



COMPETITION ISSUES IN TELECOMS AND RELATED MARKETS: MARKET STRUCTURE, FIRM BEHAVIOUR, SHARING AGREEMENTS AND MERGERS

Modern telecoms and communications markets are competitive, dynamic and innovative, resulting in large benefits for consumers and society.

As in all competitive sectors, day-to-day commercial operations often lead to new entry, service improvements, mergers, acquisitions, and agreements between firms, all facilitating investment and product developments.

However, normal commercial activities occasionally give rise to competition concerns, especially when larger players are involved.

To safeguard the effectiveness of competition, many countries have rules designed to promote healthy competition. Laws often ban anticompetitive agreements between firms, such as agreements to fix prices or to carve up markets. In Australia, the UK, the EU and many other countries, it is also illegal for businesses to abuse or misuse a dominant market position.

In many countries, mergers between businesses can also be prevented if they substantially lessen competition, and in some countries like the UK, uncompetitive markets can be investigated through market studies.

In recent years, online platform businesses have challenged the effectiveness of these competition rules. Network effects in platform businesses are strong and may lead quickly to market dominance in new markets that may diminish the effectiveness of

competition – but their presence spurs innovation.

Online platform businesses facilitate interaction across different markets and these ‘multi-sided platforms’ can make the identification of markets for the purpose of applying competition rules challenging.

Economic analysis and appraisal of market evidence undertaken by CEPA are critical in helping clients navigate the evolving competition law landscape. Understanding how agreements and mergers impact competition, how pricing strategies affect markets, how markets are defined, are some areas in which we add value.

Analysis by CEPA has arisen recently in a high-profile proposed mobile network sharing agreement in Australia. We are advising Optus and have argued that the proposed agreement would, or likely would, substantially lessen competition and should not be allowed to proceed.

On 21 December 2022 the Australian competition authority agreed with our position and denied authorising the proposed agreement.

In this note we look at some issues in competition economics and law and how these affect some telecoms and related markets. We motivate the discussion with reference to a number of recent and ongoing cases, and touch on developments involving platform businesses and gateways.

Size of market, history, regulation and innovation all impact the effectiveness of competition in telecoms markets. These markets fall into wholesale and retail categories and in many cases can be highly concentrated.

Wholesale markets are often highly concentrated¹ due to high and irrevocable investments associated with building networks and achieving scale economies. By their nature, highly concentrated markets are susceptible to competition problems, as larger firms in these markets may have *market power*.²

The UK is an example where there is a highly concentrated wholesale fixed telecoms market. There are two large broadband networks offering most

wholesale fixed services: Openreach (owned by BT) and Virgin Media O2 (having 66% and 20% of the market share respectively), and a fringe of smaller 'altnets' having 14% of market share.^{3, 4, 5}

Similarly, the UK mobile market has a small number of players, with four established vertically integrated network operators offering both retail and wholesale services: EE (owned by BT), Virgin Media O2, Vodafone and Three. In terms of subscribers, in Q1 2022, Virgin Media O2 had the largest share (c. 36%), followed by EE (c. 31%), Vodafone (c. 22%) and Three (c. 11%).^{6,7}

The market structures outlined above are often described as *oligopolistic*.⁸ Competition problems in such markets tend to reflect *market power*.⁹ The

¹ Market concentration is often defined by looking at some measure of sales (usually by value or volume) accounted for by the largest firms in a market. A commonly used measure is the Herfindahl-Hirschman Index (HHI), which is calculated by squaring the market share of each firm and then summing the resulting numbers. This places a greater weight on those firms with a larger market share.

The HHI considers the relative size distribution of the firms in a market. It approaches zero when a market is occupied by many firms of relatively equal size and reaches its maximum of 10,000 when a market is controlled by a single firm. The HHI increases both as the number of firms in a market decreases and as the disparity in size between firms increases.

Competition authorities generally consider markets in which the HHI is between 1,500 and 2,500 to be moderately concentrated and consider markets in which the HHI is in excess of 2,500 to be highly concentrated. For example, see U.S. Department of Justice & FTC, Horizontal Merger Guidelines § 5.3 (2010) at <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010>

² In UK and European law, larger firms with market power are defined as firms holding a *dominant position* in a relevant market "a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers'." Case 27/76 United Brands v Commission [1978] ECR 207. In Australia, the equivalent concept is a firm holding a *substantial degree of market power*, see <https://www.accc.gov.au/system/files/Updated%20Guidelines%20on%20Misuse%20of%20Market%20Power.pdf>

³ The term 'altnet' is short for alternative fibre network.

⁴ Market shares measured by share of retail connections using Ofcom Communications Market Report 2022 interactive data. BT (including EE and Plusnet), Sky and TalkTalk all use the Openreach network. See <https://www.ofcom.org.uk/research-and-data/multi-sector-research/cmr/the-communications-market-2022/communications-market-report-2022-interactive-data>.

⁵ The HHI for the reported market shares (treating altnets as a single entity) is highly concentrated at 4,952. The contribution to the HHI by the largest two firms is 4,756.

⁶ Ofcom, Main Technology Tracker 2022 data tables, pages 157-159, QD10: "Which mobile network do you use most often?". Figures for Virgin Media O2 include giffgaff, Sky Mobile and Tesco Mobile; figures for EE include BT, Plusnet, Utility Warehouse and Virgin Media; figures for Three include iD Mobile and Smarty; and figures for Vodafone include Asda Mobile, Lebara, Lyca Mobile, Talk Mobile, TalkTalk and Voxi.

⁷ The HHI for the reported market shares is 2,862, where it has broadly been since at least the end of 2016 when Ofcom reported the HHI at 2,845. See figure 39 in https://www.ofcom.org.uk/data/assets/pdf_file/0026/108908/icmr-2017-telecoms-networks.pdf

⁸ An oligopolistic market is one having *few firms* and where competition is *strategic* – namely, each firm in the market chooses price and other competition variables considering assumptions about the behaviour of rivals. In a highly competitive market, by contrast, firms make decisions based on market data, such as prevailing output prices, rather than on views about other firms' decisions.

