digitally enabled-markets. In this respect, CCIA agrees with national competition authorities’ submissions and other

¹⁶ Crémer Report, pg. 47.

¹⁷ J. Furman “Unlocking digital competition” (March 2019), available [here](#), pg. 22.

¹⁸ European Commission Final Report “Support studies for the evaluation of the VBER” (VVA, 2020), available [here](#), pg. 76.

¹⁹ Notice on the relevant market for the purposes of Community competition law, Official Journal of the European Communities, C 372, 9.12.1997, available [here](#), paras. 20-24

²⁰ See UK Department for Business, Energy and Industrial Strategy Report “Dynamic Competition in Online Platforms” (March 2017), available [here](#), pg. 53 (“The extent to which new entrants not only enter the market but become among the largest players does seem distinctive. Other markets, e.g. trainers (see data above), cars, soft drinks, do not see this kind of regular change.”)

²¹ M. Andreessen “Why Software Is Eating the World” (August 2011), available [here](#) (“software programming tools and Internet-based services make it easy to launch new global software-powered start-ups in many industries – without the need to invest in new infrastructure and train new employees.”)

respondents to the consultation stating that static market definitions (and the use of static market shares) risk assessment failures in digital markets.²²

This same point is echoed in the Cr mer Report, which discusses as one possible solution to concerns around the efficacy of competition enforcement in the digital sector “*a broadening of the concept of potential competition to include all types of products and services that are, on the basis of their current functionalities, not yet close substitutes but could possibly expand in the future such as to become close competitors – e.g. because they serve similar user groups, the functionalities overlap and the markets are somewhat interlinked*”.²³ Failure to account for these competitive constraints could either result in overstating market power and increased risk of Type I errors, or overlooking competitive overlaps and increased risk of Type II errors.

Focusing predominantly on demand-side substitution fails to consider that innovative firms often compete aggressively against each other without offering direct substitutes in the sense of traditional product market definitions.²⁴ Demand-side substitutability alone could overlook potential overlaps between imperfect substitutes. It could also undercount the likelihood of future competition between digital products and services that may not be perfectly substitutable at present.

Competition in the digital space can occur between platforms, between platforms and complementors, or among complementors.²⁵ Windows and its ecosystem of software complements are an instructive example. Windows offered an operating system (OS), which, from the perspective of the consumer cannot be substituted by a middleware. Java programmers offered middleware, which was compatible with Windows and provided common services and capabilities to applications outside of what was offered by the OS. Under a traditional analysis, middleware would be considered a separate product market.²⁶ However, the rise of middleware threatened to shift value from OSs to programs built on middleware. Therefore, a non-substitutable “complement” exerted a significant competitive constraint on the relevant product

²² Staff Working Document, pgs. 51, 79, 82.

²³ Cr mer Report, pg. 119.

²⁴ Expert Group for the Observatory on the Online Platform Economy, “Progress Report: Work stream on Measurement & Economic Indicators” (2020), available [here](#), pg. 12. (“On the conceptual side, established measures of firm size may not always be adequate. Revenues may not be a meaningful measure in markets where services are provided for free, or in exchange for data. Market share is often difficult to establish in fast-moving and nested vertical markets. The largest platform companies tend to be active across many different markets, creating extended data-driven ecosystems around their core activities, often cross-subsidizing one service with data or revenues from another. The challenges that this creates for defining platform size or establishing dominance are especially relevant to competition policy, and are being actively researched and debated in that domain.”)

²⁵ N. Petit, D. Teece “Taking Ecosystems Competition Seriously in the Digital Economy” (OECD, 3 December 2020), available [here](#).

²⁶ See e.g. European Commission “Case No COMP/M.5904 - SAP/ SYBASE” (20 July 2010), available [here](#), para. 42.

market.²⁷ This constraint and threat of competition was so significant that Microsoft took actions that led it to be accused of exclusionary conduct in relation to Java.²⁸

In the ecosystems of connected cars competition is on multiple levels. Car manufacturers are constrained by ride-hailing providers, robotic vehicles companies, and telecommunication companies, which are pushing to monetise different parts of the ecosystem.²⁹ While the traditional notion of supply-side substitution may not be appropriate, in the sense that the telecommunications company or ride-hailing provider is not going to start supplying automobiles, these ecosystem suppliers are each engaged in dynamic competition to generate and acquire part of the value of the ecosystem. As the EU's Joint Research Centre ("JRC") notes, "[d]igital markets are characterized by fast innovation, that can rebalance leadership and facilitate entry. Most big players cannot be complacent and have to constantly strive to preserve their positions by preventing other firms from innovating faster."³⁰

