Regulating Mergers in the Communications Industry in the 21st Century

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The communications industry is part of the key infrastructure for the economy and policies to ensure a competitive, dynamic communications industry can significantly impact overall economic growth. In this article, the authors examine approaches taken by competition authorities in Europe and the United States in regulating mergers in the early years of the 21st century. The years following the end of the dotcom boom in 2000 have witnessed significant consolidation on both sides of the Atlantic. Much of this consolidation has occurred between geographically discrete networks thereby avoiding concerns about a loss in direct horizontal competition, although vertical foreclosure concerns have sometimes led to restrictions being imposed. Both European and US authorities have shown themselves ready to use merger regulation as a means to achieve more general policy objectives where there is little relationship between the conditions sought and any direct impact of the merger on market power. In some respects, the United States has applied more interventionist forms of regulation. Nonetheless, the legacy of national industries in Europe still leads to Europe having a more fragmented communications sector and the potential for further significant consolidation in the years ahead.

Introduction

For much of the 20th century, telecommunications services were provided by national monopolies in both the United States and in many parts of Europe.[1] TV services were separately provided by terrestrial broadcasters and, in some countries, cable operators. Operators thus faced little competition either from operators using the same technology or using different technology platforms. Towards the end of the 20th century, a number of changes set the scene for a dramatic increase in competition: licensing restrictions were reduced or removed entirely, mobile technology was deployed by multiple mobile operators and technological developments were put in train that led to fixed and cable operators increasingly being able to offer voice, video and broadband services in competition with each other.

The market liberalisation and technological change led to a wave of large mergers in the communications sector in the late 1990s. This merger wave and indeed some of the merging companies disappeared with the ending of the dotcom boom in 2000. In the years following the end of the boom, merger activity in the communications sector has gradually increased again. Fixed operators constrained from mergers in their core markets have sought to gain scale by expanding into other geographic areas and into related services. Regional cable operators have merged increasingly into national and international operators. Mobile operators have also sought greater scale through mergers of operators in discrete geographic areas. In addition, mobile markets have also experienced mergers between significant direct competitors, creating perhaps the greatest challenge for competition authorities.

Faced with the industry's drive to consolidate, competition authorities have needed to strike a balance between allowing firms to achieve efficiencies through greater scale and scope in an industry that is inherently concentrated at the network level while ensuring sufficient competitive pressure remains to protect consumer outcomes. The aim of this article is to assess how well competition authorities on each side of the Atlantic have approached this task.

In the article, the authors first provide an overview of the development of the industry in Europe and the United States. Much of the earlier history of the industry continues to shape the nature of competition to date. Secondly, the article outlines the nature of the consolidation that has taken place in the early years of the 21st century. It identifies the main types of mergers and their key drivers. It then briefly compares the institutional and legal frameworks for assessing mergers in Europe and the United States before turning to survey the specific approaches taken to the assessment of mergers and agreements between operators. The authors consider mergers in fixed, pay-TV and mobile markets as well as mergers between operators using different technological platforms. The article assesses the approaches taken from a consumer welfare perspective. Finally, it brings the earlier analysis together with a number of overall conclusions.

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1 In some parts of Europe, telecommunication services were provided by discrete regional monopolies.

Consolidation in the communications industry

This section reviews the development of the telecommunications industry in Europe and the United States to provide an understanding of current market structures and the process of consolidation up to 2000.

Initial consolidation and then liberalisation

The early history of telecommunications in the United States and parts of Europe was characterised by the entry of a number of generally city-based companies providing telephone services. These networks rapidly expanded, were interconnected and, in some parts, even competed directly.[2] In the United States, the proliferation of entrants gave way to market consolidation which was ultimately completed by the 1934 Communications Act that gave AT&T (the parent company of the Bell System of telephone networks) monopoly rights in return for undertaking to provide ''universal access'' to every house in the United States. In Europe, the national post offices became the monopoly providers of telephone services over time through a combination of market consolidation, restrictive licensing conditions and nationalisation.[3] As a result, the industry developed in Europe throughout much of the 20th century under state ownership while in the United States the industry operated as a regulated private monopoly.