⁹ Market power refers to the ability of a firm (or group of firms) to raise and maintain price above the level that would prevail under competition is referred to as market or monopoly power. See <http://www.oecd.org/dataoecd/8/61/2376087.pdf>

possession of market power by a firm or firms in a market may derive from the *structural* characteristics of a market and/or the *behaviour* of firms in a market. We address each of these in turn.

Structural competition issues

In oligopolistic markets there are few firms and some of these may be dominant. A dominant position in of itself is not a concern, but in many jurisdictions, including Australia, the EU and UK, abuse or misuse of a dominant position is prohibited in law.¹⁰

A firm holding a dominant position may arise because of the structural characteristics in a market. For example, high costs of entry can limit the effectiveness of competition to the detriment of consumers, as noted by the European Commission.¹¹

In some markets and especially in oligopolistic markets, horizontal mergers which may affect market structure can also give rise to the creation or strengthening of a dominant position. This can be to the detriment of consumers if it were to result in a *substantial lessening of competition* (SLC).¹²

A SLC is an interpretable concept. In competitive markets, firms are constrained in their commercial activities by the presence of existing or potential competitors or their customers. A lessening of

competition therefore occurs when such constraints are diminished. But what constitutes *substantial*?

In guidelines on SLC published by the Malaysian Communications and Multimedia Commission (MCMC), it is noted that “whether competition is lessened by particular conduct is a question of *fact* and a matter of *degree*.”¹³ Economic analysis on a case-by-case basis is used by competition authorities to determine the degree to which competition is lessened or would be lessened as a result of a merger or proposed merger.

The MCMC state conduct that “results in a reduction of (or has the purpose of reducing) the number of suppliers in a market does not, of itself, constitute a substantial lessening of competition. Whether conduct which results in a reduction in the number of suppliers in a communications market has the purpose or effect of substantially lessening competition will depend on whether and to what extent that reduction results in a reduction or weakening of the competitive constraints on the remaining suppliers in the communications market or reduces the incentives for the remaining suppliers to compete. For example, conduct which attempts to eliminate a minor market participant might only have a trivial effect on competition, but conduct which attempts to reduce competition from a major

¹⁰ Abuse of a dominant position (behaving anti-competitively) is prohibited under the TFEU article 102 and Chapter II of the Competition Act 1998 in the EU and UK respectively. In Australia misuse of market power is prohibited under section 46 of the Competition and Consumer Act 2010.

¹¹ European Commission (2020) on a structural lack of competition: “Certain market structures do not deliver competitive outcomes (i.e. a structural market failure), even without companies acting anti-competitively. For example, markets may display systemic failures due to certain structural features, such as high concentration and entry barriers, consumer lock-in, lack of access to data or data accumulation. Similarly, oligopolistic market structures increase the risk of tacit collusion, including markets featuring increased transparency due to algorithm-based technological solutions, which are becoming increasingly prevalent across sectors.”, 2 June 2020 at

https://ec.europa.eu/commission/presscorner/detail/en/ip_20_977

¹² The concept of a SLC has long endured in US competition law, see Section 7 of the Clayton Act of 1914, <https://www.govinfo.gov/content/pkg/COMPS-3049/pdf/COMPS-3049.pdf>. It was first set out in UK law in the Enterprise Act (2002) section 35 “Questions to be decided in relation to completed mergers”. In section 35(2)(a) it asserts that “there is an anti-competitive outcome if—(a) a relevant merger situation has been created and the creation of that situation has resulted, or may be expected to result, in a *substantial lessening of competition* within any market or markets in the United Kingdom for goods or services”. <https://www.legislation.gov.uk/ukpga/2002/40/section/35>

¹³ Malaysian Communications and Multimedia Commission MCMC (2014) “Guideline on Substantial Lessening of Competition” 11 July 2014, para. 3.4, <https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/Guideline-on-Substantially-Lessening-Competition-110714.pdf>

participant could have a dramatic effect on competition in the market.”¹⁴

Many countries, including Australia, frame competition law around SLC. In Australia “It’s illegal for businesses with substantial market power to do anything with the purpose, effect or likely effect of substantially lessening competition.”¹⁵ An example of the application of SLC in Australia occurred in a mobile telecommunications merger case in 2018/19.

Mobile telecoms merger case in Australia

In 2018, the Australian Competition and Consumer Commission (ACCC) commenced a review of a proposed merger between Vodafone and TPG to see if any concerns were raised under the Australian Competition and Consumer Act 2010 (CCA).¹⁶

At the time the mobile market in Australia was dominated by Telstra, Optus and Vodafone, with market shares 41%, 27% and 19% respectively (in total 87% of the mobile market – the remaining 13% share was fragmented across MVNOs including TPG (3%)).¹⁷

The ACCC opposed the proposed merger, stating in May 2019 it would likely “substantially lessen competition in the supply of mobile services because the proposed merger would preclude TPG entering as the fourth mobile network operator in Australia.”¹⁸

However, this decision was over-turned by the Federal Court following an appeal.¹⁹ The Court rejected the ACCC’s claim that in the absence of the merger TPG would enter as a fourth MNO.

Therefore, the conclusion reached was that a merged Vodafone and TPG would be better able to compete with Telstra and Optus, including through the rollout of a 5G network, relative to a stand-alone Vodafone and TPG. The parties merged their businesses on 29 June 2020 and became TPG Telecom.²⁰

Online Platforms

Over the last twenty years the emergence of huge online platforms such as Amazon, Facebook, Google, eBay, etc. has been spectacular.²¹ Some firms have acquired dominant status in online markets very quickly.

¹⁴ Para 3.6, MCMC (2014) *op cit*.