In March 2017 the UK Department for Business, Energy and Industrial Strategy published a comprehensive study prepared independently by Europe Economics titled "Dynamic Competition in Online Platforms" ("DBEIS Report"),³¹ which provided extensive evidence corroborating the findings of the OECD and the JRC. The DBEIS Report involved an in-depth analysis of five different markets where digital platforms operate, specifically: search engines, short-term accommodation, music, price comparison websites (particularly those offering car insurance), social networks. The DBEIS Report found that while these markets are characterised by data and network effects,³² these market characteristics only hampered competitors in limited circumstances. In the majority of cases, network effects rather tend to increase dynamic competition, as they give the incentives to invest in the creation of new networks.³³ The DBEIS Report found that the threat of losing market share compelled platform operators to compete aggressively.³⁴

²⁷ A. Crane "Ecosystem Competition" (OECD, 28 October 2020), available [here](#), pg. 2 ("In the late 1990s, Microsoft Corporation competed with Java programmers and other technology companies over the future of middleware and operating systems. Middleware and operating systems were not substitutable products—a consumer would not choose to run a computer without an operating system and only use middleware—but middleware did threaten to commoditize operating systems and shift most differentiated value from operating systems to programs.")

²⁸ European Commission "Case COMP/C-3/37.792 Microsoft" (24 March 2004), available [here](#).

²⁹ A. Crane "Ecosystem Competition" (OECD, 28 October 2020), available [here](#).

³⁰ EC JRC Report "The Competitive Landscape of Online Platforms" (April 2017), available [here](#), pg. 7.

³¹ UK Department for Business, Energy and Industrial Strategy Report "Dynamic Competition in Online Platforms" (March 2017), available [here](#).

³² *Ibid.*, pg. 26.

³³ *Ibid.* pg. 28.

³⁴ *Ibid.*, pg. 64 ("the threat of losing market share, and therefore diminishing the network effects that make the platform attractive, often compels platforms to either offer a competitive service (e.g. they are not able to introduce a charge for users) or innovate in order to maintain their competitive position.")

Specifically, the DBEIS Report found that in all the markets considered (i) there has been significant entry the last years,³⁵ (ii) new entrants are more likely in markets with a single large incumbent,³⁶ and (iii) concentration did not reduce competition because it often ended up creating new “markets” which did not exist before.³⁷

3. Conclusion

Intervention in the dynamic digital economy risks unintended consequences when enforcers do not partake in a thorough and holistic assessment of competitive dynamics and market realities.

In this respect CCIA broadly supports the updating of the Commission’s Market Definition notice to reflect the technological advancement since the original Market Definition Notice was published in 1997. We hope this submission helps the Commission’s efforts in this direction.

Respectfully submitted,

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³⁵ *Ibid.*, pg. 53 (“In the short-term accommodation sector, the most notable new entrant is Airbnb, which may in time become the largest platform in the sector. (a) In the music sector, Spotify grows rapidly relative to other platforms. More recently, Apple Music enters the market. (b) In the price comparison website sector, two new platforms launch more recently – Gocompare.com and comparethemarket.com. (c) In the social network sector, first Facebook, then Twitter, LinkedIn, Instagram and Pinterest all enter the market and become significant. These increases in market share result in corresponding substantial declines: (a) In the short-term accommodation sector, Expedia sees a steady decline relative to other platforms (b) In the music sector, iTunes declines steadily over time, to the point where Apple introduces a competitor to Spotify in the streaming market, Apple Music. (c) In the price comparison website sector, confused.com sees a decline relative to the newer entrants, particularly comparethemarket.com. (d) In the social network sector, Myspace in particular saw a dramatic decline in its market share to the point it became a niche platform.”)

³⁶ *Ibid.*, pg. 54 (“There is no sense here that concentration reduces entry and the reverse appears more likely: new entrants are more likely in markets with a single large incumbent (or several large incumbents) than those with a number of competing incumbents. This supports a sense that network effects are encouraging competition for the market more than they are preventing entry.”); *Id.* (“we would expect that more concentrated markets would see few entrants (or, at least, those entrants would struggle to attain material market share). This does not appear to be the case.”)

³⁷ *Ibid.*, pg. 55 (“as these sectors grow and mature new innovations, which challenge incumbents, start to become different enough that they are regarded as separate sectors, different types of platform in the European Commission’s parlance, despite competing with each other. An obvious example would be the growth of social networks engines which compete with search engines both a platform for highly-targeted adverts (indeed, many social networks have much richer information about the users advertisers might reach than search engines) and as a means for users to find content relevant to their needs.”)