The dominant position established by the incumbent operators in supplying local loops to customer premises still continues to characterise competition in the sector today. However, in the last decades of the 20th century, entry in relation to particular services and products was gradually liberalised and active measures undertaken to re-introduce competition in the sector. The landmark regulatory decision in the United States was the agreement (known as the Modified Final Judgment) reached in 1982 between the Department of Justice and AT&T that required AT&T to divest its interests in the Bell Operating Companies that provided local telephone services in return for being allowed to enter new markets including in information services.[4]

The Modified Final Judgment which came into force in 1984 led to the formation of seven Regional Bell Operating Companies (RBOCs) focused on local services and AT&T focused on long-distance services. It was only with the passing of the Telecommunications Act in February 1996 that the Baby Bells were given the potential to enter into long-distance services and subsequently all of the RBOCs did receive permission to provide long-distance services.

In Europe, liberalisation proceeded less uniformly. The United Kingdom was one of the first countries to allow new entry in fixed services with the granting of a licence in 1984 to Mercury (a subsidiary of the recently privatised Cable & Wireless). In 1991, the initial duopoly period in the United Kingdom came to an end with the liberalisation of the market to other new entrants. In most of Europe, entry was initially liberalised in relation to particular services with full liberalisation of telecommunications services and networks being undertaken by January 1, 1998 to comply with the European Commission's Directive 96/19. A number of the original EU Member States were allowed some delay in liberalisation and many countries in Eastern Europe only fully liberalised their telecommunications market as part of their accession to the EU in May 2004 and, for Bulgaria and Romania, in January 2007. Many of the incumbent operators in Europe were also privatised in preparation for market liberalisation.

The 1990s also witnessed the development of cable modem technology which enabled the European and North American cable TV operators to commence offering internet access services with cable broadband services being offered from 1997. With the upgrading of cable networks to offer broadband services, the networks also began to offer Voice over the Internet Protocol (VoIP) telephony services with take-up growing more rapidly from 2000 onwards. The competitive impact of cable networks on the overall communications sector has varied significantly across Europe, with cable network coverage being limited in many Member States and, in some countries, cable networks being owned by the fixed incumbent operators. In some countries, alternative technologies have also been significant.

Mobile markets have followed a separate course of development. In the 1970s, the mobile cellular systems were developed for commercial implementation using a system of multiple low-power transmitters to support large number of simultaneous calls with particular frequencies being used to carry different calls in different cell-site areas. The initial cellular system was based on the advanced mobile phone service (AMPS) standard and the FCC assigned spectrum for AMPS services in 1982 with separate licences for hundreds of geographic areas across the United States. In each area, one licence was awarded to the local fixed (wireline) operator and a second one to a competitor.

At the end of 1994, the FCC commenced auctions for spectrum for digital mobile services known as personal communications services (PCS). The PCS auctions bought substantial new entry with many subscribers being able to choose from six mobile providers (using AMPS or a variety of digital standards) in their local area.

An important initial development in the mobile industry in Europe was the decision of the national telecommunications authorities in Scandinavia in 1969 to commence the development of an analogue cellular standard through the Nordic Mobile Telephone Group (NMT-Group).[5] The NMT standard was introduced in the Nordic Countries in 1981, although some other parts of Europe decided to introduce the American AMPS standard.

To overcome interoperability problems with analogue systems, the Conference on European Posts and Telecommunications decided in 1982 to create the Groupe Spécial Mobile (GSM) to develop a non-proprietary and interoperable digital standard. Motorola, Ericsson and Nokia rapidly developed as leading providers of GSM technology with Siemens and Alcatel also being important players. The United Kingdom was one of the first European regulatory agencies to award GSM licences in 1989 with most other European countries awarding licences over the 1990s. The licensing process

2 A description of early local competition in telecommunications is provided in G.A. Woroch, ''Local network competition'' in *Handbook of telecommunications economics*, Vol.1 (2002).