¹⁵ <https://www.accc.gov.au/business/competition/misuse-of-market-power>

¹⁶ ACCC Media Release: Statement on TPG and Vodafone Hutchison Australia's proposed merger, 30 August 2018 at <https://www.accc.gov.au/media-release/statement-on-tpg-and-vodafone-hutchison-australias-proposed-merger>

¹⁷ ACCC Communications Market Report 2018–19, December 2019 https://www.accc.gov.au/system/files/Communications%20Market%20Report%202018-19%20-%20December%202019_D07.pdf

¹⁸ ACCC Media Release: ACCC opposes TPG-Vodafone merger, 8 May 2019 at <https://www.accc.gov.au/media-release/accc-opposes-tpg-vodafone-merger#:~:text=The%20ACCC%20has%20concluded%2C%20in,mobile%20network%20operator%20in%20Australia.>

¹⁹ Federal Court of Australia Judgement, 13 February 2020 at <https://www.judgments.fedcourt.gov.au/judgments/Judgments/fca/single/2020/2020fca0117>

²⁰ In many respects the court’s findings echoed the views that prevailed in another 4-to-3 merger involving Sprint and T-Mobile in the US over 2019/20. Assistant Attorney General Makan Delrahim of the US Justice Department’s Antitrust Division stated: “The T-Mobile/Sprint transaction, as remedied by the Department of Justice, will combine T-Mobile’s and Sprint’s complementary spectrum assets while preserving competition....The end result will be *strengthened competition* with high-quality 5G networks that will benefit American consumers nationwide.” <https://www.justice.gov/opa/pr/court-enters-final-judgment-t-mobilesprint-transaction#:~:text=Today%2C%20a%20federal%20district%20court,an%20extensive%20Tunney%20Act%20process.>

²¹ An online platform is a digital service that facilitates the interaction between two or more distinct but interdependent users who interact with the service via the Internet. For instance, the Google search engine facilitates interaction between those submitting search queries and users positioning adverts in search query responses. In economics, online platforms are known more generally as *multi-sided platforms (MSP)*. See Evans, David S. (2011) *Platform Economics: Essays on Multi-Sided Businesses*, Competition Policy International <https://www.sipotra.it/wp-content/uploads/2019/02/PLATFORM-ECONOMICS-Essays-on-Multi-Sided-Businesses.pdf>

Online platforms may have become dominant through innovation and competitive pricing, which clearly benefit consumers. However, the structural characteristics of online markets are such that acquired dominance may reflect *network effects*²² and first-mover advantages which lead to market “*tipping*”.

The presence of network effects may incentivise firms to innovate faster in an attempt to win the race for customers. Over time, the emergence of large and dominant ‘winners’ may stultify competition.

In recent years several high-profile online market tipping cases have been investigated by the European Commission and other competition authorities, focusing on firms such as Microsoft, Google and Meta (formerly Facebook).

Many of these cases have given rise to questions about the appropriateness of existing competition laws, regulations and guidelines to deal with fast changing, innovative markets featuring multi-sided platform markets (MSPs) (see footnote 21).

In November 2022, the European Commission launched a public consultation on a draft revision to its notice on market definition (the key initial stage in any competition case).²³ In particular, the draft set out new guidance in relation to market definition in digital markets, for example multi-sided markets and “digital eco-systems” (e.g. products built around a mobile operating system). The draft also elaborates further on economic quantitative techniques applied to define markets, taking note of the challenges posed by MSPs.

Addressing structural competition issues

Structural remedies are measures competition agencies or courts apply with the intent to promote more effective competition by influencing the structure of a market. Typically, the aim is to have an immediate impact on the market through affecting the relative position of firms. Remedies may include divestiture of assets to competitors, or even the creation of a new player.

An example of this occurred in the UK in 2017 when BT agreed to Ofcom’s requirements for the legal separation of Openreach (BT’s wholesale businesses) from the rest of BT. This change meant Openreach became a distinct company with its own staff and management, business strategy and a legal purpose to serve all its customers equally (including competitors of BT in retail telecoms markets).²⁴ Prior to this change and despite other measures to separate BT’s businesses, Ofcom found that Openreach executives still had an incentive to make strategic decisions in the interest of the BT group, and often did so without sufficiently consulting other customers it was providing wholesale services to.²⁵

Separation remedies are likely appropriate and feasible in infrastructure-based markets, but in digital markets different tools may be needed for competition authorities to address structural competition issues. The Competition and Markets Authority (CMA) in the UK acknowledged this in 2019 and published new merger guidelines on 18 March 2021.²⁶

The European Commission also determined that competition rules were not fit for purpose, specifically with regard to online platforms. Concerns were prevalent around tipping and “*gatekeepers*” – digital

²² Network effects occur when a user attributes more value from using a platform when there are more users on that platform.

²³ See https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6528

²⁴ Ofcom Media Release: BT agrees to legal separation of Openreach, 10 March 2017 at <https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2017/bt-agrees-to-legal-separation-of-openreach>

²⁵ A House of Commons Culture, Media and Sport Committee report from 2016 stated that “Ofcom has also found that there is a pressing need for Openreach to consult its customers on strategic decisions regarding its network, so that they can be properly taken into consideration.” See

<https://publications.parliament.uk/pa/cm201617/cmselect/cmcmums/147/147.pdf>

²⁶ <https://www.gov.uk/government/news/updated-cma-merger-assessment-guidelines-published>

platforms that provide an important gateway between business users and consumers.

To address this new EU regulation, the Digital Markets Act (DMA), has listed criteria for a platform to be designated a gatekeeper.²⁷ In addition, a series of obligations have been defined for gatekeepers, including allowing business users to access data they generate through using the gatekeeper's platform and no longer being able to prevent consumers from linking up to businesses outside their platforms.

Several rules derived from the Google-Android case (see text box below) have also been included in the DMA, such as restrictions on pre-installing software and obligations to offer consumers more choices. The DMA rules entered into force on 1 November 2022 and will start to apply from May 2023. UK legislation is also foreseen that would provide the Digital Markets Unit (DMU) within the CMA with similar powers to those under the DMA regime.²⁸

Behavioural competition issues

As part of their duty to promote competitive markets, competition authorities ensure the behaviour or conduct of firms is consistent with effective competition. Often, the way firms conduct themselves in markets is exemplified through the setting of terms and conditions presented to customers.

In markets where firms' face sufficient competitive constraints from rivals (existing or potential) and/or customers, the setting of terms and conditions should not be an issue. However, in some markets where a

firm holds a dominant position, the setting of terms and conditions may lessen competition substantially.

Examples of conduct in online and telecoms markets that may lessen competition are considered below.