3 In some countries, multiple operators continued in separate local monopoly areas.

4 The agreement was reached to settle an antitrust case brought by the Department of Justice alleging that AT&T had used its market power in the monopoly local telephone service to illegally limit competition in the markets for long distance services and customer premises equipment.

5 T. Dunnewijk and S. Hulten, ''A brief history of mobile telecommunications in Europe'', United Nations University Working Papers Series 2006-034 (2006).

across the European Union resulted in between three and five GSM mobile operators being presented in each Member States by 2000.[6]

The second wave of telecommunications consolidation

The liberalisation and new entry that occurred during the 1980s and 1990s created the market context in which the second large wave of mergers and acquisitions in the telecommunications industry took place in the second half of the 1990s.

The United States, which had been among the earliest countries to liberalise, led consolidation in the industry. During the period 1996 to 2001, there were more than 20 mergers and acquisitions in the telecoms sector that were worth over US$20 billion each with 14 of these taking place in the United States.[7]

The key drivers for the merger wave in the industry in the late 1990s were rapid technological innovation across communication sectors, significant deregulation and the privatisation of national monopolies, as well as the presence of strong financial market incentives leading to concentration.

This second wave of consolidation was characterised by newly liberalised companies expanding into related markets including long-distance, internet service provision, cable television provision as well as content services.

In the United States, a number of the Regional Bell Operating Companies (RBOCs) created by the AT&T Modified Final Judgment merged with each other in the late 1990s including Bell Atlantic/NYNEX in 1996, SBC/Pacific Telesis in 1997, SBC/Ameritech in 1999. The FCC noted serious concerns about the loss of potential competition through the RBOCs choosing to merge rather than to enter into each other's markets and compete. Nonetheless, the mergers were allowed subject to extensive conditions designed to foster local competition as well as increasing the incentives of the firms to expand into other regions. For instance, in relation to SBC/Ameritech in 1999 and Bell Atlantic/GTE in 2000, the FCC required functional separation of advanced services, access to line sharing at particular discounts and certain non-discrimination provisions.

A series of large mergers led to concerns about the loss in existing competition in relation to a range of different sectors including long-distance services (e.g. WorldCom/Sprint[8]), the internet backbone (WorldCom/MCI[9]), mobile markets (AT&T/TCI, SBC-Bell South, Bell Atlantic/GTE mergers[10]), cable and satellite television services (Primestar's proposed acquisition of the direct broadcast satellite assets of News Corporation and MCI[11]) and internet access (AT&T/Media One[12], AOL-Time Warner[13]).

Mergers between operators in separate geographic areas were generally allowed such as the 1997 Bell Atlantic/NYNEX merger in the United States involving two neighbouring local service providers. However in the proposed merger of the Norwegian and Swedish incumbent operators (Telia/Telenor), the European Commission identified a concern about the potential for the merger to block new entry. Vertical mergers, which would allow a firm dominant in one market to exercise market power in a neighbouring market, have also been a concern.

In relation to BT's proposed acquisition of MCI, the US Department of Justice sought in July 1997 to impose information reporting and other measures to prevent discrimination in favour of MCI in the market for international calls between the United States and the United Kingdom. The deal was eventually abandoned.

In Europe, large mergers occurred across all communication sectors and often geographic expansion featured prominently as one of the key drivers of consolidation. Fixed incumbents merged with other incumbents across countries, as in the Telia/Telenor venture (the merger was cleared subject to conditions—but the companies de-merged only a few months after the conclusion of the transaction) or with operators that were active primarily in adjacent markets, as in Deutsche Telekom/Voice Stream or Telefonica/Endemol and Telefonica/Lycos deals. Some large transactions involving incumbent fixed operators encountered political opposition and were abandoned, as in the case of proposed deals between KPN and Telefonica, and Telecom Italia and Deutsche Telekom.

The cable industry also experienced significant consolidation. For example, in the United Kingdom, significant infrastructure costs and competitive pressure (from telephony and TV operators) led to a wave of consolidation initially led by a group of larger cable franchises (including International CableTel, Cable & Wireless and Telewest Communications). Further consolidation took place subsequently when CableTel bought NTL and Telewest continued a programme of acquiring smaller franchises to grow coverage. At the end of the 1990s NTL bought Cable and Wireless's UK cable operations and Telewest gained full control of Cable London, consolidating the market to a structure dominated by the two largest players.

In parallel, the market for internet services also experienced consolidation as a significant number of mergers prompted by repeated acquisition of small ISPs by a relatively small number of companies—including Wanadoo (which merged with Freeserve in 2000), Tiscali and T-Online—led to the emergence of strong players with activities across a number of European countries.

6 European Commission, *Sixth Implementation Report on the Implementation of the Telecommunications Regulatory Package* (2000), p.36.

7 Reported in G. Le Blanc and H. Shelanski, ''Telecom Mergers in the EU and the US'', available at *http://www.cerna.ensmp.fr/cerna_regulation/Documents/ColloqueMetR/LeBlanc-Shelanski.pdf* [Accessed July 22, 2008]. The five largest mergers during this period were Vodafone–Mannesmann, AOL–Time Warner, MCI Worldcom–Sprint, Vodafone–Airtouch and Vodafone AirTouch–Bell Atlantic GTE.

8 The Department of Justice also raised concerns with the impact of the merger on the markets for internet backbone services, international private line services, data network services and customised network services. The European Commission also opposed the merger on the basis of concerns about competition in internet backbone services.

9 WorldCom resolved the Department of Justice's concerns about concentration in the internet backbone services market by agreeing to sell MCI's internet backbone business to Cable and Wireless.

10 The Department of Justice required divestment of mobile assets in particular areas as part of these mergers.

11 The deal was abandoned following the filing of a civil antitrust suit by the Department of Justice which was concerned that the large cable operators who owned Primestar would remove the last remaining satellite competitor.

12 AT&T (which controlled the largest US provider of broadband internet access) resolved the Department of Justice's concerns by divesting Media One's interest in Road Runner, the second-largest US broadband internet access provider at the time.

13 In gaining clearance for the merger, the parties consented to open Time Warner's cable system to at least three non-affiliated cable broadband internet service providers and to offer the same price for AOL's DSL services in Time Warner's cable areas as AOL charges elsewhere.

The mobile markets also witnessed consolidation both domestically and often internationally. In the latter case, acquisitions served to expand international footprints as in the case of Deutsche Telekom/One2One, and notoriously in Vodafone/Mannesmann (in this case Vodafone created the largest mobile operator in Europe by mean of a $180 billion successful hostile bid).

Mobile operators also entered transactions that created ventures across markets, as in the Vivendi/Vodafone Vizzavi venture, though consolidation across convergent sectors (media content, internet, telephony and TV transmission) became a more prominent driver of consolidation in the 21st century during the third wave.

The third wave—consolidation in the 21st century

The collapse of equity markets in 2000 quickly altered the financial environment for telecommunications companies. Debt reduction became a key focus and companies sought measures to reduce costs and cap future investments.

One immediate consequence of the dotcom crash was a dramatic reduction in the number of telecoms mergers. Furthermore, as many countries held 3G auctions, telecom companies faced the resulting (high) licence fees and very significant investments in new networks and equipment.

In the US third wave, the largest number of mergers occurred in 2001. Over the following years most deals were domestic mergers and acquisitions, with about one case in four arising from either foreign acquisitions in the United States, or US acquisitions abroad from 2001 to 2004.[14]

The majority of mergers occurred within industries, but a growing number of vertical mergers were concluded as communications companies entered the ''triple-play'' service markets (internet services, telephony and TV services). In particular, while cable companies could relatively easily adjust their business to expand their offer, telecommunications companies often had to merge with cable or broadcasting companies.[15]

Mega-mergers in the US telecoms sector were approved by the Federal Communications Commission (FCC) as it believed the acquisitions delivered significant benefits to consumers in spite of significant consolidation. During 2005 the FCC approved the merger of Sprint and Nextel, and the mergers of SBC and AT&T ($16 billion) and Verizon and MCI ($8.5 billion). The FCC also approved the merger of AT&T and BellSouth on December 2006. All these transactions entailed only relatively minor undertakings and conditions.