Bundling and tying

Product *bundling* occurs when a seller offers different products or services in one package for one price. As many attest "Bundled discounting is an exceedingly common practice in commercial contracts involving suppliers of multiple interrelated products. Unquestionably, a great majority of such discounting practices are competitively harmless and should be lawful."²⁹

In communications markets TV, phone and broadband services are often bundled and discounted as a package. Many restaurants offer a discounted fixed-price three course lunch in addition to a standard a la carte menu. Holiday companies offer discounts when flights, accommodation and car hire are bundled.

As with many seller behaviours in competitive markets, product bundling discounts can benefit both sellers and customers. However, where bundling discounts are applied by a firm with market power in some markets, this may result in a substantial lessening of competition.

In the United States, an important product bundling discount case involving 3M and Le Page occurred in 2003 in the cellophane tape market. 3M was found in

²⁷ There are three main criteria that bring a company in the scope of the DMA as a gatekeeper: (i) A size that impacts the internal market: when the company achieves a certain annual turnover in the European Economic Area (EEA) and it provides a core platform service in at least three EU Member States; (ii) The control of an important gateway for business users towards final consumers: when the company provides a core platform service to more than 45 million monthly active end users established or located in the EU and to more than 10,000 yearly active business users established in the EU; and (iii) An entrenched and durable position: in the case the company met the second criterion during the last three years. See

https://ec.europa.eu/commission/presscorner/detail/en/IP_22_6423

²⁸ The UK regime will allow the DMU to designate powerful digital firms with "*strategic market status*", similar to the EU regime of designating "gatekeepers". The upcoming Digital Markets, Competition and Consumer Bill was mentioned in the UK Government's Autumn Statement 2022. See <https://www.gov.uk/government/publications/autumn-statement-2022-documents/autumn-statement-2022-html>

²⁹ See Hovenkamp, Herbert J. and Hovenkamp, Erik, "Complex Bundled Discounts and Antitrust Policy" (2009). Faculty Scholarship at Penn Law. 1800. page 1228 https://scholarship.law.upenn.edu/faculty_scholarship/1800

the courts to be in violation of US anti-trust law³⁰ by offering product bundling discounts. 3M's rebate programs offered discounts to certain customers conditioned on purchases in six of 3M's diverse, unrelated product lines.³¹

Facebook) ties its Facebook social media services (the tied product) with Facebook Marketplace³³ (the tying product). Whether such tying is beneficial for consumers or represents an abuse of a dominant position is up to the judgement of competition authorities.

Case Study: Google fined record €4.125bn for anti-competitive behaviour in the mobile market

On 18 July 2018, the European Commission determined that Google had abused its dominant position by pre-installation software conditions imposed on manufacturers of mobile devices. It applied a fine of €4.34bn, the largest ever imposed in a European antitrust case. Google appealed but the Court of Justice of the European Union (CJEU) agreed with the Commission and on [14 September 2022 largely confirmed the Commission's ruling](#), with the fine reduced to €4.125bn.

The Commission ruled that Google imposed anti-competitive restrictions on manufacturers of Android mobile devices. This included manufacturers only being able to install the App Store and access revenue sharing agreements if they installed Google search and browser apps, ran Google-approved operating systems, and did not install competing search engines on certain devices. The Commission claimed these restrictions led to an increase in engagement with Google's search engine, and an increase in derived advertising revenue.

The CJEU agreed with the Commission on most aspects of the case. However, the CJEU decided that allowing mobile manufacturers a revenue share only if they did not install a competing search engine was not abusive in itself, and reduced the fine accordingly.

The rise of online platforms has been associated with product *tying*.³² For instance, Meta (owner of

³⁰ Section 2 of the US Sherman Act (1890), which states that it is unlawful for any person to "monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations..."

³¹ The finding in the case was regarded contentious by some, as the court did not determine whether the product bundling discounts implied pricing below incremental cost. In a later case (Cascade (2009) involving bundled medical products) the courts adopted an attribution test, under which one attributes the entire discount to the product upon which *exclusion* is claimed (sometimes called the "competitive" product). If the resulting price of the competitive product is lower than average variable cost, the test is failed and the discount is deemed to be "exclusionary" and may be unlawful in some cases. See Herbert Hovenkamp and Erik Hovenkamp, "Complex Bundled Discounts and Antitrust Policy", 57 *Buffalo L. Rev.* 1227 (2009) https://en.wikipedia.org/wiki/LePage%27s,_Inc._v._3M

³² Tying is where a customer can only buy product X (the *tying product*) when buying product Y (the *tied product*). Tied products occur when there is a strong complementarity between goods X and Y: for example,

right and left gloves. See David S. Evans & Michael Salinger (2005) "Why Do Firms Bundle and Tie? Evidence from Competitive Markets and Implications for Tying Law" *Yale Journal on Regulation*, vol 22(1)

<https://www.justice.gov/atr/why-do-firms-bundle-and-tie-evidence-competitive-markets-and-implications-tying-law>

See also "Unilateral Conduct Workbook Chapter 6: Tying and Bundling" Prepared by The Unilateral Conduct Working Group, International Competition Network, 2015 https://www.internationalcompetitionnetwork.org/wp-content/uploads/2018/07/UCWG_UCW-Ch6.pdf Although tying is a feature in online markets, it has also been prominent in some high profile competition cases involving computer operating systems and applications. Notably Microsoft was found to be in breach of antitrust rules in the US and the EU in the early 2000s for, among other things, tying its Media Player with the Windows operating system, see EC (2004) "Commission adopts Decision in the Microsoft case" https://ec.europa.eu/competition/publications/cpn/2004_2_44.pdf

³³ Facebook Marketplace is a destination on Facebook where people can discover, buy and sell items. People can browse listings, search for items for sale in their area or find products available for delivery. <https://en-gb.facebook.com/business/help/289268564912664>

The European Commission is currently investigating whether Meta breached EU competition rules by distorting competition in the markets for online classified ads through tying and other practices.³⁴

In December 2022, the Commission reached its preliminary finding that Meta abused its dominant positions. It argues that Facebook users automatically having access to Facebook Marketplace may foreclose competitors due to the significant distribution advantage this provides Facebook Marketplace. Additionally, the Commission is concerned Meta are imposing unfair trading conditions on competing online classified ads services which advertise on Facebook or Instagram (also owned by Meta).³⁵

The CMA also launched an investigation into Meta's use of data on the same day as the European Commission's investigation. No decision has been reached to date, with the latest update to the case timetable stating the case is under "further investigation."³⁶

Customer switching

Firms in possession of market power may also behave in ways that make it more difficult for customers to switch to rival firms.

In telecoms markets, service providers find it costly to acquire customers if they are locked in to existing service providers. The effect of this may diminish the

effectiveness of competition and adversely affect welfare.³⁷

This was the situation in the UK when Ofcom found that a significant minority of consumers experienced difficulties when switching mobile service suppliers. Problems for consumers included facing barriers when looking to port their mobile number to their new service and paying charges for old services weeks after switching.

Ofcom consulted with industry and consumers on the issue and in 2017 released a statement which reformed switching in mobile communication service markets to make it both quicker and easier.³⁸

Addressing behavioural competition issues

Competition authorities also intervene in response to anti-competitive behaviour conducted by firms. Such intervention can be 'positive', by obliging firms to conduct specific behaviour, or 'negative', through banning certain actions.

A positive behavioural remedy occurred recently in the UK requiring providers of broadband and landline services to develop and operate a new "One Touch Switch" process for residential customers. This process aims to make switching easier and quicker for consumers. From April 2023, customers will only need to contact their new home broadband provider to switch, unlike the current framework where often

³⁴ European Commission Media Release: Antitrust: Commission opens investigation into possible anticompetitive conduct of Facebook, 4 June 2021 at https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2848

³⁵ European Commission Media Release: Antitrust: Commission sends Statement of Objections to Meta over abusive practices benefiting Facebook Marketplace, 19 December 2022 at https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7728

³⁶ CMA Cases: Investigation into Meta's (formerly Facebook) use of data, 4 June 2021 at <https://www.gov.uk/cma-cases/investigation-into-facebooks-use-of-data>

³⁷ Lock-in may involve loyalty points, loyalty discounts, proprietary software, etc. In September 2017, the European Court of Justice (Case C-413/14 P) reversed the ruling of the General Court, which had upheld the European Commission's €1.06 billion fine on Intel for abusing its dominant position on the market for x86 central processing units. The Intel case focused on whether loyalty/exclusivity rebates are *per se* abusive or whether their effects on competition should be assessed. The 2017 ECJ judgment makes clear that loyalty rebates issued by dominant undertakings are no longer considered as *per se* restrictive of competition. <https://curia.europa.eu/juris/liste.jsf?num=C-413/14>

³⁸ Ofcom Statement: Decision on reforming the switching of mobile communication services, 19 December 2017 at https://www.ofcom.org.uk/_data/assets/pdf_file/0023/108941/Consumer-switching-statement.pdf

both the new and current provider need to be notified. This will be the case even when switching between retail suppliers that use different wholesale networks.³⁹

An example of a negative remedy is preventing a vertically integrated firm with market power from setting wholesale prices that constitute a *margin squeeze*. This “squeeze” occurs when a vertically integrated firm, selling both wholesale and retail products, increases the price of the wholesale product and/or decreases the retail price to impede competition by lowering the margin available to competitors in the retail market. Such behaviour may constitute an abuse of a dominant position.

Margin squeeze has been evidenced in a number of fixed telecoms markets in Europe. In 2007, the European Commission fined Telefónica €151m for a margin squeeze in the Spanish broadband market. The Commission found that Telefónica, a vertically integrated telecoms operator with a dominant position in wholesale markets, inflated its wholesale broadband price to the point where retail competitors could not set retail prices at a level that would enable effective competition in the retail market. The fine was upheld in 2014 following an appeal by Telefónica to the EU General Court.⁴⁰

This decision also endorsed a previous fine levied to Deutsche Telekom in 2003. The finding here was that Deutsche Telekom had squeezed its competitors out of the market by charging abusive prices to access

German homes. Deutsche Telekom’s appeal of this decision was dismissed in 2010.⁴¹

Mergers

Mergers and acquisitions occur frequently in dynamic markets⁴² and are either horizontal (competing in the same markets); vertical (acquisitions up or down the value chain) or conglomerate (acquisitions between firms that are involved in totally unrelated business activities).

Most mergers form part of a healthy competitive process, but as the CMA note in their merger assessment guidelines they: “have the potential to have a significant impact on consumers and their welfare, including an impact on the prices they pay for goods and services, and the range and quality of those goods and services that they have available to them.”⁴³

Consequently ‘large’ mergers are often subject to review and scrutiny from the perspective of competition law. This applies in Australia, where the ACCC has set out its approach in its Merger Guidelines and Merger Authorisation Guidelines.⁴⁴ The latter are currently being applied in a proposed mobile network sharing agreement between Telstra and TPG, which under Australian law is treated as a merger transaction.⁴⁵

³⁹ Ofcom Statement: Quick, easy and reliable switching, 3 February 2022 at https://www.ofcom.org.uk/data/assets/pdf_file/0020/232058/statement-quick-easy-and-reliable-switching.pdf

⁴⁰ European Commission Media Release: The Court dismisses the appeal lodged by Telefónica and Telefónica de España concerning its abuse of a dominant position on the Spanish broadband market, 10 July 2014 at https://ec.europa.eu/commission/presscorner/detail/en/CJEU_14_95

⁴¹ European Commission Media Release: Antitrust: Commission welcomes Court judgement in Deutsche Telekom “margin squeeze” case, 14 October 2010 at https://ec.europa.eu/commission/presscorner/detail/en/mo_10_493

⁴² In 2021 there were around 40,700 acquisition deals globally. <https://www.bcg.com/publications/2022/the-2022-m-a-report-dealmaking-remains-active>

⁴³ See CMA (2021) *Merger Assessment Guidelines* p.2 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1051823/MAGs_for_publication_2021_-_pdf

⁴⁴ See ACCC (2008) Merger Guidelines <https://www.accc.gov.au/system/files/Merger%20guidelines%20-%20Final.PDF> and Merger Authorisation Guidelines (2018) <https://www.accc.gov.au/system/files/Merger%20Authorisation%20Guidelines%20-%20October%202018.pdf>

⁴⁵ Under section 68A of the Radiocommunications Act 1992 (Cth) it is considered an acquisition (merger) for the purposes of section 50 of the Competition and Consumer Act 2010 (Cth) (the Act).