Following these acquisitions, the number of nationwide mobile operators in the United States fell from six to four. Furthermore, the two largest mobile operators were controlled by the fixed incumbents—Verizon and SBC/Bell South.

In Europe consolidation often involved mergers of significant scale across European state boundaries and sectors, with transactions between fixed operators, fixed operators and mobile operators, as well as between converging businesses—mobile and fixed telephony and internet services.

The pressure to compete on a bundle of services across platforms has prompted a number of transactions to secure direct access to alternative infrastructure. Acquisitions took place across state boundaries, as in Swisscom/Fastweb, where the Swiss fixed incumbent acquired an Italian cable company active in telephony, broadband and TV services, as well as within European Member States, including Spain and the United Kingdom. In Spain, Orange (France Telecom) acquired Ya.com, Spain's third largest DSL broadband operator in 2007, and in the United Kingdom, the cable operator NTL acquired the MVNO Virgin in 2006 and BSkyB (the incumbent satellite operator and Pay TV provide) acquired Easynet in 2005.[16]

Incumbent fixed operators engaged in significant transactions affecting several national markets. Telia/Sonera and Telefonica/Cesky Telecom are examples of fixed incumbent mergers directly affecting the provision of telephony services in the incumbents' countries, while Belgacom/Swisscom and Portugal Telecom/Telefonica are examples of joint ventures that focused, respectively, on the provision of international (business) services and services outside the EU.

A number of prominent mergers between fixed incumbents and mobile operators took place since 2000, creating scope for increased geographic and product differentiation. These deals include France Telecom/Amena, Telefonica/O2, KPN/E plus and Telenor/Vodafone Sverige.

The mobile sector industry also grew increasingly concentrated within individual Member States with mergers between mobile operators. A comparison of the number of operators at the end of 2001 and at the beginning of 2008 shows fewer operators in a number of EU-15 states, including Austria, Denmark, Finland, Germany, Italy, the Netherlands, Portugal, and Sweden.[17]

During the third wave of European mergers cable consolidation continued. In the United Kingdom the national competition authorities cleared the merger between NTL and Telewest, the two leading cable network operators, creating a single UK cable infrastructure provider, while the European Commission cleared the cases UPC/Noos and LGI/Telenet. Cable markets in Germany, France, the United Kingdom and Spain became significantly more concentrated markets during this period.

Institutional framework for assessing mergers

In Europe, telecommunications mergers will be scrutinised either by the European Commission or, alternatively, by national competition authorities. The European Commission's jurisdiction over mergers is invoked where the proposed transaction has a ''Community dimension'', as defined by the combined aggregate turnover of the parties, or alternatively where a matter is referred to it by a Member State.

The European Commission assesses mergers in order to establish whether they are ''compatible with the common market''. In this respect, the Commission must assess, pursuant to Art.2(2) and (3) of the Merger Regulation, whether or not a concentration would impede effective

14 J. Kim, ''Telecommunications Merger Trends in the Context of the Convergence—Using the U.S. Merger Cases'', Telecommunications Policy Research Conference, 2005 (see Table 2).

15 Kim, ''Telecommunications Merger Trends in the Context of the Convergence'', Telecommunications Policy Research Conference (2005).

16 See *www.francetelecom.com* press release of June 6, 2007; Sky.com press release of October 21, 2005, ''Recommended Offer for Easynet''; Virginmobile.com press release ?ransaction of April 7, 2006.

17 Comparative Assessment of the Licensing Regimes for 3G Mobile Communications in the European Union and their Impact on the Mobile Communications Sector European Commission Directorate-General Information Society, Final Report, June 25, 2002. Merrill Lynch European Wireless Matrix q1 2008.