In most merger investigations, competition authorities often apply a SLC test. This involves a comparison of the prospects for competition with the merger against the competitive situation without the merger – the ‘counterfactual’.

According to the CMA in the UK, the counterfactual may consist of the prevailing, or pre-merger conditions of competition, or conditions of competition that involve stronger or weaker competition between the merger firms than under the prevailing conditions of competition.⁴⁶

The SLC test in Australia also uses a counterfactual known as the ‘with and without test’. “Merger analysis requires comparing likely future states — the future with the merger and the future without the merger. This comparison isolates the merger’s impact on competition....The ACCC therefore uses information about the state of competition prevailing at the time of the merger to inform its assessment of the likely future state of competition without the merger.”⁴⁷

Mobile network sharing in Australia

The competition authority ACCC has a duty to promote competition in markets for the benefit of consumers in Australia.⁴⁸

In this regard, the ACCC reviews any mergers that are voluntarily notified by parties and where the parties apply for an authorisation that would allow the merging businesses to go ahead with their merger or acquisition without the risk of legal action to stop the proposal because of competition concerns.

When assessing whether a merger be granted authorisation in accordance with the Competition and Consumer Act 2010 (CCA), the ACCC must be satisfied that either:

- i) The proposed acquisition would not have or be likely to have the effect of SLC, (the ‘SLC test’) or
- ii) The likely public benefit resulting from the proposed acquisition outweighs the likely resulting public detriment (the ‘net public benefit test’).⁴⁹

Application for authorisation: Telstra and TPG network sharing agreement

On 23 May 2022 the ACCC received an application for merger authorisation from Telstra and TPG (trading as Vodafone), the largest and third largest MNOs respectively in Australia.

The Telstra-TPG application relates to a mobile network sharing agreement⁵⁰ whereby: Telstra will be granted access to TPG’s spectrum rights in regional Australia, Telstra will provide network services in certain regional and urban fringe areas to TPG (known as the ‘Regional Coverage Zone’ (RCZ)) and TPG will transfer some of its mobile sites in the RCZ to Telstra and decommission the rest (in combination the ‘proposed transaction’). The proposed transaction is for ten years with a possible extension for up to a further ten years.

The ACCC reviewed the application in accordance with the CCA and denied granting an authorisation on 21 December 2022. The ACCC was not satisfied that

⁴⁶ See chapter 3 in CMA (2021) *Merger Assessment Guidelines op cit*.

⁴⁷ See paras. 3.16-3.21 in ACCC (2008) *Merger Guidelines op cit*.

⁴⁸ The Australian Competition and Consumer Commission (ACCC) is an independent Commonwealth statutory authority. Its role is to enforce the Competition and Consumer Act 2010 and a range of additional legislation, promoting competition, fair trading and regulating national infrastructure for the benefit of all Australians. See <https://www.accc.gov.au/about-us/australian-competition-consumer-commission/about-the->

[acc#:~:text=The%20Australian%20Competition%20and%20Consumer,the%20benefit%20of%20all%20Australians.](#)

⁴⁹ See ACCC Merger Authorisation Guidelines <https://www.accc.gov.au/system/files/Merger%20Authorisation%20Guidelines%20-%20October%202018.pdf>

⁵⁰ Mobile infrastructure sharing agreements are currently under consultation in the UK, where the CMA has proposed new guidance on their treatment. See paras. 5.131-5.143 in CMA (2023) “Guidance on the application of the Chapter I prohibition in the Competition Act 1998 to horizontal agreements” [Draft] CMA 174 at <https://www.gov.uk/government/consultations/draft-guidance-on-horizontal-agreements>

CEPA Advice to Optus in regard of the proposed Telstra-TPG network sharing agreement

Optus commissioned CEPA to assess the competition impacts in Australia of the proposed transaction between Telstra and TPG, which was treated as an application for merger authorisation under competition law. [Our competition assessment and review of the market](#) was comprised of three parts, followed by a conclusion.

First, CEPA examined the European evidence on network sharing agreements to form an opinion on how European regulatory authorities and competition agencies would likely consider the application, given Australian competition law principles. This involved analysing the principles of economic regulation in the European Union and case studies of nine applications for network sharing agreements in Europe. We argued that European regulators and competition authorities would likely place an agreement with a similar set of facts as the Telstra-TPG agreement under intense scrutiny, with the potential of a SLC being of particular concern.

Second, CEPA analysed how effective competition in the Australian mobile services market is and applied an effects-based approach in line with European best practice to consider the likely competition harms arising from the proposed transaction. Our analysis led to the conclusion that without the competition authority intervening to impose remedies, the agreement would strengthen Telstra's market power and likely result in a SLC.

For instance, we argued using economic principles that the proposed transaction would lead to a material shift in quality of service and product differentiation, with Telstra's quality increasing markedly in regional Australia versus that of Optus. The impact of this, all else equal, would be to lower the competitive constraint Optus places on Telstra in the national retail mobile services market. Although there would be an additional competitive constraint presented by TPG on Telstra, this latter effect would not compensate for the reduction in Optus' competitive constraint, given Telstra would enjoy wholesale revenues from the customers it loses to TPG.

Third, CEPA reviewed [the expert report on the proposed transaction prepared by Telstra's expert Mr Richard Feasey](#). Mr Feasey's report claimed that authorities in Europe are generally favourably disposed towards mobile network sharing agreements and he concluded that this agreement would not result in a SLC. Our analysis rebutted Mr Feasey's views. We highlighted that these types of agreements typically attract considerable attention from regulatory and competition authorities.

Following completion of our economic analysis, CEPA concluded that the application for merger authorisation would serve to strengthen Telstra's position of dominance and would likely lead to a SLC. On these grounds, we recommended that the proposed transaction should not be authorised.

Upon delivery of our report, Optus also commissioned CEPA to produce a [further report on specific spectrum competition issues](#) in relation to the proposed transaction between Telstra and TPG. The ACCC made its [Determination on this merger authorisation on 21 December 2022](#) and agreed with CEPA's view that it should not be authorised. [Telstra and TPG submitted an appeal](#) to the Australian Competition Tribunal (ACT) on 12 January 2023.

the proposed transaction would (i) not be likely to substantially lessen competition or (ii) likely result in a public benefit outweighing the public detriment.⁵¹

Telstra and TPG have formally asked the Australian Competition Tribunal to review the ACCC decision.⁵²

Below we highlight some other mergers and possible mergers in the communications space. In all cases

⁵¹ ACCC Determination on Telstra and TPG Application for Merger Authorisation, 21 December 2022 at <https://www.accc.gov.au/system/files/public->

[registers/documents/Determination%20-%202021.12.12%20-%20PR%20-%20OMA1000021%20Telstra%20TPG_0.pdf](#)

⁵² See <https://www.competitiontribunal.gov.au/current-matters/act-1-of-2022>

the role played by economic analysis is likely to be critical in affecting final outcomes.

Mobile tower infrastructure in the UK

In March 2022, the CMA in the UK concluded that the Cellnex proposed acquisition of CK Hutchison's passive infrastructure assets in the UK would lead to a SLC.⁵³ Cellnex operates sites with passive infrastructure used by the four UK MNOs, including towers, land and other passive infrastructure. CK Hutchison Networks are a conglomerate who operate 3UK. Under the terms of the acquisition, Cellnex UK would acquire all of the share capital of 3UK's passive infrastructure assets (except those shared with BT/EE) and the resulting economic benefit.

The CMA found that more infrastructure-based competition would have occurred in a counterfactual scenario. The impact on consumers was less heavily weighted; consumers would likely be able to change phone contract providers before the effects of the acquisition became known to them. As the merged firm would have the ability to increase the cost of using the passive infrastructure to MNOs or allow the quality to decline because of reduced competitive pressure, the CMA determined there was a risk of a SLC. The CMA suggested that selling off a large proportion of the sites would remedy the issue.⁵⁴

Satellite markets

An ongoing case is the proposed merger of satellite operators Viasat (US) and Inmarsat (UK).⁵⁵ The CMA opened Phase 1 of its investigation into this merger on 25 July 2022.⁵⁶ In Phase 1, the CMA determined that Viasat's intended acquisition of Inmarsat would result in the new entity having combined market share of around 40-50% of the in-flight connectivity (IFC) services provided to aircrafts with their satellites.⁵⁷ Therefore, the CMA has determined that this merger has the potential risk of causing a SLC, and launched a Phase 2 investigation on 6 October 2022. This investigation will be concluded in March 2023.⁵⁸

Such a SLC could be detrimental to UK consumers using IFC services on their flights around Europe. Other competitors may struggle to keep up with technology developments, and it may be difficult for airlines to change their providers. Viasat and Inmarsat are known to currently offer better performance than other competitors – they are the only two firms to offer Ka-band satellites, highlighting the significance of this potential merger. With higher quality products and barriers airlines face to switch IFC service providers, the CMA aims to determine whether potential price increases and reductions in quality will filter down to airlines and consumers.

⁵³ Passive infrastructure are the elements of a network that do not carry communication signals and are different from the electronic elements of a telecommunications network.

⁵⁴ CMA, Anticipated acquisition by Cellnex UK Limited of the passive infrastructure assets of CK Hutchison Networks Europe Investments S.À.R.L. Final Report , 3 March 2022 at https://assets.publishing.service.gov.uk/media/62221304d3bf7f4f0ec9b75e/Cellnex_CK_Hutchison_-_Final_Report.pdf

⁵⁵ CMA Issues Statement: Anticipated Acquisition of Viasat, Inc of Inmarsat Group Holdings Limited, 8 November 2022 at https://assets.publishing.service.gov.uk/media/636937d7d3bf7f6ee5bf5c79/Issues_Statement_FOR_PUBLICATION_.pdf

⁵⁶ CMA Viasat/Inmarsat Merger Inquiry, 25 July 2022 at <https://www.gov.uk/cma-cases/viasat-slash-inmarsat-merger-inquiry>

⁵⁷ CMA Full Text Decision: Anticipated Acquisition of Viasat, Inc. of Connect TopCo Limited: Decision on relevant merger situation and substantial lessening of competition, 31 October 2022 at https://assets.publishing.service.gov.uk/media/635be1f6d3bf7f20dfb0f2c7/Full_text_decision.pdf

⁵⁸ CMA Viasat/Inmarsat Merger Inquiry Administrative Timetable, 25 October 2022 at https://assets.publishing.service.gov.uk/media/6357a209e90e0777aca3e8e1/Administrative_timetable_Visat_Inmarsat.pdf

Mobile consolidation in Belgium

In December 2021, Orange, a global telecommunications operator, agreed to acquire VOO and Brutélé, cable operators who predominantly provide fixed retail services in select regions of Belgium.⁵⁹ The European Commission opened an investigation in July 2022 due to concerns of reduced competition in fixed and mobile retail markets in select regions of Belgium following the merger.

The Commission are looking to investigate whether the new merged firm would have increased buying power, whether other competitors would coordinate their decisions in response to the threat, and whether it would be too difficult for new third-party mobile networks to enter the market. All of these issues could give the merged firm increased market power and result in a SLC.⁶⁰

Mobile telecoms in the UK

In October 2022, Vodafone confirmed it is in talks with Three to merge their UK businesses to accelerate their 5G rollout, citing benefits of increased scale.⁶¹ If this goes ahead, the new entity would become the largest MNO in the UK, surpassing

the two current largest operators Virgin Media O2 and EE.

The potential for a four to three merger in the UK mobile market has been discussed many times over the past two decades.⁶² Most recently, Three had an attempt at merging with O2 blocked by the European Commission in 2016 on the grounds of reduced choice for consumers, higher prices and reduced development of mobile network infrastructure.⁶³

However, the General Court of the European Union annulled that decision in 2020, because the court viewed that the Commission had failed to prove to the requisite legal standard that the merger would damage competition or result in an increase in prices.⁶⁴

In the event, the O2-Three merger did not go ahead and by 2020 O2 had agreed to merge with Virgin Media, combining the second largest MNO and the second largest broadband network in the UK. Whether the annulment of the European Commission's prohibition of Three's previous merger attempt with O2 will aid them in their latest possible merger remains to be seen.

⁵⁹ Orange Media Release: Orange Belgium announces the signing of an agreement with Nethys to acquire 75% minus one share in VOO SA, 24 December 2021 at <https://newsroom.orange.com/orange-belgium-announces-the-signing-of-an-agreement-with-nethys-to-acquire-75-minus-one-share-in-voo-sa/?lang=en>

⁶⁰ The Commission had an original deadline of the 6th of December to make its decision, although the process has been paused until sufficient data can be provided by Orange. The deadline is currently suspended in the Commission's case portal. See https://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=2 M 10663

⁶¹ See "Vodafone Confirms Discussion In The UK", 3 October 2022 at <https://otp.tools.investis.com/clients/uk/vodafone4/rns/regulatory-story.aspx?cid=221&newsid=1630370>

⁶² Economic arguments play a key role in the assessment of mergers. Major reviews of mobile mergers have occurred in many countries. In 2010 the US competition authorities

(FCC,DOJ) reviewed a proposed merger between AT&T and T-Mobile. Unilateral and coordinated effects were prominent as part of the overall assessment, which led the authorities to block the deal. Appendix C in the FCC Staff paper provides a fascinating insight to the way economics is applied in such cases, in particular the way upward pricing pressure measures are estimated to compare the merger with the counterfactual:

<https://docs.fcc.gov/public/attachments/DA-11-1955A2.pdf>

⁶³ European Commission media release: Mergers: Commission prohibits Hutchison's proposed acquisition of Telefónica UK, 11 May 2016 at https://ec.europa.eu/commission/presscorner/detail/pt/IP_16_1704

⁶⁴ General Court of the European Union Press Release No 65/20, 28 May 2020 at https://curia.europa.eu/jcms/upload/docs/application/pdf/20_20-05/cp200065en.pdf

Fixed telecoms in the UK

An interesting trend in the telecoms space is the rise of altnets. There are over 100 altnets in the UK seeking to challenge the two big players: BT owned *Openreach*, and the 50:50 joint-venture Liberty Global and Telefónica owned *Virgin Media O2*.

The race is on to provide wholesale and retail fibre broadband services (so-called *gigabit services*). In addition to private investment, the UK government is also investing substantial sums via *Project Gigabit* to support rollout in high-cost uncommercial areas.⁶⁵

In Ofcom's Connected Nations 2022 report, it notes "Full-fibre-to-the-premises (FTTP) broadband is now available to 42%/12.4m premises. This is a nearly sevenfold increase compared to just five years ago. This is primarily driven by deployments from the larger fibre operators (Openreach, Virgin Media O2 and City Fibre) but supported by a number of smaller providers across the UK."⁶⁶

There is much ongoing speculation as to whether mergers and acquisitions will take place in this market. On 1 February 2023 the CEO of BT, Philip Jansen, reported in the Financial Times "that the market would probably 'shake out to just be a couple of big players' as well as a smattering of specialist providers for things like rural areas and multi-

occupancy buildings – a process that would 'end in tears' for many of the other operators."⁶⁷

So far there has been limited consolidation or exit, with altnets focusing on expansion in the market. However, altnets are facing rising costs and increased competitive pressures as they lag behind the big two⁶⁸ in turning premises passed into live connections, all of which makes consolidation more likely.⁶⁹

As the market matures, it could undergo a similar process to what happened in the cable TV market in the 1990s when 29 holders of regional cable TV franchises in 1992 shrank and became consolidated into NTL and Telewest in most of the market by 2000. Bain & Co predicts such a wave of consolidation will take place among altnets.⁷⁰

If consolidation happens in the fixed broadband market it could, as in other maturing markets, strengthen the effectiveness of competition by increasing competitive constraints on Openreach and Virgin Media O2.

On the other hand, a process that could 'end in tears' for altnets could end in tears for consumers if regulation becomes entrenched and competition diminished. As Sharon White, former CEO of Ofcom, said in 2017 "Only competition can unlock Britain's fibre future".⁷¹

⁶⁵ Project Gigabit is the UK Government's £5 billion mission to deliver lightning-fast, reliable broadband to homes and businesses across the UK.

<https://projectgigabit.campaign.gov.uk/> The UK Government's target is for gigabit-broadband to be available nationwide (at least 99% of premises) by 2030. DLUHC, Levelling Up the United Kingdom, 2 February 2022, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052708/Levelling_up_the_UK_white_paper.pdf

⁶⁶ Ofcom (2022) Connected Nations December 2022 https://www.ofcom.org.uk/data/assets/pdf_file/0034/249289/connected-nations-uk-report.pdf

⁶⁷ BT chief warns Openreach fibre push will 'end in tears' for rivals, 1 February 2023 <https://www.ft.com/content/031dcf72-dfaf-4e90-85d2-335ef703dbd1#comments-anchor>

⁶⁸ By end 2022 altnets offering fixed services were aspiring to have around 12.4% connections (1.44m) out of the

11.56m premises passed. See Table 1 in INCA (2022) "Metrics for the UK independent network sector Including results from Spring 2022 survey" https://www.inca.coop/sites/default/files/inca_metrics_report_2022.pdf Fibre operators typically look for connection rates of 20-25% to obtain a decent return, <https://www.ispreview.co.uk/index.php/2021/06/alt-net-full-fibre-isps-target-29-9-million-uk-premises-by-2025.html>

⁶⁹ Financial Times "UK 'altnets' risk digging themselves into a hole", 25 June 2022 at <https://www.ft.com/content/e630a3a1-03ac-4526-83ac-16ff851067cc>

⁷⁰ Bain & Co Telecommunications M&A Report 2022 at <https://www.bain.com/insights/telecommunications-m-and-a-report-2022/>

⁷¹ <https://www.ofcom.org.uk/about-ofcom/latest/media/speeches/2017/competition-britain-fibre-future>

CEPA TELECOMS

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